

Anti-doping in China: An analysis of the policy implementation

processes through stakeholders' perspectives

Abstract

Despite the vast research on anti-doping, little is known about anti-doping in China and how it responds to the World Anti-Doping Agency (WADA) will significantly influence future anti-doping work on the international level. **This article focuses on the detail of anti-doping policy implementation processes in China.** It uses the Van Meter and Van Horn top-down policy implementation approach to interpret 42 interviews that come from nine different locations in China and **from staff at WADA** and other National Anti-Doping Organisations (NADOs), to provide a comprehensive understanding of anti-doping implementation. The results demonstrate that while China has the organisational and financial resources to support anti-doping, some potential risks cannot be ignored, such as funding shortages in poorer provinces, the insufficient manpower of the Doping Control Officers (DCOs), and having a clearer strategy for student and non-elite sports contexts.

Keywords: China, Anti-doping, Policy Implementation, Governance

1 Introduction

Doping is an issue of international concern, one of the intractable problems that China's sports community needs to address. China has confronted a series of doping problems in its history, especially in the 1990s when Western media claimed that the Chinese authorities systematically doped athletes, leading to questions about the credibility of Chinese sports (Houlihan, 2002; Yang and Leung, 2008, Hong and Zhouxiang, 2012; Tan, 2018). The turning point for Chinese anti-doping was when China prepared to bid to host the 2008

Beijing Olympic Games. The Chinese authorities sought to secure votes from the IOC to host the 2008 Olympic Games, and showed more commitment towards anti-doping education and policies (Houlihan, 2002). China became a member of WADA's Foundation Board in 2000, accepting the World Anti-Doping Code (WADC) in 2003. It established bilateral agreements with Norway, Sweden, Australia, Britain and France to exchange information and establish doping quality control (Hong, 2006). China's General Administration of Sport (CGAS) established the China Anti-Doping Agency (CHINADA) as the national anti-doping organisation in 2007 (CHINADA, 2016a). CHINADA can be seen as a significant milestone in China's anti-doping efforts. **In 2019, former short track speed skating athlete Yang Yang became the first Chinese to be nominated as WADA vice president; and example of the China's commitment to global anti-doping efforts (WADA, 2019).**

This article aims to understand the process of this policy implementation, to assess strengths and weaknesses, and to identify implementation challenges. It focuses on China for the following reasons. First, despite the fact that many research studies on anti-doping policies exist, little is known about the implementation of the Chinese anti-doping policy. China's unique political system has an impact on public policy, and this uniqueness may explain why there have only been a few studies on anti-doping in China. **Therefore, this study has filled a gap in the literature on the non-USA/Europe contexts of anti-doping work.** Second, China is one of the most powerful sporting countries, so the way it responds to WADA will significantly influence anti-doping work at the international level. **It has also contributed to global anti-doping practices and management.** Third, because of China's historical series of doping problems, the credibility of Chinese sports is still questioned by other countries. As such, it is important to determine whether China has made progress in the fight against

doping. Subsequently, China may become a valuable case for understanding not only anti-doping policy implementation but also compliance with the WADC.

2 Literature Review

Not all countries and sports are compliant or take WADC compliance seriously, the recent Russian doping scandal is probably the best example of non-compliance (van Bottenburg et al., 2020). Houlihan (2002; 2013) presented several studies on achieving WADC compliance and discussed the definitions of WADC compliance and compliance systems in general. Mazanov (2016) also highlighted that current WADC compliance neglects the depth of compliance, such as inaccessibility to athletes and support personnel. Such studies on policies and implementations that show system weaknesses in such areas as the lack of monitoring, harmonisation and effectiveness in anti-doping education, testing procedures, whereabouts systems, therapeutic use exemption (TUE), and so on. (Hanstad et al., 2010; Dikic et al., 2011; Houlihan, 2013; Houlihan and Hanstad, 2013; Pound et al., 2013; Dimeo and Møller, 2018; Read et al., 2020).

Most studies of Chinese anti-doping mainly focus on reviewing the historical literature and reasons why Chinese athletes dope (Hong, 2006; Yang and Leung, 2008; Hong and Zhouxiang, 2012). A few studies discuss China's compliance with the WADC. For example, Yang and Leung (2008) and Hong and Zhouxiang (2012) concluded that the Chinese government's willingness to comply with the WADC shows the development of China's anti-doping work. However, their research relies heavily on secondary data, such as official figures and media reports, and they do not use any theoretical frameworks to interpret their findings. In the latest research on anti-doping work in China by Tan et al. (2018) the authors provided a more comprehensive evaluation of anti-doping work in China. They adopted Haas's (2003) compliance model to explain Chinese anti-doping strategies. However, their

research only focused on officials' perspectives and did not reflect any grassroots ideas about Chinese anti-doping regulations. **Considering China's vast territory, Tan's research was limited to distinguishing between highly and moderately competitive areas of sports and the differences in anti-doping work between geographical locations.** Additionally, none of the findings are specific enough to point out the challenges and the barriers facing China.

This study is, therefore, important from several standpoints. This is the first research project on this subject to use a wide range of primary data from interviewees within China, and internationally. It will focus on implementation issues including anti-doping education and prevention, doping testing and investigation, analysis, results management, punishment, and bilateral cooperation. In order to have a clear discussion and conclusion this article adopts the Van Meter and Van Horn' framework to guide public policy analysis. To the authors' knowledge, this is the first known attempt to develop an understanding of anti-doping policy implementation on the basis of individuals' experience of the implementation of anti-doping policy in China, in order to identify the challenges and barriers that China faces in implementing an anti-doping policy.

3 Theoretical Framework

Implementation of policy in general is affected by a country's government, and sport is not exception (Houlihan, 2005). China's unique political system means that the Chinese government has adopted a top-down approach to anti-doping policy (Saich, 2015).

[Insert Figure 1 about here]

Van Meter and Van Horn (1975) have created a rigorous theoretical model of the top-down approach, which includes six variables, as shown in Figure 1. These variables shape the relationship between policy implementation and performance (Sotokawa, 2001; Pülzl & Treib, 2007; Gholipour et al., 2012), which may influence the services actually delivered to

clients or citizens. Hill and Hupe (2002, p.46), defined this model as a ‘comparatively straightforward model’ and concluded that this model ‘provided a valuable starting point’ for studying the processes of implementation. This article will use this model to provide a understanding of how anti-doping policy has been implemented. However, we go beyond a simple analysis of top-down organisational policy and governance and explore questions and issues around the practical implementation of policy objectives.

Van Meter and Van Horn (1975) show that six variables are regarded as key to policy performance. This begins with initial policy standards and objectives, which include determining the performance of the policy. This means that the policy’s objectives should provide very explicit standards for evaluating the programme’s performance. Policy resources are required for achieving policy standards and objectives and include human resources, equipment, financial support, information, and authority. The programme’s standards and objectives need to be properly communicated, which includes the top-down information within lead organisations and horizontal information transmission between different organisations. These need to be accurate and consistent at all times, so that the recipients know what is expected of them. To ensure the implementer acts in accordance with a policy standard and objective, the institutional mechanisms are a useful tool for the higher authorities. Characteristics of the implementing agencies include the formal structure of organisations and the informal attributes of their personnel. Economic, social and political conditions may have an effect on the performance of implementing agencies, for example, whether economic resources are sufficient to support the policy implementation; if and how public opinion impacts policy implementation; and to what extent partisan characters are mobilised in support or in opposition to the policy. The implementer is vital in all of the components discussed above, because they are the people who actually deliver the activities

associated with the policy. There are three elements that may be used to evaluate the disposition of the implementers: cognition (comprehension and understanding) of the policy; the direction of their response towards it (acceptance, neutrality, rejection); and the intensity of that response. It is also important to note that policy performance and effectiveness are not the same, but are often focused on some combinations of outputs and outcomes (Houlihan and Hanstad, 2019). The output is connected with policy performance and can be understood as the implementation of anti-doping education or testing programs. The outcomes are primarily concerned with effectiveness, as the policy achieves or comes closer to achieving the stated objective of using anti-doping measures to establish a drug-free sport. Just as Houlihan and Hanstad (2019) conclude, efficient implementation can only reflect the high performance from the output perspective, though the high-quality output performance cannot directly reflect the effectiveness of the policy outcome.

4 Method

This article aims to understand anti-doping policy implementation in China on the basis of individual experiences. It uses constructionist ontology interpretivist epistemology to understand reality and then adopt a qualitative method to acquire such knowledge.

Qualitative methods are not uncommon in policy research (Yanow, 2007). Many scholars and policy analysts have engaged in the field as ethnographers or participant observers to address first-hand the experiences of legislators, implementers, agency clients, community members and other policy-relevant stakeholders, and have also used in-depth interviews with policy actors, legislators, agencies and other representatives (Yanow, 2007). The main purpose of these qualitative research methods in public policy analysis can be understood as 'interpretive'. Interpretive researchers use word-based analysis as policy-relevant discourses, whether written or oral. Researchers search for meanings and the sources of meanings

(Yanow, 2007). Therefore, semi-structured face-to-face and telephone interviews were undertaken to collect data and purposive sampling was adopted.

4.1 Data collection

It is not an easy task for researchers to successfully and completely convey participants' thoughts and feelings. We included almost all types of stakeholders in the anti-doping system in China and also created varied questionnaires for the different types of interviewees.

However, it is still possible that the data collection process might be disrupted because of the sensitivity of the topic. Sensitive research can be defined as research on emotionally difficult topics, which requires participants to face questions that are deeply personal and possibly distressing (Lee 1993:109; Johnson and Macleod Clarke, 2003).

Additionally, social desirability bias may be observed in responses to a socially sensitive topic (King and Bruner 2000; Jann et al., 2019). The participants may unconsciously or deliberately provide untruthful, biased answers, or refuse to answer altogether, to conform to socially acceptable values and protect themselves (King and Bruner, 2000; Lensvelt-Mulders, 2008; Krumpal, 2013; Jann et al., 2019). Specifically, the interviewees may avoid answering honestly, given the unique political and cultural environment in China. Some of the answers may reflect what the interviewees think is socially desirable behaviour (Lavrakas, 2008).

These situations can lead to a bias in the interview data quality (Jann et al., 2019). There are several ways to facilitate a smooth transition during data collection for a sensitive topic, such as protecting the interviewees through ethical guidelines, obtaining informed consent from potential research participants, and maintaining confidentiality. These strategies were employed in the course of this research to limit, as far as possible, the barriers to provide full and honest answers.

4.1.1 Participants

The interviewees were selected by identifying key individuals based on WADA's governing body, the Chinese anti-doping administration system and relevant literature, often using personal contacts for 'gatekeeper' introductions. The collection of primary data was divided into two rounds, as shown in Table 1.

[Insert Table 1 about here]

For the first-round of interviews, it was necessary to travel extensively in China. A total of seven provinces and two municipalities were visited, which involved travel for over 8,000 miles. The provinces and municipalities were chosen to highlight the contrast between the highly competitive and uncompetitive areas of sports and the differences in policy implementation in various geographic locations. There were 37 first-round interviews in 9 geographical locations. In terms of China's administrative units, the country is divided into provinces (23), autonomous regions (5), and municipalities (4), all of which are directly under the central government. The provinces and autonomous regions are further divided into autonomous prefectures, counties, autonomous counties, and cities (Gov, 2018). All of the interviews collected in provinces were conducted in the capital cities as all of the local anti-doping agencies and most of the elite athletes and coaches are based in these cities.

Many sports organisations such as CHINADA are located in Beijing, as are different sports federations, the newspaper China Sports Daily newspaper, and Beijing Sport University. That is why approximately one third of the total interviews were conducted in Beijing. Gansu (Lanzhou) had the second-highest number of interviews because the researcher knew more people who could be contacted for interviews. On average, three interviews were completed in each of the other provinces and municipalities, and most included staff from local anti-doping agencies and local sports bureaus, local elite athletes, and coaches. The

aforementioned officers involved in this research are key opinion leaders in their institutes, with sound experience working in anti-doping management and control. The athletes and coaches also have experienced many urine and blood anti-doping tests.

Additional information was obtained by conducting interviews with the staff from WADA and other NADOs, to gain knowledge of China's anti-doping policy implementation from outside the administrative structure of the country itself. There were two parts to the second-round interviews. Part 1 was to ask some additional questions of the interviewees who were interviewed before, in order to address any missing information from the first-round interview. Part 2 was starting new interviews with staff members of UK Anti-Doping (UKAD) and Anti-Doping Norway (ADNO), which has the longest cooperation with China; and WADA. Five interviews were conducted with individuals from these organisations.

4.1.2 Questionnaire design

The main themes of the semi-structured questions are based on the WADC and Chinese anti-doping regulations. More specifically, the interview questions were divided into six categories: (1) general questions (the relationships and co-ordination methods established between CHINADA and subordinate bodies), (2) anti-doping education and prevention, (3) doping testing and investigation, (4) testing procedures and sample analyses, (5) results management and punishments, and (6) bilateral policies. The questions for the different interviewees were designed according to the person and their organisational position. This does not mean that each type of questionnaire is isolated; on the contrary, the sub-themes and questions complement each other and are integrated. This research adopted the member-checking approach, which can also be understood as respondent validation (Busetto et al., 2020). For example, if this study sought to explore the consistency of anti-doping policy implementation from top to bottom during the interview, we compared the responses of

interviewees from CHINADA and local anti-doping agencies and even checked with athletes or coaches to discern the differences between their answers. The significant similarities and differences are crucial to the overall analysis.

4.2 Data Analysis

Inductive thematic analysis was adopted in this research, which enabled participants' experience to be examined and understood and influential factors to be identified (Braun et al., 2016). The majority of interviews were conducted in Chinese, transcribed and translated into English. The audio-recorded interviews were imported into NVIVO 10 software, which is used for data analysis. Specific attention was paid to patterns that occurred. Consequently, the data was inductively coded to create categories for more efficient and effective analysis. There were three rounds of coding: the first-round was based on the six categories of interview questions; the second-round involved sub-codes under these six main codes; the last round involved six main coding themes based on the Van Meter and Van Horn model.

5 Research Results and Discussion

5.1 The Anti-Doping System in China

There has not been any academic study which overviews the organisations and processes relating to the anti-doping system in China. Therefore, to provide some context and background information we will provide a brief overview.

[Insert Figure 2 about here]

Figure 2 shows the anti-doping administration system and relevant organisations in China. It was developed using policy documents and details from the interviewees about the Chinese anti-doping administration system. The first round of interviews including individuals from these organisations or agencies.

The interviewees' showed that CHINADA plays a dominant role in the Chinese anti-doping system and is responsible for leading all of the local anti-doping agencies and anti-doping work in each sports federation. The leading officer of CHINADA offered views about CHINADA and the National Anti-Doping Laboratory:

CHINADA plays a dominant role in the whole anti-doping system and is in charge of all the anti-doping work in China. Despite this, CHINADA is still supervised and guided by the CGAS and central government ... There is only one national anti-doping laboratory in China which is accredited and authorised from both CGAS and WADA (Interviewee 12).

The China Sports Daily and the Xinhua News Agency are both under the Chinese central government's control, and especially the China Sports Daily, who are directly under the CGAS (Interviewee 11). The journalist from the Xinhua News¹ Agency addressed the role that she thinks the media plays in the anti-doping efforts:

The publicity of the media becomes an inseparable factor in the fight against doping. On the one hand, the media can raise public awareness of anti-doping. On the other hand, it can also promote the introspection and improvement of the anti-doping work. Additionally, the questions and suggestions raised by the media may have an impact on the anti-doping policy formulation (Interviewee 20).

The leading officer of the Gansu Institute of Sport Science and the leading officer of the Swimming Department of the Swimming Administrative Centre, both mentioned that the main responsibilities of the local anti-doping agencies and the National Sports Federations are to make sure that the anti-doping regulations can run smoothly at the grassroots level

¹ Xinhua is the official state-owned press agency, the biggest and most influential media organisation in China, and the largest news agency in the world in terms of correspondents. It is a ministry-level institution (Xin, 2008).

(Interviewees 6, 14). Each ‘sports school and sports university’ and ‘local sports team’ is guided by the local anti-doping agencies on anti-doping work (Interviewees 3, 5, 7, 10, 21, 29, 35). Thus, we can conclude this to be a well-organised system, at least in regards to leadership, dissemination of policies, and organisational responsibilities.

5.2 Van Meter and Van Horn’s model

5.2.1 Policy Standards and Objectives

Van Meter and Van Horn (1975) argue that it is essential policy objectives are clear and consistent. The main objectives of anti-doping work in China are ‘to prevent the use of doping in sports, protect the physical and mental health of all the sports participants, maintain fair competition in sports, and regulate anti-doping work’ (CGAS, 2018). To achieve this, CGAS ensured that the ‘CHINADA Doping Control Rules’ are in accordance with the WADC. The aim of the ‘Anti-Doping Management Regulation of China’ policy is to provide a clear definition of each stakeholder’s responsibility (in practical and administrative terms), to ensure that the whole anti-doping policy can be implemented consistently from top to bottom (Interviewee 12). CHINADA also published many supporting policies such as ‘Hearing Rules for Doping Violations’, ‘Therapeutic Use Exemptions Management Rules’, and ‘Doping Control Official Management Regulation and Implementation’ to make each objective clear and consistent with the WADC (Interviewees 12, 13). The standards and objectives noted in this theoretical model can be related to anti-doping in China.

However, there are still some parts of China’s anti-doping work that are not clear enough. As Fischer (2012, p.62) notes, ‘the success of any policy strategy depends on an accurate understanding of the target group’. According to the existing literature and interviews, the objectives of the anti-doping policies around the registered athletes are very clear and consistent (Interviewees 12, 27). Anti-doping work in China also tries to cover college and

university students and mass participation sports. However, this is only in an incipient phase, and there are no clear standards for them yet (Interviewees 1, 27). The process of promoting anti-doping work among students, the general mass public, and public clubs is difficult. The leading officer from the Institute of Sports Science in Jinan noted the challenge they are facing, with respect to public clubs:

According to previous experiences, we have a serious doping problem with bodybuilders, and it is also our responsibility to look after those public clubs. But the problem is what we should do. As you know, in China, we need to consider the administration system before every movement. Obviously, those public clubs are not in the national sports administration system and are not constrained by the administration's power. That is to say, we find it difficult to manage those clubs without the administration's involvement (Interviewee 27).

Compared with registered athletes, several factors explain why CHINADA pays less attention to school students, mass participation sports and public sports clubs. First, the proportion needs to be considered. Even though there are some doping incidents that involve students in normal schools, they concern a really small group of people who generally have a low probability of doping (Interviewees 12, 13). The second factor is the position in the administrative system. Schools and public clubs are in a different system of the anti-doping administration and national sport administration. The advantage of a strong administration system is that it can implement anti-doping with less resistance, but the disadvantage is that different administrations face the difficulty of synchronising their affairs.

As Van Meter and Van Horn (1975) noted, the objectives should include evaluating the programme's performance. If the main target of the anti-doping policy is to eradicate doping in sports then, to confirm that the implementation has been successful, organisations must

determine whether the percentage of athletes testing positive and using banned substances has decreased, and assess the progress of related anti-doping projects. For the percentage of doping violations to continue to decrease, all the anti-doping programmes must work together cohesively. The effective implementation of these programmes can directly affect the quality of the outputs of anti-doping policy and also have an indirect impact on the policy's outcomes (Houlihan and Hanstad, 2019). For example, CHINADA adopted the 'Anti-Doping Education Qualification Access Control Programme'² for anti-doping education. The percentage of athletes who pass the anti-doping knowledge exam³ before the main competition reflects the effectiveness of the anti-doping education programmes; we cannot make a direct conclusion on whether these outputs are actually reducing or deterring doping.

5.2.2 Policy Resources

Various resources are needed for anti-doping policy implementation, such as funding, human resources, and jurisdiction. The interviews showed that anti-doping in China is supported and partly funded by the central government (Interviewee 12). The leading officer at CHINADA indicated two funding sources of CHINADA: the first one being the government, which is the same for other NADOs. Funding for the delegated doping tests comes from some national and international sports organisations, the major cost is for the testing. The annual anti-doping testing plan is created and paid for by CHINADA, and each client (local anti-doping agencies, sports federations and sport event organizers) needs to pay the cost of the delegated testing (Interviewees 1, 6, 12, 22, 27, 34, 37). For local anti-doping agencies, the cost of delegated testing is an additional expense, and insufficient funding causes many problems. Some poor provinces have limited funding for doping testing, which will, as a result,

² Anti-Doping Education Qualification Access Control Programme refer to that all athletes taking part in competitions and their assistant personnel must receive anti-doping education, pass the anti-doping knowledge exam, sign the letter of commitment on anti-doping and take an oath on anti-doping (CHINADA, 2016b).

³ The content of Anti-Doping knowledge exam includes general knowledge education, health education, ethics education, law education and moral education. (CHINADA, 2016b).

negatively affect its coverage. Other factors of anti-doping work are not expensive. As the leading officer of the Gansu Institute of Sport Science noted, the cost of anti-doping education in the Gansu province is low. They only need to organise anti-doping lectures and print out anti-doping learning materials for athletes (Interviewee 6). **During the interviews, no interviewee could provide any specific financial data about the cost of the anti-doping work, and CHINADA also did not have any financial report for the anti-doping work.**

Chinese anti-doping work may also have a problem with human resources in regard to the DCOs. **China is such a big country and has a huge number of athletes⁴**, which places great pressure on the DCOs. A journalist from the Xinhua News Agency said:

Chinese anti-doping work is facing ten thousand registered athletes and a hundred thousand young athletes (for the sample collection) while there are only 300 DCOs. That is just a drop in the ocean (Interviewee 20).

The shortage of DCOs in China is a problem may have an impact on the efficiency of out-of-competition testing. The leading officer of the Qinghai Institute of Sport Science presented more details about the work status of DCOs, especially the management of out-of-competition testing. He notes that the majority of doping control officials prefer in-competition testing, because they can do a number of tests in one place, in a short time, with more subsidies (subsidies are based on the number of samples collected and working days). Out-of-competition tests are really time-consuming; sometimes, they travel over 1000 miles only to collect one sample with little subsidies (Interviewee 30). However, Article 17 of Chapter 3 of the Doping Control Official Management Regulation and Implementation states:

⁴ There were 1,189 athletes in the national registered testing pool in 2019 in China (CHINADA, 2019a). According to the latest National Bureau of Statistics report, the number of total registered athletes in China is 464,025 (National Bureau of Statistics, 2009).

The DCOs shall comply with the work arrangement and shall not select the site of inspection, projects or an accompanying person during the inspection.

A response from the leading officer of Legal Affairs and the Investigation Department of CHINADA also noted that the DCOs cannot pick whether testing is done in or out of competition (Interviewee 13). However, given the pressure and significance of their work, CHINADA should show more understanding and encourage the DCOs to improve the efficiency and accuracy of the anti-doping sample collection. The DCOs' working conditions and work satisfaction will have a significant impact on the policy implementation.

Jurisdiction is an important consideration for anti-doping implementation. As the leading officer at CHINADA said, **administrative organisations like CHINADA do not have any authority to conduct investigations (Interviewee 12)**. Specifically, investigations in anti-doping work include looking into violating behaviours of producing, trading and using doping substances and the investigation of specific situations. These include Anti-Doping Rule Violations, sources of prohibited substances and approaches and the responsibility of relevant personnel and institutions (CHINADA, 2016c). However, CHINADA does cooperate with the central government, which means that CHINADA can rely on the powerful Chinese administration system and does not need to worry about jurisdiction (Interviewee 12). If the relevant staff do not cooperate, or if they reject or even obstruct the doping investigation, the government can issue a warning, record a demerit and even dismiss the staff, according to the relevant provisions of the state. Without sufficient jurisdiction, anti-doping implementation will face many obstacles (more will be discussed in the section on '5.2.4 Characteristics of the implementing agencies').

5.2.3 Inter-organisational communication and enforcement activities

The interviews show that CHINADA communicates frequently with local anti-doping agencies (Interviewees 1, 6, 33). The provinces report to and are overseen by CHINADA, regarding almost every anti-doping activity. The leading officer of the Gansu Competitive Sports Department offered information about the biggest meeting on anti-doping in China.:

CHINADA organises the annual meeting around April every year, and all the relevant anti-doping staff and organisations in each province need to attend. The annual meeting is mainly about the summary of last year's work and planning the anti-doping work for the following year (Interviewee 9).

The interviewees held different views on the communication between local anti-doping agencies. The leading officer of the Gansu Institute of Sports Science said that:

The communication between each province on anti-doping is almost not necessary because the anti-doping agency in each province is their own business and I don't think they want other provinces to know their own situations on the matter (Interviewee 6).

The leading officer of the Guizhou Institute of Sport Science had a different view on this:

The directors of all institutes of sports science are all quite familiar with each other; that is to say, if I have some questions (about anti-doping) and I want to ask them, I can just simply make a phone call (Interviewee 33).

Only these two interviewees gave specific answers; the rest only mentioned that they might communicate with other provinces during annual anti-doping meetings. According to the interviews, vertical communication led by CHINADA is quite frequent and compulsory in some cases, but horizontal communication between each local anti-doping agency barely takes place, and may be superficial. This is probably because CGAS has published the 'Anti-Doping Management Regulation of China' which presents, in detail, the anti-doping

administrative hierarchy. This regulation structures the policy implementation process vertically and horizontally. This may mean that each local anti-doping agency can get all the information they need from anti-doping regulations, and do not feel it is beneficial to regularly communicate with other provinces (Interviewees 6, 27). Apart from the communication between CHINADA and other national anti-doping organisations, CHINADA also has frequent communication and co-operation with other NADOs. The leading officers from CHINADA and ADNO asserted that China and Norway both benefit from the bilateral cooperation (Interviewees 12, 13, 40). **Scholars have noted that the best practices in bilateral cooperation are between Norway and China and defined it is a practical approach to achieve WADC compliance (Hanstad and Houlihan, 2015; Hanstad, 2015).**

Regarding enforcement activities, it is in the power of the leadership in the anti-doping system to control the subordinated parties. As Van Meter and Van Horn (1975) noted, one condition for a successful implementation is that the higher authorities (superiors) adopt institutional mechanisms and procedures to increase the likelihood that implementers (subordinates) will conform to the policy's standards and objectives. CGAS is the superior anti-doping system in China, having the power of recruitment and selection, assignment and relocation, advancement and promotion, and dismissal of subordinates. The subordinates of the CGAS include not only the staff from CHINADA, the local anti-doping agencies, the National Sports Federations, and all anti-doping agencies but registered athletes, coaches, and support staff members. **The leading officer of CHINADA also noted other unique enforcement activities it adopted which are joint responsibility and punishment: administrative sanctions for athletes' support personnel and administrative units. If the athletes test positive and are punished, the support personnel and administrative units may face penalties as well (Interviewees 12, 27, 37). CHINADA provides the violations list to the**

public and updates it quarterly (Interviewees 12, 13). It is stricter than the sanctions noted in WADC, and therefore becomes an effective tool to guarantee that all the policy implementers will act on the basis of Chinese anti-doping regulation's standards and objectives. **Therefore, this punishment strategy also demonstrates a deep commitment to WADC compliance.**

To summarise, based on Van Meter and Van Horn's (1975) model, we can focus upon key issues: central government aims to implement the policies that are needed to achieve their objectives by using normative and remunerative power or asking each stakeholder to participate in a particular programme. As the Chinese government plays a dominant role in the administration system in China, the different types of enforcement activities and vertical communication play a more vital role in the successful implementation of anti-doping policy. The clarity and uniformity of the translation of the anti-doping policy from CHINADA for each local anti-doping agency and sports federation depends on the strength and frequency of top-down guidance. The lack of horizontal communication between each local anti-doping agency also supports top-down policy implementation in that it reduces the impact of intentional and unintentional distortions or adaptations (Downs, 1967). For example, if each of the local anti-doping agencies has inconsistent or conflicting interpretations of the anti-doping policy, horizontal communication will undermine convergence.

5.2.4 Characteristics of the implementing agencies

This section will describe the main characteristics of each organization which may have an impact on anti-doping policy implementation and management. To begin with CHINADA is heavily reliant on the central government's support and administrative power to deliver anti-doping policy and execute anti-doping investigations and punishment. As the leading officer from CHINADA noted:

At least in the sports administration system, the anti-doping investigation can be executed (Interviewee 12).

In a strict sense, CHINADA does not have the authority to conduct inspections and investigations. As such, the mechanism for enhancing police powers would be to codify anti-doping within the criminal law and justice system (Interviewees 12, 13). The leading officer of the Legal Affairs and Investigation Department of CHINADA noted that criminalisation of doping has developed in other countries, and that CHINADA launched a programme to complement criminal law in 2010. This law is not directly focusing on athletes, but the people who supply doping drugs and infringe on other people's rights (Interviewee 13). This view was also supported by the first President of WADA, Dick Pound, during an interview:

Personally, I am reluctant to contemplate athletes being criminally charged for doping, but would agree regarding suppliers and administrators having potential criminal responsibility (Interviewee 38).

However, the process of codifying doping violations in criminal law is complicated and time-consuming, as the leading officer of the Legal Affairs and Investigation Department of CHINADA noted:

We call on the NCP [National People's Congress] and CPPCC [Chinese People's Political Consultative Conference] to run a proposal [regarding the codification of doping violation in the criminal law]. The process is not easy, because there are a number of proposed criminal laws waiting to pass. But we are still hopeful (Interviewee 13).

From this perspective, it is a matter of time before doping violation is codified in the criminal law of China.

Second, the different provinces and Sports Federations have contrasting approaches to anti-doping work. According to the Anti-Doping Management Regulation of China, it is essential for the local sport bureau (province level) and the Sports Federations to establish specialised agencies/branch institutions or assign a full-time person for anti-doping work. The leading officer of the Gansu Institute of Sport Science noted:

We do not have a specialised department to manage and supervise anti-doping. We only have full-time employees from the Gansu Institute of Sport Science and the Gansu Competitive Sports Department who jointly manage it (Interviewee 6).

Except for Gansu and Qinghai, the other provinces and municipalities covered in the interviews have anti-doping working groups or anti-doping departments (Interviewees 1, 22, 27, 33, 37). The leading officer of the Guiyang Institute of Sport Science explained:

We have set up an anti-doping working group and established the working office of the Guiyang Institute of Science, which can be seen as a specialised department for anti-doping (Interviewee 33).

Some of the local Sports Management Centres assign full-time employees to work with the local anti-doping agencies. As the leading officer of Jinan Athletics Management Centre said:

We have assigned a person to manage the anti-doping work in our management centre, which is especially focusing on the anti-doping work for the athletes in our athletics management centre (Interviewee 28).

This means that the size of the agency's staff is different in each province and sports federation, depending on the influence of sports and local economic conditions. It is difficult to determine if setting up specialised agencies or providing full-time employees is a better approach.

Third, the characteristics of the media relating to the anti-doping work are worth noting. China Sports Daily is a good example. As the largest sports newspaper agency in China, it is also directly run by the CGAS and can only report what CGAS authorise them to report (Interviewee 11). **That means there is a limitation on the free press.** Regarding anti-doping, there are several advantages of a free press, which increases transparency and generates greater monitoring power (Dutta and Roy, 2016). Both of these advantages are important for improving anti-doping work in China. For example, some doping incidents in China were not reported in the first instance.

5.2.5 Economic, social and political conditions

This section is going to explain how the economic, social and political conditions impact on anti-doping. Starting with the economic, the funding for each local anti-doping agency in the provinces comes from the sports bureau at the provincial level. The local economic conditions influence anti-doping work, especially in terms of how many anti-doping delegated tests they can run. A summary of key points from the interviews, can help to explain why the number of delegated tests is different in different provinces:

1. It depends on the number of athletes.
2. It depends on the number of different high-risk sports affected by doping, for example, track and field, swimming and weightlifting.
3. It depends on the local economic conditions; if the sports bureau at the provincial level does not have enough funding for doping testing, they decrease the number of tests.

Anti-doping policy applies only to a small proportion of the Chinese population. Thus, compared with other public policies, anti-doping policy does not attract as much attention from the public and society. As a result, public opinion has a limited impact on anti-doping implementation. This suggests the central government may take more time to deal with anti-doping issues in comparison with other civic issues. Potential measures to implement anti-

doping regulations include codifying doping violations into criminal law and setting up a new administration unit (National Sport Arbitration system) which relates to the anti-doping work.

There is no sports arbitration in China at the moment; if the athletes or coaches are not satisfied with the punishment decision after the hearing, they can appeal to the international Court of Arbitration for Sport (Interviewee 19).

On the political side, China defines itself as a multi-party state under the leadership of the Chinese Communist party (CCP) and adopts the institutionalized political consultation system (Saich, 2015). However, only the CCP holds any effective power and it can be understood as a one-party system. No other party can directly influence policy implementation, meaning that the political conditions are almost identical across the country's all provinces and municipalities (Saich, 2015).

5.2.6 The disposition of implementers

All interviewees had a positive attitude towards anti-doping. However, the interviewees from each local institute of sports science showed varying degrees of understanding of anti-doping policy implementation. Although each province has adopted CHINADA policy, its implementation will be affected by differences in local circumstances. For example, the leading officer of the Hunan Institute of Science noted that they were not only following CHINADA regulation but had also adapted it to the local context (Interviewee 37). This means that they have a better understanding of anti-doping regulations in their own province.

The other point worth noting here regards the interviewees' behaviour during the interview. Anti-doping has always been considered a sensitive topic, so the discussions do not always go smoothly. For example, during some of the interviews, several of the interviewees did not want their interview recorded (Interviewees 3, 4, 16, 32) and some of them directly rejected

requests to record (Interviewees 2, 15, 31). 14 athletes and coaches participated in the interviews and answered each question in accordance with the questionnaire. However, answers related to sensitive topics were extremely unclear and general. The behaviour of those interviewees may not have had a direct impact on the implementation of anti-doping policies, but could influence the further development of the policies. The more a policy is openly discussed and critiqued, the more opportunity there is to develop it. No single country has a perfect anti-doping policy, and there have always been flaws during policy implementation. Therefore, CHINADA should consider encouraging officials, athletes and coaches to be more transparent in their reflections and ideas for improvement.

5.2.7 The dynamic character of the implementation process

Any change or execution in one of the variable may have consequences on others. The arrows in Figure 1 show the different relationships between the six criteria and their implementation performance. The standards and objectives of a policy have an indirect impact on performance. As Van Meter and Van Horn (1975, p. 474) noted, ‘what influence this component has on the dependent variable is mediated by other independent variables’. This means that implementing the public policy will be affected by both the way in which standards and objectives are communicated to implementers and the extent to which they facilitate oversight and enforcement (Van Meter and Van Horn, 1975).

‘Standards and Objectives’ have an indirect effect on the ‘Disposition of Implementers’ through ‘Inter-Organisational Communication and Enforcement Activities’. The implementers are the staff in charge of local anti-doping work, and the way they understand the policy are through the communication with superiors and the degree of hierarchical control of each agency. Their responses to the policy are important and can reflect their perception and interpretations of anti-doping policy objectives. They adopted various ways to

support the policy, which can be partially explained by their understanding and interpretation of the standards and objectives. Some local anti-doping agencies in China have elaborated on the anti-doping policy from CHINADA, but some have not. These findings do not lead us to conclude that the provinces that did not elaborate on the anti-doping policy are in low compliance with the anti-doping policy in China. **Rather, it shows that the provinces that did elaborate on CHINADA anti-doping policy may have a better understanding of their discretions and have a positive impact on the anti-doping policy implementation.**

Due to the strong administration system and enforcement activities, all of the implementers have complied with the orders from CHINADA. However, if the standards and objectives of the anti-doping policy are vague in some aspects, the implementation may have some flaws. China is a vast country, and, even though the strong administration system can be a really effective tool for guaranteeing the widespread acceptance of anti-doping policy, there are still risks associated with less scrutiny in some provinces. As discussed, CHINADA can provide clear requirements for the athletes, including that they pass the anti-doping knowledge exam before any national or international competition. However, it is harder for CHINADA to make a coherent policy for each province and municipality and to ensure they adopt the same methods and intensity of anti-doping education. All the athletes interviewed firmly believed that they had anti-doping education requirements before every major competition and 3 athletes (Interviewees 17, 18, 23) noted that during the training time, they barely received any information or education. As one walking race athlete mentioned:

'I cannot say that we frequently have anti-doping education during the out-of-competition period'. (Interviewee 17)

Anti-doping education may have flaws and inconsistencies which, as CHINADA and the local anti-doping agencies noted, compare with what the athletes actually received. The

vague standards and objectives of some aspects of the anti-doping policy and loose enforcement activities may lead implementers to have low levels of engagement, planning and response to policy directives.

The 'Policy Resources' in Figure 1 are directly linked to three other components of the model. One of the links is between the 'Policy Resources' and 'Inter-Organisational Communications and Enforcement Activities'. The link between these two components is significant. For example, jurisdiction plays a vital role in implementing the enforcement activities, and all anti-doping punishments rely upon administration power. However, the heavy reliance upon the administrative power of the CGAS and the central government may have consequence on compliance to the WADC. Article 20.5 of the WADC says, 'The National Anti-Doping Organisations need to be independent in their operational decisions and activities from sport and government' (WADA, 2020a:129). In December 2020, WADA even provided a new 'Guide for the Operational Independence of National Anti-Doping Organizations', which has significant ramifications for compliance with the WADC (WADA, 2020b). This means that WADA takes each NADO's independence into account. CHINADA is perceived as a department under CGAS (Interviewee 12). It is worth mentioning that for anti-doping matters in China, the top-down model, although providing efficiency, may also result in potential conflicts of interest.

The policy resource also has a directly impact on the 'Disposition of Implementers'. For example, some DCOs are not satisfied with their subsidies for out-of-competition testing (Interviewee 30), which may have an impact on the anti-doping work. The third direct link is between the 'Policy Resources' and 'Economic, Social and Political Conditions'. Van Meter and Van Horn (1975) define this as follows: the actors may not comply with the policy

because the benefit is less than the cost to the participant. This might not be relevant as all the anti-doping stakeholders in China are obligated to comply with the anti-doping policy.

The 'Economic, Social and Political Conditions' will also affect the other two components- 'Characteristics of the Implementing Agencies' and the 'Disposition of Implementers' and subsequently, policy performance; 'The environment condition (economic, social and political) can have a significant effect on the willingness and capacity of jurisdiction or organisations to support policy implementation' (Van Meter and Van Horn, 1975, p. 476). All of the anti-doping stakeholders in China are required to implement and comply with the anti-doping policy, and the jurisdictions for stakeholders such as the local anti-doping agencies and sports federations are quite similar and clearly noted in the 'Anti-Doping Management Regulation of China'.

Environmental conditions will also influence the 'Disposition of Implementers'. If the new policy is designed to deal with a serious problem and gets support from private citizens and interest groups, the implementers would be more willing to accept the policy goals, standards, and objectives (Van Meter and Van Horn, 1975). Conversely, if the problems are not severe and interest groups are not interested in or are even against the programme, the implementers may feel dissatisfied with the policy implementation. Private citizens have a weak impact on anti-doping policy in China, and since China has a one-party political system, no interest group will influence the central government's decision. Therefore, in this case, the implementers will need to obey the orders from the central government. We can conclude that, among the three environmental factors noted by Van Meter and Van Horn, only the economic factor has a quite obvious impact on the anti-doping policy

implementation performance. The influence of social and political factors on anti-doping policy implementation is weak or non-existent in China.

The other possible links are between ‘Inter-Organisational Communication and Enforcement Activities’ and the ‘Characteristics of the Implementing Agencies’. As Van Meter and Van Horn (1975, p. 477) concluded: ‘Enforcement and follow-up activities can provide the implementing agencies with added vitality and expertise improving their capacity to execute programmes’. Joint responsibility makes each sport organization more accountable to CHINADA in the process of anti-doping work. Van Meter and Van Horn (1975) noted that the enforcement activities are influenced by the implementing agency, as many of the enforcement mechanisms can only be utilised within a single organisation or system. All the enforcement mechanisms for the implementation of anti-doping policy can go through all the relevant sport organisations smoothly as they are all in the sport administration system in China. However, this enforcement mechanism is not that same for local schools or public clubs because of the different administration systems.

In sum, this model demonstrates a link between policy and performance and addresses the relationship between the six criteria. However, there is no policy model that can fit all situations, especially in the unique Chinese political context. Therefore, a new model of anti-doping policy implementation, built upon Van Meter and Van Horn’s (1975) theory, can be created on the basis of the Chinese environmental conditions. The following diagram depicts this adapted model.

[Insert Figure 3 about here]

The new element is added in this new approach is ‘The Central Government’. It is clear that the central government plays a dominant role in the whole policymaking and implementation

process, which can directly influence policy ‘Standards and Objectives,’ ‘Resources,’ and ‘Policy performance’ in China. The policy performance can reflect the impact of the policy implementation. **In this study, the policy performance can be understood as the degree of anti-doping programmes that is actually delivered.** This new diagram also uses the red and green lines to indicate significant and non-significant relationships between each element. Specifically, some characteristics of each criterion and links noted by Van Meter and Van Horn (1975) are not applicable. One of the characteristics of the ‘Economic, Social and Political conditions’ is the conflict between different partisan groups, which is not applicable in China. Some links are also less obvious, such as the impact of ‘Policy Resources’ on the ‘Economic, Social and Political conditions’. However, some links are comparatively significant, such as the ‘the Disposition of Implementers’ and the ‘Characteristics of the Implementing Agencies’ are influenced by the ‘Enforcement Activities’.

After looking at the Chinese anti-doping policy from the perspective of this model, it can be concluded that the implementation of the policy has been effective from an output perspective. For example, anti-doping in China have clear organisations, directives and structures, and because of the strong administration system, all the implementers have complied with the work arrangements and followed orders from CHINADA. However, we are not assuming implementation is the same as effectiveness and there are still some potential risks and flaws during policy implementation that may impact the performance of the anti-doping policy from both output and outcome perspectives, such as the vague standards and objectives of some aspects of the anti-doping policy, the limited policy resource (shortage of funding for anti-doping work in some provinces), the public’s slow awareness of anti-doping, and restrictions on the media’s freedom to investigate issues and publicise sanctions.

6 Conclusion

This research adopts the Van Meter and Van Horn model to understand anti-doping policy implementation in China, reflected in the 41 interviewees' experience of the implementation of anti-doping policy. It contributes two significant aspects to the literature: demonstrating what Chinese anti-doping work looks like from policy implementation perspectives; identifying the challenges and barriers China faces in anti-doping development.

Anti-doping work in China is always a topical issue in the world of sport. International media, athletes and anti-doping experts have raised suspicions that China has a serious doping problem. However, the interviewees, especially those from other countries and international organisations, only had a basic conception of anti-doping work in China (Interviewees 38, 39, 40, 41). Even the interviewees from WADA and Norway's anti-doping agency were not familiar with the details of anti-doping work in China. They might be familiar with some programmes, but they had a limited understanding of how to execute those programmes and how to guarantee that those programmes could successfully cover such a large country with a large number of athletes. **Therefore, this study has addressed a gap in the literature relating to anti-doping in China and shows the nature of the anti-doping administration and management system, which can explain how an anti-doping policy can be implemented in China.** After using Van Meter's and Van Horn's model, the findings reveal that the Chinese government has demonstrated its willingness to implement and comply with an anti-doping policy. Moreover, because of its strong central administrative power, street-level officials have complied and have followed the orders of their superiors. **This has, on the face of it, resulted in the current policy's effective and smooth implementation in China, and also demonstrated China's commitment to the WADC. China has continued to make improvements in anti-doping as a global effort in the fight against doping. For**

instance, in 2018, China decided to set up a National Doping-Control Laboratory in Shanghai (CHINADA, 2018). If this laboratory is successfully accredited by WADA, China will become the first country to host two accredited doping laboratories. Moreover, CHINADA has officially recognized doping violations as a criminal offence⁵ from the 1st of January 2020 (CHINADA, 2019b). However, as in many other countries, the current anti-doping policy in China has a lot of room for improvement.

Therefore, the second practical contribution is to reflect upon factors that may have had an impact on policy implementation and to identify challenges and barriers. For example, CHINADA needs to promote specific regulations and take actions to prevent doping within student and mass participations sports. CHINADA also needs to pay more attention to the DCOs. On the one hand, it is necessary to increase the number of DCOs with the rise in the number of doping tests. On the other hand, the DCOs' work status also needs to be improved by, for example, adopting a more effective way to distribute in- and out-of-competition doping tests. We have also found other main challenges facing CHINADA: setting up a national sports arbitration body. Moreover, CHINADA's annual testing plan may need to pay more attention to the provinces that have insufficient funding for the delegated testing.

This study has only shown that the Chinese government has effectively implemented the current anti-doping policy and practices at national level. According to the current standard of implementation from WADA, China has achieved a high degree of compliance with the WADC. However, WADC compliance and good implementation are not sufficient to conclude that a policy is effective. Other countries might learn not to assume that either and

⁵ This law was just published after this research and called 《An Interpretation of Criminal Offence in Smuggling, Illegal Business Practices, and Illegal Use of Anti-doping》. This law clearly focuses on drug traffickers who provide drugs for others rather than on athletes.

focus on effectiveness as much as implementation, and WADA could develop a framework for assessing effectiveness based in prevalence and social science measures of risk that go beyond simple measurements of implementation (i.e. the number of education workshops, the number of tests, etc.). It is clear that Russia appeared to be compliant during their doping period and was successfully hiding a doping sub-culture as there were no measures of effectiveness to monitor anything other than compliance (Martensen and Møller, 2017). This study has explored the complex nature of the Chinese policy implementation, in relation to organisation, progress, strengths and weaknesses. It is a fascinating context which contrasts in some ways with 'Western' societies, and while there are many examples of good practice, there is still scope for change and improvement.

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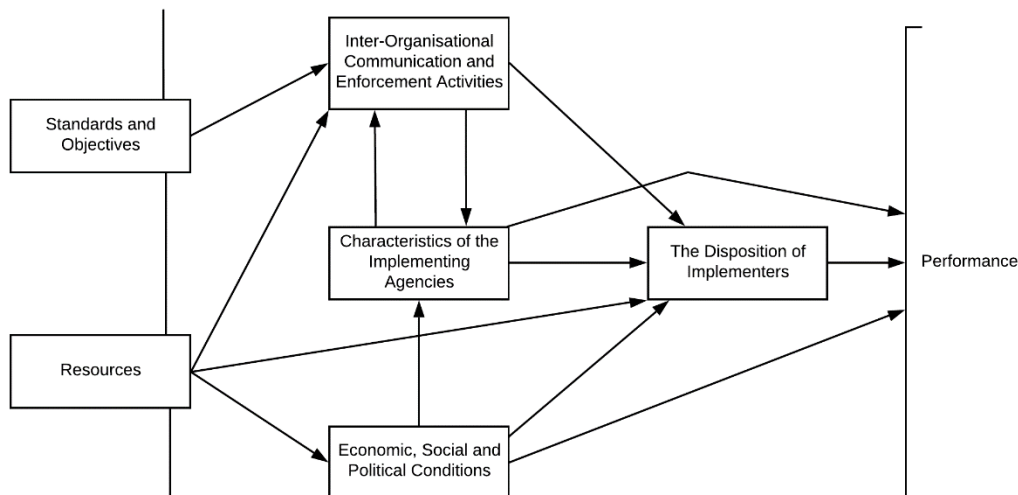
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Figure 1. A model of the policy-implementation process



Source: Van Meter and Van Horn (1975, p. 463).

Table 1. The number of interviewees of different types in different provinces, municipalities and Countries.

| Number | Profiles of interviewee | Location (Where the interview took place) |
|---------------------------|--|---|
| First-round of interviews | | |
| 1 | An official from the Shanghai Sport Science Centre | Shanghai |
| 2 | A scholar from Shanghai University of Sports | |
| 3 | A Mid- and long-distance running coach from the Gansu Province team | Gansu (Lanzhou) |
| 4 | A marathoner from the Gansu Province team | |
| 5 | An official from the Lanzhou College of Sport | |
| 6 | An official from the Gansu Sport of Institution Science | |
| 7 | An official from the Gansu Athletic School | |
| 8 | A coach from the Gansu Athletic School | |
| 9 | An official from the Gansu Competitive Sports Department | |
| 10 | An associate Professor from the Beijing Sport University | Beijing |
| 11 | A journalist from the China Sports Daily | |
| 12 | An official from CHINADA | |
| 13 | An official from The Legal Affairs and Investigation Department of CHINADA (interview twice) | |
| 14 | An official from the Swimming Department of the Swimming Administrative Centre | |
| 15 | A canoe and kayak athletes | |
| 16 | A judo athlete from the Beijing Sport University | |
| 17 | A walking race athlete from the Beijing Sport University | |
| 18 | A synchronised swimming athletes from the Beijing Sport University | |
| 19 | A sport legalist from the Capital University of Physical Education and Sports | |
| 20 | A Journalist from the Xinhua News | Anhui (Hefei) |
| 21 | A walking race coach form the Hefei Province team | |
| 22 | An official from the Anhui Institute of Sports Science | |
| 23 | A walking race athlete from the Hefei Province team | Guangdong (Guangzhou) |
| 24 | A journalist from the Guangdong Radio and Television station | |
| 25 | An official from the Guangzhou Institute of Sports Science | |
| 26 | A track and field coach from the Guangzhou track and field team | Shandong (Jinan) |
| 27 | An official from the Jinan Institute of Sport Science | |
| 28 | An official from the Jinan Athletics Management Centre | |
| 29 | A track and field coach from the Jinan track and field team | Qinghai (Xining) |
| 30 | An official from the Qinghai Institute of Sport Science | |
| 31 | An official from the Qinghai Competitive Sports Department | |
| 32 | A walking race coach from the Xining Sport team | |
| 33 | An official from the Anshun Sports Bureau | |

| | | |
|----------------------------|---|-------------------------------|
| 34 | An official from the Guiyang Institute of Science | Guizhou (Guiyang & Anshun) |
| 35 | A coach from the Hunan Athletics Management Centre | Hunan (Changsha) |
| 36 | A long jump athlete from the Hunan Province team | |
| 37 | An official from the Hunan Institute of Science | |
| Second-round of interviews | | |
| 38 | Dick Pound (The first president of WADA) | UK |
| 39 | Mr. Anders Solheim (CEO of Anti-Doping Norway) | UK |
| 40 | Mr. Andy Parkinson (Former Chief Executive of UK Anti-doping) | UK |
| 41 | An Official from WADA | UK |

Figure 2. Anti-Doping Administration System in China.

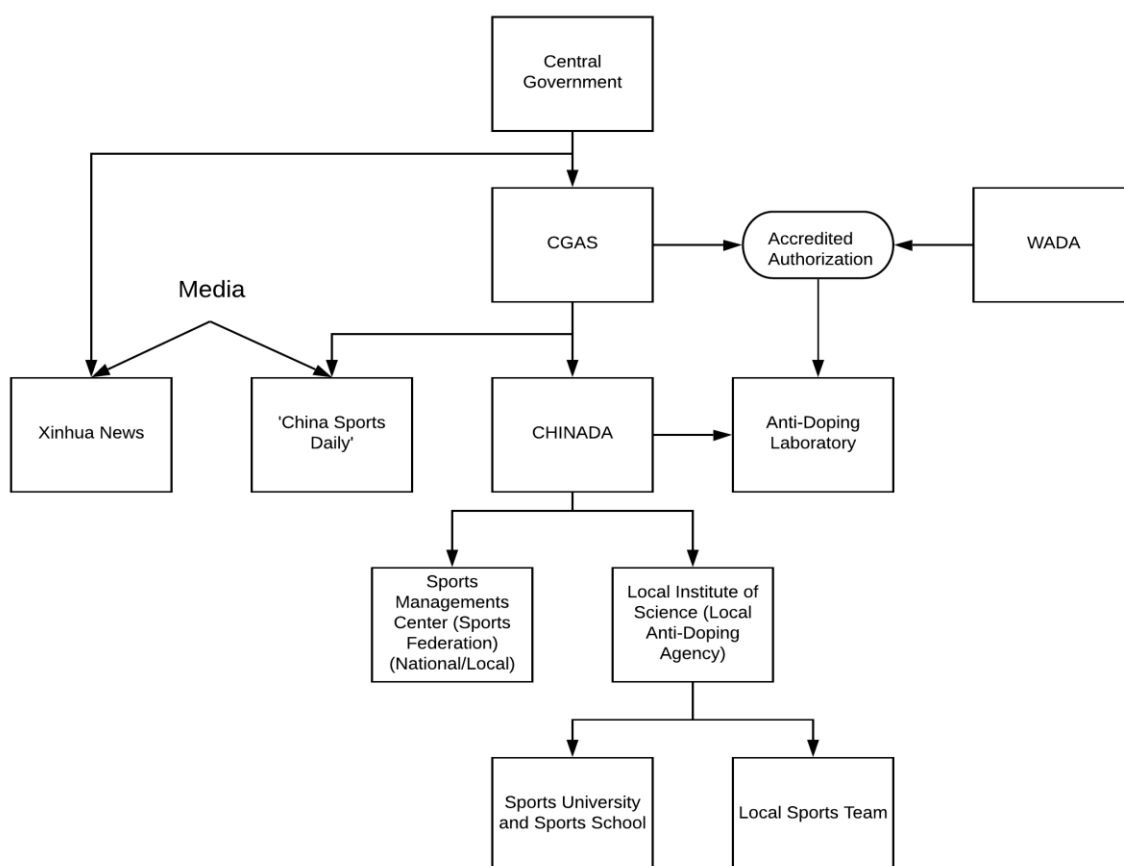


Figure 3. The developed Van Meter and Van Horn's model.

