ATHLETES AND COACHES' PERSPECTIVE ON CLEAN SPORT

Makuc, N., Dvoršak, J., Kivinukk, E., Müller, D.,
Smrdu, M. & Kajtna, T.

»The book Athletes and coach's perspective on clean sport presents the findings of a large international research on the view of elite athletes and coaches on doping. This is a unique perspective of doping, because it focuses not on what doping is, but reflects the opinions on doping of the population, at which we are trying to prevent its abuse. The number of participants is remarkable, as literature review shows that there is but little published research on that scale with an international sample.«

Matej Tušak, Ph. D., psychologist

»Fight against doping is on a high level in Slovenia, as SLOADO took a major step in the direction of raising athletes and other sports participants' awareness with its involvement in European research projects. Attitudes towards doping and fight against it are a complex topic, which is and has to be covered by many scientific disciplines and I believe that the book before you presents a major contribution to the field of clean sport, as there is lack of such existing literature…«

Lovro Žiberna, Ph. D., mag, pharm.

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INTRODUCTION

Doping presents a threat to clean sport, it is a threat to fair play and to the values that sport can teach – hard work, discipline, integrity, honour. The responsibility for the anti-doping work lies primarily in the hands of the World Anti-doping Agency (WADA) and, nationally, National Anti-Doping Organisations (NADOs), who focus on their task from the widest possible perspective. In addition to offering education and spreading awareness about doping and a carefully planned testing programme, WADA is aware that its work can be done better with more knowledge. We often see that attitudes and opinions about doping will affect the probability that athletes will disobey doping rules, and thus we decided to research some of these attitudes and opinions.

The book before you presents the findings of a large international study on views and opinions about different aspects of doping. A total of 1,118 participants responded to our questionnaire, with 705 athletes and 408 coaches, 725 males and 388 females. A total of 528 of the respondents were from Austria, 142 from Estonia and 448 from Slovenia.

These countries have one similarity – they are all fairly small when it comes to the population, yet extremely successful when it comes to athletic results. This means that every athlete they "lose" to doping is important, as children lose their role models, associations lose athletes they can rely on to bring them recognition and so on. Thus the work of NADOs in such countries is extremely important.

The questionnaire we used was developed by Zentrum für Sportwissenschaft und Universitätssport der Universität Wien. It was originally written in German and was later translated both into Estonian and Slovenian, and the latter two versions contained a few additional questions.

The structure of the book is based on the sets of questions in the questionnaire. First we inquired about the participants' personal attitudes towards sport. Then we asked for their opinions on the development of sport, then about their attitudes toward NADOs and their familiarity with their operations.

We were also interested in how they obtain information about different aspects of doping, how satisfied they are with NADOs' operations and information, how satisfied they are with the testing programmes and how with NADO prevention programmes. In addition we asked some questions about their knowledge of doping and about anonymous reporting.

On each topic we compared the results of athletes and coaches, of male and female participants, and those from participants in the three countries. We also compared participants from team and individual sports, from sports where doping violations are more frequently found to those in which they are less common sports, athletes who have already been tested for doping with those who have not, and athletes who have already participated in doping awareness programmes with those with those who have never done so. Finally we compared athletes who have been very successful in their careers (winning medals in major competitions) with those who have been less successful.

The results presented in this book give an interesting overview about how the athletes and coaches see doping and efforts for clean sport. Several practical implications of the results can be found throughout the book, and we believe that many readers will find ideas for their research or practical work in them.

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1. CHARACTERISTICS OF PARTICIPANTS

This chapter presents the demographic characteristics of the participants in our study. We found a large body of research when looking for studies on attitudes and knowledge about doping, the majority of it involving the use of questionnaires and with the participants mainly being athletes. Interviews were typically used for asking about more sensitive issues, where questionnaires would be unlikely to touch the topic into depth. For example, Erickson, Backhouse, and Carless (2017a) conducted 14 interviews on the role of parents in preventing doping, educating their children about doping, and creating the attitudes towards doping held by their children. Goldsmith (2015) interviewed 10 athletes about whistleblowing and used the findings for his doctoral dissertation. Similarly Whitaker, Backhouse, and Long (2014a) interviewed 9 athletes on reporting doping in sport, asking them about their views on doping, if they would be willing to disclose a friend who they knew was doping, asking what dilemmas they would face whilst making such a decision, and similar questions.

As our research also focused on coaches, we will first present a brief overview of questionnaire-based studies which also included this group. Backhouse and McKenna (2012) carried a review of studies in which coaches were examined with regard to their impacts on athletes' attitudes toward doping, and found four studies with a significant number of participants, outlined as follows. Fjeldheim (1992, in Backhouse & McKenna, 2012) included 100 instructors and sports leaders; while Laure, Thouvenin, and Lecerf (2001, in Backhouse & McKenna, 2012) included 260 graduate professional coaches, of which 70% were male. Scarpino et al. (1990, in Backhouse & McKenna, 2012) used a sample comprised of 92 coaches, 22 managers and 102 doctors, of which 68% were male, while Fung and Yuan (2006, in Backhouse & McKenna, 2012) examined 114 community coaches. The participants in all four of these studies were mostly male, and the mean participant age across the two studies reporting this variable was 30 years old.

There are relatively few studies where athletes and coaches were both included and asked the same set of questions. Of these, Šajber, Rodek, Escalante, Olujić, and Sekulić (2013) investigated swimmers' and their coaches' knowledge of sports nutrition and doping, and asked where they obtained information on both issues, with a total of 55 swimmers and 22 coaches completing the related questionnaire. A similar design was used by Seif Barghi, Halabchi, Dvorak, and Hosseinnejad (2015), who examined a group of 239 Iranian football players and 136 coaches, and asked about their knowledge of and attitudes towards doping.

The next two tables give the demographic details of the participants in the current study.

Table 1

Demographic structure of participants

		Austria	Estonia	Slovenia	Total
	men	327	91	307	725
all participants	*women*	196	51	141	388
	total	528	142	448	1118
	men	151	40	129	320
coaches	*women*	44	17	27	88
	total	195	57	156	408
	men	176	51	178	405
athletes	*women*	152	34	114	300
	total	328	85	292	705

Table 1 shows that this was one of the largest studies yet conducted into this topic, and we believe its greatest value lies in the fact that it involves participants from three relatively small countries with a lot of athletic success. Based on this demographic structure, all the following chapters will first compare the views of participants according to their country of origin, and then compare views and attitudes of coaches and athletes. These two comparisons included all participants, while all other comparisons included only athletes – the first comparison made in each chapter looks at the differences between men and women.

Table 2

Age structure of participants

		Austria	Estonia	Slovenia	Total	F	p(F)
age M (SD)	*total*	32.76	35.73	29.02	31.64	12.28	0,00
		(16.69)	(17,75)	(13.88)	(15.93)		
	men	35.60	38.27	30.89	33.94	10.40	0,00
		(16.76)	(18,06)	(15.02)	(16.43)		
age by gender	*women*	28.45	31.20	24.96	27.55	5.98	0,00
		(12.46)	(16.38)	(9.87)	(12,36)		
	p (t)	0.00	0.00	0.00	0.00		
	athletes	25.46	23.84	22.18	23.91	6.00	0,00
age by category		(14.16)	(8.12)	(8.94)	(11.86)		
	coaches	44.98	53.47	41.82	44.96	18.25	0,00
		(12.52)	(12.60)	(12.34)	(12.98)		

Table 2 shows the age structure of the participants, and we can see that the ages of participants are similar to those in other studies, as were the years of experience in sport, shown in the next table.

Table 3

Years of experience/duration of career at the top of each participant's sport

	coaches				athletes				
		by country				by country			
	Total	***Austria***	***Estonia***	***Slovenia***	***Total***	***Austria***	***Estonia***	***Slovenia***	**all together**
less than 1 season	2	2	0	0	6	5	1	0	**8**
1 or 2 seasons	10	5	0	5	27	18	0	9	**37**
between 2 and 5 seasons	37	16	0	21	106	73	6	27	**143**
5 seasons or longer	360	173	57	130	563	229	78	256	**923**

Many large studies include athletes from a large number of sports. For example, Mazanov, Backhouse, Connor, Hemphill, and Quirk (2013) examined the views and knowledge of athletes support personnel on doping, with a total of 292 participants who responded to a questionnaire, 39 of who were also interviewed on certain aspects of the focal issues. The average age of their respondents was 40.2 years old, with an average 16.8 years' experience working at the top levels of their sport. Dunn, Thomas, Swift, Burns, and Mattick (2010) included 24 interviews with key experts on doping in a larger, questionnaire-based study, which included 974 athletes. In this work elite Australian athletes were asked about their attitudes to doping control system, and their own experience with such testing.

We also found several other studies where a large number of participants, elite athletes from several sports, were examined with regard to doping. For example, Overbye (2016a) studied how elite Danish athletes perceive and trust the functioning of the doping testing system in their sport, with a total of 645 participants included from 40 sports, of which 41% were female and 59% male. The response rate in this study was just 43%, which might indicate that doping remains a sensitive subject for athletes, who are thus reluctant to discuss it. Another large study was conducted in Poland, where 830 athletes (31.69% female and 68.31% male) responded to questionnaires about their knowledge and attitudes towards doping (Sas-Nowosielski & Swiatkowska 2007). The authors noted that one interesting finding was that only 45.22% of the respondents answered "yes" when asked about their knowledge of doping.

In Tavani et al. (2012) 508 Italian athletes responded to a questionnaire on their beliefs and attitudes about doping, and the results showed they the respondents believed that doping (mainly supplement use) is a widespread phenomenon in sport. Another study with a large number of participants was done on 811 Polish students of physical education, of which about a third were professional athletes – they were asked about their anti-doping education, and how they get the information on anti-doping (Posiadala, Smorawinski, Pluta, & Andrzejewski, 2009).

The details of the current study's participants, with regard to what sport they engage in, are shown in Table 4.

Table 4

Number of participants according to the sport

		by country				
	Total	***Austria***	***Estonia***	***Slovenia***	***coaches***	***athletes***
track&field athletics	123	71	21	32	43	80
football	94	19	4	71	46	48
volleyball	70	33	20	17	20	50
basketball	67	41	16	10	19	48
swimming	50	10	17	23	20	30
handball	50	14	1	35	14	36
equestrian	49	47	2	0	11	38
Nordic skiing	46	15	9	22	10	36
parasports	46	20	0	26	14	32
ice-hockey	43	18	0	25	16	27
judo	34	13	3	18	12	22
alpine skiing	33	4	0	29	13	20
golf	29	10	0	19	7	22
rugby	28	28	0	0	7	21
rowing	27	13	4	10	8	19
ski jumping	24	4	0	20	8	16
cycling	22	1	4	17	5	17
archery, biathlon, kayak-canoe, sports climbing, table tennis, sailing, orientation, sports shooting	11-19	2-15	0-5	0-11	2-7	5-12
artistic gymnastics, triathlon, jiu jitsu, Nordic combined, wrestling, badminton, ultimate frisbee, martial arts, tennis, water skiing	6-10	2-9	0-5	0-7	0-8	1-8
boxing, weight-lifting, beach volleyball, dance, bob sled, karate, racketlon, sled-skeleton, billiard, snowboard, curling, 9-pin bowling, rhythmic gymnastics, cheerleading, checkers, roller-sport, taekwondo, Thai boxing, water polo, bodybuilding, figure skating, fistball, futsal, kickboxing, moto sports, sky diving, fencing, surfing, chess	1-5	0-4	0-2	0-3	0-5	0-4
Total	**942**	**418**	**119**	**406**	**316**	**626**

Based on such a large variety of sports practiced by the participants, we decided that the most reasonable comparison would be between team and individual sports, the distribution of which is shown in the following table.

Table 5

Number of participants according to the type of sport

		by country		
	Total	***Austria***	***Estonia***	***Slovenia***
individual sports	675	313	99	263
team sports	386	173	43	170
Total	1061	486	142	433

A number of studies have been conducted on athletes from a specific sport or a sport group – for example, 44 high-level sailing athletes were asked about dietary supplements, knowledge about them and their use and doping-related issues (Rodek, Sekulić, & Kondrič, 2012). Some of the same authors also worked on a study in which 65 tennis players were asked about the same set of topics (Kondrič, Sekulić, Uljević, Gabrilo, & Žvan, 2013). Some research focused on certain specific issues, such as ethnic-specific views on doping among 181 football players, with this particular study done in Bosnia and Herzegovina, an ethnically diverse country (Ćorluka, Gabrilo, & Blažević, 2011).

240 athletes in track & field throwing events were, as representatives of so-called strength/power athletes, asked about their attitudes towards the use of prohibited substances and doping control system (Judge, Bellar, Craig, & Gilreath, 2010), and this is not the only research in which certain sports or groups of athletes are addressed as being more prone to doping. Such sports are typically those in which more doping is discovered and that might have a reputation for such abuse. In our study, we decided to call these "exposed" sports. Turning to the literature, with regard to this group of sports 72 Spanish cyclists were asked about their attitudes to doping (Morente-Sanchez, Mateo-March, & Zabala, 2013) and 426 Iranian wrestlers were investigated for both their knowledge of and attitude to doping (Halabchi, Esteghamati, Razzaghi, & Noori, 2011). Some authors also specifically examine sports which are "typically not associated with doping", such as the study by Kondrič et. al. (2011) on substance the abuse habits of 187 elite racket-sports athletes.

In our study the group of exposed sports, which will be compared in every chapter, consisted of cycling, track & field athletics, biathlon, Nordic skiing, swimming and weight-lifting, with the following table showing the sizes of the exposed and non-exposed groups.

Table 6

Number of participants according to the exposure of the sport

		by country		
	Total	***Austria***	***Estonia***	***Slovenia***
exposed sports	248	104	52	92
non-exposed sports	839	393	90	356
Total	1087	497	142	448

We also found studies which examined how many athletes have been already tested for doping. For example, Dunn et al. (2010) reported that 66% of athletes said that they had been tested in the past two years in competition, and 41% out of competition, Elbe and Overbye (2015) reported similar figures, with 30.5% of their participants not having been tested in the past year, while 55.5% were tested one to three times in the past year, and 14% were tested more than three times.

Table 7

Number of participants who have already been tested for doping and number of tests

have you (your athletes) ever been tested	coaches				athletes				
		by country				by country			
	Total	***Austria***	***Estonia***	***Slovenia***	***Total***	***Austria***	***Estonia***	***Slovenia***	**all together**
yes	178	72	24	82	402	239	47	116	580
no	230	123	33	74	306	92	38	176	536
M (SD) of tests in the past 12 months	3.82 (4.89)	5.31 (5.56)	2.00 (1.41)	2.20 (3.67)	1.88 (2.72)	2.09 (3.21)	1.93 (2.06)	1.60 (2.37)	2.70 (3.91)

Table 7 shows that about 57% of the athletes in our sample have been already tested, which corresponds with previous studies, while the average number of tests is similar to that reported by Elbe and Overbye (2015). One of the comparisons made in each chapter of this study is between athletes who have already been tested for doping and those who have never been tested before.

There is little empirical evidence on how many athletes have participated in NADO doping prevention programmes or received anti-doping information. For instance, Neeraj, Maman, and Sandu (2011) found that less than 50% of the athletes they examined had received information about prohibited substances. As NADO doping prevention programmes in Austria, Estonia and Slovenia are strong, we wanted to see how information received in these programmes affects attitudes and opinion about doping, and thus compared athletes who had attended NADO doping prevention programmes with those that had not.

Table 8

Participation in doping prevention programmes and number of programmes the coaches and athletes participated in the past 12 months

have you (your athletes) ever participated in a doping prevention programme	coaches				athletes				
		by country				by country			
	Total	***Austria***	***Estonia***	***Slovenia***	***Total***	***Austria***	***Estonia***	***Slovenia***	**all together**
yes	198	67	19	112	284	146	22	116	482
no	212	130	38	44	424	185	63	176	636
M (SD) of programmes in the past 12 months	1.68 (2.76)	2.25 (3.54)	1.50 (1.24)	1.03 (1.42)	0.92 (5.81)	0.78 (7.62)	1.75 (1.29)	1.03 (0.82)	1.22 (4.86)

Table 8 shows, that the share of athletes who have participated in a doping prevention programmes or anti-doping educational programme is 40%, which is a bit less than what Neeraj et al. (2011) reported, but the percentage is quite close to that in the case of coaches.

Participants in this study were quite diverse in quality and thus the greatest success of their career, with the related data shown in the following two tables, although unfortunately we were not able to find any pre-existing studies where athletes' views or attitudes on doping were compared with their success.

Table 9

Level of competition of the participants

	coaches				athletes				
		by country				**by country**			
	Total	***Austria***	***Estonia***	***Slovenia***	***Total***	***Austria***	***Estonia***	***Slovenia***	**all together**
Olympic/Paralympic Games	93	31	10	52	98	12	22	64	191
World Championships	129	67	26	36	176	86	16	74	305
European Championships	62	34	10	18	163	66	28	69	225
national championships/ highest national league	101	47	11	43	209	117	18	74	310
regional competitions	17	10	0	7	43	31	1	11	60

Table 10

Greatest success of participants

	coaches				athletes				
		by country				by country			
	Total	***Austria***	***Estonia***	***Slovenia***	***Total***	***Austria***	***Estonia***	***Slovenia***	**all together**
entry in one of the abovementioned competitions	121	60	11	50	223	91	36	96	344
medal or victory in regional competitions	26	17	2	7	65	44	2	19	91
medal or victory in national level competitions	126	60	23	43	242	127	33	82	368
medal or victory in European Championships	41	12	12	17	86	36	7	43	127
medal or victory on World Championships	60	33	6	21	67	29	3	35	127
medal or victory in Olympic or Paralympic Games	35	14	3	18	23	2	4	17	58

In the final comparison in each chapter we wanted to see if there are any differences between athletes who have had more or less success in their careers and thus decided to compare those who have won a medal in a major competition (Olympic or Paralympic Games, World or European championships) with those have not.

The questionnaire used in this study was developed by Zentrum für Sportwissenschaft und Universitätssport der Universität Wien especially for this research, the questionnaire was written in German, then translated into Slovenian and Estonian, with two versions being produced, one for athletes and one for coaches. The structure of this book is based on the sets of questions in the questionnaire, with eight demographic questions and then six about the respondents' personal attitudes towards sport, six questions about their opinions on the development of sport, eight questions about their attitudes toward NADOs and six about their familiarity with how a NADO operates. These were followed by six questions on the respondents' sources of information about different aspects of doping, six about their satisfaction with their NADO's operations and the information it provides, fourteen questions about their satisfaction with the testing programme and thirteen about their satisfaction with NADO prevention programmes. We also asked the respondents thirteen questions about their knowledge about doping and three about the system of anonymous reporting. Some questionnaires omitted some questions, for example the Austrian version did not contain the questions on anonymous reporting. All the questionnaires in all three languages (both the athletes' and coachs' versions) are in the appendix.

2. ATTITUDE AND APPROACH TOWARDS SPORT

INTRODUCTION

Sport is usually recognised as a platform for the development of specific motor and also general physical skills. However, through sport many social skills (i.e. cooperation, communication, solidarity, sportsmanship) can be taught, along with many other personal values (i.e. responsibility, adaptation to the environment, planning, organisational and coping skills). Therefore, sport offers a wide range of possibilities for development, and which ones athletes choose are visible through their attitudes. These are described in different ways, but by integrating various definitions an attitude can be understood as a predisposition, observable through beliefs and emotions towards a specific object, subject or event/action, that direct an athlete's behaviour (Hogg & Vaughan, 2005; Lee, Whitehead, & Ntoumanis, 2007). An attitude can also be comprehended as an evaluation of an object (subject), ranging not just linearly on a continuum from extremely negative to extremely positive, but it can be multi-layered. As such, one can simultaneously hold different attitudes towards an object, which can also be both positive and negative, and this would therefore result in conflicted or ambivalent attitudes.

Some attitudes are inherited (Olson, Vernon, Harris, & Jang, 2001) and some are learned through different social interactions (i.e. with family, friends, different social models, society, tradition, culture, media) (Hargreaves & Tiggemann, 2003; Poteat, 2007), coercion and through direct and indirect experiences with the focal objects (De Houwer, Thomas, & Baeyens, 2001). A person's attitude also depends on socioeconomic issues such as an individual's salary, status, work environment, work, and so on. The most important time for the formation of attitudes is from the period of adolescence up to early adulthood, when attitudes become more or less permanent. Attitudes that are more highly heritable and form at early age are also stronger and more resistant to change than others (Bourgeois, 2002). But even so, attitudes are dynamic and can be taught later in one's life, can be modified and replaced (Cid, Alves, & Dosil, 2008). Mostly they can change due to novel experiences and various factors, such as changes in one's circumstances (e.g. factors that attitude originated on modify) and personality changes.

In sport, attitudes are especially important since they are considered basic mental skills, which provide the foundation for learning, sustaining continuous training and achieving long-term goals. They direct behaviour on daily basis and enable the development of skills to higher levels.

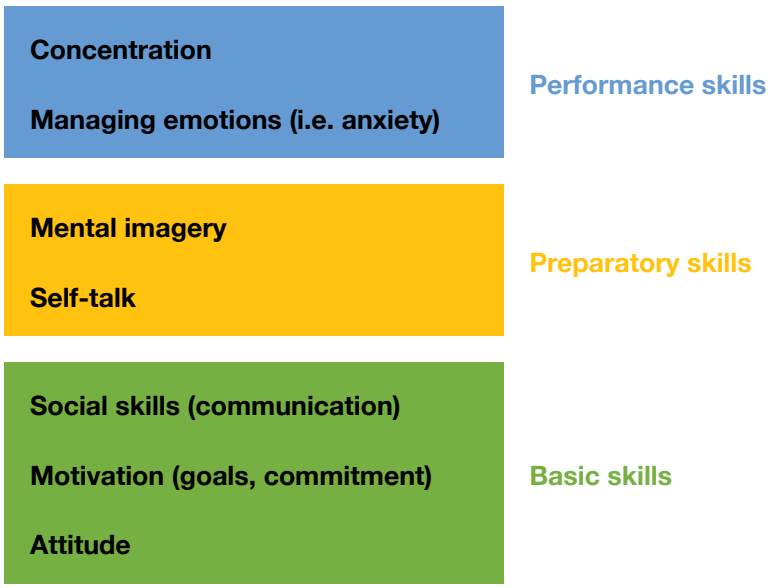

Figure 1. The performance pyramid, adapted from Lesyk (1998).

Attitudes are made up of cognitive, affective and behavioural components, although the rate and importance of each component change across people and attitudes. In general, the affective component is the strongest and most important (Stangor, Sullivan, & Ford, 1991), and the stronger the affective component is, the stronger the attitude. Attitudes are also stronger when affect, behaviour, and cognition all align. On the other hand, attitude strength is determined by cognitive accessibility. In order to make attitudes stronger or change them it is crucial that athletes have both the possibility and encouragement to think, express and discuss their attitudes to others. This is important as attitudes can be implicit, involuntarily formed and typically unknown to us, and so they can unconsciously influence and direct one's behaviour. This most likely happens when the demands on an individual are higher and he or she feels stressed or distracted (Hahn, Judd, Hirsh, & Blair, 2013), which is often the case in elite sport.

To better understand the relationship between attitude and behaviour, three key factors are important (Glasman & Albarracin, 2006):

- The attitude toward the behaviour: the stronger the attitude, the more likely the behaviour will be enacted.
- Subjective norms and the support of people important to the individual. People can be divided into high and low self-monitors. The first tend to blend in with others in order to be liked, while the latter are less likely to allow social situations to influence their behaviour. Therefore, the relationship between attitudes and behaviour will be stronger for low self-monitors than high self-monitors (Kraus, 1995).
- Perceived behavioural control: the extent to which we believe we can actually perform a certain behaviour.

These factors predict intention to perform (or not perform) a certain behaviour, and consequently also actual behaviour. However, this relationship between attitude and behaviour is not linear, but more complex and can be even circular. In other words, attitude may influence the attention towards attitude objects, the use of categories for encoding information and its interpretation, which may then influence judgement and consequently behaviour, but also the recall of attitude-relevant information, thus forming a new cycle of selective attention.

The attitude of a person is determined by psychological factors like ideas, values, believes, perception, and so on. Values are the ideals, guiding principles and set of belief we have concerning desirable behaviours or goals (Maio & Olson, 1998; Musek, 1993). As underlying factors of attitudes they motivate behaviour and guide actions. They precede attitudes and are fewer in number than attitudes, although one attitude may reflect one or more underlying values. Meanwhile, attitudes have a certain appraisal (mostly positive or negative), and values are considered as expressions of desirable ends. For example, a positive attitude toward using performance enhancing drugs might reflect an underlying value system in which achievement is highly ranked. Values are also related to decision-making, to choosing what goals to pursue, and thus have an impact on behaviour (Parks & Guay, 2009), and are in this way at the heart of motivation. Many researchers (i.e. Rokeach, 1973; Schwartz, 1994) claim that values are a link between the more general motivational construct of needs and the more specific motivational construct of goals. The self-concordance model of motivation suggests that individuals are more likely to persist at goals consistent with their values (Sheldon & Elliot, 1999), and for Rokeach (1973) values have an inherent motivational component.

Motivation is defined as an energising force that induces action, which is related to decisions (conscious or unconscious) that involve how, when, and why we allot effort to a certain activity (Pinder, 1998; Parks & Guay, 2009). There are numerous theories describing and emphasising different aspects of motivation, however in the context of the current work the most relevant is the divide between intrinsic and extrinsic motivation. This distinction is mostly presented through the theory of self-determination (Deci & Ryan, 1985), Achievement goal theory (Nicholls, 1984; Dweck, 1986) and hierarchical model of intrinsic and extrinsic motivation (Vallerand, 1997). In these motivation has two sources, with two underlying reasons for participation in any activity. In the context of the current work intrinsic motivation thus revolves around an athlete's interests, curiosity, cares or abiding values, and personal choices, with the individual participating because they find a certain activity interesting and pleasurable (Vallerand, Deshaies, Cuerrier, Pelletier, & Mongeau, 1992). Intrinsic motivation involves doing an activity for pleasure and inherent enjoyment rather than a specific (and separate) outcome (Deci & Ryan, 2000), with intrinsic motivation important for self-determined and autonomous behaviour. There are three main types of intrinsic motivation (Vallerand & Rousseau, 2001):

- Intrinsic motivation to know, which pushes a person to take part in an activity for the pleasure they receive from learning.
- Intrinsic motivation to accomplish, which happens when athletes strive for a task or goal because it brings them pleasure.
- Intrinsic motivation to experience stimulation, which occurs when a person takes part in an activity because of the satisfying feelings the act produces.

Conversely, extrinsically motivated athletes participate to obtain something they want (e.g. receiving a tangible reward, such as a medal) or to avoid something they do not want (e.g. avoiding punishment). The four sources of extrinsic motivation are (Deci & Ryan, 2002):

- externally regulated behaviour (a person being motivated strictly by outside sources);
- introjected regulation of behaviour, (where internal pressures such as fear and guilt pressure people into action and behaviours);
- identified regulation (when a person acts autonomously, because the outcomes of the action are accepted as personally important);
- integrated regulation (when a person acts autonomously because the outcomes related to the behaviour reinforce perceptions of his or her self-image).

Therefore, with extrinsic motivation as the main factor, an athlete is motivated because they must meet a requirement, they want a reward, or because completing a task helps them to maintain a particular self-image.

LITERATURE REVIEW

We have already recounted different factors that impact attitudes towards sport, however we were also interested if we can (perhaps more indirectly) connect attitudes towards sport with the attitudes for use of prohibited substances. This indirect predisposition is valuable, since athletes' often hide their values in relation to and motivation for doping, since this is forbidden and a positive attitude towards it causes a negative social response and condemnation. Only two studies, and quite old ones, have provided data which show that many athletes would use doping if it were undetectable (Tricker & Connolly, 1997). Moreover, existing models of doping behaviours emphasise the complexity of this phenomenon, and include psychological, societal and environmental/situational factors. There are many studies linking attitudes, values and motivation towards participation in sport, yet since our interest is broader than this we will outline just those which can also be connected with (un)ethical behaviour in sport.

Research that studied the connection between ethical attitudes and self-determination theory has determined that intrinsic or autonomous motivation for participation in sport (i.e. motivation based on enjoyment and valuing of sport) are positively linked to prosocial attitudes and negatively related to antisocial ones. The opposite pattern of results was observed between extrinsic or controlled motivation and prosocial and antisocial attitudes. Petroczi and Aidman (2007) carried out a meta-analysis and determined that taking prohibited substances is mostly related to the desire for better performance, winning and improving one's appearance. Thus, there is evidence that values are important precursors of achievement motivation and that ethical attitudes can be meaningfully predicted by the achievement goals and motivation of athletes (Lee, Whitehead, Ntoumanis, & Hatzigeorgiadis, 2008).

Similar results are observed in studies on attitudes and values in connection with prosocial and antisocial behaviours influenced through different forms of motivation in accordance with the achievement goal theory. When athletes are ego-oriented they perceive themselves to be successful when they perform better than others, and they also have the desire to prove that they are better (i.e., a normative view of success). On the other hand, task-oriented athletes view themselves as successful when they give their best effort, learn something new, or achieve a personal best, and thus have the desire to improve (Hodge & Petlichkoff, 2000). The two orientations are not mutually exclusive, and athletes may express low or high degrees of both orientations simultaneously. Task orientation (i.e., an emphasis on individual improvement and hard work) is predicted by competence values and adheres to prosocial attitudes, while an ego orientation (i.e., emphasis on showing superiority over others) is predicted by status values and connected with antisocial attitudes (Lee et al., 2008).

Morente-Sanchez and Zabala (2013) reviewed studies on attitudes towards doping among elite athletes that were made between year 2000 and 2011. They observed that the main reasons for using prohibited included the desire for athletic success, financial gain, improvement of recovery and prevention of nutritional deficiencies. The decision was also facilitated by the idea that other athletes use prohibited substances and by the so-called "false consensus effect", a cognitive bias that other athletes share their attitudes and values about doping. Similarly, Stamm and colleagues (Stamm, Lamprecht, & Kamber, 2016) postulated that athletes who demonstrate more enjoyment goals have the least probability of doping, and those with more expressed performance goals the most. Likewise, the predominance of intrin-

sic motivation in performance-oriented recreational athletes may increase the aversion towards doping, contrary to extrinsically motivated athletes. Attitudes towards doping have been measured also among competitive high-school athletes, with the results showing that important reasons for considering usage of prohibited substances were ambition and emotional pressure (Nolte, Steyn, Fletcher, & Krüger, 2014).

These results go hand-in-hand with the incremental model of doping (Petróczi, 2007), which proposes that doping is a socially learned, goal-oriented behaviour. The model additionally reveals that the use of prohibited substances may develop out of habitual use of accepted performance enhancing strategies (e.g., the use of nutritional supplements), with the importance of the latter factor is underlined in all research about doping (e.g. Nkaku & Robinson, 2014; Petróczi & Aidman, 2008; Savulescu, Foddy, & Clayton, 2004; Scarpino et al., 1990). This finding indicates that athletes who dope are not necessarily looking to cheat or outperform others, but may simply perceive doping as another way to maximise their own performance.

A contextual conceptual model of doping in sport suggests that doping-related decisions are not always rational, nor bound by clear intentionality, that is why understanding implicit attitudes may be important. Even though the model proposes that contextual influences may be subconscious, we also suggest that intrapersonal factors can have similar impacts on a subconscious level.

RESULTS WITH DISCUSSION

The results of the current research reveal numerous statistical differences among all the groups compared: between coaches and athletes, male and female athletes, athletes in team and individual sports, athletes who were tested and not tested for use of prohibited substances in the last 12 months, athletes who already participated in NADO doping prevention programmes and those who have not, athletes competing in exposed and non-exposed sports, and more or less successful athletes (with regard to medals won in major competitions).

Table 11

Summary of replies to the questions regarding attitudes and approaches towards sport

Motive	coach (C)/ athlete (A)	country	gender	team (T) / individual (I) sports	exposed (E) / non-exposed (NE) sports	tested (T) / never tested (NT) athletes	participated (P) / never participated (NP) in NADO education	with medals (M) / without medals (NM) in big competitions
love of movement	A > C	A > S > E		I > T	E > NE			
fame	A > C	E > S > A	M > F			NT > T		NM > M
way of life	C > A	E > S > A	M > F	T > I		NT > T	NP > P	
money	A > C	S > E > A	M > F	T > I		NT > T	NP > P	NM > M
testing my limits	A > C	E > S > A	M > F	I > T	E > NE			
staying in sport	C > A	E > A > S					NP > P	
table in appendix	21	22	23	24	25	26	27	28

Notes. A - Austria, E - Estonia, S - Slovenia; M - males; F - females

Comparison between coaches and athletes

There are quite a few differences in the motives and attitudes with regard to being involved in sport for athletes and coaches. In both groups a love of movement is the main motive, although a desire to stay in sport is stronger among coaches than athletes, naturally, since that is their chosen occupation and source of income. On the other hand, athletes love sport for the way it tests their limits. This difference is to be expected, since both groups have different tasks and different roles in sport. External motives, like money and fame, are the least important for both groups, although they are significantly more important for athletes. Generally, intrinsic motives are predominant, although there is a surprise that perceiving sport as a way of life is one of the least important motives in both groups. It may be that this motive is considered more important for recreational athletes and less for elite ones. Moreover coaches engaged less often in physical activity per se, even though they are very fond of moving (Table 21).

Comparison between male and female athletes

The importance of love for movement is the predominant motive in both male and female athletes. The desire to test one's own limits through sport and for further participation in sport are also important in both groups, although the male athletes emphasised the first motive statistically more often than the female athletes (see also Table 23). Extrinsic motives (fame and money) are significantly more important for male athletes than female ones, although in both groups they are expressed as the least important motives. Male athletes also appreciate sport as a way of life more than female athletes.

Comparison between athletes in individual and team sports

It is evident from the results that a love of movement is more significant for the individual athletes than those who are engaged in team sports, although even for the latter this is, by far, the most important motive. For athletes from individual sports, testing their limits through sport is more important, which can be explained by the different nature of individual and team sports. Namely, athletes in individual sports have more possibilities for objective measures, and the responsibility for achieving them is much more individualised than for athletes in team sports. It is interesting that for athletes in team sports their sport is seen as more a way of life than for athletes in individual sports. This may be partly because athletes in team sports are part of an already existing group (the team they are playing in), and they tend to socialise with their team mates after training or playing. Although fame, as an extrinsic motive, is the least important in both groups, money is more important for team athletes. Perhaps this is because they can compare earnings more directly than individual athletes.

Comparison between tested and not tested athletes, and more and less successful athletes

It is interesting that for athletes who have not been tested for the use of prohibited substances the extrinsic motives, like fame and money, are more important than for those who have already been tested. Very similar results are found if we divide our participants into those with more and less experience and success in major competitions, with the latter group showing a bigger desire to prove themselves to the outside world and to gain more recognition. However, athletes who have not been tested (un comparison with tested athletes) also express higher importance of sport being their way of life.

Comparison of athletes from different countries of origin

When comparing the athletes from the three countries, it is evident that the motives are roughly the same for those from Austria and Slovenia. For the athletes from all three countries, including Estonia, the love of movement is the most important while the desire to earn money is the least. For Estonian athletes the desire to stay in sport is the most important motive (with the love of movement the second). Although there are statistically important differences with regard to the importance of money, it is the least important motive for all three groups. For Estonian athletes the desire for fame is significantly higher than for

athletes from the other two countries, with Austrian athletes in particular considering this unimportant. On the other hand, seeing sport as way of life is the least important for the Austrian athletes, and for the Slovenian and Estonian athletes is has a similar value (while still not given a very high importance). For Estonian athletes testing their limits through sport is significantly more important than for the other two groups, especially in comparison to the Austrian athletes. In general, for Austrian athletes the importance of attitudes connected with intrinsic motivation is greater than for those from the other two countries, with the biggest difference being with the Estonian athletes.

CONCLUSION

Attitudes are extremely important in sport as they direct behaviour on daily basis and enable the development of skills to higher levels. On the other hand, one's attitude toward sport can lead to the use of prohibited substances in order to maximise the performance. The results of the present research revealed numerous statistical significant differences among all the groups compared but generally, internal motives prevailed over external ones when talking about attitudes toward sport.

Love for movement was the main motive for athletes and coaches with no regard to country, gender, type of sport, etc. Testing the limits and staying in sport followed, with differences mainly between athletes and coaches, but this is to be expected, since both groups have different tasks and roles in sport. External motives, like money and fame, were the least important for all groups, even though there were many statistically significant differences among most of the groups that we compared. Surprisingly, perceiving sport as a way of life was one of the least important motives in all groups. It may be that this motive is considered more important for recreational athletes and less for elite ones and their support personnel.

3. OPINIONS ABOUT THE DEVELOPMENT OF SPORT

INTRODUCTION

In the broadest sense, sport is a sociological, economic and also political phenomenon. Sport is nowadays - especially in the developed world - at the very top of leisure activities, since it represents a pleasant, interesting and useful physical activity, which is increasingly lacking in daily life, to the extent that this lack has become a risk factor for human health (Sila, 2000). However, in the 19th century (and before) sport was primarily the domain of the upper, aristocratic class, while the lower classes usually did not engage in such activities. Then it was seen as a leisure activity and was closely associated with religion, in that it aimed to serve the ideals of nobility, as proclaimed during the Victorian Era. Only at the turn of the century did organised sport begin to spread to the middle classes and develop into "sport for the crowd". In the 20th century, sport as a game started including the lower social classes and with this gained a wider social significance. Over time, the idea of sport underwent many changes, leading to its mass practice and popularisation (Rubio, 2013).

As such, in earlier times the structure and values of sport were shaped through the interests of the ruling classes, but now they are defined by the practical ethics of sport as a particular institution within human society. These ethics as a framework are established by legal rules, the maintenance of which ensures sportsmanship and fair play (Panagiotopoulos, 1998).

This is one aspect of the development of sport overtime, from an activity for a select group of people to one that is practiced or followed by all. Another key development was sport moving from being an amateur activity to a professional one. At the beginning of this transition, a person who competed for money was not just inferior, but, before anything else, a person with a suspect character. Professional athleticism was seen as a contradiction to the central ethos of sport, which was to train and compete for their own sake and enjoyment, rather than for money. Dunning (Rubio, 2013) emphasised that the abandonment of amateurism in sport for professionalism, with the aim of maximising expertise, was enabled by changes in the degree of competitiveness in society in general. Professionalism first transformed athletes to employees of companies, which gave their names to athletic teams, and later (since the 1980's) this was replaced with sponsors and companies interested in investing in sport. Professionalisation created many changes to sport 's organisations, from an institutional point of view, as well as to the related competitive activities themselves. Athletic competitions gained greater visibility and complexity, became a sporting spectacle and a product of industrial culture. As such, economic motivations linked to policy provisions and government interventions produced and reinforced some of the most robust institutions on the planet (Rubio, 2013).

With these developments, sports took on various different forms, with Sila (2000) dividing these into three main groups:

- physical education,
- elite sport (sport for achievement, competitive sport or professional sport) and
- sports recreation (also amateur sports).

Professional sports are those in which athletes receive payment for their performance, so that sport can be their primary career and they can devote themselves to training in order to maximally develop

their skills and physical condition. Elite sport is associated with systematic training and competition, and requires dedication, long-term commitment and sacrifice (Carstairs, 2003). Its ultimate goal is achieving the best possible results, with physical and psychological conditioning being maximised to attain these (Murphy & Waddington, 2007). Today elite athletes are expected and encouraged to seek every possible way to improve their performance, including specialised training, the use of hi-tech equipment and apparel, scientific and medical support, with the latter including the use of nutritional supplements (McNamee, 2007). Professional athletes have also had to adapt to the increased physical and mental demands expected of them. Moreover, the commercialisation of sport has led athletes to protect their brand image, part of which is also their social image. As such, athletes are required to demonstrate integrity, sportsmanship and "good" character. Further, inherent in the role of the sportsperson is to be an appropriate role model in society (Stewart & Smith, 2008), and such expectations of high standards have also filtered down to many amateur players (Garraway, Lee, Hutton, Russell, & Macleod, 2000).

Sport as recreation, on the other hand, is intended for a broader range of participants, regardless of age, gender, knowledge and ability. Its purpose, above all, is pleasant physical activity, which gives people the opportunity to enjoy movement and be in pleasant contact with others. Doing recreational sports is often a reflection of the attitude towards movement that was shaped in one's youth, and then become an integral part of one's life.

While both recreational and elite sport involve different patterns of social relations and have different effects on health (Petrović & Doupona, 1996), this seems to be changing, since steroids, growth hormones, stimulants and diuretics are now used among recreational athletes, mostly to improve appearance, but also athletic performance (Baker, Graham, & Davies, 2006; Parkinson & Evans, 2006). In addition, high school students take supplements and prohibited substances (Field et al., 2005).

There are quite a few models that try to understand use of prohibited substances by considering the complexity of human life. Stewart and Smith (2008) proposed three categories of factors that might impact athletes' decision to use these: 1) intrapersonal constraints (psychological issues), 2) interpersonal constraints (social issues), and 3) structural constraints (systems within sport). In contrast, the life-cycle model of doping (Petroczi & Aidman, 2008) proposes that athletes' decisions in this area based on an interplay among various personality, systemic, situational and environmental factors. The model assumes a strategic use of prohibited substances, and has been developed for athletes with a predominant ego orientation, however it can be applicable to other, similar situations. In this chapter we are mostly interested in factors that are not individual, but connected with society and its features.

Systemic factors include motivational climate, authority structure, prohibited substances culture in sport teams and the wider sport community, perceived fairness and other attributes of the testing procedures and enforcement sanctions. Coaches, parents, colleagues and fans are those who create a motivational climate. Pressure from an athletic subculture may lead to the use of prohibited substances in order to show solidarity with colleagues, or to enhance sport identity (English, 1987). Dunn and Thomas (2012) stress that the decision to use prohibited substances is not made in isolation, and that knowing other athletes who use doping is a risk factor for using it as well, something that is even more true for male athletes (Dunn & Thomas, 2011). Sports environments are a key factor in the well-being of athletes and contribute to the expectations placed on them, particularly with regard to winning. These can also produce negative pressure, since fear that competitors are chemically or medically enhanced and thus have an unfair advantage elevates that likelihood that other athletes will behave in the same way (Yesalis, Herrick, & Buckley, 1988). Most athletes state they would prefer to compete in doping-free sports, although top level athletes tend to agree that doping is a necessary addition to competitive sport

(Peretti-Watel et al., 2004). There is one special characteristic of note here in the athletic environment, in that it forms a so-called community of silence. Athletes report feeling an inner conflict between a desire for clean sport and the consequences for sport and themselves if they report doping, since with that sport could lose it's good reputation and important sponsorships. However, this is truer for athletes involved in team sports than those from individual sports (Whitaker, Long, Petróczi, & Backhouse, 2014b).

Situational factors incorporate interactions with one's peers, significant others, the characteristics of role models and the availability of permitted and forbidden performance enhancing alternatives. Most of these factors change through the development of athletes.

Environmental factors consist of the socio-cultural, political, legislative system, availability of drugs, medicalisation and legalised alternatives, (e.g. nutritional supplements). The increasing support of medical help for athletes has been defended with the explanation that elite athletes have unique needs – if they want to reach their potential, to prevent injury or shorten rehabilitation periods. Such treatment is not only accepted but also expected by all sport participants. This is supported by many studies, especially when it comes to painkillers and other doping agents for overcoming injuries (Gilberg, Breivik, & Loland, 2006; Tricker, 2000).

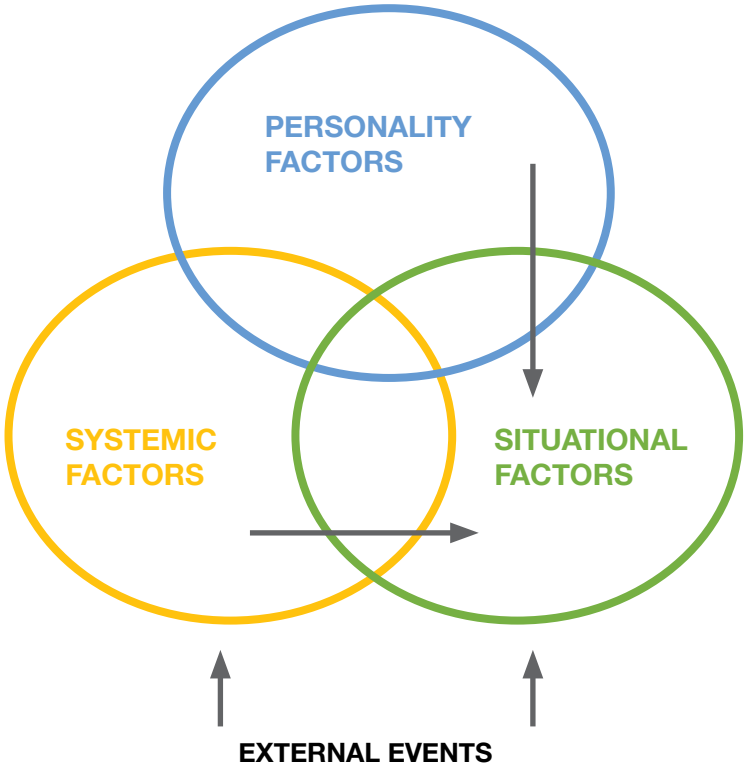

Figure 2. Life-cycle model of doping (Petroczi & Aidman, 2008).

LITERATURE REVIEW

Scientific literature on opinions about the development of sport is hard to find. It mostly covers two topics that we have already discussed above: the perception that the use of medicine is inevitable in elite sport and is also expected from athletes (Petroczi & Aidman, 2008; Gilberg et al., 2006; Tricker, 2000); and the fact that recreational sport is becoming increasingly similar to competitive sport, with regard to goal orientation and its increasing medicalisation, from the consumption of different nutritional supplements to prohibited substances (Baker et al., 2006; Parkinson & Evans, 2006; Field et al., 2005).

Table 12

Summary of replies to the questions regarding opinions about the development of sport

	coach (C)/ athlete (A)	country	gender	team (T) / individual (I) sports	exposed (E) / non-exposed (NE) sports	tested (T) / never tested (NT) athletes	participated (P) / never participated (NP) in NADO education	with medals (M) / without medals (NM) in big competitions
importance of victory is increasing	C > A	A > S > E						
temptation for doping abuse in elite sport is increasing		S > A > E						
temptation for doping abuse in recreational sport is increasing	C > A	S > A > E		I > T	E > NE			
with more money in sport there is more cheating	C > A	S > A > E						
the importance of fair-play is increasing		S > E > A		T > I				
elite sport cannot exist without sports medicine	C > A	A > S > E		T > I	NE > E			
table in appendix	29	30	31	32	33	34	35	36

Notes. A - Austria, E - Estonia, S - Slovenia; M - males; F - females

The respondents' opinions about development of sport reveal statistical differences between athletes and coaches and between sports participants from different countries. Some differences in opinions also arise between athletes involved in team and individual sports, and those in non-exposed or exposed sports. With regard to many of these opinions, at least to the best of our knowledge, no other studies are available, therefore not many comparisons could be made, but we will present those that we can make as follows.

Comparison between coaches and athletes

Both coaches and athletes agree that nowadays sport cannot exist without sports medicine, yet coaches find this statement even truer than athletes. In comparison with athletes, coaches believe more strongly that the importance of victory is increasing in sport, and that with the growing amount of money in sport the amount of cheating also increases.

Comparison of opinions about the development of sport between participants from different countries

With regard to all of the opinions obtained in this study, the respondents from the three different countries differed among themselves, but in general the Austrian and Slovenian participants had much more similar opinions about development of sport than the Estonian ones.

The Austrian participants more strongly agree than the Slovenian and especially Estonian ones that the importance of victory is increasing. In order to understand this difference it would be important to know how athletes in different countries are evaluated with regard to their placements in competitions. The Slovenian participants feel that the importance of fair play in sport is increasing, in contrast to those from Austria, who do not really agree with the statement, while those from Estonia only partly agree. The Slovenian participants perceive the temptation for doping in elite and recreational sports is more serious than those from Austria and Estonia. With regards to the statement that more money in sports also means more cheating, the Slovenian participants agree most strongly, with the Austrian just slightly less strongly, and the Estonians still little strongly. In order to understand the differences in opinion found for this whole set of questions, more details about the sporting culture in all three countries would be needed.

Comparison between participants involved in individual and team sports

The participants in individual sports feel that doping in recreational sport is becoming more prominent, with those taking part in team sports feeling this is not the case. The views of the first group are more congruent with the findings of other studies and with the development of recreational sport, that is becoming more like elite competitive sport in terms of motivation, increasing medicalisation and use of prohibited substances. Participants in team sports also feel that fair play is more important than those in individual sports. This could be because team sports cannot exist without cooperation, solidarity and respect among peers and the authorities, and thus these have more respect for fair play. Further, the participants from team sports agree more strongly than those from individual sports that elite sport cannot exist without sports medicine. Despite this statistical difference, both groups find this statement congruent with the situations in their respective sports. This opinion is also supported by other studies. Since many studies report that sports medicine is used mainly for treatment of pain and injuries, a comparison between the amount of injuries experienced by athletes from team and individual sports could explain this difference.

Comparison between more and less exposed sports

Is logical that athletes from more exposed sports see a greater temptation for doping in recreational sport than do those from non-exposed sports, since they are exposed to more of it themselves. However,

it is notable that the same difference in opinion is not present also in the context of elite sport. But it is evident that this is due to the different perception of participants from non-exposed sports. This is because they see doping to be a much higher threat in elite sport than in a recreational context. The participants from both non-exposed and exposed sports agree that sports medicine is essential in sport, although the latter hold this opinion even strongly than the former.

CONCLUSION

History of development of sport is long and rich, extending back to the Ancient world. Nowadays we perceive sport as a game, with its structure and values defined by the practical ethics of sport as a particular institution within human society.

Several statistical significant differences were found among the groups but overall participants agreed to the highest extent that professional sport, that brought more money into sport, is causing more cheating. They also pointed out that importance of victory is increasing and that elite sport can not exist without sports medicine. All this opinions go hand in hand, as they are strongly connected with the professionalism of the sport at the elite level. Opinions about increasing the importance of fair play and increasing temptation for doping were somewhere in between with part of participants agreeing/strongly agreeing with it and part of them only partially agreeing.

However, for further understanding and discussion about the differences among opinions we would need a more in-depth study of this content, with more details about the cultural differences between the countries and sports taken into account.

4. ATTITUDES TOWARDS NATIONAL ANTI-DOPING ORGANISATIONS

INTRODUCTION

Since the timid beginnings of anti-doping work in the early 1960s, control and repression have been the strategies of choice (Müller, 2016). This development is analogous to repressive approaches in other fields, as Hoberman (2009) observed. He noted the striking similarity to the "war on drugs" proclaimed by US-president Richard Nixon, which heavily influenced the international anti-drug policies. Wagner and Pedersen (2014) pointed out that the International Olympic Committee (IOC) adopted the language of the "warfare genre" after the case of Ben Johnson in 1988, "to construct a narrative presenting itself as a successful pioneering leader of a coalition fighting doping in sport."

In the last few decades significant improvements have been made, most notably the containment of prohibited substances with strong side effects, like anabolic steroids. However, not every sport competition is clean, despite the intensified efforts made in recent years. A great number of problems and difficulties remain in the current anti-doping system which need adjustment and correction and – at least partly – explain the continued moderate success in the campaign against doping (Müller, 2016).

It is common sense that each and every person, group and organisation in sport has to contribute to improve the situation, but somehow anti-doping work tends to forget or neglect the most important target group: the athletes themselves. This phenomenon is not unique to the field of anti-doping, but also exists in several other aspects of the modern system of sport. Without the efforts, passion and risks of athletes all around the world, the extensive framework of officials, coaches, support personal, sponsors, event organisers, media coverage and political interest would not exist. However, the voice of the athletes is hardly heard when it comes to rules or regulations, competition schedules or regeneration times.

Of course, the main responsibilities in the whole anti-doping framework (like whereabouts, doping controls, etc.) are focused on athletes, but few thoughts are given to the essential question: "How can we ensure that athletes are not only participating in clean sport, but also actively engaging and promoting their right to clean sport?"

One of the reasons athletes might limit their engagement is the anti-doping ideology of the last 50 or 60 years, which was dominated by the questionable assumption that a considerable proportion of all athletes are using substances or methods to enhance, optimise or maintain performance. In a mindset where all athletes are seen as potential cheats it is not surprising that their approval of the current system be rather limited. This rejection is fuelled by the language and verbalisations used in the anti-doping sphere: Doping is labelled as a "disease / cancer / plague / virus of sport", which leads to a "war / crusade / fight / battle against doping" with new "weapons" in the "arms race", implying that athletes are to be "hunted" and – if finally "caught" – regarded as "doping-sinners", and the "scandal" is complete.

These military, religious or pathologising terms obscure the factual reality and obstruct the needs of anti-doping work. Young athletes do not start their careers thinking about the subsequent handling of blood bags or artificial genitals. Personal inhibition thresholds are reduced step by step until the first drug is swallowed, or the first syringe is set. Creating a doped athlete takes time and several bad influences.

The main mission of all anti-doping efforts must be the protection of the vast majority of athletes who are clean and want to compete clean. From this point of view, the term “anti-doping” is problematic as well, since it emphasises sport without doping in contrast to “clean sport” or just “sport”. Just as the command “Don´t think about a pink elephant!” immediately leads you to visualise a big pink animal with a trunk, “anti-doping” always refers to prohibited substances and methods, because the human mind is challenged by negations (Nieuwland & Kuperberg, 2008).

This necessary paradigm shift in anti-doping work from “hunting” to “protection” implies an inherent obligation to convince the athletes about the need for these endeavours. Anti-doping can only be successful if it is not working against the athletes but in support of them. One of the strands of anti-doping work that advances this approach is education. It is said to be the second pillar of anti-doping work, and is on the rise in recent years. However, in reality athletes have seen too many empty words and lip service paid to the rules. A great proportion of “educational” activities are merely the mediation of specific information on the doping control process and/or the prohibited list, which is not enough to enable the next generation of athletes to decide to engage in and promote clean sport.

While doping controls show measurable results, the effect of long-term prevention is harder to prove, which, at least partly, explains the financial weighting such activities are given. It is interesting in this context that prevention activities are often required to show their effectiveness. This is understandable, since prevention is an investment in the future and needs to be planned well and consistently. However, the results that are provided by the doping control system only refer to the number of tests performed, analyses made, and cases prosecuted, but there is little to no evaluation of the actual effectiveness of the whole doping control programme. As long as cheaters can beat the system for many years, clean athletes will always ask themselves why they endure this burden if it does not serve its intended purpose (Overbye, 2016a; Dineen, 2019).

Ever since their foundation, National Anti-Doping Organisations (NADOs) have played a vital and responsible role in the anti-doping framework. NADOs represent the anti-doping movement like no other stakeholder of the World Anti-Doping Code. While many of the problems that have shaken the anti-doping framework had their origin in other organisations (e.g. national or international federations), NADOs have also been affected. In some rare instances NADOs are even involved in criminal activities, most notably the organised doping scheme in Russia. As painful as this affair has been, it also had positive consequences like the increased number of athletes who raise their voice on the problem of doping.

Since anti-doping organisations are a kind of “moral authority” in sport, the highest standards of good governance (transparency, democratic process, accountability, term limits, checks and balances, etc.) must apply. Credibility is a currency in the age of transparency, and requires authenticity, expertise and courage for correction.

Bearing all this in mind, the attitudes of athletes and coaches towards their respective NADOs are of great interest, since they also indicate the current degree of satisfaction of the most important stakeholders in the whole anti-doping system, and help to improve the performance of such organisations.

LITERATURE REVIEW

Scientific studies on attitudes towards doping are hard to find. One reason for this might be that not many NADOs or other organisations invest resources to investigate this topic or, if they do it for quality management purposes, they do not publish the findings, at least in a scientific way. Most of the available literature on attitudes focuses on attitudes towards doping in general or to specific parts of the anti-doping work, but not on NADOs specifically (e.g. Duiven & De Hon, 2015; Judge et al.; Lamberti et al., 2017; Mazanov et al., 2014; Westmattelmann, Dreiskämper, Strauβ, Schewe, & Plass, 2018).

Gebert, Lamprecht, and Stamm (2017a) carried out an online survey of 588 elite athletes in Switzerland. Only a small proportion of the participants felt that they were tested too often, and one quarter regarded the frequency of doping controls as too low. In general doping controls of the Swiss anti-doping agency were perceived as very good, including when compared to other countries. The security of doping controls was regarded as high and improved, even from the high level of a previous study carried out in 2010. The work of the agency's doping control officers was valued, and the related website, drug database and app appreciated by a majority of athletes. However, the athletes´ whereabouts system, SIMON, was seen as outdated and difficult to use.

In the same year Gebert, Lamprecht and Stamm (2017b) conducted an online study with 1,040 coaches of elite athletes in Switzerland. Thirteen percent of the participants had direct contact with the Swiss Anti-doping Agency and regarded this contact as very positive, highlighting its competence and friendliness. The coaches know the NADO website (75 %), drug database (67%) and app (40%) and regard this support as good. The Swiss anti-doping work is perceived as role model for that in other nations.

Peters, Postler, and Oberhoffer (2013) conducted a written study with 761 German elite athletes and 101 doping control officers. The aim of the study was to gather information from athletes and officials about their satisfaction and acceptance concerning the doping control system in Germany. Athletes and control officials evaluated their communication and coordination with each other as mainly positive. The majority of athletes also felt that the doping control officials' attitude was friendly and open-minded, and their behaviour neutral and discreet.

Table 13
Summary of replies to the questions regarding attitudes towards NADOs

	coach (C)/ athlete (A)	country	gender	team (T) / individual (I) sports	exposed (E) / non-exposed (NE) sports	tested (T) / never tested (NT) athletes	participated (P) / never participated (NP) in NADO education	with medals (M) / without medals (NM) in big competitions
… an important part of the system		E > S > A	F > M		E > NE			
… an interference for athletes	A > C		M > F					
… an independent organisation		E > S > A		T > I			NP > P	
… a protection for “clean” athletes		E > S > A		T > I			NP > P	
…a help in changing doping mentality	C > A	E > S > A			E > NE			
… a trustworthy organisation	C > A	E > S > A			E > NE		NP > P	
… useful support	C > A	S > E > A			E > NE	NT > T	NP > P	
…a way to send sports associations information		S > E > A				NT > T		
I turn to NADO when looking for information	C > A	A > E > S	F > M		E > NE		NP > P	M > NM
The NADO website is easy to use and understand	C > A	E > S > A	F > M		E > NE		NP > P	
I wish NADO had a drug verification app		S > A > E		I > T		NT > T	NP > P	M > NM
NADO information is sufficient	C > A						NP > P	
NADO is quick in informing about changes in doping	C > A	E > S > A			E > NE		NP > P	
NADO provides enough information	C > A	E > S > A			E > NE		NP > P	
I would like someone to speak to at NADO	C > A	S > A > E				NT > T		
I would like email news from NADO	C > A						NP > P	
Athletes must be informed about changes quickly	C > A						NP > P	
Adult athletes should attend NADO lectures yearly	C > A	S > A > E						
table in appendix	37	38	39	40	41	42	43	44

Notes. A - Austria, E - Estonia, S - Slovenia; M - males; F - females

Statistically significant differences were found between coaches and athletes, as well as between male and female athletes, team and individual sports, non-exposed and exposed sports, athletes with/without medals from major competitions and athletes who were tested/not tested or educated/non-educated. To allow a better overview, the results of every question will be presented and discussed in separate sections.

Important part of the system

Athletes and coaches from all three countries felt that their respective NADOs are an important part of the system, although participants from Estonian and Slovenia answered this more positively. The approval of female athletes was higher than their male colleagues, and athletes from exposed sports expressed a greater agreement with this item than those from non-exposed sports.

Interference for athletes

Athletes regarded NADOs as a greater interference than coaches, and male athletes also saw them as a greater interference than female athletes.

NADO's independence

The Estonian athletes and coaches saw their NADO as an independent organisation, followed by the Slovenians. Athletes in team sports felt their NADO was more independent than their colleagues in individual sports, and athletes who never had any NADO education also saw their independence as higher.

Protection of "clean athletes"

Athletes and coaches in Estonia showed the highest approval of the claim that NADOs are protecting "clean athletes". Athletes in team sports felt a greater protection than those in individual sports, as did athletes who had never experienced education activities of a NADO.

Change of doping mentality and trustworthiness

A greater percentage of coaches thought that NADOs are helping to change the doping mentality than athletes. Participants in Estonia also expressed more support for this statement than their colleagues in Slovenia and Austria, as did athletes in exposed sports compared to those in non-exposed sports. Similar results were found with regard to the trustworthiness of NADOs, although athletes who had never received NADO education showed a greater approval than those had received some.

Useful support

Greater approval for the statement that NADO offered useful support can be observed in the answers of coaches, athletes in exposed sports and athletes who were never tested nor educated by NADO. Athletes and coaches in Slovenia had more support for this than their counterparts in Estonia and Austria.

Information hub

There were a great number of significant differences with regard to whether the participants turn to NADO when they are looking for information. This statement was supported by coaches, female athletes, athletes in exposed sports, athletes who were never educated and those who had won medals at major competitions. Austrian athletes and coaches also expressed more support for this than their colleagues in Estonia and Slovenia.

NADO website

When asked about the user experience of the NADO websites, coaches, female athletes, athletes in exposed sports and those who had never experienced NADO education felt they were easier to use and understand. The Estonian participants expressed more support for this than the Slovenian and Austrian athletes and coaches.

Sufficient information

Coaches and athletes who had never experienced NADO education regarded the information that they received from the organisations as more sufficient than those who had received such education.

Information on changes and level of information

Two items showed the same significant differences: When asked whether the NADO is quick in informing people about changes in the anti-doping work and if the it provides enough information, coaches, athletes in exposed sports and athletes who had never received NADO education, as well as participants from Estonia and Slovenia, all expressed more support for this statement.

Direct contact

Coaches and athletes who had never been tested expressed a greater wish to speak to someone at NADO. Participants from Slovenia felt a greater need for this than their colleagues in Austria and Estonia.

Email news from NADO and the need for quick information.

Coaches and athletes who had never experienced NADO education expressed a greater wish to receive email news from the organisations. The same significant differences were found with regard to the statement that athletes must be informed about such changes quickly.

CONCLUSION

Since there are – to the best knowledge of the authors – no other studies available that cover these questions, comparisons cannot be made with the literature. But there are several interesting tendencies and general observations, as follows.

In general, coaches had a better attitude towards NADOs, regarded their information as more useful and wished for even more support, while athletes expressed a greater feeling of interference than the coaches. One explanation for this could be that athletes are more directly involved in anti-doping work (due to strict liability rules, doping controls, TUEs, etc.) than coaches, and therefore have more negative feelings about the organisations that hold them accountable to these responsibilities. Another reason for this significant difference might be that coaches want to take over responsibility for their athletes and – in return – athletes trust their coaches when it comes to knowledge about doping. However, from the data available, it is not entirely clear if coaches feel competent enough to perform this service, since they also ask for better contact with NADOs and email news from them[1].

A rather striking result is the less favourable answers of athletes who had participated at NADO prevention programmes. Only six out of 18 questions indicated no correlation between the responses and participation in NADO prevention programmes, and each of these items was answered more positively from athletes who had not participated in prevention programmes. The reasons for this result

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[1] See Chapter 8 for more discussion on such knowledge.

can only be speculated upon. Maybe the majority of NADO prevention activities focussed on athletes who had poorer attitudes to NADOs in general, or athletes who have not had any such education feel a greater need for it, as suggested by a number of items. This assumption is also supported by the fact that for some questions athletes who had never been tested also offered more favourable answers with regard to the work of NADOs.

The support offered by NADOs is seen as significantly better by athletes in exposed sports compared to their colleagues in non-exposed ones. This is understandable, since – in general – athletes performing in sports that have a higher risk of doping receive more services (information, education and doping controls) from NADOs. This risk assessment and the measures that derive from such organisations are a vital part of modern anti-doping work. Needless to say, in an ideal world each and every athlete would have access to these services, however in practice resources are limited.

As a conclusion of these findings it can be argued that one major problem of the present anti-doping work is the underestimation of the need for strong public commitment. It appears as if policymakers are so confident that everyone already knows clean sport is vital that they neglect the importance of awareness-raising campaigns. The current focus is on testing and passing on information, but only recently have efforts been made to improve education and how to “sell” the idea of clean sport correctly.

Other fields of prevention already show the way things can be improved. Consider the drinking and driving problem for a moment. When trying to implement the reasonable ban of being drunk and driving through increased surveillance and penalties alone, the limits of such repression would be recognised very quickly. To address this problem more effectively we have thus seen numerous campaigns in the last few decades in order to establish greater awareness that drinking and driving has no place in our society. These activities involve not only drivers themselves, but also their family members, friends, colleagues and so forth. In a similar manner, we have to make sure that not only athletes and their support personnel are convinced of the anti-doping idea, but also a majority of the general public.

5. SOURCES OF GAINING ANTI-DOPING INFORMATION

INTRODUCTION

The field of anti-doping is extremely comprehensive. It consist of many different contents, some of it having more direct influence and consequences for the athletes than others. However, athletes and their support personnel must be well acquainting with all the rules, risks, roles and responsibilities in order to avoid unintentional doping.

Anti-doping content can be delivered via both formal and informal channels. Nevertheless, at the end, what matters the most is the quality of information that is being delivered. Most common channels for delivering anti-doping content are seminars (lectures), workshops, e-learnings and handbooks. Despite the growing number of e-learning tools available, face-to-face education still has many advantages. However, e-learning's ability to transcend borders might be more practical in some cases. Many anti-doping organisations use e-learning tools as their main tool in doping prevention programmes, but are these tools efficient? Do athletes ever discuss these topics between themselves as they would in the classroom? If we want to be successful in the field of doping prevention, we have to encourage athletes to talk about clean sport, to share their opinion with their peers and to stand up for what they believe. However, also face-to-face education in a form of seminars, lectures and/or workshops, has its challenges and its success highly depends on knowledge, skills and motivation of the person delivering the content. NADOs use educated staff to deliver anti-doping content – from medical doctors to young anti-doping ambassadors, so the quality of message delivered can vary. However, this can still be treated as a correct, qualitative information.

We are aware that athletes and their support personnel are seeking for information everywhere – from websites to media articles. Internet represents the biggest threat for accuracy of information. Everyone can post and publish whatever they want, so websites promoting "safe" steroids etc. can be found on regular basis. Such website can mislead athletes and the consequences can be tremendous. We can control the web, but for sure, we can at least warn the users from visiting such sites and encourage them to use trustful sources of information when it comes to anti-doping content.

Since it is impossible to reach all athletes via formal channels, it is important to have the knowledge what informal channels athletes and their support personnel are using on regular basis. That way we can pay more attention on those resources and improve them if possible and needed.

LITERATURE REVIEW

Anti-doping knowledge may be formed of many components, arriving via both formal and informal channels. Several studies have been carried out across different sports and sports populations, and the details of these are presented below according to the information related to athletes and coaches. Many studies cover both information on doping and nutrition (most often focusing on supplement use), and in order to generalise the details of these have been merged. Most studies are based on self-reported data from the subjects, being mostly quantitative in nature.

One of the large-scale studies (Thomas, Dunn, Swift, & Burns, 2011) on elite multi-sport athletes in Australia (with a total of 974 respondents) found the main source of knowledge to be the internet (64%), friends (24%), information leaflets (23.9%), family members (13.5%) and coaches (9.9%). Surprisingly, coaches were concluded to have a minor role, although some studies find otherwise.

Another extensive study by Sas-Nowosielski and Swiatkowska (2007) examined 830 Polish competitive athletes across different sports. The most frequent source of information was TV (68.53%), second was by the internet (53.97%), followed by peers (53.84%), coach/instructor (36.8%), and sports press (24.32%). Amongst the sports press bodybuilding magazines were popular choices, along with some sports periodicals and newspapers. Books were also considered as a source of information (11.31%) and 9.88% learned from their own experience.

The media is an important source of knowledge according to another Polish study on 811 student-athletes, carried out by Posiadala et al. (2009). A total of 46% of the participants said their main source to be media, followed by school (21%), acquaintances (18%) and sports clubs (8%). What seems worrying is the decrease in the significance of sport clubs as sources of knowledge about doping. The fact that as many as 79% of the examined students stated that they do not have access to institutions enabling them to develop their knowledge about doping is also alarming.

Peers and friends are important advisors according to research (Halabchi et al., 2011) carried out amongst 426 Iranian competitive wrestlers, who stated that their main advisors were peers and friends (40.8%), coaches (13%), dietitians (6.4%) and physicians (5.2%).

When collecting information on dietary supplements, several studies show interesting findings. Waddington et al. (2005, as cited in Morente-Sanchez & Zabala, 2013) found that 28% of English professional footballers sought info from club's physiotherapist, 21% from fitness trainers, and 21% from other sports scientists, such as nutritionists, club doctor was on the last place. A large percentage say that they just took the supplements without consulting anyone. Nieper (2005, as cited in Morente-Sanchez & Zabala, 2013) found that coaches had the most influence (65%), he was followed by sports dieticians (30%) and doctors (25%), regardless of the fact that 72% athletes had access to a sports dietician. In contrast, Somerville, Lewis, and Kuipers (2005, as cited in Morente-Sanchez, & Zabala, 2013) report that doctor was the first point of consultation for 62% of athletes they researched.

Athletes often trust internet more than doctors, the following sources of obtaining information were newspapers, radio and television, coaches were stated to be one of the key sources (Backhouse & McKenna, 2012) – they also found coaches (as well as parents and team doctors) to be one of the key characters when it comes to intentions and motivation to use forbidden substances and were even stated as agents, who could exert social pressure in this area (either positive or negative). When athletes move away from coaches who are against doping, they danger for them to succumb to new coach's views increases (Pappa & Kennedy, 2013, as cited in Backhouse & McKenna, 2012). We can see significant relevance of this finding when we speak about the early carrer of athletes and development of their views on doping (Huybers & Mazanov, 2012, as cited in Backhouse & McKenna, 2012).

The role of the coach proved to be questionable in studies of sanctioned athletes – two of five sanctioned athletes admitted to the involvement of medical practitioners into shaping their doping programmes, and one drew upon their own medical training when preparing their doping regime (Georgiadis & Papazoglou, 2014). Athletes report that education on doping was made through online tutorials of their NADOs, other sources on the internet, media and they emphasise the role of team doctors (Johnson,

Butryn, & Masucci, 2013). They say that workshops were mainly oriented into increasing awareness of which substances are on the list. It was interesting that elite female triathletes viewed this anti-doping education as a formality instead of a real education and means of learning about doping. It seems that it is important how the athletes perceive this education in order for it to be successful.

Some studies found that coaches are the main source of information related to doping and nutritional supplements (Backhouse & McKenna, 2012; Scofield & Unruh, 2006; Šajber et al., 2013). Others that coaches are more knowledgeable than athletes, although the samples in such studies were quite small (see Šajber et al., 2013; Mandić, Perić, Krželj, Stanković, & Zenić, 2013), the knowledge seemed to be strongest related to anti-doping regulations and procedures, and weakest with regard to specific substances.

With regard to coaches, one study found that two thirds of the respondents (just 28 coaches from Croatia and Serbia) declared self-education as the primary source of information, and 21% reported formal education (Mandić et al., 2013). Similarly, Šajber et al. (2013) confirmed with their study population of 22 coaches that 50% of stated that formal education was the primary source about sports nutrition, while 41% answered self-education. Šajber et al. (2013) found that there is a lack of systematic life-long formal education for coaches related to these topics, and that this is the case across different sports (although their study focused on swimming). Furthermore, Scofield and Unruh (2006) stressed that it is necessary to set certain criteria with regard to coaching qualifications in order to meet the current needs for more education, although they concluded that this issued needs more research studied.

A qualitative study carried out in Scotland offered some insights related to self-education among coaches (Allen, Dimeo, Morris, Dixon, & Robinson, 2013). It found that coaches consulted three different sources to develop their anti-doping actions: their own experiences as an athlete; experts, such as medical staff and anti-doping officers; their personal observations; and anti-doping materials (emails, leaflets, websites). The respondents were not aware of any systematic education for coaches (their education very often being the sessions for athletes that they also attended), but their knowledge tended to be a result of their personal interest in the topic and their experience as an athlete, and thus often unsystematic.

Scofield and Unruh (2006) studied 150 adolescent athletes and found that they saw their coaches as the best source of information on dietary supplements (38.1%). Other important sources were considered health clubs (24.5%), health store personnel (10.8%), and books/magazines (10.1%). Although it coaches are not always the primary source of information – for example, only 9.9% of athletes identified coaches as a source of information in an Australian study (Thomas et al., 2011, as cited in Backhouse & McKenna, 2012), a number of small-scale studies stress their importance in this context. A study of 55 swimmers (both junior and senior levels) from Croatia (Šajber et al., 2013) found that coaches were the primary source of knowledge on nutrition and doping (50%), while 25% of the respondents said they educated themselves on this issue. Coaches can also be important among the tennis players, as found by Kondrič et al. (2013).

RESULTS WITH DISCUSSION

Not many studies on doping inquire specifically about NADOs as a source of information with reference to their education sessions or websites. It is thus not surprising that it is difficult to find research on this specific point, although the findings of the works outlined above are in general very interesting.

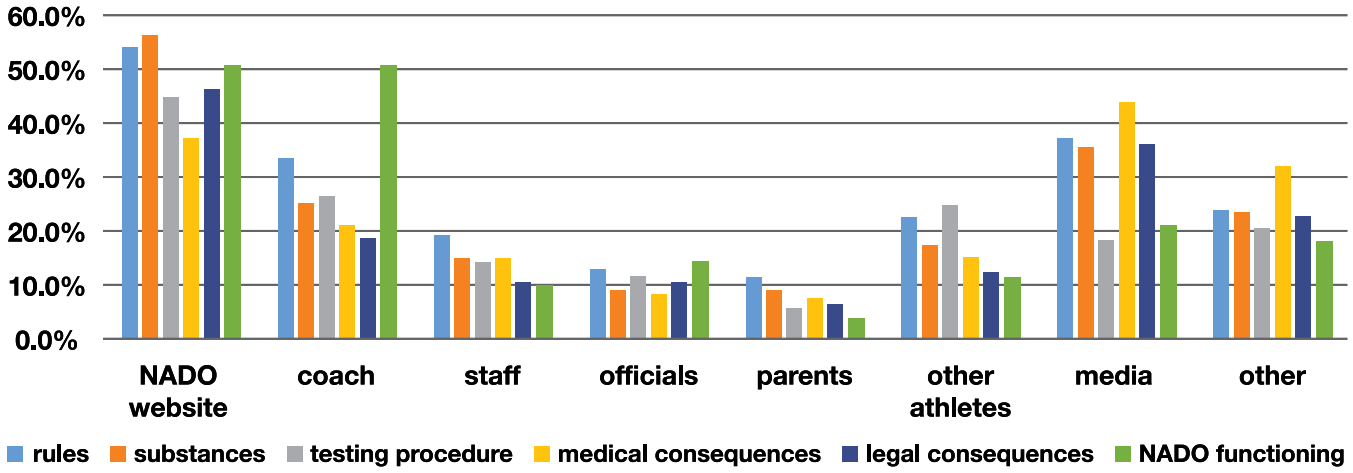

Figure 3. Overview of sources of information on doping.

With regard to the current study, in general all the populations from all three countries use the websites of their NADOs as the main source of knowledge regarding prohibited substances, the anti-doping rules, the work of such organisations, the legal consequences and testing procedures for doping. The media and internet were also found to be main sources of information by other researchers, such as Sas-Nowosielski and Swiatkowska (2007) and Posiadala et al. (2009), as well as Johnson et al. (2013).

What is concerning in the results is that details of the health consequences of doping are looked for more from the media than from medical staff, although a similar finding was also reported in Australia (Thomas et al., 2011). As Backhouse and McKenna, (2012) stated, information on medical issues, obtained from non-medical sources, typically indicates the use of a less professionalism, low-quality, and suspect information source. In contrast, several studies reported that doctors and medical staff are an important source of information (Somerville et al., 2005, as cited in Backhouse & McKenna, 2012), some even noted a crucial role of medical staff in designing doping programmes (Georgiadis & Papazoglou, 2014).

While it is good to find that NADOs' websites are seen as trusted sources, one still needs to keep in mind the specifics of these three countries, and the fact that this finding may not apply to other nations. This finding shows that if a NADO keeps its website up-to-date then it could be a valuable source to provide good support and reliable information for both athletes and coaches. All three sites of the countries included in the current study are regularly updated, well-maintained and thus valuable sources of current information on all issues related to doping.

The second most popular source where both athletes and coaches received information about doping was the media, although naturally less information was gained about specific testing procedures here. Still, the media was a significant resource for getting information about the health consequences of doping, anti-doping rules, the legal consequences and substances.

Other sources were also mentioned several times, although these were not identified, but they did not involve coaches, medical staff, officials, parents, other athletes or the media. When reflecting on what these sources could be, we could perhaps think of discussions with the general public, reporters, or other people athletes encounter, as they tend athletes come into contact with a large number of people during their everyday lives.

We also looked at the differences between coaches and athletes, with the results summarised in the following table.

Table 14

Comparison of sources of information between athletes and coaches

		NADO website	*coach*	*staff*	*officials*	*parents*	*other athletes*	*media*	*other*
rules	*athlete*	*48.8%*	*43.6%*	*23.9%*	*12.5%*	*15.1%*	*31.2%*	*38.3%*	*19.9%*
	coach	*64.4%*	*17.2%*	*12.1%*	*14.1%*	*6.1%*	*8.7%*	*35.9%*	*31.3%*
substances	*athlete*	*52.1%*	*32.5%*	*18.3%*	*8.1%*	*13.2%*	*23.5%*	*37.3%*	*20.5%*
	coach	*64.1%*	*13.6%*	*9.2%*	*11.0%*	*2.8%*	*7.4%*	*33.6%*	*29.2%*
testing	*athlete*	*39.6%*	*32.7%*	*17.0%*	*11.2%*	*7.0%*	*33.3%*	*18.8%*	*17.4%*
procedures	*coach*	*54.6%*	*16.5%*	*9.8%*	*13.4%*	*3.8%*	*11.3%*	*18.0%*	*26.3%*
health	*athlete*	*35.8%*	*25.7%*	*17.8%*	*8.4%*	*9.9%*	*19.0%*	*45.0%*	*26.0%*
consequences	*coach*	*40.3%*	*13.6%*	*10.3%*	*8.2%*	*3.3%*	*9.0%*	*42.8%*	*43.3%*
legal	*athlete*	*42.6%*	*23.4%*	*11.7%*	*9.6%*	*8.9%*	*16.8%*	*36.8%*	*18.5%*
consequences	*coach*	*52.7%*	*11.1%*	*8.2%*	*12.3%*	*3.3%*	*5.4%*	*35.5%*	*30.8%*
NADO operations	*athlete*	*45.6%*	*28.1%*	*13.5%*	*13.7%*	*4.8%*	*15.6%*	*21.8%*	*16.2%*
	coach	*59.6%*	*11.6%*	*5.1%*	*15.7%*	*2.8%*	*4.4%*	*20.3%*	*21.1%*

As noted earlier, NADO websites play an important role in developing the knowledge base on anti-doping for both coaches and the athletes. Coaches from all three countries stated that they receive knowledge from such websites about the following topics: 64.4% about anti-doping rules, 64.1% about prohibited substances, 54.6% about the testing procedures, 59.6% about NADO operations, and 52.7% about the legal consequences of doping.

With regard to athletes, 48.8% stated that they search for rules about doping on NADO websites, 52.1% about prohibited substances, 45.6% about NADOs' operations, and 42.6% about the legal consequences of doping. It is notable that 43.6% of the athletes responded that they use coaches as a source for getting information about the rules on doping. This is also confirmed by other studies, where coaches are the main source of information about anti-doping issues, as we noted above. In general, however, our findings show that coaches do not get their information from other coaches, which indicates a relatively low amount of discussion among coaches, which is somewhat alarming since peer-to-peer communication can be a valuable source of sharing and obtaining information. This could be particularly important in sport, as it is a highly specialised field and knowledge is often difficult to obtain, including that on doping. Mandić et al. (2013) and Šajber et al. (2013) found that coaches rely on self-education to obtain knowledge about doping, while Allen et al. (2013) reported that coaches would like more systemic education on doping, which suggests that this group should be more included in the educational programmes carried out by NADOs.

The results of the current study also show that 23.9% of the athletes get information about anti-doping rules on doping from medical staff and 31.2% from other athletes, thus showing the importance

of peer learning with regard to knowledge, although maybe not for the attitude towards doping. Halabchi et al. (2011) also noted the importance of peers with regard to sharing anti-doping knowledge.

Many of the respondents, 45% of athletes and 42.8% of coaches – stated that they get information on the health consequences of doping from the media, which is somewhat worrying. Newspaper reporters, journalists and other people working in the media may do good research as part of their work, but this is still second-hand information. Athletes and coaches should be aware that medical staff, NADO websites and people working at NADOs can provide more reliable information when it comes to prohibited substances, as they deal with it on a daily basis.

We also compared participants from different countries with regard to where they gain their information, although in Austria the category "parents" was not included in the survey. Similar to the results of previous research on this topic, NADO websites were crucial in all three countries, and athletes from all three countries stated that they received the majority of their knowledge from these, with such sites being the main sources of information about rules, prohibited substances, testing procedures, legal consequences and NADOs' operations.

Table 15

Comparison of sources of information between participants from different countries

		NADO website	*coach*	*staff*	*officials*	*parents*	*other athletes*	*media*	*other*
rules	*Austria*	*45.5%*	*39.1%*	*19.4%*	*18.8%*		*24.4%*	*33.7%*	*34.8%*
	Estonia	*66.1%*	*39.7%*	*25.7%*	*8.8%*	*21.3%*	*29.4%*	*58.1%*	*10.3%*
	Slovenia	*45.6%*	*26.6%*	*17.6%*	*8.5%*	*8.7%*	*19.2%*	*35.0%*	*17.4%*
substances	*Austria*	*71.3%*	*25.2%*	*13.0%*	*11.5%*		*16.3%*	*30.4%*	*30.2%*
	Estonia	*50.0%*	*33.1%*	*23.0%*	*9.6%*	*17.6%*	*27.2%*	*56.6%*	*17.6%*
	Slovenia	*43.5%*	*23.4%*	*14.5%*	*6.7%*	*6.7%*	*15.8%*	*35.3%*	*19.0%*
testing procedures	*Austria*	*52.1%*	*32.2%*	*13.3%*	*18.2%*		*31.1%*	*17.7%*	*27.6%*
	Estonia	*26.5%*	*42.6%*	*16.9%*	*6.6%*	*19.3%*	*34.6%*	*35.3%*	*15.4%*
	Slovenia	*44.0%*	*16.3%*	*14.5%*	*7.4%*	*1.6%*	*16.3%*	*14.3%*	*15.4%*
health consequences	*Austria*	*38.8%*	*24.6%*	*12.9%*	*8.8%*		*13.8%*	*47.8%*	*47.6%*
	Estonia	*26.5%*	*24.3%*	*22.1%*	*11.8%*	*13.2%*	*24.3%*	*59.6%*	*19.9%*
	Slovenia	*39.5%*	*16.7%*	*15.0%*	*6.9%*	*5.6%*	*14.1%*	*35.9%*	*21.0%*
legal consequences	*Austria*	*56.2%*	*20.0%*	*9.9%*	*13.7%*		*12.8%*	*36.4%*	*32.7%*
	Estonia	*33.8%*	*30.9%*	*12.6%*	*5.9%*	*14.7%*	*17.6%*	*53.7%*	*11.8%*
	Slovenia	*40.4%*	*13.8%*	*10.3%*	*8.9%*	*4.2%*	*10.7%*	*31.0%*	*17.0%*
NADO operations	*Austria*	*51.3%*	*28.5%*	*15.4%*	*27.0%*		*16.0%*	*21.7%*	*28.7%*
	Estonia	*47.8%*	*41.9%*	*11.0%*	*4.4%*	*14.7%*	*15.4%*	*40.4%*	*10.2%*
	Slovenia	*51.3%*	*9.2%*	*5.1%*	*4.7%*	*.7%*	*5.6%*	*15.0%*	*9.6%*

An interesting finding is that in Estonia the media seems to play more important role than elsewhere, being used by 58.1% of respondents compared to 33.7 in Austria and 35% in Slovenia. Likewise, the media seems to be a more important source of information for Estonian athletes and coaches with regard to the prohibited substances and health and legal consequences of doping. This may be because the Estonian media reported more about doping than that in Slovenia or Austria, although we have no data on this, and thus no conclusions can be made here. What the media focus on often depends on what is happening, and thus doping is given more attention when there is a related scandal.

We also found an interesting result regarding the testing procedures, as 42.6% of the Estonian athletes and coaches stated that they received such information from coaches, while this was true for only 32.2% of the Austrians and only 16.3% of the Slovenians. This could mean that there is more discussion about testing procedures between coaches and athletes in Estonia than in Austria or Slovenia, and another reason could be that perhaps more coaches accompany their athletes to doping testing in Estonia. In Slovenia, for example, it is a common practice that team doctors or physiotherapists accompany athletes, rather than coaches, which also provides fewer opportunities for discussion about the topic.

We also looked at differences in obtaining information between those participants who already attended a NADO prevention programmes, and those who had never attended such a programme. The differences found were small, and the main sources of information on practically all topics were the NADO websites and coaches. However, it can be said that those respondents who had attended a programme relied slightly more on the NADO websites and coaches. The former could be a direct result of the content of the education, as such websites are frequently stressed as the most relevant sources of information, apart from the doping officials and people employed by NADO, and this is why these organisations must take care to keep up-to-date websites.

Table 16

Comparison of sources of information between athletes who have already participated in NADO prevention programmes, and those who have never participated in such programmes

		NADO website	*coach*	*staff*	*officials*	*parents*	*other athletes*	*media*	*other*
rules	*attended*	*51.4%*	*51.4%*	*24.3%*	*12.1%*	*14.6%*	*33.6%*	*39.3%*	*21.5%*
	didn't attend	*47.2%*	*38.9%*	*23.6%*	*12.7%*	*15.3%*	*29.7%*	*37.7%*	*19.0%*
substances	*attended*	*55.5%*	*36.7%*	*18.8%*	*6.5%*	*10.9%*	*25.7%*	*37.6%*	*24.1%*
	didn't attend	*50.0%*	*30.0%*	*18.1%*	*9.0%*	*14.5%*	*22.2%*	*37.1%*	*18.3%*
testing procedures	*attended*	*43.4%*	*37.3%*	*17.6%*	*8.2%*	*5.1%*	*34.8%*	*18.4%*	*17.6%*
	didn't attend	*37.3%*	*30.0%*	*16.6%*	*12.9%*	*8.1%*	*32.4%*	*19.0%*	*17.3%*
health consequences	*attended*	*36.7%*	*26.1%*	*18.0%*	*8.6%*	*12.4%*	*23.3%*	*45.7%*	*29.0%*
	didn't attend	*35.2%*	*25.4%*	*17.7%*	*8.4%*	*8.5%*	*16.5%*	*44.6%*	*24.1%*
legal consequences	*attended*	*45.2%*	*28.6%*	*13.3%*	*8.8%*	*8.0%*	*18.3%*	*39.2%*	*20.4%*
	didn't attend	*41.1%*	*20.3%*	*10.8%*	*10.0%*	*9.4%*	*15.9%*	*35.5%*	*17.4%*
NADO operations	*attended*	*50.6%*	*29.0%*	*10.0%*	*10.8%*	*2.9%*	*15.4%*	*22.4%*	*16.6%*
	didn't attend	*42.6%*	*27.5%*	*15.6%*	*15.3%*	*6.0%*	*15.8%*	*21.4%*	*16.0%*

CONCLUSION

Anti-doping content is comprehensive and yet extremely important for athletes and their support personnel. It can be delivered via both formal and informal channels. However, what matters the most is the quality of information that is delivered.

In the current study, respondents were asked about their sources of information for different anti-doping content. From rules and testing procedures to legal consequences and NADO operations. For each content, they checked the sources on which they rely the most.

Results showed that respondents from all three countries use the websites of their NADO as the main source for all contents, with the exception of medical consequences, where they rely more on information from the media. The media turned out to be the second most significant resource, which is quite worrisomely since we can often notice that information from media is not entirely correct and might mislead athletes. People working in the media may do good research as part of their work, but this is still second-hand information that is usually not reviewed by experts before publishing.

While it was positive to find that NADOs' websites are seen as a trusted source we have to keep in mind that this might be country specific and that this findings may not apply to other nations. However, these findings should encourage all NADOs to keep their websites up-to date, as they could be a valuable source to provide good support and reliable information for both athletes and coaches. Findings also indicate that the knowledge of athletes support personnel is extremely important as athletes trust them largely and that we should encourage athletes to rely more on first-hand information from NADOs and medical personnel rather than media.

6. ATHLETES' AND COACHES' PERCEPTIONS OF TESTING PROGRAMS AND SANCTIONS

INTRODUCTION

Functioning of the doping control system of particular sport may influence athletes' perception, their views and support of the system as a whole. It may also have a deterrent effect. NADOs have to legitimise extensive anti-doping programmes and enforce the rules regardless of athlete's perceptions of such efforts, but they depend on the their support and trust in order to prevent doping efficiently in elite sport. Additionally, athletes' responses to policies must be considered because they involves all athletes and are (formally) developed in order "to protect the athletes' fundamental right to participate in doping-free sport …" (World Anti-Doping Code, 2015), with doping controls being a key measure to achieve this (Overbye, 2016a).

Doping controls (testing) are undertaken to obtain analytical evidence as to the athlete's compliance (or non-compliance) with the strict prohibition on the presence/use of a prohibited substance or prohibited method. Any athlete may be required to provide a sample at any time and at any place by an anti-doping organisation with testing authority over him or her (World Anti-Doping Code, 2015).

The first "doping controls" were in fact small-scale tests for stimulants introduced at the 1964 Olympic Games in Tokyo. At the 1968 Games in Mexico, a somewhat larger doping control program was carried out (Catlin, Fitch, & Ljungquist, 2008). In the last 50 years testing programmes have become more sophisticated, and with improvements in analytical methods more efficient as well. In 1991 the International Association of Athletics Federations (IAAF) was the first international sports body to introduce "out-of-competition" testing, which today is regarded as an indispensable part of any effective doping control program. The Australian Anti-Doping Agency (ASADA) became the first national anti-doping agency to establish a domestic blood-testing program, while the International Cycling Union (UCI) took it even further with the development of the athlete's biological passport in 2008.

The number of tests on a global level was increasing significantly until the early 2010s, when optimisation through intelligent (evidence-based) testing was recommended. Yearly there are now around 280,000 tests (both urine and blood) carried out around the globe, but the percentage of positive cases is not increasing, and each year less than 2% of doping tests reveal positive results. Although the number of blood tests has been increasing with the greater use of biological passports, the most common procedure for detecting the presence/use of prohibited substances remains the use of urine tests.

The establishment of the World Anti-Doping Agency in 1999 and implementation of the World Anti-Doping Code (in 2004, 2009 and 2015), along with its International Standards, eliminated some of the inconsistencies and inefficiencies seen in anti-doping efforts, but not all.

According to the Overbye (2016a), recent studies show that because of inconsistency in implementation of World Anti-Doping Code and International Standards for Testing and Investigations, existing policies have led to a different kind of inconsistency and new forms of inequality for athletes under stronger regimes. For example, studies have shown that:

- the national implementation of the Code takes various forms (Wagner & Hanstad, 2011);

- that there are differences across NADOs in how missed tests and filing failures are managed (Dikić, Marković, & McNamee, 2011);
- that there is a great variation among Anti-doping Organisations in criteria for registered testing pools (RTP), athletes' availability for testing and in how sanctions are imposed (Hanstad, Skille, & Loland, 2010; Siekmann & Soek, 2010);
- and finally, that not all signatories are compliant with the Code (Code Compliance, 2018).

LITERATURE REVIEW

In Denmark, Overbye (2016a) examined how elite athletes perceive and trust the functioning of the doping testing system in their sport. Based on a web-based questionnaire (N=645; response rate 43%) qualitative findings to elaborate on and explain quantitative results were used. The results showed that one-third (33%) of athletes who reported their views disagreed to some extent that the number of tests and selection of athletes for these were appropriate. Of these athletes (n=175), a majority (81%) wanted the number of tests to be increased; only 2% felt that testing was too frequent; 47% felt that the same athletes were tested too often; 30% felt that the number of tests on sub-elite athletes (athletes just below elite level) should be increased; and 29% reported that the "wrong" athletes were selected for doping controls in their sport. Majority of athletes who had an opinion about testing programmes thought that in some countries testing programmes are not extensive enough or that doping controls were limited in order for athletes to win more medals. Based on previous experiences with testing and the frequency of doping, athletes expressed trust/distrust in the testing system. This was particularly shown among the athletes who need the testing system in their sport to be effective because of a high doping prevalence.

Tavani et al. (2012) did a survey among 508 Italian athletes at various competition levels and types of sport about their beliefs on and attitudes toward doping. About half the athletes thought that doping controls did not exist or were rare, that they should be more frequent and that they are not or only poorly effective, with almost 84% stating they could be more effective. Consistency among the answers was substantial. Almost three quarters (72%) of athletes believed, that athletes who are using doping, do not get caught. About 90% of all athletes would prefer testing to be done more periodically, especially during training.

Dunn et al. (2010) aimed to investigate, among a sample of elite Australian athletes (N=974), the extent to which that group supported doping control system as a deterrent to doping use. Their study showed that three-quarters of the sample (75.9%) agreed/strongly agreed that testing for prohibited substances was an effective way of deterring people from using them, and a much smaller proportion (7.1%) disagreed/strongly disagreed. Perceptions of punishment severities were also investigated. Three-fifths (62,6%) of the sample agreed/strongly agreed that the current sanctions for breaking the anti-doping rule violations are strict enough. Similar proportions disagreed/strongly disagreed and agreed/strongly agreed (25.2% and 23.1% respectively) that the sanctions should be more severe[2].

Judge et al. (2010) studied the attitudes toward doping testing of US track & field athletes in throwing events (N=240). Most of the participants (67.8%) did not feel that the current protocols with which athletes get tested are fair. More than half (58.1%) agreed/strongly agreed that doping testing was the

[2] At the time of the study the 2009 World Anti-Doping Code was enforced, with the sanction of two years of ineligibility for first anti-doping rule violations.

most effective method to prevent/control the use of prohibited substances in sport, yet in response to the very next question an even larger majority (98.3%) agreed that doping testing does not catch all athletes who cheat. From this study we can also gather that participants do not believe that doping testing is an invasion of privacy (81,4%) and accept it as part of participation. A total of 61.7% of the surveyed athletes believed that the sanctions imposed on doping cases are not stringent enough, while they favoured a two-year ban for first-time offenders (56%) and supported a lifetime ban for second offenders (71.2%).

Ćorluka et al. (2011) studied doping-related factors, knowledge and attitudes among Bosnian and Herzegovinian football players (N=181). The subjects were asked about general, educational, social and sport factors, along with doping factors, including penalties in the case of doping. The highest percentage (35.35%) of athletes believed that first-time offenders should get a mild punishment and second-time offenders a lifetime ban. In more detail, 27.07% were in favour of suspension for a couple of seasons for first-time offenses, while18.79% were in favour of lifetime suspension and financial penalties for second offences. None of the athletes believed that doping should be allowed. Rodek et al. (2012) did a similar study on 44 Croatian high-level sailing athletes and 34 coaches. The highest percentage of athletes (38.6%) and coaches (52.9%) believed that first-time offenders should get a mild punishment and second time offenders a lifelong ban. In more detail, 29.5% of athletes and 23.5% of coaches were in favour of suspension for a couple of seasons for first time offences, while with regard to second offences 18.2% of athletes and 14.7% of coaches wanted livelong suspension, but for first time offenses financial penalties were favoured by 11.4% of athletes and 2.9% of coaches. One of the athletes and two coaches thought that doping should be allowed. Šajber et al. (2013) did a parallel analysis about sport nutrition and doping factors among 55 Croatian athletes and 22 coaches in swimming. Two fifths of the athletes (40%) believed that financial punishment is the proper sanction for all doping offenders, while 33% would go with lifelong suspension, and a quarter felt that first time offenders should get a milder punishment, then lifelong suspension for a second offence. One of the athletes thought that doping should be allowed. Coaches had a different opinion, and 64% believed that lifelong suspension is the appropriate sanction for doping, while 18% favoured financial punishment and 18% other mild punishments for first time offences, then lifelong suspension for second offences.

Halabachi et al. (2011) carried out a knowledge and attitude study on 426 Iranian free-style wrestlers from 25 randomly selected clubs from all four geographically identified districts of Teheran. More than 94% of wrestlers disagreed with the free use of all prohibited substances, which indicates their agreement with doping control system. About one third of the athletes would enhance doping controls via increased in-competition and/or out of competition testing (37.5% and 34.7% respectively) and would also increase doping sanctions for doping offences (35.8%). A quarter (25.5%) would consider heavy financial penalties, and 11.8% would consider imprisonment for doping offences. Notable, 16.3% would deprive doping offenders of all citizenship rights.

A similar cross-sectional study (N=375) was done by Seif Barghi et al. (2015), who investigated the knowledge and attitudes toward doping among Iranian football coaches (n=136) and players (n=239). More than 80% of coaches and players disagreed/completely disagreed that the free use of all prohibited substances should be allowed. The majority also agreed/completely agreed that doping controls should be enhanced via increased in-competition testing (80.8 %) and out of competition testing (71.7%). Moreover, 74.7% of coaches and players would increase sanctions for doping offences, and 62.7% would add heavy financial penalties for the offenders. Similar proportions agreed/completely agreed and disagreed/strongly disagreed (36.3% and 36.5% respectively) about imprisonment for doping offenders, while 16.3% would deprive them of all citizenship rights.

Table 17

Summary of replies to the questions regarding satisfaction with testing programs

	coach (C)/ athlete (A)	country	gender	team (T) / individual (I) sports	exposed (E) / non-exposed (NE) sports	tested (T) / never tested (NT) athletes	participated (P) / never participated (NP) in NADO education	with medals (M) / without medals (NM) in big competitions
satisfaction with doping controls frequency	A > C	E > S > A						
doping controls are an interference in my life		A > E > S						M > NM
doping controls are an invasion of privacy			M > F	I > T				
doping officials are kind and fair during testing	A > C	E > S > A						M > NM
punishments for doping violations should be more severe	C > A	S > A > E						
the use of prohibited substances should be also punished		S > A > E	F > M	I > T				
adult athletes should decide on their own regarding doping, external control is redundant	A > C	S > E > A		T > I	NE > E			
our country has stricter rules regarding doping than other countries		A > E > S				NT > T		
doping controls are a necessary part of elite sport			F > M		E > NE	T > NT	P > NP	
doping controls help protect clean athletes		E > S > A					P > NP	
table in appendix	45	46	47	48	49	50	51	52

Notes. A - Austria, E - Estonia, S - Slovenia; M - males; F - females

For the purpose of this research and clearer interpretation of the results, we identified three main areas of the testing programme:

- attitude toward doping controls (1-4);
- experiences with doping controls (5-7);
- adequacy of sanctions (8-11).

Attitudes toward doping controls

Attitudes toward doping controls were established by asking the participants to respond to the following statements:

- doping controls interfere with my life/the lives of the athletes;
- doping controls are an invasion of privacy;
- doping controls are a necessary part of elite sport;
- doping controls protect clean athletes.

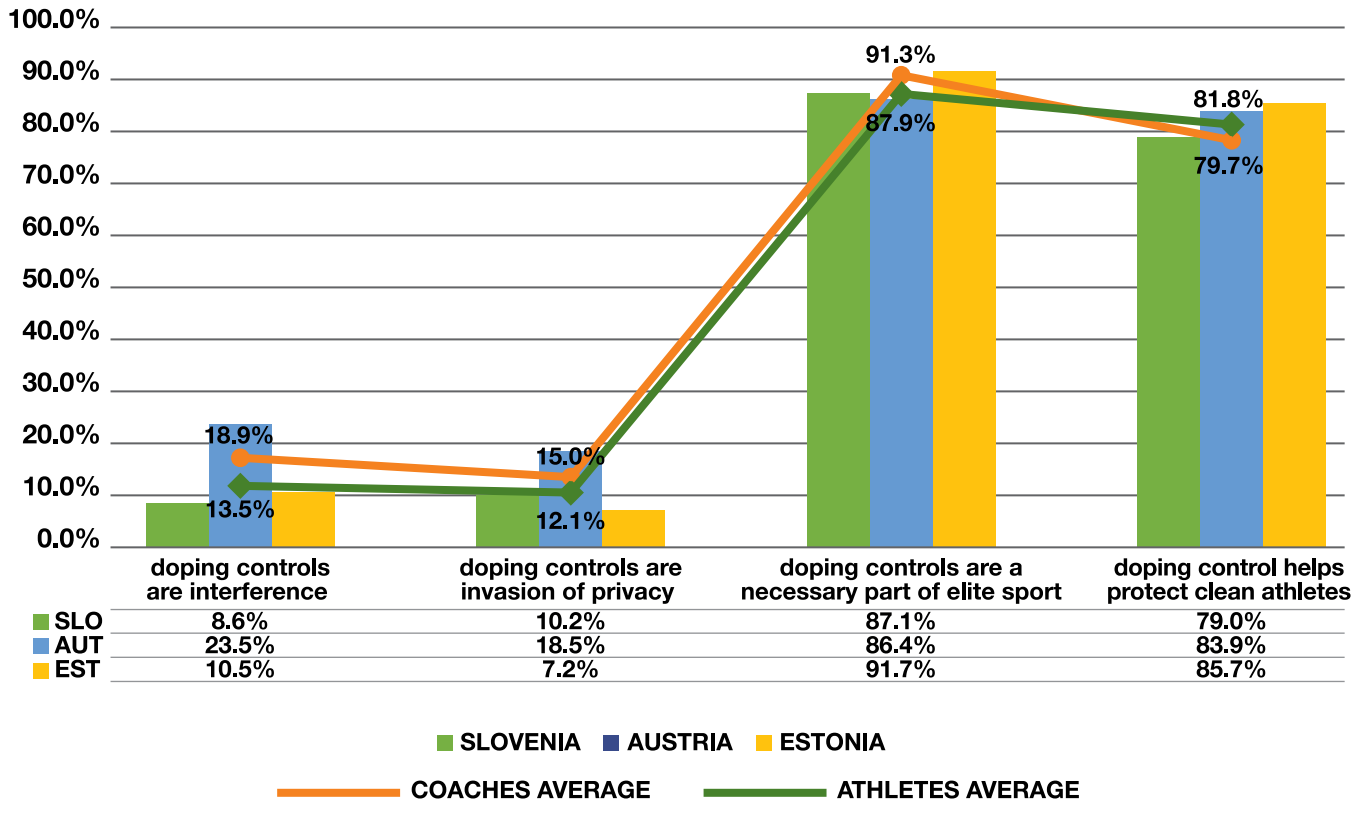

Figure 4. Athletes' attitudes toward doping controls.

The Austrian athletes have the most negative attitude toward doping controls, as 23.5% view them as an interference in their life (compared to Estonian and Slovenian athletes there were statistically significant differences), and 18.5% as an invasion of privacy.

Judge et al. (2010) found that US athletes in track & field throwing events did not believe that doping controls are an invasion of privacy, while in our research this was felt by 83.9% of the Estonian athletes, 69.3% of the Slovenian athletes, and 63% of the Austrian athletes.

Perhaps surprisingly, in our research more male athletes than female ones saw doping controls as an invasion of privacy, although unfortunately we have no gender specific data for Judge et al.'s research. We would expect that women would have more issues with giving samples in front of a witness than men. However, our results might be explained by the fact that there were statistically significant differences between males and females in their view of doping controls as a necessary part of sport. Female athletes were more aware than men that sport cannot be fair without doping controls, so this could be one of the reasons for their more favourable attitude toward these. Another reason could be that female athletes are more confident than male ones that doping controls protect clean athletes.

The highest number of statistically significant differences among our sample were found for the statement "Doping controls are a necessary part of elite sport". Differences were found between:

- males and females
- exposed and non-exposed sports
- tested and never tested respondents
- educated and not educated respondents

However, the mean scores in all groups were well over four (out of five), which means that the majority of the participants strongly agreed with the statement that doping controls are a necessary part of elite sport, so further discussion is not necessary (Figure 5).

	gender		type of sport		testing		education	
Doping controls are a necessary part of elite sport	female	male	exposed sports	non-exposed sports	tested	never tested	educated	not educated
strongly disagree / disagree	1.00%	4.50%	4.40%	3.60%	1.60%	4.30%	2.80%	4.00%
partially agree	6.30%	5.40%	0.50%	6.40%	3.90%	6.80%	4.80%	6.30%
agree / strongly agree	92.10%	88.50%	95.10%	88.50%	93.40%	87.70%	92.10%	87.80%
M (SD) - doping controls are necessary	4.63 (0.78)	4.31 (1.08)	4.62 (0.90)	4.38 (0.99)	4.65 (0.67)	4.34 (1.09)	4.60 (0.72)	4.34 (1.10)

Figure 5. Doping controls are a necessary part of elite sport – statistically significant differences.

Experience with doping controls

Experience with doping controls were established by asking the participants to respond to the following statements:

- satisfaction with doping control frequency;
- doping controls officers were kind and fair during testing;
- I was aware of the doping control process before my first test.

Participants were asked to only answer the questions about the frequency of doping controls and behaviour of doping control officers if they (athletes) or their athletes had ever been tested (coaches), with a total of 105 athletes and 130 coaches responding.

Doping control frequency is often discussed among athletes and the sports community, with regard to issues such as should doping controls be more frequent, should there be more target testing, should all tests be out of competition, and so on. Our study confirmed that opinions differ and statistically significant differences were found between athletes and coaches, as well as between countries (the highest in Estonia, followed by Slovenia and Austria).

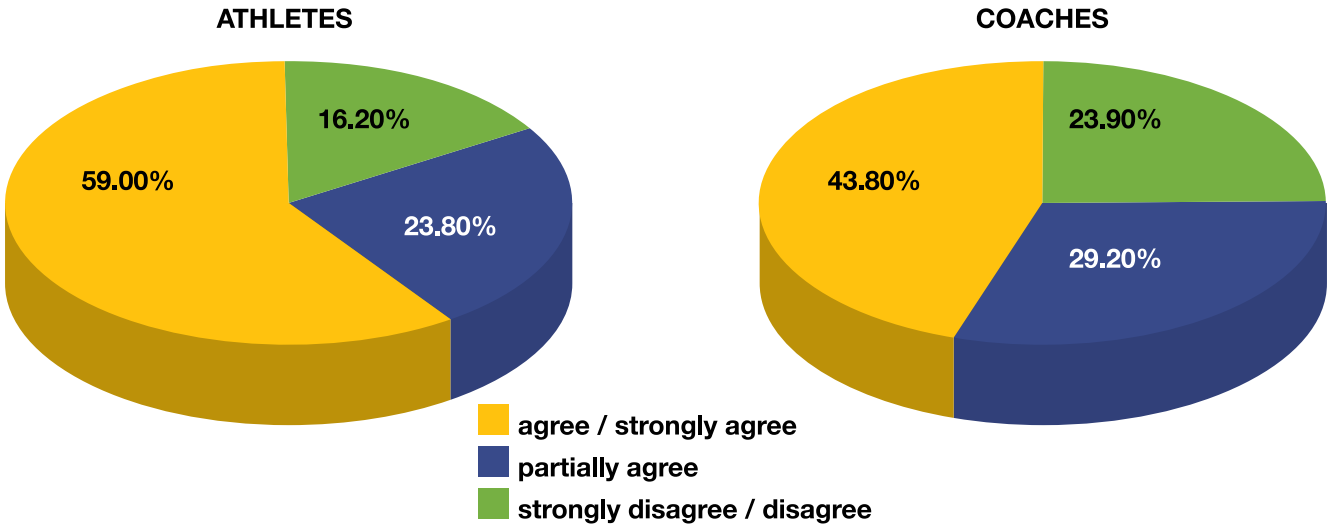

Figure 6. Athletes' and coaches' satisfaction with doping control frequency.

In Slovenia, 26.6 % of athletes strongly disagreed/disagreed with the number of doping controls. Among Estonian athletes the percentage was 4.5%, and none of the Austrian athletes who had been tested answered this question. Comparing these results to those from to Danish (Overbye, 2016a) and Italian (Tavani et al., 2012) athletes, where 33% and 52.2%, respectively, were not satisfied with the doping control frequency, we can see that our results were quite different. The results from the Italian and Danish studies showed that 54.7% and 81% of athletes, respectively, would prefer more frequent doping controls. Unfortunately, in our study we did not ask the sub-questions, so we have no data on whether our athletes would prefer more or less frequent doping controls.

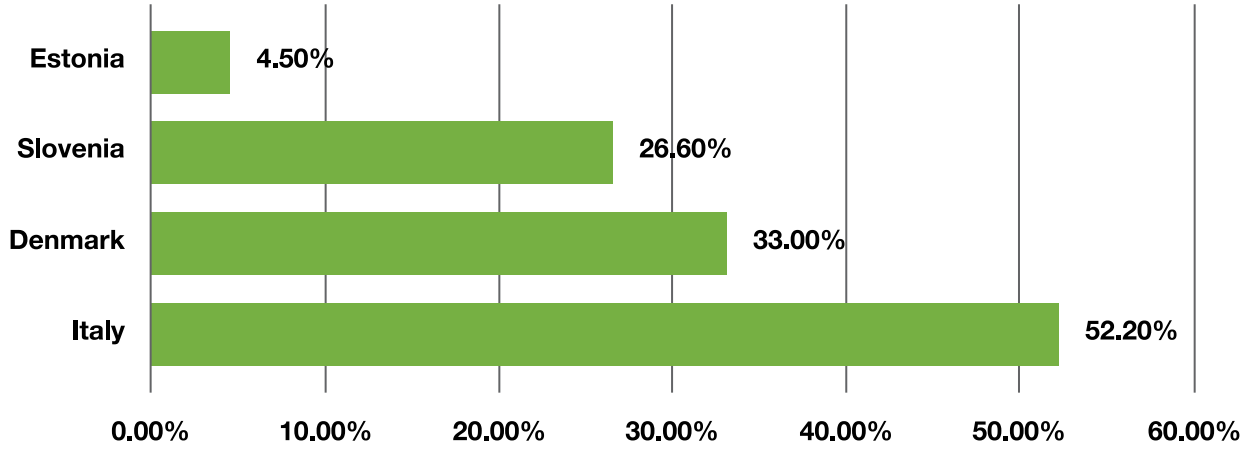

Figure 7. Percentage of athletes, that are not satisfied with the frequency of doping controls.

It is important that doping control officers treat athletes fairly and with respect. It is true that the purpose of doping controls is to catch offenders, but that does not mean that all athletes should be treated as criminals. The majority of athletes do not dope, so there should not be any negative views of them. Doping controls are also quite an intimate act, and proper behaviour from the doping control officers is thus needed.

A total of 90.5% of athletes that had experience with doping controls agreed or strongly agreed that doping control officers treated them fairly and with respect (among Slovenian athletes the percentage was 88.5 and among Estonians 93.1%, while none of the Austrian athletes that were tested responded to this question). There were statistically significant differences between athletes and coaches. If we look at the results about attitudes towards doping controls (Figure 4), we can see that the coaches had a more negative attitudes than the athletes did, so this might explain big differences in satisfaction with doping control officers.

Proper behaviour from doping control officers is not the only thing that is important in this process. It is necessary that athletes know the procedure before they are tested for the first time. Even though doping control officers will lead athletes through the procedure and answer all their questions, athletes should receive some basic information about the procedure beforehand.

educated before doping control	athletes	coaches
strongly disagree / disagree	27.70%	28.60%
partially agree	16.20%	9.80%
agree / strongly agree	55.00%	54.00%
M (SD) - doping controls are necessary	3.38 (1.56)	3.20 (1.76)

Figure 8. In the scope of educational programmes the doping control procedure was explained to me (my athletes).

Statistically significant differences were found between the countries in receiving information about the doping control process beforehand of testing – Slovenians had the highest mean score, followed by Estonians and Austrians. If we take a look at the frequencies among the athletes we can see that only 16.8% of the Slovenians were not educated before their first doping control, while in Estonia and especially Austria the percentages are much higher.

Adequacy of sanctions

Adequacy of sanctions was established by asking the participants to respond to the following statements:

- I wish that sanctions for anti-doping rule violations were more severe;
- the use of doping should be criminally charged as well;
- adult athletes should decide on their own to use doping or not, external control is redundant;
- in our country anti-doping rules are followed stricter than in other countries.

Adequacy of sanctions is also one of the topics that are frequently discussed among the sports community as well as the general public. Some people support the idea of lifetime sanctions for first-time doping offenders, while others are aware that some athletes are victims of unintentional doping so this seems rather harsh.

In our research, the majority of athletes and coaches stated that sanctions should be more severe, although there were statistically significant differences between these two groups. If we compare our results with those of other studies we can see that the findings differ among countries – from 23.1% in Australia to 74.7% among footballers and coaches in Iran, which is in line with our findings since statistically significant differences were found among Slovenia, Austria and Estonia. Athletes and coaches were also asked if they agree that the use of prohibited substances should be criminally charged, and 72.3% of athletes and 69.6% of coaches agreed/strongly agreed. We can conclude that in general the sports community is in favour of more severe sanctions for doping.

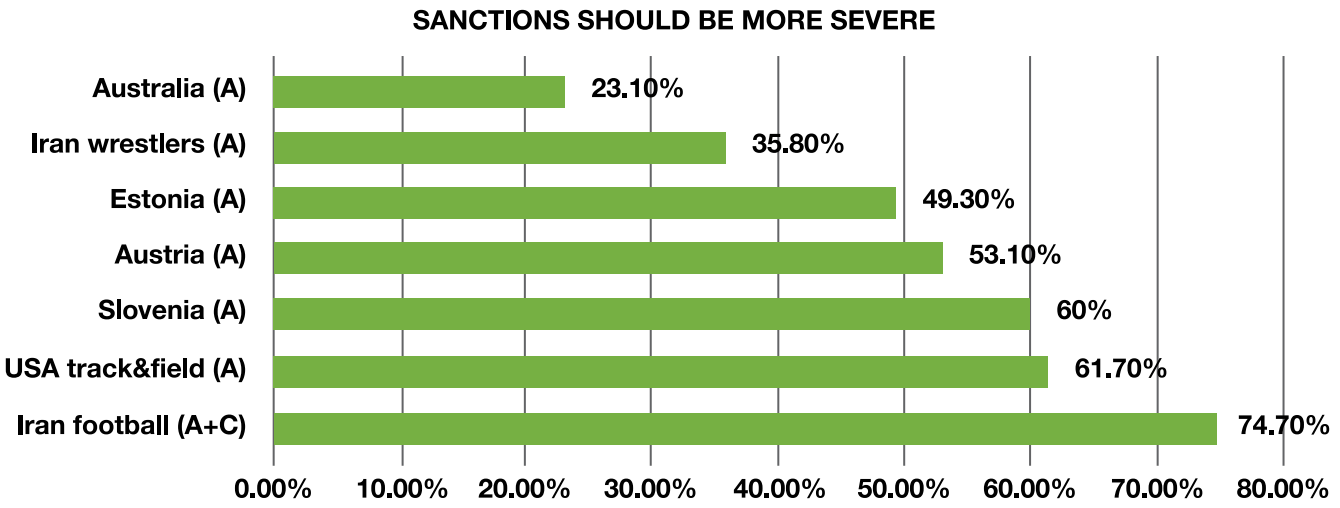

Figure 9. Athletes' / coaches' opinions about the adequacy of sanctions (A = athletes, C = coaches); N= 375 (Iran football), 240 (USA track & field), 170 (Slovenia), 81 (Austria), 71 (Estonia), 426 (Iran wrestling), 974 (Australia).

The participants in this study also responded to the statement: "Adult athletes should decide on their own whether to dope or not, external control is redundant" (Figure 10). The average results show that athletes are more in favour of allowing doping than coaches, but a closer look at the results showed that this is a consequence of the responses from Slovenian athletes. Surprisingly, 24.7% of Slovenian athletes (a total of 15) believe that adult athletes should decide on their own if they want to dope or not and that external control is not necessary. In comparison to other available data, we can see that this result stands out. However, overall the high percentage of respondents that disagree with the free use of doping indicates their agreement with doping controls.

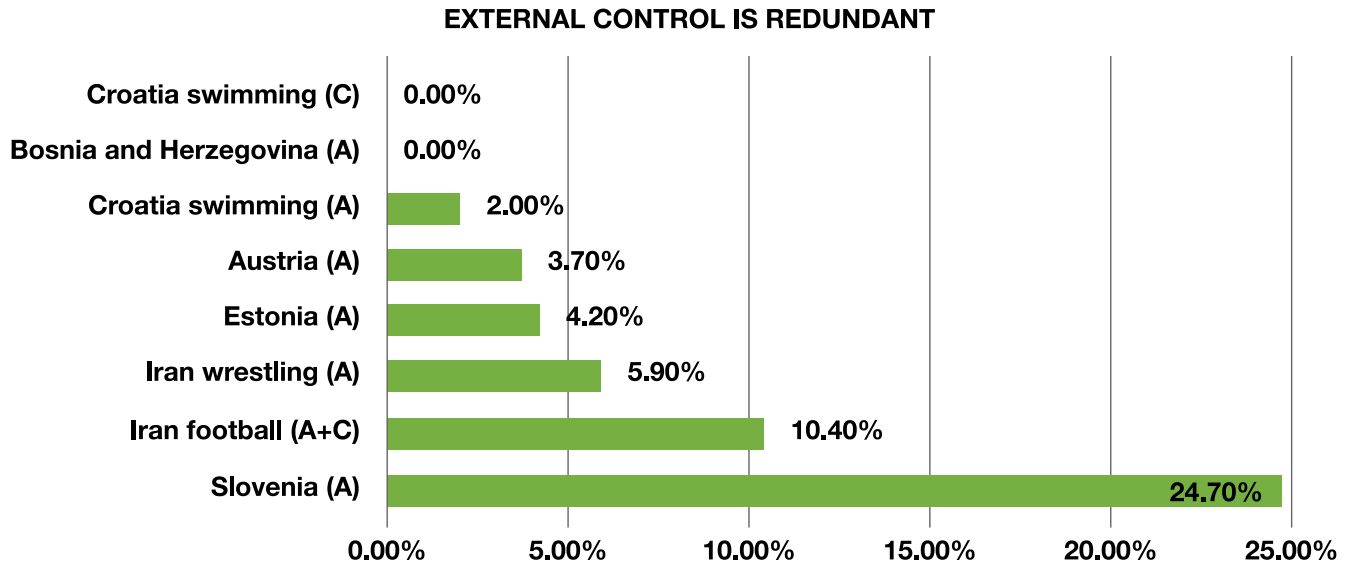

Figure 10. Should doping be allowed? A = athletes, C = coaches; N = 170 (Slovenia), 375 (Iran football), 426 (Iran wrestling), 71 (Estonia), 81 (Austria), 55 (Croatia swimming A), 181 (Bosnia and Herzegovina), 22 (Croatia swimming C).

The respondents were also asked if they believe that rules are stricter in their country compared to others. We found statistically significant differences between countries and tested/never tested athletes. Austria stands out with the mean score of 2.5, while Slovenia and Estonia have similar mean scores (1.97 and 1.98 respectively) when looking and the combined results of athletes and coaches, but there were differences with regard to the results for the athletes alone.

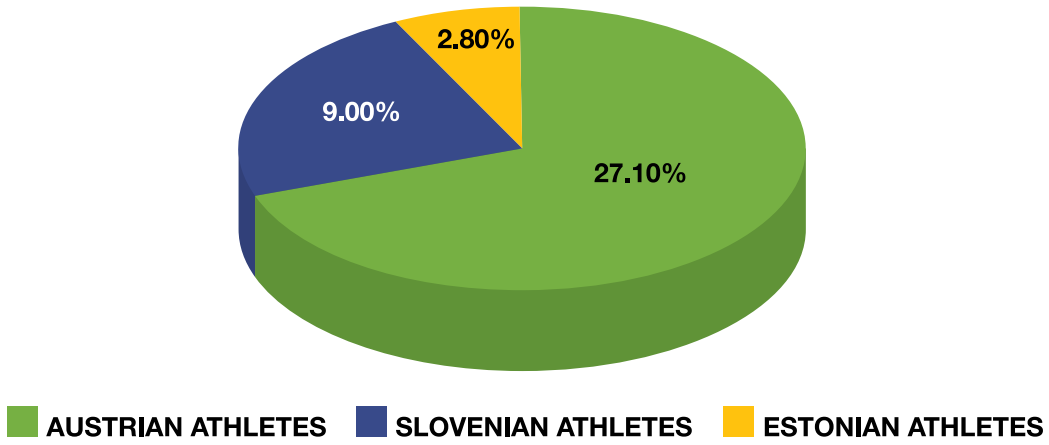

Figure 11. Share of athletes that believe that the rules are stricter in their country.

CONCLUSION

We can conclude that the majority of statistically significant differences were found between the countries and between athletes and coaches. Unfortunately, there are not that many existing studies with similar content, so we could only make a few comparisons here.

Overall, Austrian athletes had the most negative attitude towards doping controls, and the Estonians felt more than others that doping controls are necessary and protect clean athletes. These differences might be explained by the athletes' satisfaction with the doping control frequency (Austrians were least satisfied with the frequency), but since there were no sub-questions on this topic we do not know if athletes and coaches would prefer more doping controls or less.

There were many differences (also compared to other studies) with regard to the adequacy of the sanctions and whether doping should be allowed. For example almost a quarter of Slovenian athletes believed that adult athletes should decide on their own whether to use doping or not, and that external control is not necessary (in the other countries the figure is around 10% or lower). Only 23% of Australian athletes think that sanctions should be more severe, while this is true for 74% of Iranian football players. To make some general conclusions we would need more research, but type of sport and nationality might have an influence on an athlete's opinion about these issues/topics.

7. EFFICIENCY OF DOPING PREVENTION PROGRAMS

INTRODUCTION

Sport has the power to provide a universal framework for the acquisition of values and ethics, thereby contributing to the development of the soft skills required for responsible citizenship. “As noted in the International Charter of Physical Education, Physical Activity and Sport (2015), the provision of quality education in sport is essential for promoting values such as fair play, equality, honesty, excellence, commitment, courage, teamwork, respect for rules and laws, respect for oneself and others, community spirit and camaraderie, as well as fun and enjoyment. The whole of society stands to benefit from the significant health, social and economic benefits that sport can yield, which means that sport programmes must therefore encourage lifelong participation. An active lifestyle helps prevent heart disease, diabetes, cancer and obesity, and ultimately reduces the risk of premature death. Doping, on the other hand, is the cause of a host of health problems” (Makuc & Kivinukk, 2017, p.7).

Integrity of physical education, physical activity and sport can only be protected if all stakeholders work closely together. Recent case of state-sponsored doping programme in Russia shows, that the world has not change that much since the “golden” ages of doping in 70s and 80s of the 20th Century. Numerous cases of systematic doping, intimidations of whistle-blowers, cover-ups etc. along with the known cases of corruption in sport federations, match-fixing, sexual and physical violence against athletes have weakened the image of sport around the world.

World Anti-Doping Agency with its priorities drives the international anti-doping work since 1999. From WADA’s beginning main priority was testing followed by intelligence and investigations. Which is fine, we can only prove athletes doping by testing. However, it will take WADA more than 20 years since the establishment before the first International Standard for Education (ISE) will be introduced to the stakeholders (in 2021). With the ISE, educational and prevention programs will become mandatory in order for Anti-Doping Organisation remain complained with the world Anti-Doping Code. Moreover, if we borrow one of Nelson Mandela’s’ inspirational quotes: “Education is the most powerful weapon which you can use to change the world.,” we can frankly ask, what took them so long?

In order to lay strong foundations for the knowledge, skills, attitudes and ambitions required to maintain lifelong participation in sport, priority should be devoted to ensuring that young people have an early positive experience of play, games and physical activities. The problems that can lead athletes to turn to doping include specialising too early and the setting of unrealistic expectations and goals. Offences such as doping, cheating or other forms of misconduct, which have no place in sport, must be rejected at an early stage. In order to ensure this, sport activities must be held in a safe environment which protects the dignity, rights and health of all participants. It is clear that the protection and promotion of the integrity and ethical values of sport must remain the focus of our attention, and that all forms of physical education, physical activity and sport need to be protected from abuse. Phenomena such as doping not only jeopardise its credibility and integrity, but also undermine its educational, developmental and health promoting functions. Every effort must be made to counter the harmful effects of doping and to protect the physical, psychological and social capabilities and well-being of participants, the virtues of fair play and competition, the integrity of the sporting community and the rights of all those involved at

every level. The anti-doping rules, which apply globally, must be implemented at all performance levels by the competent national and international authorities (Makuc, & Kivinukk, 2017, p.7).

Article 18 of the World Anti-Doping Code (World Anti-Doping Code, 2015) binds the signatories to invest in anti-doping education and prevention with the main goal of preserving the spirit of sport from being undermined by doping. According to WADA, main goal of such programmes is to prevent intentional or unintentional use of prohibited substances and/or prohibited methods by athletes. Appropriate education can establish the basis for preventing current and future athletes from doping. This primary prevention approach is the focus of many health-based interventions. Preventing an unhealthy/ undesirable behaviour from the beginning is more effective than stopping an already established behaviour (Backhouse, Patterson, & McKenna, 2009).

Because doping is becoming a greater problem in elite sports, anti-doping and prevention programs are receiving more attention. However, current doping prevention programs that primarily involve pedagogical education in young people have not been shown to be very effective. Consequently, because the main target group of doping prevention should be youth sports rather than professional sports, it is important to take a new path in doping prevention in line with the spirit of sport (Melzer, Elbe, & Brand, 2010). Prevention programmes, which include value-based education and information components, are crucial. These should be targeted at athletes and their support personnel, with special attention devoted to young people. Prevention programmes foster positive attitudes towards the efforts for clean sport and negative attitudes towards cheating, and should be provided to everyone involved in sport, e.g. P.E. teachers, referees, families, medical staff, coaches and other stakeholders.

When talking about the primary goals of any doping prevention education we must keep in mind, that:

- teaching young athletes about fair and clean sport is very important, since it helps to encourage young athletes not only to stay clean but even to become anti-doping advocates;
- emphasising the wider and longer-term consequences of doping is also important – from the impact doping has on fellow athletes and the reputation of their sport to the affects that has on one's career. Ensuring the next generation of athletes are aware of this from the start may prevent them from even considering doping in the future;
- with the provision of thorough anti-doping education, along with emphasis on its importance and how it works, athletes will better understand and comply by the day-to-day testing processes and related activities;
- offering the guidance and support required to help young athletes' confidence grow will help to empower them and make anti-doping less daunting, and thus establish it as an ordinary part of life in the sporting world.

At the end of the day, we must protect young athletes and assure that they participate in sport that is safe and fair. Raising athletes from their beginnings with good and strong ethics, emphasising the value of sport, should motivate them to practise clean sport.

LITERATURE REVIEW

Anti-doping education and intervention research are limited in both their span and scale. Most of the existing research are limited by the chosen research design. This limits the capacity to transfer findings across settings, populations or communities. According to Backhouse, McKenna, Robinson, & Atkin (2007) there is a need to increase the overall level of research output and studies should compare

“best bet” intervention options to establish the everyday value of intervention approaches. Of the few published studies in this field, most have sought to improve knowledge, attitudes and intentions towards anabolic steroid use amongst male college or university athletes.

Seif Barghi et al. (2015) did a cross-sectional study of Iranian football coaches and players (N=239 players and 136 coaches). More than 90% of them agreed or strongly agreed that young people, athletes and coaches should be educated about the harm and side effects of prohibited substances, and that such education might be the most effective anti-doping strategy. However, the study did not investigate their satisfaction with existing programs.

There are some other studies available that suggest the content, methods and target audience for prevention programmes, but we did not find any research about athletes and coaches’ satisfaction with existing prevention programmes in their countries. That means we are not able to provide any comparisons.

Table 18

Summary of replies to the questions regarding the efficiency of prevention programmes

	coach (C)/ athlete (A)	country	gender	team (T) / individual (I) sports	exposed (E) / non-exposed (NE) sports	tested (T) / never tested (NT) athletes	with medals (M) / without medals (NM) in big competitions
at the lecture I learned all I need to know about clean sport							
I am well informed about the consequences of doping		E > S > A			E > NE		
I know the list of prohibited substances is posted on NADO websites		E > S > A			E > NE	NT > T	
I understand how the national and international efforts for clean sport function							
in case of testing I know what to expect						T > NT	M > NM
I know how to apply for a therapeutic use exemption	C > A	S > E					
before the lecture I wasn't aware of the extent of the health consequences of doping	A > C	S > E		T > I		NT > T	NM > M
before the lecture I wasn't aware of the risk of unintentional doping		S > E				NT > T	
I would like more anti-doping lectures				T > I			
table in appendix	53	54	55	56	57	58	59

Notes. A - Austria, E - Estonia, S - Slovenia; M - males; F - females

The results shown above are only from those participants that attended at least one lecture in the past year. Because we made some changes to the questionnaires in Austria, Slovenia and Estonia, some questions were only answered by athletes and coaches in Slovenia and Estonia.

The efficiency of prevention programs was determined with following statements:
- at the lectures I learned all I need to know about anti-doping;
- I am well informed about the consequences of doping;
- I know that the list of banned substances list can be found on NADO websites;
- I understand how the national and international efforts for clean sport function;
- in case of testing, I know what to expect;
- I know how to apply for a therapeutic use exemption.

Participants were also asked about their knowledge prior to the educational session. The following statements were used:
- before the lecture I wasn't aware of the extent of the health consequences of doping;
- before the lecture I wasn't aware of the risks of unintentional doping.

At the end, athletes and coaches were also asked if they would like to have more anti-doping lectures.

One of the ways to measure the efficiency of prevention programmes is by assessing the knowledge that participants gain during them. We have already noted some of the most important topics in anti-doping, such as where the Prohibited list can be found, understanding the anti-doping program, knowing what the testing procedure is like and knowing how to apply for a therapeutic use exemption. Figure 12 shows the results in percentages based on the participants' agreement/disagreement with the related statements.

	coaches			athletes		
	strongly disagree/ disagree	partially agree	agree / strongly agree	strongly disagree/ disagree	partially agree	agree / strongly agree
at the lecture I learned all I need to know about clean sport	2.80%	17.90%	79.30%	4.00%	18.80%	77.20%
I am well informed about the consequences of doping	11.70%	22.20%	65.00%	15.10%	23.70%	57.70%
I know the list of prohibited substances is posted on NADO websites	17.80%	27.20%	53.90%	21.80%	17.40%	56.50%
I understand how the national and international efforts for clean sport function	2.80%	16.00%	81.20%	5.00%	18.80%	76.20%
in case of testing I know what to expect	2.00%	10.60%	87.50%	2.00%	8.90%	89.10%
I know how to apply for a therapeutic use exemption	14.90%	17.80%	67.13%	29.00%	19.00%	52.00%

Figure 12. Differences between coaches and athletes in their knowledge about selected topics.

As we can see from the results, coaches' and athletes' knowledge varies from topic to topic. They are most confident about the doping control process, where 87.5% of coaches and 89.1% of athletes know what to expect in case of testing (doping control). Both groups strongly agreed that at the lecture they learned all they need to know about clean sport. However, the figures are quite low with regard to the consequences of doping (65% and 57.70 % for coaches and athletes, respectively), about the knowledge that the Prohibited list is posted on NADO websites (53.90% and 56.50 % respectively) and in understanding the therapeutic use exemption process (67.13% and 52%, respectively).

Since there were statistically significant differences among different groups with regard to the statements that received lower scores, we should take a closer look at the results.

For the statement "I am well informed about the consequences of doping", notable differences were found between the countries (Figure 13) and between exposed and non-exposed sports (mean scores of 3.99 and 3.37 respectively).

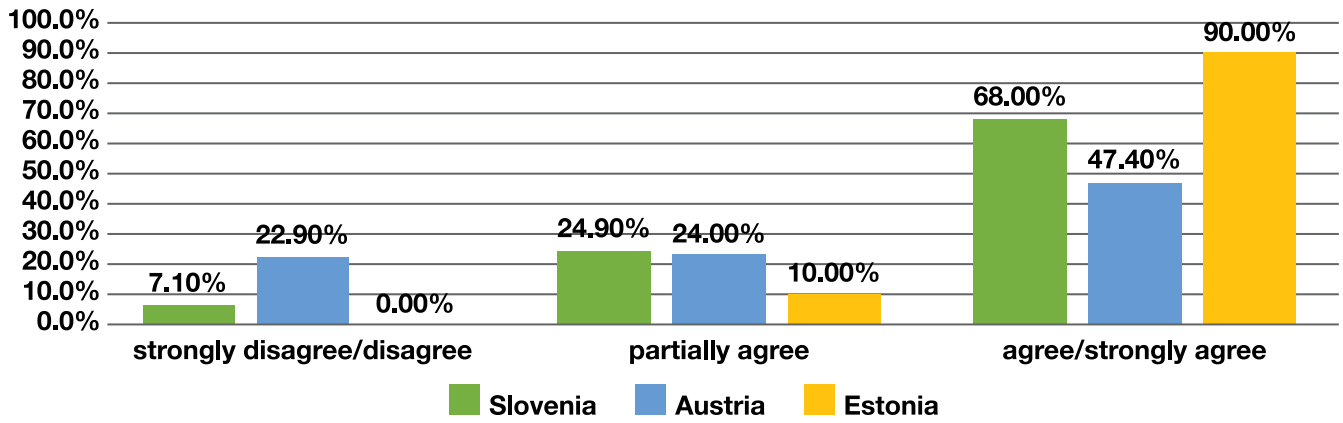

Figure 13. Differences between the countries in regard to how well the respondents feel they are informed about the consequences of doping.

The Estonian participants stand out, with 90% of them agreeing that they are sufficiently informed about the consequences of doping, with the figures for the Slovenians and Austrians much lower. This could be explained with the smaller number of participants from Estonia (40 compared to 197 and 196 from Slovenia and Austria, respectively) and with the fact that, on average, those participants attended more than 1.5 prevention programmes in the past year (Table 8).

For the statement "I know that the Prohibited list is posted on NADO websites", notable differences were found between the countries, between exposed and non-exposed sports (mean scores of 3.79 and 3.31 respectively) and surprisingly between never tested and tested athletes (mean scores of 3.97 and 3.07 respectively). It should be expected that most of the tested athletes would know that the List is posted on the NADO websites (most of NADOs even translate the List into their national languages to make it more understandable for their athletes), but obviously they also look for details of this elsewhere.

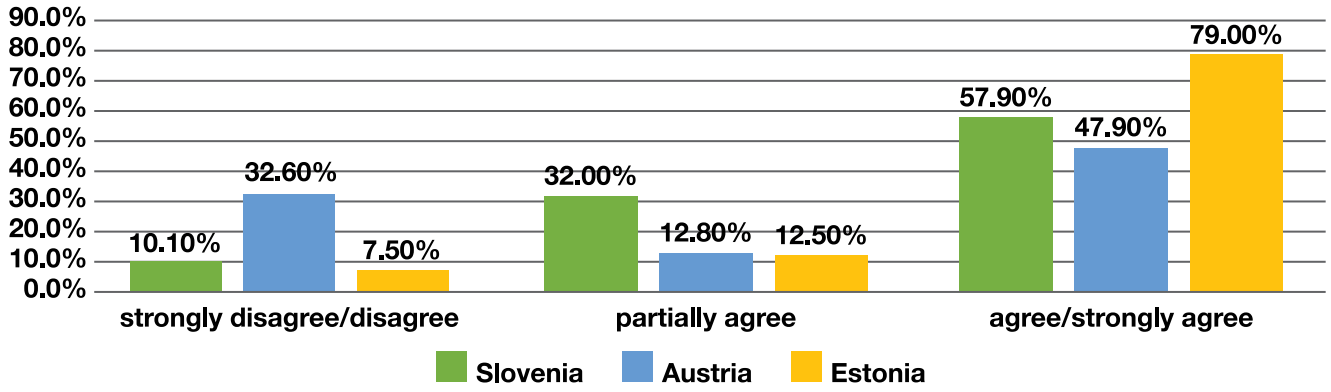

Figure 14. Differences between the countries about their knowledge that the Prohibited list is posted on NADO websites.

The differences in the results were similar to those for the previous statement, with the Estonians having the best knowledge, followed by the Slovenians and Austrians. However, these lower scores in Slovenia and Austria were not expected, as the Prohibited list is a topic that is covered in each lecture and thus all of the participants should have known that there is a List in their national language available on their local website.

The lowest scores were for the statement on the therapeutic use exemption, but this was expected since the process of applying for this can be confusing. There were statistically significant differences between coaches and athletes on this issue, and between the Slovenian and Estonian participants, with mean scores of 3.74 and 3.09 respectively, for these latter two groups.

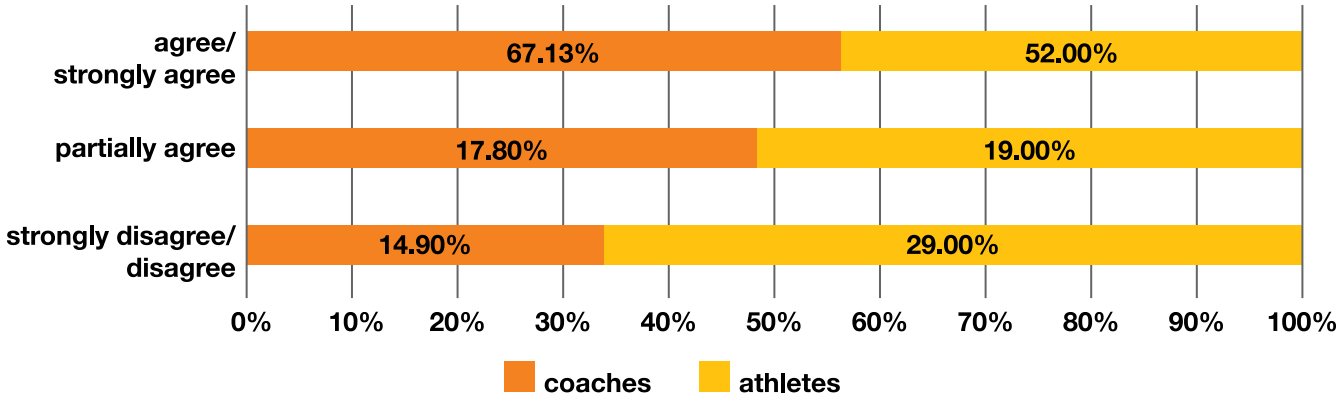

Figure 15. Differences between coaches and athletes in understanding the therapeutic use exemption application process.

The results show that coaches have a better understanding of the exemption process, which means that they might be able to help athletes if needed. However, applying for a therapeutic exemption is an important part of any anti-doping programme, since athletes who are using prohibited substances and/or methods as part of their legitimate medical treatment could be charged with rule violations if they do not have a valid exemption. These results should direct NADOs to improve their prevention programs by being clearer on this issue in order to further improve coaches' and athletes' understanding of the application process.

One of the goals of the asking about satisfaction with doping prevention programmes was also to assess the prior knowledge of athletes and coaches. They were asked if before the lectures they received they were aware of the extent of the health consequences of doping, and if they were aware of the risks of unintentional doping. Knowing what doping can do to one's health can prevent the use of prohibited substances and/or methods. Athletes should be aware of all the consequences before they make a decision either to engage in doping or not. People who will try to convince them to take banned substances will not tell them that they could die from using doing so, they will just promise them better results, medals, sponsorship money, and so on. Moreover, being aware of the risks of unintentional doping can help athletes to stay clean and not to make some foolish mistakes that would define their sporting careers forever.

From the athletes' point of view those issues are thus very important for their health and sporting careers. However, as we can see from the results (Figure 16), only around 40% of athletes were aware of the extent of health consequences or of the risks of unintentional doping before the lectures. The percentage might seem high, but since we are talking about a person's health and reputation, this figure is not acceptable.

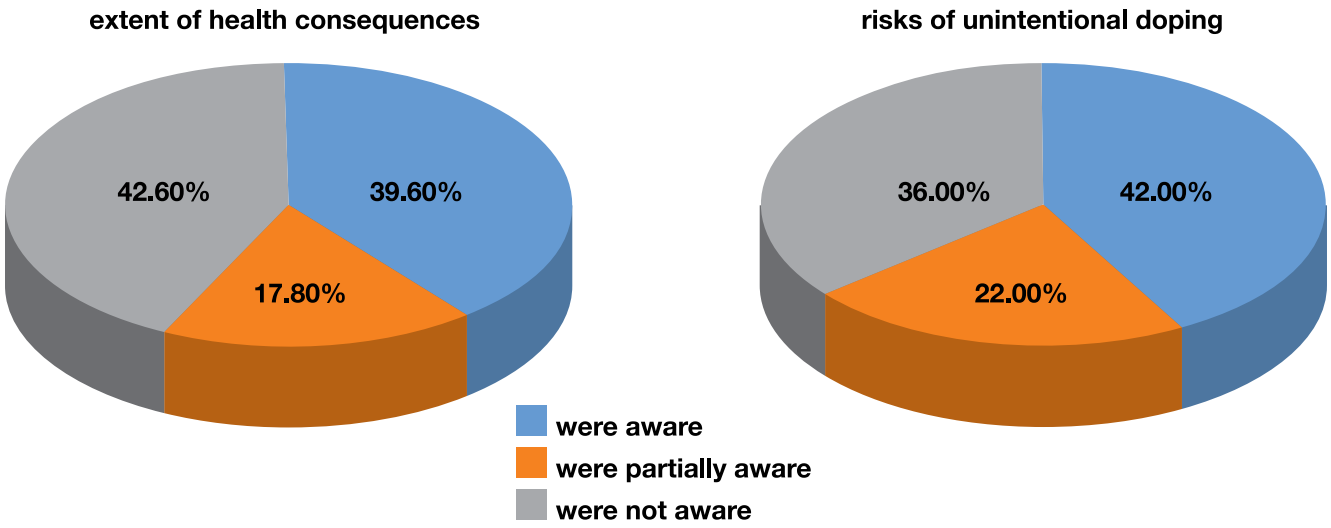

Figure 16. Athletes' knowledge about health consequences and unintentional doping prior to the lectures.

The results also show that there were differences between coaches and athletes and the Slovenian and Estonian participants with regard to both topics (for both coaches had better knowledge, and for the health consequences the difference was statistically significant, and for both the differences were statically significant for the Estonians). There were also statistically significant differences among other groups (participants from team/individual sports, never-tested/tested participants, without medals/with medals in major competitions). All these differences can be explained by the fact that higher profile athletes from individual sports are better educated because of their greater exposure on one hand, and the higher risk for doping on the other.

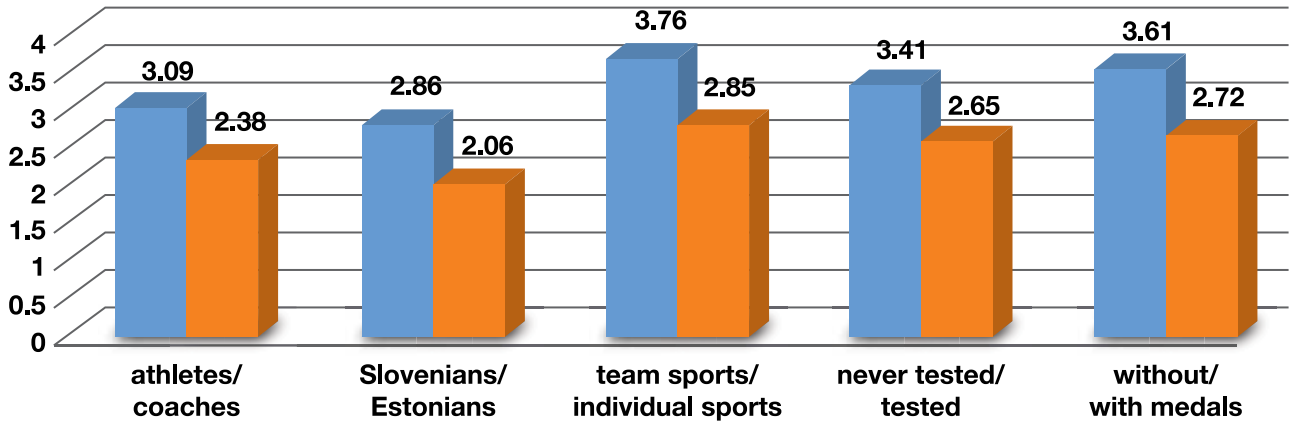

Figure 17. Statistically significant differences in knowledge about the extent of health consequences prior to the lectures (results shown in mean scores – a lower mean score means better knowledge).

The number of prevention programmes that athletes and coaches should attend is a question that many anti-doping organisations are dealing with. In addition, are athletes and coaches even interested in anti-doping education, or is this just seen as another burden for them?

As we can see from the results, almost half of the athletes and coaches who had already participated in doping prevention programmes would like to attend more such programmes. Since the percentage of those who are against additional programmes is quite low (17.8% among athletes and 9.6% among coaches) we can conclude that most of participants are aware of the importance of regular attendance. There were no major differences between the Slovenian and Estonian participants, but there were statistically significant differences between athletes who compete in team sports and those who compete in individual sports (mean scores of 3.92 and 3.41, respectively). This may be because elite athletes in individual sports are more exposed and NADOs prevention programmes usually target high profile athletes (in addition to younger people). These athletes have probably taken part at more than one prevention activity, and they might feel that they are educated enough and do not need additional lectures. This can be confirmed with the results for one of previous questions, where more athletes from team sports were unaware of the extent of the health consequences of doping before the lecture (the differences were statistically significant between team and individual sport athletes).

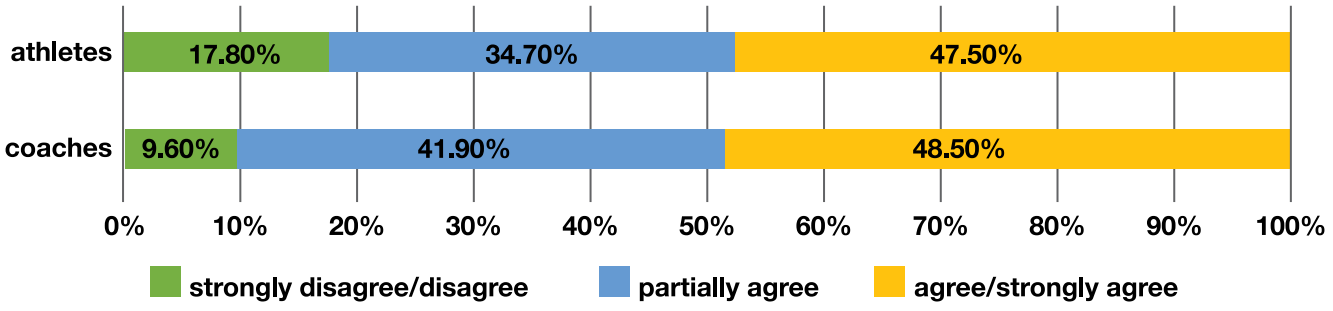

Figure 18. Do athletes and coaches want more prevention programmes?

CONCLUSION

It is quite difficult to establish an efficient, systematic and well-structured prevention programme in a country. In most cases, anti-doping organisations cannot be sure that they will have an opportunity to carry out more than one lecture for a particular group of athletes and/or support staff. In addition, when they get a chance to have a second lecture there are usually some new participants in the group. Therefore, the challenge is how to make lectures interesting for everyone – the ones who have already listened to it and those who are new and have to get all the general information from scratch. Athletes have a packed schedule, and anti-doping organisations' goal is not to waste their time but rather to provide important information and assist them on their path to stay clean.

Overall, we can conclude that prevention programs are efficient to some extent but there are also some weaknesses, such as therapeutic use exemption application process, that needs to be improved. Most differences were found between the countries, but with the high variety of participants in the three countries these results cannot be generalised. Other differences, which were related to the individual athletes or their sporting level/importance were expected and are understandable. It is encouraging that almost half of the coaches and athletes would prefer to take part in more prevention programmes on a yearly basis. This information should be strongly considered by NADOs in their prevention plans for the future.

8. ANTI-DOPING KNOWLEDGE

INTRODUCTION

The trends in the doping prevention show striking but time-delayed parallelism to the developments in the prevention of addictive behaviour (Arnold & Schille, 2002; Knörzer & Steen, 2006; Laure & Treutlein, 2006). In the 1960s and 1970s the main approach was to solve the problem by spreading fear regarding the health and moral consequences. Images of people with terminal diseases and a comprehensive list of side effects were meant to discourage potential dopers or make those who already involved rethink their behaviours. However, experience from other areas of prevention shows that even experts who know exactly about the risks of their lifestyles do not behave accordingly, because they trivialise the dangers.

Children and adolescents, as well as adults, can usually only be impressed by striking images for a short period of time, because they convince themselves that they are not affected. The credo of the displacement mentality is: "Bad things happen only to others!" In view of the manifold sources of danger to health and well-being that exist, people are overburdened. This results in a negative, defensive attitude towards these forms of "health education" (Knörzer & Steen, 2006, p. 135).

When the ineffectiveness of the deterrence and risk factor model became evident, initiatives and projects aimed at maintaining fairness, morals and sportsmanship were developed. Rather pompous speeches and publicly presented statements emphasised the importance of the sporting ethos and fair competition. The sustainable raising of awareness through serious projects, however, was the exception, which reduced the success of this approach. At the same time, information about the inefficacy of many prohibited substances was propagated, with the mark their use as obsolete. This proved to be unsuccessful, since the experiences of users as well as scientific studies on the performance-enhancing potential of certain substances and methods contradicted this approach. In addition to the actual effectiveness of the substances, performance enhancement through placebo effects have also been reported for quite some time (Prokop, 1986).

A more recent approach to protect clean sport focuses on providing information about without falling back into the deterrence model. The basic hypothesis is that the mediation of information and knowledge leads to a change in attitude and as a consequence to a change of behaviour. However, even Socrates had to acknowledge posthumously that a purely cognitive assessment of implications and consequences does not necessarily cause any lasting change in behaviour. In addition, the unreflective absorption of information and knowledge on doping could provoke curiosity, or even provide guidance on the most effective, efficient and secretive ways of doping.

Even with these risks, information and knowledge transfer remain an important basis for prevention work, and recognising the difficulties and inadequacies that exist in this context is crucial to provide an effective preventative approach.

Based on Uhl and Springer (2002), doping prevention can be differentiated into four areas:

- ***primary prevention*** targets people who are not special risk groups and who are not (yet) interested in doping and drug misuse, as well as targeting others in their surroundings. It aims to make sure that this problem will not occur at all;
- ***secondary prevention*** targets at-risk groups and groups already confronted with doping and doping-equivalent behaviour (for definitions see Müller, 2016) and others in their surroundings,

but who not yet fully involved. It aims to identify and end the behaviour at the earliest possible time to prevent the full manifestation of the problem;
- ***tertiary prevention*** targets people who are already using doping and doping-equivalent behaviour and others in their surroundings to minimise the problem, or at least prevent it from worsening. It aims to end or reduce the consumption of banned substances and the related consequences, even if the causes persist;
- ***quaternary prevention*** targets people who have successfully stopped using doping and doping-equivalent behaviour. It provides support and make the addressing this issue more sustainable.

In the field of anti-doping the dominant approaches are primary and secondary prevention, and people who have been involved in doping or doping-equivalent behaviour are still largely excluded from today's discussion.

A "doping mentality" is usually developed at an early age, irrespective of a person's the athletic commitment. The naïve belief in the unrestricted efficacy of pharmaceutical substances today goes so far that stimulants, anti-depressants, mind-altering drugs, sleeping pills, hair restorers, erectile aids and slimming pills are taken almost without hesitation. The ultimate aim is to eliminate unwanted physical conditions or needs in order to be fit for what one wants to do. This development can be observed in all social and age groups. Even small children are taught that they only need to "take something" in order to overcome test anxiety, a cold or lack of concentration. The euphemistic term "neuro-enhancement" (or "brain doping") cannot obscure the intention to increase performance and thus benefit in education or work. Ultimately, this is all about "functioning" in society, with so-called lifestyle drugs generating annual sales of several billion euros, and the trend is rising. That this social development also diffuses into the sporting world is clear. Modern prevention work must therefore include substances and methods that are not on the usual Prohibited list.

Addressing these considerations, the approach of Gerhard Treutlein emphasises the importance of behavioural prevention (in addition to the structural prevention). Modern (doping) prevention has thus developed the "resource-orientated" or "empowerment" approach. In close connection with a comprehensive health education programme in the sense of salutogenesis (Antonovsky, 1997) and the development of healthy living environments ("setting approach"), these strategies aim to increase the self-competence and self-esteem of (young) athletes, and thus make them more resistant to the demands and trials of sport and society.

The confident belief of having the right resources and competencies is of paramount importance in (competitive) sports. If these requirements are perceived as too high, this can easily lead to the search for alternative means. Enormous potential thus lies in the development of a "sports-suitable" mindset (Amler, Bernatzky, Breuer, & Knörzer, 2006; Frester, 2007).

In addition to these non-specific personality developments, the specific development of decision-making and action competence forms another important starting point for modern doping prevention work. The construction of a sense of responsibility and healthy self-esteem is seen as essential. Values-based education programmes promote life skills development, are interactive, include case studies and solving dilemmas and take place in in schools, training facilities, camps, etc., meaning they are close to their recipients.

Reduced to a simple equation, this means "reflection and argumentation = prevention" (Singler, 2006, p. 151). The goal is to achieve an "inner steering" of the athletes, so they confidently and argumenta-

tively decide against doping, in contrast to an “external guidance” through repression and normativity. The long-term aim of pedagogical-preventive work is the generation of a doping-resistant athlete. For Schwartz (1994), eight areas of competence form the basis of the “new” athlete: enduring, capable of decision-making, coping with stress, being emotionally aware, body-conscious, sociable, sensual and appreciative, brave and daring. Multidisciplinary education should go both ways - top-down and bottom-up, and must be specific for each target group. “One size fits all” approaches do not work when it comes to doping prevention, as the phenomenon is too complex.

LITERATURE REVIEW

In the current WADC 2015 there are 80 pages about the doping control and investigations system, but only 3 pages about education, which makes this aspect of the anti-dopign work seem rather unimportant, especially as it involves mainly superficial headlines and slogans (WADA, 2018a, p. 96-98).

In order to develop effective prevention strategies, we need to determine target groups and first of all get to know their knowledge and attitudes on doping and doping-equivalent behaviour. Current research shows that target groups are athletes, coaches, physicians, and pharmacists and, to a lesser extent, parents (Blank, Leichtfried, Fürhapter, Müller, & Schobersberger, 2015a, Blank et al., 2015b).

First studies about knowledge and attitudes of junior athletes and their peers were done in Europe - Laure, Lecerf, Friser, and Bisinger (2004) and Laure and Bisinger (2007) investigated the consumption behaviour and attitudes regarding doping in sports focusing with children of 11 and adolescents (16–17 years). Mottram, Chester, Atkinson, and Goode (2008) analysed an international sample of elite athletes and reviewed their knowledge on doping and over-the-counter medication. In Germany, Wanjek, Rosendahl, Strauss, and Gabriel (2007) as well as Peters, Schulz, Oberhoffer, and Michna (2009) researched the knowledge and attitudes of junior athletes regarding doping, with the participants judging their own knowledge rather poor. Studies in Iran and Poland showed the same results (Barghi , Halabchi, Dvorak, & Hosseinnejad, 2015; Sas-Nowosielski & Świątkowska, 2007).

The first Austrian study on schools with and without a sports focus was done in 2009. Adolescents aged 12–19 were given a questionnaire, where they reported their attitudes to doping - 35% said they thought about taking prohibited substances if doping wasn’t forbidden (Blank et al., 2013, Fürhapter et al., 2013).

As mentioned earlier in this work, coaches are a strong influence in the development of athletes’ behaviour and attitudes, and they frequently transfer anti-doping knowledge to athletes (Auersperger et al., 2012; Bloodworth, Petroczi, Bailey, Pearce, & McNamee, 2012; Ćorluka et al., 2011; Kondrič et al., 2013; Peters et al., 2009; Šajber et al., 2013; Tavani et al., 2012). Direct association between doping attitude and intentions was found in some studies (Barkoukis, Lazuras, Tsorbatzoudis, & Rodafinos, 2013; Sas-Nowosielski & Swiatkowska, 2008) – more knowledge was found to prevent athletes from using doping (Auersperger et al., 2012; Bloodworth et al., 2012). Knowledge comes from training, learning and a complex environment, which is united in the view that doping should always be avoided (Blank et al., 2013; Fung & Yuang, 2006; Mazanov et al., 2013).

Coaces and teachers are role models, which means that they must have a lot of knowledge and must be ethical in their actions (Peters et al., 2009), especially because the coach’s behaviour is often the justification for athletes to use doping (Dodge & Robertson, 2004). The duty of a coach is defined by the

WADC as follows: "…to use their influence on athletes values and behaviour to foster anti-doping attitudes" (WADA, 2018a). Reviews on coaches' knowledge, attitudes and beliefs regarding doping found that they have positive attitudes towards anti-doping, and can inspire athletes to avoid doping, but are often lacking in knowledge of the field (Backhouse & McKenna, 2012).

A recent study in Austria evaluated the knowledge and attitudes of West-Austrian coaches and sport teachers regarding anti-doping, research was aimed at coaches, who work with young athletes (14 – 19 years old), as this age group has proven to be especially vulnerable to doping, as many career transitions occur at this age (Blank, Leichtfried, Fürhapter, Müller, & Schobersberger, 2014).

Studies often check athletes, coaches, and team physicians, as they have a strong influence on the knowledge and athlete's doping attitudes (Bundy, 2009, Greenway & Greenway, 1997; Laure, Binsinger, & Lecerf, 2003; Mazanov et al., 2013), there are also studies on pharmacists (Greenway & Greenway, 1997; Ambrose, 2011; Auersperger et al., 2012) which show consistent findings with respect to knowledge and attitudes. These groups of sports participants deem use of prohibited substances to be ethically and morally unacceptable, but they also show that many of these participants lack thorough knowledge about prohibited substances and their side effects (Blank, Müller, Wechselberger, & Schobersberger, 2014).

The role of parents with regard to attitude and knowledge is a relatively new field of anti-doping research (Blank et al., 2013). Erickson et al. (2017b) carried out qualitative interviews and concluded that parents should be a priority group of intervention when it comes to anti-doping education, as the parent–athlete relationship is one of the most important influences for shaping athlete's view on doping.

Table 19
Summary of replies to the questions regarding their anti-doping knowledge

	coach (C)/ athlete (A)	country	gender	team (T) / individual (I) sports	exposed (E) / non-exposed (NE) sports	tested (T) / never tested (NT) athletes	participated (P) / never participated (NP) in NADO education	with medals (M) / without medals (NM) in big competitions
short-term use of steroids can be damaging to health							NP > P	M > NM
long-term use of steroids can be damaging to health								
short-term use of EPO can be damaging to health		S > E > A					NP > P	
long-term use of EPO can be damaging to health		S > E > A					NP > P	
short-term use of GH can be damaging to health							NP > P	
long-term use of GH can be damaging to health	C > A	S > E > A						
short-term use of painkillers can be damaging to health			M > F					
long-term use of painkillers can be damaging to health				I > T				
medically supervised doping is relatively safe	A > C	S > A > E		T > I	NE > E			
I could easily access prohibited substances and information about them		S > E > A	M > F					
I believe athletes use doping when they are sure they won't be caught		S > E > A	M > F					
I believe athletes use doping		E > S > A	M > F	T > I				
I use dietary supplements and I believe they are part of my success	C > A	S > E > A	M > F	T > I		NT > T		NM > M
table in appendix	60	61	62	63	64	65	66	67

Notes. A - Austria, E - Estonia, S - Slovenia; M - males; F - females

Statistically significant differences were found between coaches and athletes as well as between male and female athletes, team and individual sports, non-exposed and exposed sports, athletes with/without medals from major competitions and athletes who were tested/never tested or educated/never educated. To allow a better overview, the results of every question will be presented and discussed in separate sections.

Damage to health

In general, athletes who never participated in NADO education regarded the risks and side-effects of steroids, erythropoietin and growth hormone as higher than other (e.g. short-term use of steroids can be damaging to health). This is quite an interesting finding which can be interpreted in two ways: either the risk of side-effects was regarded as too high from those who had never been educated by a NADO, or the NADO interventions resulted in the undesired side effect that the risks and side-effects of doping were regarded as less harmful after receiving specific information. Another possible interpretation is the presumption that athletes who compete in sports with a greater risk of doping are more likely to be educated by a NADO, and thus have a more realistic estimation of the health consequences.

One correlation could be found indicating that athletes who had won a medal in a major competition regard the side effects of steroids as more severe than those who had not . This finding could be related to the fact that more successful athletes are more likely to be educated on doping. Coaches regarded the side effects of using growth hormone as more severe than athletes, which might be connected to their greater knowledge regarding sports physiology.

Athletes and coaches from Slovenia considered the dangers of erythropoietin and growth hormone as more severe than the participants from Estonia and Austria (e.g. short-term use of EPO can be damaging to health). Male athletes regarded the short-term effects of painkillers as greater than their female colleagues.

Athletes in individual sports saw the long-term use of painkillers as more damaging to health than those in team sports. This correlates to the findings of several studies and the author's personal experience that athletes in team sports are more likely to use painkillers, and therefor might have developed this view on the health consequences of this behaviour. Peer pressure might also influence these attitudes.

Safety of medical supervision

Athletes expressed more support for the claim that medically supervised doping is relatively safe than coaches. This result can also be found for athletes in team sports compared to individual sports and non-exposed to exposed sports. The support in Slovenia was also higher than in Austria and Estonia.

These findings in general correlate with the trust athletes have in their support staff. This trust is even greater in team sports, were athletes tend to receive around-the-clock support and assistance. The difference between non-exposed and exposed sports might be the result of a lack of knowledge with regard to actual doping practices.

Access to prohibited substances

Male athletes were more convinced that they could easily access prohibited substances and information about them than female athletes. This correlates to the fact that the use of doping is dominated by men, as WADA statistics show (WADA, 2018b). Support for this item was also higher in Slovenia than in Estonia and Austria.

Use of doping without being caught

Male athletes showed more support for the claim "I can understand why athletes use doping when they can be sure that they won´t be caught" than female athletes. Support for this was higher in Estonia than in Slovenia and Austria. Similar results for the male and female athletes were found when the claim was modified to "I can understand that athletes use doping when they could win 1 billion euros and could be sure that they won´t be caught." The level of support in each country differs, with Estonia showing the most support, followed by Austria and Slovenia. This statement also saw more support in team sports than in individual ones. The findings also correlate with the male predominance regarding anti-doping rule violations (WADA, 2018b), and the previously discussed differences between team and individual sports.

Use of dietary supplements is a part of success

Coaches showed more support for the statement "I recommend dietary supplements to my athletes and I am convinced that without them they would not be able to perform well", than athletes did for "I use supplements and believe that without them I would not be able to perform well." Given the fact that some coaches sell dietary supplements themselves, their greater support is not a surprise. However, this finding is interesting since it shows that even if the role of coaches is a very important one, athletes maintain their own point of view.

Moreover, support for this statement is higher among male athletes, athletes in team sports, athletes who were had never been tested and those who have not won win medals in major competitions. The respondents from Slovenia also showed more support for this than those in Estonia and Austria.

The great difference in the level of support from male and female athletes correlates with the fact that the former are more likely to violate the anti-doping rules (WADA, 2018b). In addition, and as discussed before, athletes in team sports tend to rely more on their coaches, which might explain why they are more in favour of dietary supplements, since coaches – in general – also feel this way (Tavani et al., 2012).

Athletes who have never won a medal in major competitions are more likely to have never been tested, and therefore it is not surprising that these two groups gave similar responses. For example, both groups gave similar levels of support to the statement "I can understand why athletes use doping when they can be sure that they won´t be caught." One reason for this might be that athletes who are already successful know what is important for their performance and what is not, while another could be that they are supported by a more experienced and educated staff.

CONCLUSION

In the field of anti-doping the most used approaches are primary and secondary prevention, targeting people who are not special risk groups and are not (yet) interested in doping and those who are at-risk groups and groups already confronted with doping but who not yet fully involved. That means that people, who are (were) involved in doping are still largely excluded from today's prevention programs.

Overall, athletes and coaches showed satisfying knowledge about health consequences of doping in the current study but there were some surprising results. First, athletes who did not attend any prevention programmes in past 12 months find side effect of doping substances more severe than those

who attended such programmes. Second, athletes expressed more support for the claim that medically supervised doping is relatively safe (mean score 2.30).

The findings reported in this chapter offer a number of valuable insights with regard to the information and education programmes needed to tackle doping in sport. As in previous research, the importance of the role of coaches (and other support staff) in anti-doping work is confirmed and male athletes remain an important target group. Moreover, due to the differences in individual or team sports, special considerations must be made addressing both populations. The correlation between athletic success and attitudes to dietary supplements could be considered for further research, since it provides a strong message to young athletes.

9. REPORTING DOPING IN SPORT

INTRODUCTION

Anti-doping science is improving every year and more sophisticated substances can be detected. However, the use of prohibited substances continues to occur within sport. The percentage of anti-doping rule violations in Olympic sports remains under 2% (WADA anti-doping testing figures 2016) while social science research suggests that the prevalence of doping is likely to be much higher (Whitaker et al., 2014a). Some studies suggest a prevalence rate up to 35%, and question the efficacy of current doping testing system.

Revisions to the global anti-doping policy and growing evidence of systematic doping in sport means athletes and athlete support personnel are increasingly encouraged to "blow the whistle" on doping. Yet these populations' thoughts, feelings, and anticipated behaviours in reporting wrongdoing of this kind are unknown, hindering its promotion. Addressing doping presents a true moral dilemma, and is not a dichotomous process whereby athletes either report doping or do nothing (Erickson et al., 2017b).

In recent years, whistleblowing has received greater attention in research (Erickson et al., 2017a). There are many ways, how doping can be reported (evidence, research, investigative journalism, etc.) but whistleblowing (along with investigative journalism) seems to be the most efficient one. Resent example of Russia, where information gained from whistleblowers caused that Russian athletes were banned from some sports at the 2016 Summer Olympics in Rio de Janeiro and from the entire 2018 Winter Olympic Games in Pyeongchang shows the extent of whistleblowing actions. The validity of the whistleblowing approach remains to be determined scientifically. WADA's Whistleblowing Programme is significant in that it recognises the importance of individual responsibility for creating and maintaining a zero-tolerance culture for doping (WADA, 2018c), as well as providing a secure and confidential method for anyone who reports an activity that is in violation of WADA's anti-doping rules (Zhang, 2018).

How willing we are to report doping abuse depends on our level of moral development. Kohlberg defined three levels of moral orientation, each consisting of two stages (Papalia, Wendkos Olds, & Feldman, 2003) – this is a theory which relates to Piaget's theory of cognitive development, as it uses a person's thinking to determine the level of moral development (Zupančič, 1990). Most often, this level is determined through Rest's questionnaire (1986), where participants need to decide how people depicted in morally problematic situations should react. Kohlberg states that not everybody reaches the highest level of moral development and emphasises a great amount of variability amongst people, so he gives no age limitations as to when a certain level of moral development should occur (Zupančič, 1990).

The first of Kohlberg's levels is called the **preconventional level** - a child's sense of morality is externally controlled, and the child accepts and believes the rules of authority figures, for example of parents and teachers (Kohlberg, 1984). The first stage of this level is *orientation towards obedience and punishment* – the person on this stage desires to obey rules and avoid being punished. An action is perceived as morally wrong because the person gets punished - the worse the punishment for the act is, the more "bad" the act is perceived to be. With regard to doping violations, people on this level of moral development would avoid them simply because they know they would be punished for it. The second stage is *instrumental orientation* (or self-interest orientation) – it expresses the position that is also known as "what's in it for me?", in which the correct behaviour is defined by whatever the individual believes to be in their best interest. There is thus no interest in the needs of others, unless it might further the individual's

own interests. For example, a child in this stage would be asked by his parents to take out the trash. The child would ask "what's in it for me?" and the parents would give the child an allowance for being good (Kohlberg, 1984). Someone at this stage would avoid doping if they saw it as somehow useful to do so, for example to be able to keep participating in sport and to keep their financial and social status, but would also be willing to report another athlete for doping if their status would improve because of this.

The second level is called the **conventional level**, where one's sense of morality is tied to personal and societal relationships (Kohlberg, 1984). Authority's rules are still accepted, but due to the belief that this is necessary to ensure positive relationships and societal order. A person on this level rigidly follows the rules and conventions, without asking if a certain rule might be fair or appropriate. The third stage is *orientation to conformity* and interpersonal accord – here the child desires the approval of others and acts in ways to avoid disapproval. A lot of emphasis is placed on good behaviour and people being "nice" to others. This will mean that a person will not use doping because most people do not do it and because this is the general consensus. In the case of more exposed sports, where there are frequent occurrences of doping, this means that individuals might also say that doping is not a problem, since everybody does it and it is normal. The fourth stage is called *orientation to authority* (law and order orientation). The child on this stage will blindly accept rules and convention, because they are important to maintain a functioning society. The child perceives rules as being the same for everyone, and obeying rules is what one is supposed to do. There is no perceived need for an individual to approve rules – they are simply there for everyone to follow and there is a duty to uphold laws and regulations (Kohlberg, 1984). The fact is that most people remain at this stage throughout their lives and sometimes even regress to lower levels, especially when the decisions to be made are very emotional. People at this stage will refrain from doping doing simply because the rules say that it is forbidden.

The third level is called the **post-conventional level**, where a person's sense of morality is defined in terms of more abstract principles and values, and such individuals now believe that some laws are unjust and should be changed or eliminated (Kohlberg, 1984). People on this level have their own set of ethical principles, which include basic human rights such as life, liberty, and justice. Rules are seen as useful, but people at this level are aware that they can be changed if events in society show that they are no longer appropriate. Post-conventional individuals elevate their own moral evaluation of a situation over social conventions, and their behaviour is sometimes even confused with that of people at the pre-conventional level (Lamovec, 1994). The fifth stage is called *orientation to a social contract* – a person understands that we all have different opinions, rights, and values and an individual's or community's perspective should always be respected. Laws at this stage are regarded as social contracts and those that do not promote the general welfare should be changed when necessary to meet the greatest good for the greatest number of people. This is achieved through majority decisions and inevitable compromises. This is the level on which democratic government is theoretically based (Kroflič, 1997), and doping at this stage should be avoided because most people agree that it is harmful. The last stage of moral development is rarely achieved, and Kohlberg calls it the *orientation towards universal ethical principles*. These principles are fairly abstract, such as equality, dignity, or respect (Walker & Taylor, 1991). People at this stage perceive laws as valid only insofar as they are grounded in justice, and a commitment to justice bears an obligation to disobey unjust laws. People feel guilty when they disobey their own chosen ethical laws, not when the society believes they are guilty. While Kohlberg insisted that stage six exists, he admitted that very few people consistently operate at that level. For a person at this stage, doping would be avoided because they believe that it is unjust, that it gives an unfair advantage, and that it is generally bad (Clarke – Stewart, Perlmutter, & Friedman, 1988).

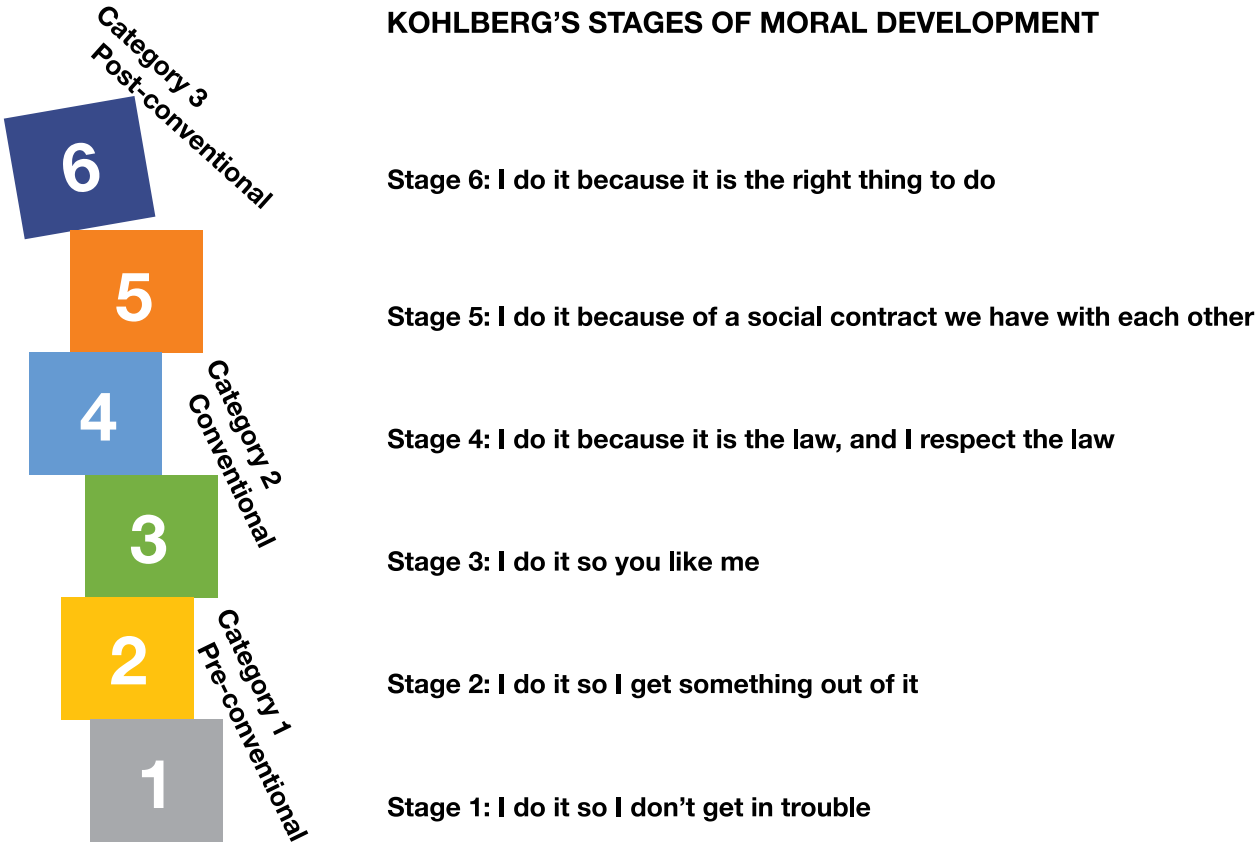

Figure 19. Kohlberg's stages of moral development (Kohlberg, 1984).

Cognitive theories of moral development understand moral maturity as the understanding of the society in which we live – the more complex the society, the more complex one's morality needs to be for the person to successfully adapt to it (Marjanovič Umek & Zupančič, 2004). Moral maturity is a reflection of one's interpersonal relationships and adhering to the rules of society (not necessarily laws). As doping is a complex topic, an athlete's morality should be on as high as possible level to respect the related rules and regulations and truly understand their importance for the sport, as well as for each individual athlete. Mature morality implies a stable set of moral rules, behaviour in accordance to rules because a person believes they are important for good interpersonal relationships, thus implying a sense of responsibility to oneself and others (Colby & Kohlberg, 1987).

Thomas (1992) stated that according to Kohlberg moral development is dependent upon the level of cognitive development (cognitive development may precede moral development, but not vice versa, and post-conventional morality cannot exist before formal reasoning is achieved and used in practice). It also depends on motivation – a person may be able to act on a morally higher level, but does not show it in a certain environment - as it might be "dangerous" for him or her to do the right thing. It also depends on assuming social roles – a person may assume different roles in different environments, which will also mean that they will make moral decisions on different levels. Lastly, moral development also depends on the structure of rights in social groups and institutions – groups, that encourage decision-making and responsibility, where principles of equality and reciprocity are applied, will stimulate moral development far more than rigid, authority-based groups and institutions (Kroflič, 1997). This means that in order to stimulate the moral development of athletes we should focus on education and understanding as a means of prevention, rather than on punishment. This does not mean that punishment should be abolished, but more emphasis should be placed on encouraging children to reflect on doping, as it will

encourage higher levels of moral development and moral maturity in adult athletes – and starting at an early age means establishing good grounds for further education during an athlete's development.

Another established model of moral development was developed by Rest (1986), who struggled with Kohlberg's levels when it came to explaining the responses of participants who addressed the moral dilemmas in his questionnaire. So rather than establishing levels, he assumed four main components of moral development, assuming higher moral development means that a person is able to use all four processes when faced with moral dilemmas:

- the first process is *interpretation of the moral situation* or ability to explain the moral situation – it includes recognition of the situation, one's emotions, defining possible responses, prediction of possible consequences and the possible moral rules which apply to the situation. It also includes a certain level of compassion, one's defensive mechanisms and first impressions, which are a big part of interpretation, even though they may be largely subconscious;
- the second process is *ability to define appropriate responses* or morally appropriate responses – finding out what is the "correct" thing to do, what is the just or fair response or the good decision, based on social cooperation, equality, and feelings of moral responsibility, but can also be influenced by a certain belief system or ideology, stress and pathological or physiological circumstances;
- the third process is *prioritising different appropriate responses* or prioritising values, which means forming a decision, which is most appropriate for the given situation, based on the value which the person selects as the most important in that given moment (Rest, 1986). The person takes into account both moral and personal values, which can overcome moral ideals and this often leads to a difference between his or her words and actions. Selection of the appropriate response creates the intention for moral action;
- the last process is the *ability to carry out a moral act* – this means pursuing the selected action and overcoming potential obstacles on the way (Rest, 1986). One of the most important factors in this process is ego strength – a person with low ego strength might have strong beliefs, but is not willing to enforce them in action. Actual execution of the act depends also on a person's goals, positive emotional state and the expectation of the act's efficiency – how many obstacles he or she will face, and any thoughts during the act itself.

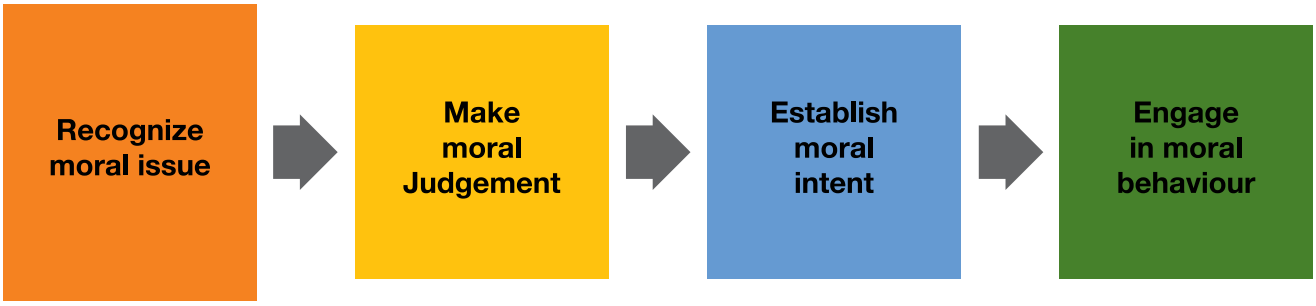

Figure 20. Rest's model of moral behaviour (Rest, 1986).

The increased prevalence of whistleblowing in sport has precipitated the need to understand the antecedent conditions that underpin whistleblowing intentions. The act of whistleblowing centres on reporting an illegal (or unethical) act by an observer who possesses inside information of the wrongdoing (Goldsmith, 2015).

Sport has seen an increase in high-profile whistleblowing cases over the last fifteen years. One of the first cases of whistleblowing in doping was when Trevor Graham, a former USA track & field coach, anonymously phoned the US Anti-Doping Agency to make them aware of undetectable anabolic steroid being distributed to world-class athletes. The case, known as the BALCO scandal, was at the time the biggest drugs scandal in athletics history, implicating sprinters and baseball stars.

Whistleblowing was also a reason for the biggest doping scandal in cycling. Floyd Landis, a former teammate of Lance Armstrong, blew the whistle on Armstrong after he himself was caught blood doping. The case ended with Armstrong being stripped of his seven Tour de France titles and ordered to pay millions in restitution.

Yuliya Stepanova, Russian track & field athlete and her husband, Vitaly Stepanov, a former employee of the Russian Anti-Doping Agency, helped expose state-sponsored doping in Russia and set off a global scandal ahead of the 2016 Rio Olympics. Russian track & field athletes were not allowed to compete at those Olympics, and as a result of the further investigation only selected athletes were allowed to compete at the 2018 Pyeongchang Olympics under the neutral Olympic flag.

LITERATURE REVIEW

Judge et al. (2010) measured track & field athletes' (specifically among those in throwing events) attitudes toward the use of prohibited substances and doping testing. The results suggested that both attitude (mean = 1.20 ± 0.91) and behavioural intent (mean = 1.27 ± 1.5) of such athletes in the US are supportive of the anti-doping movement.

Whitaker et al. (2014b) carried out semi-structured interviews with 9 national level athletes from UK (4 track & field athletes aged 19 to 22 and 5 Super League rugby players aged 24 to 34). Based on conversations he concluded that in order to explore the willingness of national level athletes to report doping in sport, contextual differences that may shape the behaviours athletes perceive they would display if they became aware that an athlete was doping should be appreciated. Overall, track & field athletes gave the impression that they are more willing to blow the whistle that the rugby league players.

Erickson et al. (2017a) did semi-structured interviews with 28 track & field university students, from both UK (N=14) and US (N=14). The results showed that addressing doping presents a true moral dilemma and is not a dichotomous process whereby athletes either report it or do nothing. Instead, four options for addressing others' use of prohibited substances emerged: (1) confront the user of prohibited substances directly, (2) report to "someone", (3) report to anti-doping "authorities", or (4) ignore the behaviour. Underpinned by relational concerns and empathy, direct confrontation was the participants' preferred approach to addressing doping, which has the potential to protect both the doping athlete and whistleblower, while simultaneously reducing the presence of prohibited substances in sport.

RESULTS WITH DISCUSSION

Table 20

Summary of replies to the questions regarding reporting doping in sport

	coach (C)/ athlete (A)	country	gender	team (T) / individual (I) sports	exposed (E) / non-exposed (NE) sports	tested (T) / never tested (NT) athletes	educated (ED) / not educated (NEP)	with medals (M) / without medals (NM) in big competitions
I know where and how to make an anonymous report	C > A					T > NT	ED >NED	
Anonymous reporting of doping is an important part of the efforts for clean sport	C > A	S > E						
I would make an anonymous report if I knew someone was doping	C > A			I > T				
table in appendix	68	69	70	71	72	73	74	75

Notes. A - Austria, E - Estonia, S - Slovenia; M - males; F - females

Note that questions regarding reporting doping in sport were only part of the Slovenian and Estonian questionnaires.

Statistically significant differences were found between coaches and athletes for all three statements – coaches were more aware where and how to make an anonymous reports, they also more strongly believed that anonymous reporting is an important part of the efforts for clean sport, and they would be more likely to report someone for doping. Athletes trust and rely on the expertise, guidance and advice of their coaches and other support personnel in helping them to achieve their goals, and there should be no question about coaches attitudes toward the anti-doping work and consequently towards anonymous reports. However, even if the results show (Figure 21) that they are more in favour of anonymous reporting than athletes (67.8% of coaches agreed or strongly agreed that they would make a report – while for athletes it was 56.9%), their attitudes should be even more favourable on this point.

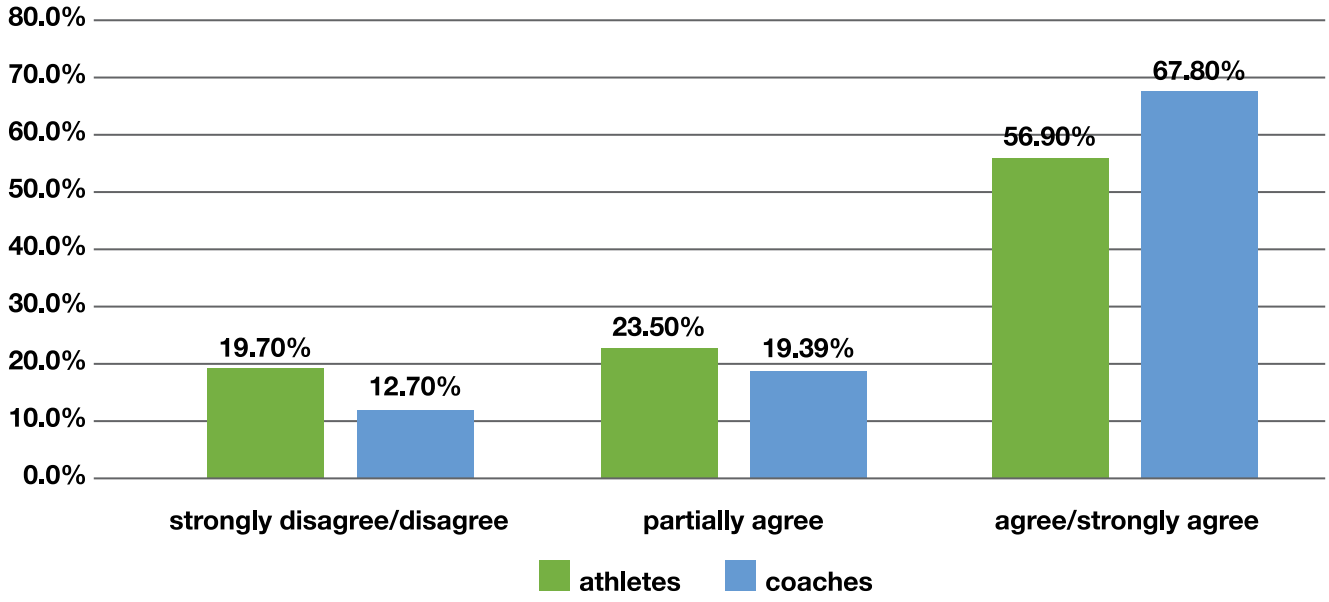

Figure 21. Reporting doping in sport N= 234 (athletes), 165 (coaches).

If we take a look of the athletes' results from our research we can see that in general 19.7% of athletes disagreed or strongly disagreed, but there were differences between the Slovenian and Estonian athletes (the percentage among Slovenian athletes was 21% (N=167) and among the Estonian ones was 15,1% (N=66)). In the only other similar research that we found (Judge et al., 2010) 28.2% of athletes disagreed or strongly disagreed that they would take action against friends or relatives who were doping, while 22% had no comment. However, since Judge et al.'s sample of athletes was limited to only those from track & field events, and in our research athletes were from a variety of sports (see Table 4), a direct comparison cannot be done.

From the country point of view there were significant differences between Slovenia and Estonia on the importance of anonymous reporting, but not on the reporting itself. On one hand the Slovenians were aware that reporting doping is important for clean sport, but on the other hand they were not that confident that they would make a report. In Estonia the results were quite similar for both statements – the mean was exactly the same, but there was a slight difference in the standard deviation, with a greater variety of answers on making the report.

Even though there is evidence to suggest that perceptions of doping differ between males and females (Whitaker et al., 2014a), this did not appear to be the case in the present study, as the differences between male and female athletes were insignificant. Similar results were found by Whitaker et al. (2014b), where female athletes offered the same views on reporting doping as their male counterparts.

On the other hand, we found differences in the willingness to make an anonymous report between team and individual sport athletes. Individual sport athletes were more in favour of taking an active role and blowing the whistle. Whitaker et al. (2014a) had similar results (track & field athletes were willing to report doping while rugby players were against it). They suggested that one of the reasons is that in team sports (especially in small sporting communities, such as Rugby Super League) it is likely that if a player was to provide information on an individual who was doping, even if the player was from another team, at some point in the future they could end up playing for the same team as that player. Alternatively, they could find themselves at the same club as the player's former teammates or support network. If this were to happen then the whistleblower could experience negative consequences, such as being singled out and isolated for being a "grass", which in turn could negatively affect his well-being.

Although individual sport athletes might train together, they mainly compete for themselves and therefore may feel no loyalty towards their training partners. On the other hand, in a team sport athletes are likely to enhance feelings of loyalty. Team spirit, the need to work together obviously prevents athletes from reporting doping. The only exception is when an athlete is competing for the same position within a team. Otherwise it might be perceived that another player's doping behaviour could actually benefit the team and enhance the performance/success of the team as a whole. In such circumstances, there might be reluctance to report doping.

Of course, not all individual and/or team sports are the same, so these results cannot be generalised. Further research should be done in this area, and it should be more sport specific. We are all aware of the strength of the doping Omerta (code of silence) in cycling, and cycling is an individual sport.

Further comparisons showed significant differences in the knowledge of where and how to make an anonymous report, with differences between tested and never tested athletes and educated and not educated athletes. It is expected that athletes who are tested on a regular basis have more knowledge about the anti-doping work. Since the introduction of the whistleblowing programme is part of prevention activities it was expected that athletes who had participated in NADO educational programs knew where and how report doping behaviour. Surprisingly, there were no differences in the willingness to make reports between educated and not educated athletes.

CONCLUSION

As Zhang (2018) pointed out, there is a need to create an education program that provides athletes at all levels with support for their whistleblowing actions to ensure that doping does not occur. The education programme should not only include discussion of the significance, mechanisms, responsibilities, and psychological, social, and economic consequences of doping in sports, but also identify the means available for reporting, the potential risks of reporting (e.g., stress, intimidation), and measures in place to protect the integrity and identity of whistleblowers.

EXECUTIVE SUMMARY

The current study explores how the athletes and coaches see doping and the efforts against it. The study involves athletes and coaches from three countries, Austria, Estonia and Slovenia – all fairly small when it comes to the population, yet extremely successful when it comes to athletic results.

A total of 1,118 participants answered the questions, with 705 athletes and 408 coaches, 725 males and 388 females. A total of 528 of the respondents were from Austria, 142 from Estonia and 448 from Slovenia. The questionnaire was developed by Zentrum für Sportwissenschaft und Universitätssport der Universität Wien especially for this research, the questionnaire was written in German, then translated into Slovenian and Estonian, with two versions being produced, one for athletes and one for coaches.

A large international study focuses on views and opinions about different aspects of doping: (a) participants' personal attitudes towards sport; (b) opinions on the development of sport; (c) attitudes towards national anti-doping organisations (NADOs); (d) sources of information about doping; (e) satisfaction with NADOs' operations and information; (f) satisfaction with the testing and prevention programmes; (g) knowledge of doping; (h) anonymous reporting.

The data was analysed and compared extensively between different population segments, nationalities, types of sports etc. The most significant findings of the study could be considered as follows:

- Related to the motives and attitudes, love for movement was the main motive for athletes and coaches with no regard to country, gender, type of sport, etc. Testing the limits and staying in sport followed, with differences mainly between athletes and coaches. A desire to stay in sport is stronger among coaches than athletes.
- Participants agreed to the highest extent that professional sport is causing more cheating. It was also pointed out that importance of victory is increasing, and that elite sport cannot exist without sports medicine.
- Coaches had generally more favourable attitudes towards NADOs, regarded their information as more useful and wished for even more support, while athletes expressed a greater feeling of interference than the coaches.
- Respondents from all three countries use the websites of their NADO as the main source for most contents (substances, the anti-doping rules, the work of such organisations, the legal consequences and testing procedures for doping), with the exception of medical consequences, where 45% of athletes and 42.8% of coaches rely more on information from the media. The media turned out to be the second most significant resource.
- It is worthwhile noting that the knowledge of athletes support personnel is extremely important as athletes trust them largely.
- Amongst the nations studied, Austrian athletes had the most negative attitude towards doping controls, and the Estonians felt more than others that doping controls are necessary and protect clean athletes.
- Almost a quarter of Slovenian athletes believed that adult athletes should decide on their own whether to use doping or not, and that external control is not necessary (in the other countries the figure is around 10% or lower).
- Both athletes and coaches strongly agreed that at the lecture they learned all they need to know about clean sport, being most confident about the doping control process, where 87.5% of coaches and 89.1% of athletes know what to expect in case of testing (doping control).

- Athletes and coaches showed generally substantial knowledge about health consequences of doping.
- Athletes who did not attend any prevention programmes in past 12 months find side effect of doping substances more severe than those who attended such programmes.
- Athletes also expressed more support for the claim that medically supervised doping is relatively safe.
- Related to reporting doping, coaches were more aware where and how to make anonymous reports, also believed that anonymous reporting is an important part of the efforts for clean sport, and they would be more likely to report someone for doping.
- Differences were found in the willingness to make an anonymous report between team and individual sport athletes, where individual sport athletes were more in favour of taking an active role and blowing the whistle. Surprisingly, no differences were stated in the willingness to make reports between educated and not educated athletes.

Based on the findings and discussion some recommendations could be made to NADOs on how to improve their anti-doping work:

- The present anti-doping work needs strong public commitment to make the awareness-raising campaigns more effective.
- These findings should encourage all NADOs to keep their websites up-to date, as they could be a valuable source to provide good support and reliable information for both athletes and coaches.
- It is encouraging to know that almost half of the coaches and athletes would prefer to take part in more prevention programmes on a yearly basis.
- The prevention activities should focus more on the coaches (and other support staff) and male athletes remain an important target group.
- Due to the differences in individual or team sports, special considerations must be made addressing both populations.
- The education programme should also identify the means available for reporting and the potential risks of reporting.

Naturally numerous topics remain still to be explored. More in-depth study is needed related to the cultural differences and different sports and its influence on the athletes' attitudes. Some interesting notions could be found about the attitudes towards NADOs and their relation to the participation in the education. More could be discovered about the athletes' and coaches' perceptions of testing programmes and sanctions and the correlation between athletic success and attitudes towards dietary supplements.

The current study has improved the knowledge of anti-doping education, prevention and reporting in three small sporting countries, Austria, Estonia and Slovenia. However, we do hope that many readers find ideas either for their research or practical implications and make more effective steps in their anti-doping work.

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APPENDIX I

The structure of this book is based on sets of questions in the constructed questionnaire, with eight demographic questions and then six about the respondents' personal attitudes towards sport, six questions about their opinions on the development of sport, eight questions about their attitudes toward NADOs and six about their familiarity with how a NADO operates. These were followed by six questions on the respondents' sources of information about different aspects of doping, six about their satisfaction with their NADO's operations and the information it provides, 14 questions about their satisfaction with the testing programme and 13 about their satisfaction with NADO prevention programmes. We also asked the respondents 13 questions about their knowledge about doping and three about the system of anonymous reporting. Some questionnaires omitted some questions, for example the Austrian version did not contain the questions on anonymous reporting. All the questionnaires in all three languages (both the athletes' and coaches' versions) are in the following appendix.

Comparisons between different groups were made on the bases of the literature review and demographic data and thus we compared:

- athletes and coaches;
- participants from different countries;
- male and female athletes;
- athletes from individual and team sports;
- athletes from "exposed" and "non-exposed" sports ("exposed" sports: cycling, track & field athletics, biathlon, Nordic skiing, swimming and weight-lifting);
- athletes, who have already been tested for doping and those who have never been tested before;
- athletes, who have already participated in NADO prevention programmes and those, who have never participated.

The differences were calculated using t – test where two groups were compared and One way Anova in the case of comparison of participants from different countries. The statistical programme used was IBM SPSS Statistics 25. Each table represents descriptive statistics of each group and statistical parameters with its significance level, statistically significant differences are coloured in grey. Explicit data on how many participants responded to the exact set of questions is written in the note of each table.

In the final comparison in each chapter we wanted to see if there are any differences between athletes who have had more or less success in their careers and thus decided to compare those who have won a medal in a major competition (Olympic or Paralympic Games, World or European championships) with those have not.

Table 21

Comparison of motives between athletes and coaches

	athletes		coaches			
Motive	*M*	*SD*	*M*	*SD*	t	sig (t)
love for movement	4.40	0.94	4.27	1.01	2.03	0.04
fame	2.25	1.14	1.76	1.01	7.05	0.00
way of life	2.24	1.38	2.77	1.56	-5.80	0.00
money	1.92	1.15	1.67	0.96	3.70	0.00
testing my limits	3.86	1.12	2.96	1.39	11.65	0.00
staying in sport	3.30	1.21	4.52	0.94	-17.18	0.00

Note: 684 athletes and 399 coaches responded to this question

Table 22

Comparison of motives between participants from different countries

	Austria		Estonia		Slovenia			
Motive	*M*	*SD*	*M*	*SD*	*M*	*SD*	F	sig (F)
love for movement	4.45	0.96	3.93	1.07	4.37	0.90	16.85	0.00
fame	1.88	1.04	2.43	1.16	2.18	1.16	17.20	0.00
way of life	2.03	1.43	2.86	1.46	2.71	1.25	42.02	0.00
money	1.50	0.94	2.11	1.15	2.15	1.12	51.92	0.00
testing my limits	3.36	1.40	3.75	1.16	3.50	1.18	10.56	0.00
staying in sport	3.84	1.27	3.98	1.11	3.56	1.29	8.50	0.00

Note: 412 athletes and coaches from Austria, 528 from Slovenia and 142 from Estonia responded to this question

Table 23

Comparison of motives between male and female athletes

	male athletes		female athletes			
Motive	*M*	*SD*	*M*	*SD*	t	sig (t)
love for movement	4.34	0.96	4.47	0.91	-1.79	0.07
fame	2.44	1.17	2.00	1.07	5.04	0.00
way of life	2.42	1.43	2.00	1.29	3.97	0.00
money	2.13	1.24	1.65	0.97	5.74	0.00
testing my limits	3.94	1.04	3.75	1.20	2.11	0.04
staying in sport	3.34	1.19	3.25	1.24	0.94	0.35

Note: 389 male and 292 female athletes responded to this question

Table 24

Comparison of motives between athletes from individual and team sports

	individual sports		team sports			
Motive	*M*	*SD*	*M*	*SD*	t	sig (t)
love for movement	4.45	0.87	4.29	1.03	2.02	0.04
fame	2.22	1.16	2.39	1.12	-1.85	0.07
way of life	2.08	1.31	2.66	1.45	-5.04	0.00
money	1.75	1.07	2.34	1.23	-6.14	0.00
testing my limits	3.94	1.15	3.73	1.03	2.34	0.02
staying in sport	3.27	1.25	3.39	1.12	-1.26	0.21

Note: 414 individual sports athletes and 233 team sports athletes responded to this question

Table 25

Comparison of motives between athletes from "exposed" and "non-exposed" sports

	"exposed" sports		"non-exposed" sports			
Motive	*M*	*SD*	*M*	*SD*	t	sig (t)
love for movement	4.50	0.75	4.35	0.99	1.95	0.05
fame	2.35	1.19	2.24	1.13	1.07	0.28
way of life	2.14	1.31	2.32	1.41	-1.50	0.13
money	1.85	1.14	1.99	1.17	-1.33	0.18
testing my limits	4.21	0.89	3.74	1.15	5.34	0.00
staying in sport	3.35	1.19	3.28	1.21	0.57	0.57

Note: 165 athletes from "exposed" sports and 494 athletes from "non-exposed" sports responded to this question

Table 26

Comparison of motives between athletes, who have already tested for doping and those, who have never been tested

	tested athletes		never tested athletes			
Motive	*M*	*SD*	*M*	*SD*	t	sig (t)
love for movement	4.42	0.94	4.36	0.94	0.87	0.38
fame	2.07	1.05	2.47	1.21	-4.46	0.00
way of life	2.14	1.37	2.36	1.39	-2.00	0.05
money	1.73	1.01	2.16	1.27	-4.82	0.00
testing my limits	3.89	1.11	3.81	1.12	0.93	0.35
staying in sport	3.32	1.18	3.29	1.25	0.34	0.73

Note: 377 athletes, who have already been tested and 307 athletes, who have never been tested for doping responded to this question

Table 27

Comparison of motives between athletes, who have already participated in NADO prevention programmes and those, who have never participated

	athletes, who participated in programmes		athletes, who never participated in programmes			
Motive	*M*	*SD*	*M*	*SD*	t	sig (t)
love for movement	4.44	0.90	4.36	0.97	1.11	0.27
fame	2.19	1.14	2.30	1.14	-1.22	0.22
way of life	2.09	1.35	2.34	1.40	-2.36	0.02
money	1.77	1.09	2.03	1.19	-2.95	0.00
testing my limits	3.84	1.14	3.87	1.10	-0.33	0.74
staying in sport	3.15	1.19	3.41	1.21	-2.79	0.01

Note: 284 athletes, who already participated and 400 athletes, who never participated in doping prevention programmes, responded to this question

Table 28

Comparison of motives between athletes, who have medals from European, World Championships or Olympic/Paralympic games and athletes, who have no such medals

	athletes with medals from major competitions		athletes without medals from major competitions			
Motive	*M*	*SD*	*M*	*SD*	t	sig (t)
love for movement	4.31	0.94	4.33	0.97	-0.17	0.87
fame	2.21	1.05	2.49	1.24	-1.96	0.05
way of life	2.56	1.48	2.57	1.40	-0.03	0.98
money	2.08	1.07	2.41	1.23	-2.28	0.02
testing my limits	3.93	1.11	3.87	1.08	0.41	0.68
staying in sport	2.95	1.19	3.15	1.19	-1.25	0.21

Note: 87 athletes with medals from European, World Championships and Olympic/Paralympic games and 181 athletes without such medals responded to this question

Table 29

Comparison of opinion about development of sport between athletes and coaches

	athletes		coaches			
	M	*SD*	*M*	*SD*	t	sig (t)
importance of victory is increasing	3.57	1.03	3.71	1.02	-2.13	0.03
temptation for doping abuse in elite sport is increasing	3.17	1.15	3.24	1.17	-1.03	0.30
temptation for doping abuse in recreational sport is increasing	2.95	1.27	3.32	1.17	-4.69	0.00
with more money in sport there is more cheating	3.75	1.06	3.93	1.03	-2.73	0.01
the importance of fair-play is increasing	3.09	1.08	3.04	1.04	0.87	0.39
elite sport can not exist without sports medicine	3.95	1.19	4.20	1.07	-3.38	0.00

Note: 684 athletes and 399 coaches responded to this question

Table 30

Comparison of opinion about development of sport between participants from different countries

	Austria		Estonia		Slovenia			
	M	*SD*	*M*	*SD*	*M*	*SD*	F	sig (F)
importance of victory is increasing	3.71	1.06	3.28	0.94	3.63	0.98	9.73	0.00
temptation for doping abuse in elite sport is increasing	3.20	1.23	2.97	1.06	3.27	1.09	3.41	0.03
temptation for doping abuse in recreational sport is increasing	3.08	1.27	2.88	1.09	3.18	1.24	3.08	0.05
with more money in sport there is more cheating	3.85	1.09	3.45	0.99	3.89	0.99	10.04	0.00
the importance of fair-play is increasing	2.81	1.07	3.16	1.01	3.37	1.00	34.47	0.00
elite sport can not exist without sports medicine	4.17	1.08	3.50	1.26	4.06	1.14	19.87	0.00

Note: 412 athletes and coaches from Austria, 528 from Slovenia and 142 from Estonia responded to this question

Table 31

Comparison of opinion about development of sport between male and female athletes

	male athletes		female athletes			
	M	*SD*	*M*	*SD*	t	sig (t)
importance of victory is increasing	3.59	1.03	3.54	1.03	0.62	0.54
temptation for doping abuse in elite sport is increasing	3.13	1.19	3.24	1.10	-1.25	0.21
temptation for doping abuse in recreational sport is increasing	3.00	1.27	2.89	1.26	1.08	0.28
with more money in sport there is more cheating	3.76	1.05	3.74	1.07	0.25	0.80
the importance of fair-play is increasing	3.13	1.08	3.04	1.08	1.11	0.27
elite sport can not exist without sports medicine	4.03	1.16	3.86	1.21	1.84	0.07

Note: 389 male and 292 female athletes responded to this question

Table 32

Comparison of opinion about development of sport between athletes from individual and team sports

	individual sports		team sports			
	M	*SD*	*M*	*SD*	t	sig (t)
importance of victory is increasing	3.55	1.02	3.62	1.00	-0.84	0.40
temptation for doping abuse in elite sport is increasing	3.14	1.16	3.27	1.10	-1.49	0.14
temptation for doping abuse in recreational sport is increasing	3.12	1.32	2.67	1.11	4.69	0.00
with more money in sport there is more cheating	3.78	1.06	3.71	1.02	0.78	0.43
the importance of fair-play is increasing	3.00	1.06	3.29	1.07	-3.29	0.00
elite sport can not exist without sports medicine	3.79	1.23	4.25	1.05	-4.87	0.00

Note: 414 individual sports athletes and 233 team sports athletes responded to this question

Table 33

Comparison of opinion about development of sport between athletes from "exposed" and "non-exposed" sports

	"exposed" sports		"non-exposed" sports			
	M	*SD*	*M*	*SD*	t	sig (t)
importance of victory is increasing	3.58	0.92	3.56	1.04	0.19	0.85
temptation for doping abuse in elite sport is increasing	3.14	1.14	3.20	1.15	-0.55	0.59
temptation for doping abuse in recreational sport is increasing	3.35	1.22	2.82	1.26	4.70	0.00
with more money in sport there is more cheating	3.86	1.00	3.72	1.06	1.46	0.14
the importance of fair-play is increasing	3.02	1.06	3.13	1.08	-1.20	0.23
elite sport can not exist without sports medicine	3.78	1.28	4.02	1.15	-2.14	0.03

Note: 165 athletes from "exposed" sports and 494 athletes from "non-exposed" sports responded to this question

Table 34

Comparison of opinion about development of sport between athletes, who have already tested for doping and those, who have never been tested

	tested athletes		never tested athletes			
	M	*SD*	*M*	*SD*	t	sig (t)
importance of victory is increasing	3.55	1.06	3.59	0.99	-0.55	0.58
temptation for doping abuse in elite sport is increasing	3.16	1.16	3.18	1.16	-0.15	0.88
temptation for doping abuse in recreational sport is increasing	3.02	1.24	2.87	1.30	1.58	0.12
with more money in sport there is more cheating	3.73	1.07	3.76	1.05	-0.35	0.73
the importance of fair-play is increasing	3.02	1.08	3.18	1.09	-1.87	0.06
elite sport can not exist without sports medicine	3.99	1.15	3.91	1.23	0.85	0.40

Note: 377 athletes, who have already been tested and 307 athletes, who have never been tested for doping responded to this question

Table 35

Comparison of opinion about development of sport between athletes, who have already participated in NADO prevention programmes and those, who have never participated

	athletes, who participated in programmes		athletes, who never participated in programmes			
	M	*SD*	*M*	*SD*	t	sig (t)
importance of victory is increasing	3.61	1.02	3.54	1.03	0.94	0.35
temptation for doping abuse in elite sport is increasing	3.22	1.17	3.13	1.14	0.95	0.34
temptation for doping abuse in recreational sport is increasing	2.95	1.29	2.96	1.25	-0.13	0.90
with more money in sport there is more cheating	3.73	1.07	3.76	1.05	-0.44	0.66
the importance of fair-play is increasing	3.03	1.14	3.14	1.04	-1.33	0.18
elite sport can not exist without sports medicine	4.02	1.20	3.90	1.18	1.29	0.20

Note: 284 athletes, who already participated and 400 athletes, who never participated in doping prevention programmes, responded to this question

Table 36

Comparison of opinion about development of sport between athletes, who have medals from European, World Championships or Olympic/Paralympic games and athletes, who have no such medals

	athletes with medals from major competitions		athletes without medals from major competitions			
	M	*SD*	*M*	*SD*	t	sig (t)
importance of victory is increasing	3.61	0.94	3.60	1.00	0.10	0.92
temptation for doping abuse in elite sport is increasing	3.21	1.14	3.29	1.10	-0.59	0.56
temptation for doping abuse in recreational sport is increasing	3.09	1.36	3.01	1.25	0.48	0.63
with more money in sport there is more cheating	3.78	0.98	3.88	0.98	-0.76	0.45
the importance of fair-play is increasing	3.29	0.99	3.38	1.06	-0.67	0.51
elite sport can not exist without sports medicine	3.89	1.27	4.06	1.15	-1.10	0.27

Note: 87 athletes with medals from European, World Championships and Olympic/Paralympic games and 181 athletes without such medals responded to this question

Table 37

Comparison of attitude towards NADO between athletes and coaches

	athletes		coaches			
NADO is …	*M*	*SD*	*M*	*SD*	t	sig (t)
… an important part of the system	4.11	1.03	3.93	5.96	0.56	0.57
… an interference for athletes	1.52	0.87	0.99	5.74	2.21	0.03
… an independent organization	3.49	1.13	3.37	5.98	0.39	0.70
… a protection for “clean” athletes	3.99	1.12	3.66	5.97	1.09	0.28
…a help in changing doping mentality	3.71	1.10	4.02	1.06	-4.43	0.00
… a trustworthy organization	3.91	1.07	4.11	0.98	-2.86	0.00
… useful support	3.69	1.13	4.02	1.02	-4.77	0.00
…a way to send sports associations informations	3.31	1.09	3.42	1.10	-1.52	0.13
I turn to NADO when looking for informations	3.58	1.27	3.94	1.05	-4.77	0.00
NADO website is easy to use and understand	3.63	1.07	3.89	0.87	-4.25	0.00
I wish NADO had a drug verification app	3.47	1.66	3.67	1.53	-1.88	0.06
NADO information is sufficient	3.50	1.10	3.84	0.93	-5.19	0.00
NADO is quick in informing about changes in doping	3.16	1.20	3.61	1.15	-5.71	0.00
NADO provides enough information	3.33	1.24	3.65	1.14	-4.08	0.00
I would like someone to speak to at NADO	3.00	1.34	3.21	1.25	-2.40	0.02
I would like e-mail news from NADO	3.57	1.38	4.00	1.12	-5.34	0.00
Athletes must be informed about changes quickly	4.32	1.10	4.63	0.73	-5.37	0.00
Adult athletes should attend NADO lectures yearly	3.48	1.39	4.09	1.07	-7.63	0.00

Note: 605 athletes and 381 coaches responded to this question

Table 38

Comparison of attitude towards NADO between participants from different countries

NADO is …	Austria		Estonia		Slovenia		F	sig (F)
	M	*SD*	*M*	*SD*	*M*	*SD*		
… an important part of the system	3.75	5.23	4.43	0.72	4.30	0.84	2.99	0.05
… an interference for athletes	1.16	5.01	1.37	0.65	1.53	1.01	1.11	0.33
… an independent organization	3.17	5.22	3.99	0.99	3.63	1.01	3.08	0.05
… a protection for “clean” athletes	3.55	5.24	4.27	0.78	4.15	1.00	3.43	0.03
…a help in changing doping mentality	3.52	1.15	4.19	0.94	4.13	0.93	43.73	0.00
… a trustworthy organization	3.75	1.18	4.40	0.67	4.18	0.84	31.23	0.00
… useful support	3.38	1.17	4.25	0.74	4.28	0.81	95.73	0.00
…a way to send sports associations informations	3.07	1.14	3.58	0.99	3.68	0.95	36.84	0.00
I turn to NADO when looking for informations	3.91	1.28	3.67	1.14	3.47	1.04	14.18	0.00
NADO website is easy to use and understand	3.68	1.14	3.92	0.79	3.74	0.85	3.01	0.05
I wish NADO had a drug verification app	3.03	1.83	3.00	1.04	4.43	0.85	98.30	0.00
NADO information is sufficient	3.64	1.18	3.79	0.75	3.57	0.93	2.27	0.10
NADO is quick in informing about changes in doping	3.25	1.32	3.76	0.93	3.29	1.07	10.24	0.00
NADO provides enough information	3.32	1.35	3.90	0.91	3.48	1.05	12.85	0.00
I would like someone to speak to at NADO	3.03	1.43	2.62	1.19	3.32	1.12	14.51	0.00
I would like e-mail news from NADO	3.64	1.49	3.88	0.98	3.81	1.13	2.56	0.08
Athletes must be informed about changes quickly	4.41	1.17	4.48	0.72	4.46	0.77	0.34	0.71
Adult athletes should attend NADO lectures yearly	3.69	1.45	3.47	1.15	3.85	1.15	4.37	0.01

Note: 504 athletes and coaches from Austria, 345 from Slovenia and136 from Estonia responded to this question

Table 39

Comparison of attitude towards NADO between male and female athletes

	male athletes		female athletes			
NADO is …	*M*	*SD*	*M*	*SD*	t	sig (t)
… an important part of the system	3.98	1.07	4.27	0.94	-3.52	0.00
… an interference for athletes	1.58	0.87	1.44	0.87	2.01	0.05
… an independent organization	3.51	1.10	3.46	1.16	0.52	0.60
… a protection for “clean” athletes	3.93	1.16	4.08	1.05	-1.57	0.12
…a help in changing doping mentality	3.67	1.17	3.76	1.01	-1.01	0.31
… a trustworthy organization	3.87	1.10	3.97	1.04	-1.14	0.25
… useful support	3.61	1.14	3.79	1.10	-1.86	0.06
…a way to send sports associations informations	3.33	1.13	3.28	1.05	0.55	0.58
I turn to NADO when looking for informations	3.39	1.26	3.81	1.24	-4.07	0.00
NADO website is easy to use and understand	3.52	1.09	3.77	1.02	-2.88	0.00
I wish NADO had a drug verification app	3.46	1.64	3.50	1.69	-0.29	0.77
NADO information is sufficient	3.44	1.13	3.58	1.06	-1.57	0.12
NADO is quick in informing about changes in doping	3.09	1.20	3.23	1.20	-1.37	0.17
NADO provides enough information	3.24	1.25	3.44	1.23	-1.92	0.06
I would like someone to speak to at NADO	2.98	1.36	3.02	1.32	-0.28	0.78
I would like e-mail news from NADO	3.47	1.40	3.68	1.36	-1.76	0.08
Athletes must be informed about changes quickly	4.28	1.11	4.37	1.08	-1.02	0.31
Adult athletes should attend NADO lectures yearly	3.43	1.41	3.56	1.36	-1.12	0.26

Note: 339 male and 263 female athletes responded to this question

Table 40

Comparison of attitude towards NADO between athletes from individual and team sports

	individual sports		team sports			
NADO is …	*M*	*SD*	*M*	*SD*	t	sig (t)
… an important part of the system	4.08	1.09	4.14	0.86	-0.66	0.51
… an interference for athletes	1.49	0.84	1.62	0.91	-1.69	0.09
… an independent organization	3.41	1.16	3.66	1.01	-2.58	0.01
… a protection for “clean” athletes	3.89	1.18	4.14	0.98	-2.69	0.01
…a help in changing doping mentality	3.67	1.11	3.82	1.03	-1.62	0.11
… a trustworthy organization	3.87	1.13	3.99	0.91	-1.40	0.16
… useful support	3.69	1.16	3.75	1.02	-0.69	0.49
…a way to send sports associations informations	3.27	1.11	3.44	0.98	-1.83	0.07
I turn to NADO when looking for informations	3.63	1.28	3.49	1.18	1.32	0.19
NADO website is easy to use and understand	3.64	1.09	3.63	0.93	0.09	0.93
I wish NADO had a drug verification app	3.58	1.62	3.27	1.71	2.05	0.04
NADO information is sufficient	3.48	1.10	3.53	1.05	-0.52	0.61
NADO is quick in informing about changes in doping	3.21	1.24	3.11	1.08	1.01	0.31
NADO provides enough information	3.41	1.24	3.26	1.17	1.29	0.20
I would like someone to speak to at NADO	3.01	1.34	2.99	1.29	0.16	0.87
I would like e-mail news from NADO	3.57	1.40	3.53	1.37	0.32	0.75
Athletes must be informed about changes quickly	4.31	1.15	4.38	0.93	-0.71	0.48
Adult athletes should attend NADO lectures yearly	3.53	1.42	3.41	1.34	0.94	0.35

Note: 377 individual sports athletes and 196 team sports athletes responded to this question

Table 41

Comparison of attitude towards NADO between athletes from "exposed" and "non-exposed" sports

	"exposed" sports		"non-exposed" sports			
NADO is …	*M*	*SD*	*M*	*SD*	t	sig (t)
… an important part of the system	4.27	0.97	4.04	1.03	2.48	0.01
… an interference for athletes	1.48	0.80	1.55	0.89	-0.87	0.38
… an independent organization	3.43	1.19	3.52	1.08	-0.83	0.41
… a protection for "clean" athletes	3.93	1.13	4.00	1.12	-0.71	0.48
…a help in changing doping mentality	3.95	0.97	3.64	1.11	3.22	0.00
… a trustworthy organization	4.11	0.99	3.85	1.07	2.66	0.01
… useful support	3.87	1.05	3.66	1.13	2.00	0.05
…a way to send sports associations informations	3.44	0.96	3.30	1.11	1.44	0.15
I turn to NADO when looking for informations	3.80	1.10	3.50	1.29	2.82	0.01
NADO website is easy to use and understand	3.89	0.84	3.54	1.09	4.03	0.00
I wish NADO had a drug verification app	3.55	1.59	3.46	1.68	0.54	0.59
NADO information is sufficient	3.62	0.91	3.45	1.14	1.82	0.07
NADO is quick in informing about changes in doping	3.38	1.21	3.09	1.18	2.51	0.01
NADO provides enough information	3.53	1.24	3.28	1.21	2.08	0.04
I would like someone to speak to at NADO	3.02	1.28	3.01	1.34	0.09	0.93
I would like e-mail news from NADO	3.67	1.33	3.53	1.40	1.06	0.29
Athletes must be informed about changes quickly	4.39	1.04	4.31	1.09	0.70	0.48
Adult athletes should attend NADO lectures yearly	3.58	1.42	3.46	1.38	0.91	0.36

Note: 153 athletes from "exposed" sports and 427 athletes from "non-exposed" sports responded to this question

Table 42

Comparison of attitude towards NADO between athletes, who have already tested for doping and those, who have never been tested

	tested athletes		never tested athletes			
NADO is …	*M*	*SD*	*M*	*SD*	t	sig (t)
… an important part of the system	4.13	1.04	4.07	1.00	0.67	0.50
… an interference for athletes	1.50	0.88	1.55	0.86	-0.77	0.44
… an independent organization	3.56	1.19	3.40	1.04	1.73	0.08
… a protection for “clean” athletes	4.01	1.12	3.96	1.13	0.58	0.56
…a help in changing doping mentality	3.66	1.14	3.77	1.04	-1.30	0.19
… a trustworthy organization	3.92	1.13	3.91	0.99	0.14	0.89
… useful support	3.60	1.17	3.81	1.06	-2.24	0.03
…a way to send sports associations informations	3.23	1.12	3.43	1.04	-2.24	0.03
I turn to NADO when looking for informations	3.55	1.35	3.62	1.15	-0.75	0.45
NADO website is easy to use and understand	3.59	1.14	3.68	0.96	-1.12	0.26
I wish NADO had a drug verification app	3.08	1.81	3.98	1.28	-7.01	0.00
NADO information is sufficient	3.49	1.16	3.51	1.00	-0.25	0.81
NADO is quick in informing about changes in doping	3.15	1.25	3.17	1.13	-0.26	0.80
NADO provides enough information	3.31	1.30	3.36	1.17	-0.45	0.65
I would like someone to speak to at NADO	2.87	1.40	3.17	1.23	-2.68	0.01
I would like e-mail news from NADO	3.55	1.46	3.59	1.28	-0.37	0.71
Athletes must be informed about changes quickly	4.35	1.17	4.27	1.00	0.91	0.36
Adult athletes should attend NADO lectures yearly	3.40	1.45	3.60	1.29	-1.72	0.09

Note: 346 athletes, who have already been tested and 259 athletes, who have never been tested for doping responded to this question

Table 43

Comparison of attitude towards NADO between athletes, who have already participated in NADO prevention programmes and those, who have never participated

	athletes, who participated in programmes		athletes, who never participated in programmes			
NADO is …	*M*	*SD*	*M*	*SD*	t	sig (t)
… an important part of the system	4.02	1.16	4.17	0.92	-1.75	0.08
… an interference for athletes	1.49	0.89	1.55	0.85	-0.83	0.41
… an independent organization	3.29	1.21	3.64	1.04	-3.70	0.00
… a protection for “clean” athletes	3.85	1.30	4.10	0.96	-2.60	0.01
…a help in changing doping mentality	3.67	1.23	3.73	1.00	-0.63	0.53
… a trustworthy organization	3.76	1.26	4.03	0.90	-2.88	0.00
… useful support	3.56	1.27	3.78	1.00	-2.23	0.03
…a way to send sports associations informations	3.28	1.19	3.33	1.02	-0.59	0.55
I turn to NADO when looking for informations	3.37	1.35	3.73	1.18	-3.47	0.00
NADO website is easy to use and understand	3.43	1.24	3.77	0.90	-3.62	0.00
I wish NADO had a drug verification app	3.20	1.80	3.67	1.53	-3.32	0.00
NADO information is sufficient	3.28	1.20	3.66	0.98	-4.12	0.00
NADO is quick in informing about changes in doping	3.02	1.29	3.25	1.12	-2.32	0.02
NADO provides enough information	3.19	1.34	3.43	1.15	-2.34	0.02
I would like someone to speak to at NADO	2.92	1.46	3.06	1.25	-1.16	0.25
I would like e-mail news from NADO	3.30	1.52	3.75	1.25	-3.77	0.00
Athletes must be informed about changes quickly	4.17	1.34	4.41	0.88	-2.46	0.01
Adult athletes should attend NADO lectures yearly	3.46	1.50	3.50	1.31	-0.30	0.76

Note: 253 athletes, who already participated and 352 athletes, who never participated in doping prevention programmes, responded to this question

Table 44

Comparison of attitude towards NADO between athletes, who have medals from European, World Championships or Olympic/Paralympic games and athletes, who have no such medals

	athletes with medals from major competitions		athletes without medals from major competitions			
NADO is …	*M*	*SD*	*M*	*SD*	t	sig (t)
… an important part of the system	4.36	0.77	4.13	0.87	1.88	0.06
… an interference for athletes	1.46	0.87	1.62	0.96	-1.13	0.26
… an independent organization	3.48	0.93	3.43	0.98	0.41	0.69
… a protection for “clean” athletes	4.13	0.87	4.12	1.05	0.08	0.93
…a help in changing doping mentality	4.03	1.02	3.94	0.93	0.65	0.52
… a trustworthy organization	4.24	0.71	4.03	0.89	1.63	0.10
… useful support	4.29	0.81	4.14	0.79	1.28	0.20
…a way to send sports associations informations	3.81	0.95	3.67	0.86	1.06	0.29
I turn to NADO when looking for informations	3.56	0.98	3.19	1.08	2.41	0.02
NADO website is easy to use and understand	3.72	0.83	3.65	0.89	0.53	0.60
I wish NADO had a drug verification app	4.60	0.72	4.31	0.93	2.56	0.01
NADO information is sufficient	3.47	0.84	3.46	0.95	0.09	0.93
NADO is quick in informing about changes in doping	3.13	1.03	3.20	1.02	-0.45	0.65
NADO provides enough information	3.40	1.07	3.35	1.04	0.29	0.77
I would like someone to speak to at NADO	3.29	1.12	3.17	1.10	0.76	0.45
I would like e-mail news from NADO	3.73	1.10	3.57	1.24	0.89	0.37
Athletes must be informed about changes quickly	4.38	0.71	4.32	0.86	0.58	0.56
Adult athletes should attend NADO lectures yearly	3.51	1.24	3.66	1.19	-0.84	0.40

Note: 69 athletes with medals from European, World Championships and Olympic/Paralympic games and 144 athletes without such medals responded to this question

Table 45

Comparison of satisfaction with testing programmes between athletes and coaches

	athletes		coaches			
	M	*SD*	*M*	*SD*	t	sig (t)
satisfaction with doping control frequency	3.46	1.20	3.22	1.18	2.33	0.02
doping controls are an interference in my life	2.06	1.20	2.17	1.32	-1.02	0.31
doping controls are an invasion of privacy	2.01	1.20	2.06	1.26	-0.49	0.63
doping officals are kind and correct during testing	4.17	1.10	3.67	1.62	4.28	0.00
punishments for doping violations should be more severe	3.69	1.18	3.94	1.28	-2.64	0.01
also the use of prohibited substances should be punished	4.06	1.03	3.91	1.28	1.63	0.10
adult athletes should decide on their own regarding doping, external control is redundant	2.02	1.33	1.63	1.20	3.94	0.00
our country has stricter rules regarding doping than other countries	2.22	1.18	2.12	1.32	1.00	0.32
doping controls are a necessary part of sport	4.45	0.98	4.55	0.96	-1.42	0.16
doping control helps protect the “clean” athletes	4.28	1.12	4.24	1.21	0.46	0.65

Note: 270 athletes and 290 coaches responded to this question

Table 46

Comparison of satisfaction with testing programmes between participants from different countries

	Austria		Estonia		Slovenia			
	M	*SD*	*M*	*SD*	*M*	*SD*	F	sig (F)
satisfaction with doping control frequency	3.11	1.26	3.93	0.92	3.35	1.15	16.37	0.00
doping controls are an interference in my life	2.39	1.38	2.02	1.17	1.85	1.08	11.61	0.00
doping controls are an invasion of privacy	2.14	1.33	1.79	0.97	2.03	1.19	2.71	0.07
doping officals are kind and correct during testing	3.59	1.70	4.31	1.05	4.13	1.03	12.92	0.00
punishments for doping violations should be more severe	3.69	1.39	3.50	1.08	4.09	1.10	12.79	0.00
also the use of prohibited substances should be punished	3.86	1.36	3.71	1.07	4.21	0.96	10.76	0.00
adult athletes should decide on their own regarding doping, external control is redundant	1.27	0.81	1.89	1.19	2.26	1.46	46.32	0.00
our country has stricter rules regarding doping than other countries	2.50	1.45	1.98	0.97	1.97	1.11	14.16	0.00
doping controls are a necessary part of sport	4.42	1.19	4.57	0.83	4.55	0.79	1.49	0.23
doping control helps protect the “clean” athletes	4.13	1.34	4.49	0.92	4.27	1.08	3.88	0.02

Note: 216 athletes and coaches from Austria, 253 from Slovenia and 90 from Estonia responded to this question

Table 47

Comparison of satisfaction with testing programmes between male and female athletes

	male athletes		female athletes			
	M	*SD*	*M*	*SD*	t	sig (t)
satisfaction with doping control frequency	3.50	1.24	3.39	1.16	0.75	0.46
doping controls are an interference in my life	2.16	1.26	1.90	1.07	1.68	0.09
doping controls are an invasion of privacy	2.16	1.23	1.81	1.14	2.32	0.02
doping officals are kind and correct during testing	4.02	1.20	4.38	0.89	-2.77	0.01
punishments for doping violations should be more severe	3.69	1.25	3.67	1.07	0.14	0.89
also the use of prohibited substances should be punished	3.96	1.08	4.20	0.95	-2.06	0.04
adult athletes should decide on their own regarding doping, external control is redundant	2.07	1.35	1.95	1.30	0.84	0.40
our country has stricter rules regarding doping than other countries	2.32	1.27	2.09	1.04	1.77	0.08
doping controls are a necessary part of sport	4.31	1.08	4.63	0.78	-3.08	0.00
doping control helps protect the “clean” athletes	4.21	1.19	4.41	0.96	-1.72	0.09

Note: 163 male and 105 female athletes responded to this question

Table 48

Comparison of satisfaction with testing programmes between athletes from individual and team sports

	individual sports		team sports			
	M	*SD*	*M*	*SD*	t	sig (t)
satisfaction with doping control frequency	3.38	1.22	3.64	1.14	-1.70	0.09
doping controls are an interference in my life	2.23	1.31	1.77	0.89	3.33	0.00
doping controls are an invasion of privacy	2.13	1.30	1.81	0.98	2.23	0.03
doping officals are kind and correct during testing	4.19	1.10	4.17	1.07	0.11	0.91
punishments for doping violations should be more severe	3.76	1.19	3.50	1.14	1.89	0.06
also the use of prohibited substances should be punished	4.15	1.04	3.86	1.00	2.34	0.02
adult athletes should decide on their own regarding doping, external control is redundant	1.89	1.32	2.22	1.29	-2.14	0.03
our country has stricter rules regarding doping than other countries	2.14	1.19	2.36	1.15	-1.61	0.11
doping controls are a necessary part of sport	4.49	0.98	4.38	0.95	0.90	0.37
doping control helps protect the “clean” athletes	4.25	1.16	4.33	1.06	-0.63	0.53

Note: 173 individual sports athletes and 89 team sports athletes responded to this question

Table 49

Comparison of satisfaction with testing programmes between athletes from "exposed" and "non-exposed" sports

	"exposed" sports		"non-exposed" sports			
	M	*SD*	*M*	*SD*	t	sig (t)
satisfaction with doping control frequency	3.54	1.22	3.42	1.20	0.72	0.47
doping controls are an interference in my life	2.16	1.35	2.03	1.14	0.72	0.47
doping controls are an invasion of privacy	2.07	1.34	1.99	1.16	0.44	0.66
doping officals are kind and correct during testing	4.32	0.97	4.12	1.13	1.29	0.20
punishments for doping violations should be more severe	3.78	1.15	3.65	1.19	0.85	0.39
also the use of prohibited substances should be punished	4.17	1.03	4.01	1.04	1.24	0.21
adult athletes should decide on their own regarding doping, external control is redundant	1.69	1.23	2.15	1.35	-2.96	0.00
our country has stricter rules regarding doping than other countries	2.11	1.23	2.25	1.16	-0.97	0.33
doping controls are a necessary part of sport	4.62	0.90	4.38	0.99	2.15	0.03
doping control helps protect the "clean" athletes	4.41	0.99	4.22	1.17	1.36	0.18

Note: 76 athletes from "exposed" sports and 190 athletes from "non-exposed" sports responded to this question

Table 50

Comparison of satisfaction with testing programmes between athletes, who have already tested for doping and those, who have never been tested

	tested athletes		never tested athletes			
	M	*SD*	*M*	*SD*	t	sig (t)
satisfaction with doping control frequency	3.58	1.17	3.38	1.22	1.33	0.19
doping controls are an interference in my life	1.96	1.08	2.13	1.26	-1.15	0.25
doping controls are an invasion of privacy	1.85	1.04	2.12	1.30	-1.88	0.06
doping officals are kind and correct during testing	4.51	0.75	3.94	1.23	4.69	0.00
punishments for doping violations should be more severe	3.75	1.18	3.67	1.17	0.61	0.54
also the use of prohibited substances should be punished	4.03	0.96	4.08	1.07	-0.39	0.70
adult athletes should decide on their own regarding doping, external control is redundant	2.07	1.39	1.99	1.30	0.56	0.58
our country has stricter rules regarding doping than other countries	1.86	0.86	2.41	1.28	-4.52	0.00
doping controls are a necessary part of sport	4.65	0.67	4.34	1.09	3.13	0.00
doping control helps protect the “clean” athletes	4.36	1.05	4.24	1.15	0.90	0.37

Note: 105 athletes, who have already been tested and 165 athletes, who have never been tested for doping responded to this question

Table 51

Comparison of satisfaction with testing programmes between athletes, who have already participated in NADO prevention programmes and those, who have never participated

	athletes, who participated in programmes		athletes, who never participated in programmes			
	M	*SD*	*M*	*SD*	t	sig (t)
satisfaction with doping control frequency	3.48	1.23	3.45	1.19	0.23	0.82
doping controls are an interference in my life	2.13	1.14	2.02	1.23	0.68	0.50
doping controls are an invasion of privacy	2.04	1.22	1.99	1.20	0.30	0.77
doping officals are kind and correct during testing	4.26	0.91	4.11	1.21	1.05	0.30
punishments for doping violations should be more severe	3.68	1.10	3.70	1.23	-0.11	0.91
also the use of prohibited substances should be punished	4.16	0.90	3.99	1.10	1.47	0.14
adult athletes should decide on their own regarding doping, external control is redundant	2.12	1.34	1.94	1.32	1.19	0.23
our country has stricter rules regarding doping than other countries	2.18	1.13	2.25	1.22	-0.54	0.59
doping controls are a necessary part of sport	4.60	0.72	4.34	1.10	2.57	0.01
doping control helps protect the “clean” athletes	4.45	0.92	4.17	1.22	2.34	0.02

Note: 104 athletes, who already participated and 166 athletes, who never participated in doping prevention programmes, responded to this question

Table 52

Comparison of satisfaction with testing programmes between athletes, who have medals from European, World Championships or Olympic/Paralympic games and athletes, who have no such medals

	athletes with medals from major competitions		athletes without medals from major competitions			
	M	*SD*	*M*	*SD*	t	sig (t)
satisfaction with doping control frequency	3.49	1.19	3.44	1.21	0.29	0.77
doping controls are an interference in my life	2.37	1.30	1.90	1.11	2.93	0.00
doping controls are an invasion of privacy	2.08	1.24	1.98	1.19	0.64	0.52
doping officals are kind and correct during testing	4.37	0.90	4.06	1.18	2.39	0.02
punishments for doping violations should be more severe	3.78	1.18	3.65	1.17	0.89	0.38
also the use of prohibited substances should be punished	4.17	1.04	4.01	1.02	1.31	0.19
adult athletes should decide on their own regarding doping, external control is redundant	2.09	1.51	1.98	1.25	0.63	0.53
our country has stricter rules regarding doping than other countries	2.30	1.36	2.19	1.10	0.69	0.49
doping controls are a necessary part of sport	4.48	1.04	4.43	0.95	0.34	0.73
doping control helps protect the “clean” athletes	4.29	1.22	4.28	1.08	0.09	0.93

Note: 100 athletes with medals from European, World Championships and Olympic/Paralympic games and 224 athletes without such medals responded to this question

Table 53

Comparison of satisfaction with prevention programmes between athletes and coaches

	athletes		coaches			
	M	*SD*	*M*	*SD*	t	sig (t)
at the lecture I learned all I need to know about clean sport	4.04	0.85	4.03	0.79	0.10	0.92
I am well informed about the consequences of doping	3.53	1.28	3.74	1.13	-1.88	0.06
I know the list of prohibited substances is posted on NADO websites	3.43	1.51	3.49	1.22	-0.52	0.61
I understand how the national and international efforts for clean sport function	4.00	0.86	4.10	0.77	-0.92	0.36
in case of testing I know what to expect	4.46	0.74	4.38	0.79	0.66	0.51
I know how to apply for therapeutic exemption	3.40	1.21	3.86	1.13	-2.79	0.01
before the lecture I didn't know the gravity of health consequences	3.09	1.42	2.38	1.28	3.78	0.00
before the lecture I didn't know about inadvertent doping	2.85	1.46	2.57	1.38	1.39	0.17
I would like more antidoping lectures	3.55	1.12	3.55	0.91	0.01	0.99

Note: 180 coaches and 253 athletes from Austria, Estonia and Slovenia responded to the first two subquestions and 101 athletes and 106 coaches from Slovenia and Estonia responded to the last 7 subquestions

Table 54

Comparison of satisfaction with prevention programmes between participants from different countries

	Austria		Estonia		Slovenia			
	M	*SD*	*M*	*SD*	*M*	*SD*	F/t	sig (F/t)
at the lecture I learned all I need to know about clean sport	3.22	1.43	4.17	0.62	4.01	0.85	1.20	0.27
I am well informed about the consequences of doping	3.09	1.68	4.40	0.67	3.85	0.92	24.12	0.00
I know the list of prohibited substances is posted on NADO websites			4.25	0.95	3.45	1.39	16.30	0.00
I understand how the national and international efforts for clean sport function			3.97	0.66	4.07	0.84	0.42	0.52
in case of testing I know what to expect			4.43	0.61	4.42	0.80	0.01	0.94
I know how to apply for therapeutic exemption			3.09	1.29	3.74	1.15	8.83	0.00
before the lecture I didn't know the gravity of health consequences			2.06	1.19	2.86	1.40	10.06	0.00
before the lecture I didn't know about inadvertent doping			2.26	1.27	2.80	1.44	4.35	0.04
I would like more antidoping lectures			3.56	0.93	3.55	1.03	0.00	0.97

Note: the first two subquestions were calculated with A-nova and the rest with a t-test; 501 coaches and athletes from Austria, 134 from Estonia and 345 from Slovenia responded to the first two subquestions and 172 athletes and coaches from Slovenia and 35 from Estonia responded to the last 7 subquestions

Table 55

Comparison of satisfaction with prevention programmes between male and female athletes

	male athletes		female athletes			
	M	*SD*	*M*	*SD*	t	sig (t)
at the lecture I learned all I need to know about clean sport	4.06	0.77	4.02	0.93	0.24	0.81
I am well informed about the consequences of doping	3.44	1.21	3.62	1.35	-1.14	0.26
I know the list of prohibited substances is posted on NADO websites	3.31	1.52	3.58	1.49	-1.40	0.16
I understand how the national and international efforts for clean sport function	3.94	0.93	4.06	0.79	-0.69	0.49
in case of testing I know what to expect	4.42	0.67	4.49	0.81	-0.47	0.64
I know how to apply for therapeutic exemption	3.41	1.27	3.39	1.17	0.07	0.95
before the lecture I didn't know the gravity of health consequences	3.18	1.42	3.00	1.43	0.63	0.53
before the lecture I didn't know about inadvertent doping	3.06	1.43	2.65	1.47	1.43	0.16
I would like more antidoping lectures	3.50	1.11	3.61	1.13	-0.48	0.63

Note: 135 male and 116 female athletes from Austria, Estonia and Slovenia responded to the first two subquestions and 50 male and 51 female athletes from Slovenia and Estonia responded to the last 7 subquestions

Table 56

Comparison of satisfaction with prevention programmes between athletes from individual and team sports

	individual sports		team sports			
	M	*SD*	*M*	*SD*	t	sig (t)
at the lecture I learned all I need to know about clean sport	4.03	0.87	4.12	0.78	-0.48	0.63
I am well informed about the consequences of doping	3.57	1.28	3.52	1.22	0.30	0.77
I know the list of prohibited substances is posted on NADO websites	3.54	1.42	3.27	1.60	1.30	0.20
I understand how the national and international efforts for clean sport function	3.99	0.88	4.04	0.84	-0.27	0.79
in case of testing I know what to expect	4.52	0.72	4.24	0.78	1.64	0.10
I know how to apply for therapeutic exemption	3.41	1.25	3.36	1.15	0.16	0.87
before the lecture I didn't know the gravity of health consequences	2.85	1.44	3.76	1.16	-2.85	0.01
before the lecture I didn't know about inadvertent doping	2.72	1.46	3.16	1.40	-1.33	0.19
I would like more antidoping lectures	3.41	1.13	3.92	1.00	-2.00	0.05

Note: 169 athletes from individual and 71 athletes from team sports from Austria, Estonia and Slovenia responded to the first two subquestions and 75 athletes from individual and 25 athletes from team sports from Slovenia and Estonia responded to the last 7 subquestions

Table 57

Comparison of satisfaction with prevention programmes between athletes from "exposed" and "non-exposed" sports

	"exposed" sports		"non-exposed" sports			
	M	*SD*	*M*	*SD*	t	sig (t)
at the lecture I learned all I need to know about clean sport	4.13	0.79	3.98	0.88	0.82	0.41
I am well informed about the consequences of doping	3.99	1.02	3.37	1.31	3.98	0.00
I know the list of prohibited substances is posted on NADO websites	3.79	1.17	3.31	1.58	2.60	0.01
I understand how the national and international efforts for clean sport function	4.00	0.82	4.00	0.89	0.00	1.00
in case of testing I know what to expect	4.58	0.71	4.38	0.76	1.32	0.19
I know how to apply for therapeutic exemption	3.36	1.29	3.43	1.18	-0.27	0.79
before the lecture I didn't know the gravity of health consequences	2.80	1.45	3.28	1.38	-1.67	0.10
before the lecture I didn't know about inadvertent doping	2.64	1.39	2.98	1.50	-1.15	0.25
I would like more antidoping lectures	3.35	1.17	3.69	1.07	-1.50	0.14

Note: 75 athletes from "exposed" and 166 athletes from "non-exposed" sports from Austria, Estonia and Slovenia responded to the first two subquestions and 40 athletes from "exposed" and 61 athletes from "non-exposed" sports from Slovenia and Estonia responded to the last 7 subquestions

Table 58

Comparison of satisfaction with prevention programmes between athletes, who have already tested for doping and those, who have never been tested

	tested athletes		never tested athletes			
	M	*SD*	*M*	*SD*	t	sig (t)
at the lecture I learned all I need to know about clean sport	4.07	0.91	4.02	0.81	0.31	0.76
I am well informed about the consequences of doping	3.42	1.37	3.69	1.11	-1.73	0.08
I know the list of prohibited substances is posted on NADO websites	3.07	1.64	3.97	1.07	-5.27	0.00
I understand how the national and international efforts for clean sport function	4.12	0.79	3.91	0.90	1.17	0.24
in case of testing I know what to expect	4.79	0.47	4.21	0.81	4.56	0.00
I know how to apply for therapeutic exemption	3.60	1.26	3.25	1.17	1.47	0.14
before the lecture I didn't know the gravity of health consequences	2.65	1.33	3.41	1.41	-2.75	0.01
before the lecture I didn't know about inadvertent doping	2.47	1.44	3.14	1.42	-2.34	0.02
I would like more antidoping lectures	3.47	1.05	3.62	1.17	-0.69	0.49

Note: 153 athletes, who have already been tested and 100 athletes, who have never been tested for doping from Austria, Estonia and Slovenia responded to the first two subquestions and 43 athletes, who have already been tested and 58 athletes, who have never been tested for doping from Slovenia and Estonia responded to the last 7 subquestions

Table 59

Comparison of satisfaction with prevention programmes between athletes, who have medals from European, World Championships or Olympic/Paralympic games and athletes, who have no such medals

	athletes with medals from major competitions		athletes without medals from major competitions			
	M	*SD*	*M*	*SD*	t	sig (t)
at the lecture I learned all I need to know about clean sport	4.17	0.76	3.91	0.94	1.31	0.19
I am well informed about the consequences of doping	4.06	0.86	3.79	0.90	1.44	0.15
I know the list of prohibited substances is posted on NADO websites	3.79	1.02	3.67	0.93	0.59	0.56
I understand how the national and international efforts for clean sport function	4.21	0.82	3.93	0.93	1.37	0.18
in case of testing I know what to expect	4.69	0.54	4.33	0.82	2.37	0.02
I know how to apply for therapeutic exemption	3.66	1.23	3.49	1.15	0.60	0.55
before the lecture I didn't know the gravity of health consequences	2.72	1.39	3.61	1.28	-2.92	0.00
before the lecture I didn't know about inadvertent doping	2.69	1.47	3.23	1.44	-1.61	0.11
I would like more antidoping lectures	3.52	1.09	3.54	1.18	-0.07	0.94

Note: 33 athletes with medals from European, World Championships and Olympic/Paralympic games and 66 athletes without such medals from Austria, Estonia and Slovenia responded to the first two subquestions and 29 athletes with medals from European, World Championships and Olympic/Paralympic games and 54 athletes without such medals from Slovenia and Estonia responded to the last 7 subquestions

Table 60

Comparison of views on anti-doping knowledge between athletes and coaches

	athletes		coaches			
	M	*SD*	*M*	*SD*	t	sig (t)
short-term use of steroids can be damaging to health	4.09	1.10	4.01	1.13	0.94	0.35
long-term use of steroids can be damaging to health	4.52	3.73	4.73	0.84	-1.01	0.31
short-term use of EPO can be damaging to health	3.91	1.18	3.91	1.23	0.05	0.96
long-term use of EPO can be damaging to health	4.43	1.06	4.55	1.05	-1.62	0.11
short-term use of GH can be damaging to health	3.86	1.28	4.00	1.21	-1.62	0.10
long-term use of GH can be damaging to health	4.42	1.08	4.60	0.97	-2.52	0.01
short-term use of pain killers can be damaging to health	2.86	1.36	2.78	4.57	0.39	0.69
long-term use of pain killers can be damaging to health	4.23	1.11	4.36	1.04	-1.64	0.10
medically supervised doping abuse is relatively safe	2.30	1.28	1.99	1.28	3.45	0.00
I could easily access prohibited substances and information about them	2.34	1.31	2.21	1.35	1.38	0.17
I believe athletes use doping when they are sure they won't be caught	2.50	1.48	2.40	1.51	0.89	0.38
I believe athletes use doping	2.83	1.52	2.63	1.61	1.76	0.08
I use dietary supplements and I believe they are part of my success	1.95	1.17	2.32	1.30	-4.11	0.00

Note: 508 athletes and 336 coaches responded to this question

Table 61

Comparison of views on anti-doping knowledge between participants from different countries

	Austria		Estonia		Slovenia			
	M	*SD*	*M*	*SD*	*M*	*SD*	F	sig (F)
short-term use of steroids can be damaging to health	4.02	1.24	4.09	0.89	4.12	0.99	0.75	0.47
long-term use of steroids can be damaging to health	4.47	4.01	4.70	0.54	4.76	0.58	0.87	0.42
short-term use of EPO can be damaging to health	3.80	1.34	3.99	0.89	4.07	1.05	4.57	0.01
long-term use of EPO can be damaging to health	4.39	1.28	4.55	0.64	4.60	0.75	3.88	0.02
short-term use of GH can be damaging to health	3.88	1.38	3.82	1.05	4.02	1.10	1.44	0.24
long-term use of GH can be damaging to health	4.42	1.26	4.48	0.67	4.63	0.70	3.51	0.03
short-term use of pain killers can be damaging to health	2.73	4.05	2.81	1.16	3.00	1.30	0.69	0.50
long-term use of pain killers can be damaging to health	4.23	1.25	4.23	0.84	4.38	0.86	1.73	0.18
medically supervised doping abuse is relatively safe	2.04	1.25	1.99	1.18	2.47	1.35	11.43	0.00
I could easily access prohibited substances and information about them	2.14	1.35	2.20	1.18	2.56	1.32	9.03	0.00
I believe athletes use doping when they are sure they won't be caught	2.31	1.55	2.89	1.24	2.51	1.47	7.27	0.00
I believe athletes use doping	2.82	1.60	3.36	1.22	2.39	1.53	17.25	0.00
I use dietary supplements and I believe they are part of my success	1.70	1.08	2.53	1.11	2.55	1.31	55.66	0.00

Note: 444 athletes and coaches from Austria, 280 from Slovenia and 116 from Estonia responded to this question

Table 62

Comparison of views on anti-doping between male and female athletes

	male athletes		female athletes			
	M	*SD*	*M*	*SD*	t	sig (t)
short-term use of steroids can be damaging to health	4.08	1.16	4.10	1.04	-0.19	0.85
long-term use of steroids can be damaging to health	4.36	4.93	4.71	0.84	-1.07	0.28
short-term use of EPO can be damaging to health	3.92	1.20	3.90	1.16	0.16	0.88
long-term use of EPO can be damaging to health	4.36	1.10	4.53	0.99	-1.75	0.08
short-term use of GH can be damaging to health	3.88	1.31	3.83	1.25	0.44	0.66
long-term use of GH can be damaging to health	4.38	1.12	4.48	1.02	-1.08	0.28
short-term use of pain killers can be damaging to health	2.97	1.39	2.73	1.33	1.95	0.05
long-term use of pain killers can be damaging to health	4.20	1.15	4.27	1.07	-0.63	0.53
medically supervised doping abuse is relatively safe	2.40	1.29	2.18	1.26	1.92	0.06
I could easily access prohibited substances and information about them	2.47	1.35	2.19	1.25	2.42	0.02
I believe athletes use doping when they are sure they won't be caught	2.73	1.53	2.21	1.36	4.08	0.00
I believe athletes use doping	3.05	1.52	2.56	1.49	3.63	0.00
I use dietary supplements and I believe they are part of my success	2.22	1.26	1.62	0.97	6.08	0.00

Note: 284 male and 222 female athletes responded to this question

Table 63

Comparison of views on anti-doping knowledge between athletes from individual and team sports

	individual sports		team sports			
	M	*SD*	*M*	*SD*	t	sig (t)
short-term use of steroids can be damaging to health	4.09	1.12	4.13	1.00	-0.41	0.68
long-term use of steroids can be damaging to health	4.41	4.68	4.75	0.55	-0.94	0.35
short-term use of EPO can be damaging to health	3.93	1.19	3.91	1.08	0.12	0.91
long-term use of EPO can be damaging to health	4.47	1.09	4.38	0.90	0.88	0.38
short-term use of GH can be damaging to health	3.91	1.27	3.76	1.24	1.26	0.21
long-term use of GH can be damaging to health	4.48	1.07	4.38	0.95	1.03	0.30
short-term use of pain killers can be damaging to health	2.89	1.39	2.87	1.31	0.18	0.86
long-term use of pain killers can be damaging to health	4.33	1.08	4.13	0.98	2.00	0.05
medically supervised doping abuse is relatively safe	2.22	1.31	2.49	1.22	-2.17	0.03
I could easily access prohibited substances and information about them	2.30	1.32	2.45	1.30	-1.17	0.24
I believe athletes use doping when they are sure they won't be caught	2.47	1.50	2.62	1.41	-1.00	0.32
I believe athletes use doping	2.75	1.56	3.05	1.44	-2.09	0.04
I use dietary supplements and I believe they are part of my success	1.90	1.18	2.14	1.15	-2.18	0.03

Note: 318 individual sports athletes and 164 team sports athletes responded to this question

Table 64

Comparison of views on anti-doping knowledge doping between athletes from "exposed" and "non-exposed" sports

	"exposed" sports		"non-exposed" sports			
	M	*SD*	*M*	*SD*	t	sig (t)
short-term use of steroids can be damaging to health	4.22	1.00	4.06	1.10	1.48	0.14
long-term use of steroids can be damaging to health	4.69	0.94	4.46	4.40	0.61	0.54
short-term use of EPO can be damaging to health	3.98	1.22	3.90	1.14	0.66	0.51
long-term use of EPO can be damaging to health	4.50	1.08	4.42	1.01	0.74	0.46
short-term use of GH can be damaging to health	3.88	1.33	3.85	1.24	0.26	0.80
long-term use of GH can be damaging to health	4.47	1.05	4.44	1.02	0.29	0.77
short-term use of pain killers can be damaging to health	2.92	1.42	2.87	1.34	0.36	0.72
long-term use of pain killers can be damaging to health	4.30	1.10	4.25	1.03	0.49	0.62
medically supervised doping abuse is relatively safe	2.13	1.34	2.39	1.26	-1.98	0.05
I could easily access prohibited substances and information about them	2.30	1.33	2.38	1.32	-0.54	0.59
I believe athletes use doping when they are sure they won't be caught	2.52	1.51	2.54	1.46	-0.10	0.92
I believe athletes use doping	2.85	1.56	2.85	1.52	-0.01	0.99
I use dietary supplements and I believe they are part of my success	2.05	1.23	1.96	1.16	0.71	0.48

Note: 131 athletes from "exposed" sports and 356 athletes from "non-exposed" sports responded to this question

Table 65

Comparison of views on anti-doping knowledges between athletes, who have already tested for doping and those, who have never been tested

	tested athletes		never tested athletes			
	M	*SD*	*M*	*SD*	t	sig (t)
short-term use of steroids can be damaging to health	4.15	1.09	4.00	1.12	1.52	0.13
long-term use of steroids can be damaging to health	4.75	0.78	4.18	5.73	1.44	0.15
short-term use of EPO can be damaging to health	3.96	1.18	3.85	1.18	1.04	0.30
long-term use of EPO can be damaging to health	4.50	1.05	4.34	1.07	1.71	0.09
short-term use of GH can be damaging to health	3.87	1.27	3.84	1.29	0.25	0.81
long-term use of GH can be damaging to health	4.43	1.05	4.41	1.11	0.17	0.87
short-term use of pain killers can be damaging to health	2.82	1.35	2.92	1.39	-0.77	0.44
long-term use of pain killers can be damaging to health	4.23	1.10	4.23	1.12	0.07	0.94
medically supervised doping abuse is relatively safe	2.25	1.27	2.38	1.30	-1.09	0.27
I could easily access prohibited substances and information about them	2.24	1.31	2.47	1.31	-1.91	0.06
I believe athletes use doping when they are sure they won't be caught	2.39	1.47	2.64	1.48	-1.89	0.06
I believe athletes use doping	2.81	1.55	2.86	1.50	-0.32	0.75
I use dietary supplements and I believe they are part of my success	1.82	1.08	2.15	1.27	-3.13	0.00

Note: 299 athletes, who have already been tested and 209 athletes, who have never been tested for doping responded to this question

Table 66

Comparison of views on anti-doping knowledge between athletes, who have already participated in NADO prevention programmes and those, who have never participated

	athletes, who participated in programmes		athletes, who never participated in programmes			
	M	*SD*	*M*	*SD*	t	sig (t)
short-term use of steroids can be damaging to health	3.89	1.24	4.22	0.99	-3.25	0.00
long-term use of steroids can be damaging to health	4.61	1.00	4.45	4.74	0.47	0.64
short-term use of EPO can be damaging to health	3.77	1.22	4.01	1.14	-2.22	0.03
long-term use of EPO can be damaging to health	4.29	1.25	4.53	0.89	-2.32	0.02
short-term use of GH can be damaging to health	3.71	1.35	3.96	1.22	-2.17	0.03
long-term use of GH can be damaging to health	4.38	1.19	4.45	0.99	-0.74	0.46
short-term use of pain killers can be damaging to health	2.86	1.38	2.86	1.35	0.01	0.99
long-term use of pain killers can be damaging to health	4.14	1.16	4.29	1.07	-1.57	0.12
medically supervised doping abuse is relatively safe	2.28	1.30	2.31	1.27	-0.30	0.76
I could easily access prohibited substances and information about them	2.29	1.33	2.37	1.30	-0.62	0.54
I believe athletes use doping when they are sure they won't be caught	2.50	1.47	2.50	1.48	-0.01	0.99
I believe athletes use doping	2.79	1.54	2.85	1.51	-0.44	0.66
I use dietary supplements and I believe they are part of my success	1.92	1.23	1.98	1.14	-0.52	0.60

Note: 203 athletes, who already participated and 305 athletes, who never participated in doping prevention programmes, responded to this question

Table 67

Comparison of views on anti-doping knowledge between athletes, who have medals from European, World Championships or Olympic/Paralympic games and athletes, who have no such medals

	athletes with medals from major competitions		athletes without medals from major competitions			
	M	*SD*	*M*	*SD*	t	sig (t)
short-term use of steroids can be damaging to health	4.34	0.86	3.99	1.01	2.21	0.03
long-term use of steroids can be damaging to health	4.79	0.49	4.69	0.59	1.06	0.29
short-term use of EPO can be damaging to health	4.11	1.11	3.97	0.97	0.81	0.42
long-term use of EPO can be damaging to health	4.63	0.62	4.46	0.78	1.45	0.15
short-term use of GH can be damaging to health	4.09	1.18	3.92	1.05	0.91	0.36
long-term use of GH can be damaging to health	4.68	0.61	4.48	0.80	1.76	0.08
short-term use of pain killers can be damaging to health	2.95	1.41	2.97	1.29	-0.12	0.91
long-term use of pain killers can be damaging to health	4.30	0.91	4.23	0.89	0.50	0.62
medically supervised doping abuse is relatively safe	2.55	1.33	2.82	1.29	-1.22	0.22
I could easily access prohibited substances and information about them	2.63	1.34	2.63	1.30	-0.04	0.97
I believe athletes use doping when they are sure they won't be caught	2.77	1.40	2.87	1.40	-0.45	0.65
I believe athletes use doping	2.88	1.58	2.80	1.50	0.31	0.76
I use dietary supplements and I believe they are part of my success	2.00	1.22	2.60	1.28	-2.88	0.00

Note: 56 athletes with medals from European, World Championships and Olympic/Paralympic games and 110 athletes without such medals responded to this question

Table 68

Comparison of views on reporting doping in sport between athletes and coaches

	athletes		coaches			
	M	*SD*	*M*	*SD*	t	sig (t)
I know where and how to make an anonymous report	2.91	1.43	3.34	1.36	-2.98	0.00
Anonymous report of doping is an important part of the efforts for clean sport	3.83	1.07	4.11	1.04	-2.60	0.01
I would make an anonymous report if I knew someone was using doping	3.60	1.25	3.95	1.18	-2.76	0.01

Note: 234 athletes and 167 coaches responded to this question

Table 69

Comparison of views on reporting doping between participants from different countries

	Estonia		Slovenia			
	M	*SD*	*M*	*SD*	t	sig (t)
I know where and how to make an anonymous report	2.95	1.33	3.16	1.45	1.39	0.16
Anonymous report of doping is an important part of the efforts for clean sport	3.66	0.93	4.07	1.10	3.78	0.00
I would make an anonymous report if I knew someone was using doping	3.66	1.15	3.79	1.26	0.92	0.36

Note: 281 athletes and coaches from Slovenia and 118 from Estonia responded to this question

Table 70

Comparison of views on reporting doping between male and female athletes

	male athletes		female athletes			
	M	*SD*	*M*	*SD*	t	sig (t)
I know where and how to make an anonymous report	3.03	1.39	2.75	1.47	1.46	0.15
Anonymous report of doping is an important part of the efforts for clean sport	3.78	1.09	3.90	1.05	-0.82	0.41
I would make an anonymous report if I knew someone was using doping	3.68	1.24	3.49	1.27	1.11	0.27

Note: 137 male and 97 female athletes responded to this question

Table 71

Comparison of views on reporting doping between athletes from individual and team sports

	individual sports		team sports			
	M	*SD*	*M*	*SD*	t	sig (t)
I know where and how to make an anonymous report	2.96	1.46	2.87	1.38	0.47	0.64
Anonymous report of doping is an important part of the efforts for clean sport	3.94	1.02	3.71	1.09	1.64	0.10
I would make an anonymous report if I knew someone was using doping	3.74	1.19	3.40	1.31	1.98	0.05

Note: 146 individual sports athletes and 82 team sports athletes responded to this question

Table 72

Comparison of views on reporting doping between athletes from "exposed" and "non-exposed" sports

	"exposed" sports		"non-exposed" sports			
	M	*SD*	*M*	*SD*	t	sig (t)
I know where and how to make an anonymous report	3.07	1.52	2.85	1.39	1.10	0.27
Anonymous report of doping is an important part of the efforts for clean sport	3.96	1.01	3.77	1.10	1.20	0.23
I would make an anonymous report if I knew someone was using doping	3.75	1.17	3.54	1.28	1.16	0.25

Note: 71 athletes from "exposed" sports and 163 athletes from "non-exposed" sports responded to this question

Table 73

Comparison of views on reporting doping between athletes, who have already tested for doping and those, who have never been tested

	tested athletes		never tested athletes			
	M	*SD*	*M*	*SD*	t	sig (t)
I know where and how to make an anonymous report	3.07	1.52	2.85	1.39	1.10	0.27
Anonymous report of doping is an important part of the efforts for clean sport	3.96	1.01	3.77	1.10	1.20	0.23
I would make an anonymous report if I knew someone was using doping	3.75	1.17	3.54	1.28	1.16	0.25

Note: 103 athletes, who have already been tested and 131 athletes, who have never been tested for doping responded to this question

Table 74

Comparison of views on reporting doping between athletes, who have already participated in NADO prevention programmes those, who have never participated

	athletes, who participated in programmes		athletes, who never participated in programmes			
	M	*SD*	*M*	*SD*	t	sig (t)
I know where and how to make an anonymous report	3.26	1.37	2.66	1.42	3.26	0.00
Anonymous report of doping is an important part of the efforts for clean sport	3.98	1.05	3.72	1.08	1.86	0.06
I would make an anonymous report if I knew someone was using doping	3.54	1.24	3.65	1.26	-0.66	0.51

Note: 100 athletes, who already participated and 134 athletes, who never participated in doping prevention programmes, responded to this question

Table 75

Comparison of views on reporting doping between athletes, who have medals from European, World Championships or Olympic/Paralympic games and athletes, who have no such medals

	athletes with medals from major competitions		athletes without medals from major competitions			
	M	*SD*	*M*	*SD*	t	sig (t)
I know where and how to make an anonymous report	2.98	1.51	2.94	1.47	0.19	0.85
Anonymous report of doping is an important part of the efforts for clean sport	3.82	1.29	3.95	1.05	-0.67	0.51
I would make an anonymous report if I knew someone was using doping	3.70	1.32	3.50	1.32	0.91	0.36

Note: 56 athletes with medals from European, World Championships and Olympic/Paralympic games and 112 athletes without such medals responded to this question

APPENDIX II

Questionnaire for athletes and coaches was developed by ao. -Univ. Prof. MMag. Dr. Konrad Kleiner (Leader of project) and Mag.a Lisa Steinmaurer from Zentrum für Sportwissenschaft und Universitätssport der Universität Wien, Fachdidaktik für Bewegung und Sport (Centre of Sport Science and University Sports – University of Vienna). It was originally written in German and was later translated both into Estonian and Slovenian, and the latter two versions contained a few additional questions.

In Austria the research was conducted in 2016/2017, in Slovenia in 2017 and in Estonia in 2018. A total of 1,118 participants was included in the research, with 705 athletes and 408 coaches, 725 males and 388 females. A total of 528 of the respondents were from Austria, 142 from Estonia and 448 from Slovenia.

Sehr geehrte Trainer/innen, Betreuer/innen und Funktionär/innen!

*Das Zentrum für Sportwissenschaft und Universitätssport der Universität Wien führt eine Studie zum Thema „**Zufriedenheit mit der Anti-Doping Arbeit**" durch. Das Ziel der Studie ist es, ein möglichst klares Bild über die Einstellung der Sportler/innen, Trainer/innen, Betreuer/innen und Funktionär/innen in Österreich zu erhalten, um darauf aufbauend, gezielt Informationen zu geben und Verbesserungen durchführen zu können.*

*Wir möchten Sie sehr herzlich um Ihre **Mitarbeit ersuchen**. Ihre Informationen sind von entscheidender Bedeutung, um Verbesserungen entwickeln zu können. Die Gültigkeit und Verwertbarkeit der Untersuchungsergebnisse hängt sehr wesentlich von der Anzahl korrekt und engagiert ausgefüllter Fragebögen ab. Wir bitten Sie daher, den beiliegenden Fragebogen entsprechend den Hinweisen **vollständig auszufüllen**. Die Bearbeitung wird ca. 15 Minuten dauern.*

***Den Schutz Ihrer Daten nehmen wir sehr ernst**! Es erfolgt **keine Weitergabe an Dritte!** Die Auswertung wird ausschließlich in **anonymisierter Form** und zusammen mit den Daten der anderen Teilnehmer durchgeführt. Selbstverständlich können Sie die Teilnahme jederzeit abbrechen. Wir würden Sie allerdings bitten, den Fragebogen vollständig zu bearbeiten, da nur so eine Auswertung möglich ist.*

Erklärung: Ich habe die Informationen sorgfältig gelesen und verstanden. Ich nehme freiwillig an der Studie teil. Hiermit erkläre ich mich damit einverstanden, dass die im Rahmen dieser Erhebung gewonnenen Daten in anonymisierter Form verwendet werden dürfen.

Hinweise zum Ausfüllen des Fragebogens

Bitte lesen Sie zuerst die Frage und die möglichen Meinungen (Antworten) durch und kreuzen (**X**) Sie dann diejenige Antwort an, die **Ihre persönliche Meinung am besten trifft**.

Ein Beispiel: **Wie sehr interessieren Sie sich für Smartphones?**
Geben Sie anhand der angeführten Skala (1=sehr geringes Interesse, 5=sehr großes Interesse) an, in welchem Ausmaß Sie Sich dafür interessieren. Kreuzen Sie die Ziffer an, die Ihrer Antwort am ehesten entspricht.

sehr geringes Interesse 1 2 **X** 4 5 ***sehr großes Interesse***

***Hinweis**: Eine Markierung (Kreuz) auf der Ziffer 3 bedeutet, dass Sie Sich in einem mittleren Ausmaß für Smartphones interessieren.* Entscheiden Sie Sich bitte immer nur für **eine** Ziffer (Antwort) und eine Markierung.

Sollte keine der vorgegebenen Antworten auf Sie zutreffen (z. B. bei Mehrfachantworten), dann wählen Sie bitte die Antwort aus, die am ehesten auf Sie zutrifft. Beachten Sie bitte auch, dass manche Fragen vielleicht entsprechend Ihrem Antwortverhalten **übersprungen** werden sollen. Wenn eine Frage von Ihnen übersprungen werden soll, werden Sie an der relevanten Stelle im Fragebogen darauf hingewiesen. In dem Fragebogen soll **Ihre ganz persönliche Meinung** und Auffassung erhoben werden. Vertrauen Sie in der Beurteilung Ihrem **ersten** Eindruck. Arbeiten Sie zügig der Reihe nach und seien Sie bitte bemüht, keine der für Sie bestimmten Fragen auszulassen.

Vielen Dank für Ihre Teilnahme!Ao.Univ.-Prof. Dr. Konrad Kleiner

(Projektleitung)
Zentrum für Sportwissenschaft und Universitätssport der Universität Wien

Bitte geben Sie zu Beginn Auskunft über Ihre demografischen Daten.

F 1 Geschlecht: Männlich: O Weiblich: O

F 2 Alter: (in Jahren) _____

F 3 Was ist Ihre Hauptsportart? (Bitte nur Oberbegriffe anführen, z.B. Leichtathletik, Fußball, Rudern, ...)

(für Behindertensport bitte Hauptsportart (Behindertensport) angeben)

Sportart: _____

F 4 Wie trainieren / arbeiten Sie schon in dieser Sportart?

A ○ Weniger als 1 Jahr (bzw. Saison)
B ○ 1 oder 2 Jahre (bzw. Saisonen)
C ○ Mehr als 2 aber weniger als 5 Jahre (bzw. Saisonen)
D ○ Fünf Jahre oder länger (bzw. Saisonen)

F 5 Was ist der höchste Wettkampf, an denen eine Ihrer Sportlerinnen / einer Ihrer Sportler teilgenommen hat?

A ○ Olympische Spiele / Paralympische Spiele
B ○ Weltmeisterschaft
C ○ Europameisterschaft
D ○ Staatsmeisterschaft / höchste nationale Liga
E ○ Landesmeisterschaft
F ○ Regionaler Wettkampf

F 6 Was der bisher größte sportliche Erfolg, den eine Ihrer Sportlerinnen / einer Ihrer Sportler erreicht hat?

A ○ Teilnahme an dem in der vorigen Frage genannten Wettkampf
B ○ Medaille bzw. Titel bei Landesmeisterschaft
C ○ Medaille bzw. Titel bei Staatsmeisterschaft / höchster nationale Liga
D ○ Medaille bzw. Titel bei Europameisterschaft
E ○ Medaille bzw. Titel bei Weltmeisterschaft
F ○ Medaille bzw. Titel bei Olympischen Spielen / Paralympischen Spielen

Bitte beantworten Sie nachfolgende Einstiegsfragen.

F 7 Hatte eine Ihrer Sportlerinnen / einer Ihrer Sportler jemals eine Dopingkontrolle? Falls ja, wie viele Dopingkontrollen hatten diese in den letzten 12 Monaten?

Nein ○ Ja ○ etwa_____ Mal in den letzten 12 Monaten

F 8 Haben Sie jemals ein Informations- oder Präventionsangebot der NADA Austria genutzt? Falls ja, wie oft haben Sie in den letzten 12 Monaten?

Nein ○ Ja ○ etwa_____ Mal in den letzten 12 Monaten

F 9 **Nachfolgend geht es um Ihre persönliche Einstellung zum Sport.**
*Bitte kreuzen (**X**) Sie für jede Aussage an, wie sehr diese für Sie zutrifft.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Ich arbeite im Sport aus Spaß an der Bewegung.					
2. Ich arbeite im Sport, weil ich berühmt werden will / gerne berühmt bin.					
3. Ich arbeite im Sport, um damit meinen Lebensunterhalt zu verdienen.					
4. Ich arbeite im Sport, um viel Geld zu verdienen.					
5. Ich arbeite im Sport um auszutesten, wo die Grenzen der menschlichen Leistung liegen.					
6. Ich möchte auch in den nächsten Jahren als Trainer/in, Betreuer/in oder Funktionär/in arbeiten.					

F 10 **Nachfolgend geht es um Ihre persönliche Einschätzung zur Entwicklung des Sports.**
*Bitte kreuzen (**X**) Sie für jede Aussage an, wie sehr diese für Sie zutrifft.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Das Motto „Gewinnen um jeden Preis" hat sich im Spitzensport in den letzten Jahren verschärft.					
2. Im Spitzensport ist die Versuchung, zu Doping zu greifen, in den letzten Jahren gestiegen.					
3. Im Breitensport ist die Versuchung, zu Doping zu greifen, in den letzten Jahren gestiegen.					
4. Da in manchen Sportarten viel Geld zu verdienen ist, ist in den letzten Jahren auch die Gefahr von Doping, Korruption und Betrug gestiegen.					
5. Fairness hat in den letzten Jahren im Spitzensport an Bedeutung zugenommen.					
6. Spitzensport ist heute ohne sportmedizinische Betreuung nicht mehr möglich.					

F 11 **Nachfolgend geht es um Ihre persönliche Einstellung zur NADA Austria.**
Bitte kreuzen (**X**) *Sie für jede Aussage an, wie sehr diese für Sie zutrifft.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Die NADA Austria ist ein wichtiger Teil des Sportsystems.					
2. Die NADA Austria hindert Sportler/innen an Bestleistungen.					
3. Die NADA Austria ist eine unabhängige Organisation.					
4. Die NADA Austria schützt die sauberen Sportler/innen.					
5. Die NADA Austria fördert einen Bewusstseinswandel.					
6. Die NADA Austria ist vertrauensvoll.					
7. Die NADA Austria ist unterstützend.					
9. Sportler/innen in Kernsportarten werden von der NADA Austria besser und schneller informiert.					

F 12 **Nachfolgend geht es um Ihre Zufriedenheit mit Informationen von/über die NADA Austria.** *Bitte kreuzen* (**X**) *Sie für jede Aussage an, wie sehr diese für Sie zutrifft.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Wenn ich Informationen über die Anti-Doping Arbeit suche, benutze ich die Angebote der NADA Austria (Website, Apps, etc.).					
2. Ich fühle mich ausreichend über die Folgen von Doping informiert.					
3. Die Website der NADA Austria ist verständlich und übersichtlich.					
4. Ich weiß über Medikamentenabfrage der NADA Austria Bescheid.					
5. Ich weiß, dass es die Medikamentenabfrage der NADA Austria auch als App gibt?					
6. Die Informationen, die die NADA Austria bietet, sind ausreichend.					

F 13 **Nachfolgend geht es um Ihre Wissensquellen zum Thema Doping.**
*Bitte kreuzen (**X**) Sie für jede Aussage an, wie sehr diese für Sie zutrifft.*
(Mehrfachnennungen möglich)

	Website NADA Austria	Trainer/ in	Betreuer/ in	Funktionär/ in	Andere Sportler/ innen	TV / Internet	Sonstiges
1. Mein Wissen über die Anti-Doping Regelungen habe ich von							
2. Mein Wissen über verbotene Substanzen habe ich von							
3. Mein Wissen über Dopingkontrollen habe ich von							
4. Mein Wissen über gesundheitliche Folgen von Doping habe ich von							
5. Mein Wissen über die rechtlichen Konsequenzen von Doping habe ich von							
6. Mein Wissen über die NADA Austria habe ich von							

F 14 **Nachfolgend geht es um Ihre Zufriedenheit mit dem Angebot der NADA Austria.**
*Bitte kreuzen (**X**) Sie wieder an, wie sehr die Aussagen zutreffen.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Die NADA Austria informiert rechtzeitig über Änderungen der Regeln/Verbote/ Konsequenzen.					
2. Mit der Fülle an Informationen, die ich von der NADA Austria bekomme, bin ich zufrieden.					
3. Ich hätte gerne eine direkte Ansprechperson bei der NADA Austria.					
4. Ich fände es wünschenswert, wenn die NADA Austria einen speziellen Newsletter für Trainer/innen, Betreuer/innen bzw. Funktionär/innen anbieten würde.					
5. Sportler/innen sollten möglichst früh über Doping-Prävention informiert werden.					
6. Für alle Kadersportler/innen und deren Trainer/innen, Betreuer/innen bzw. Funktionär/innen sollte es zumindest alle zwei Jahre einen Anti-Doping-Vortrag geben.					

F 15 **Nachfolgend geht es um Ihre Zufriedenheit mit dem Dopingkontroll-Programm.**
*Bitte kreuzen (**X**) Sie wieder an, wie sehr die Aussagen zutreffen. Falls Sie noch keine Dopingkontrolle hatten, lassen Sie die betreffenden Fragen bitte aus .*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Ich bin mit der Häufigkeit der Dopingkontrollen zufrieden.					
2. Durch die Dopingkontrollen fühlen sich meine Sportler/innen in ihrem Alltag eingeschränkt.					
3. Meine Sportler/innen fühlen sich Rahmen einer Dopingkontrolle in ihrer Privatsphäre verletzt.					
4. Bei den Dopingkontrollen bei meinen Sportler/innen waren die Kontrollore freundlich und korrekt.					
5. Ich wurde im Rahmen von Schulungen über den Ablauf einer Dopingkontrolle informiert, bevor meine Sportler/innen ihre erste Dopingkontrolle hatten.					
6. Mir ist bewusst, dass ich mögliche Fehler bei der Dopingkontrolle auch anonym an die NADA Austria melden kann.					
7. Die Arbeit der NADA Austria hat einen hohen Qualitätsstandard.					
8. Ich wünsche mir strengere Strafen bei Verstößen gegen die Anti-Doping Bestimmungen.					
9. Mir ist bewusst, dass ich mich jederzeit vertraulich an die NADA Austria wenden kann.					
10. Nicht nur Besitz, Handel und Weitergabe verbotener Substanzen oder Methoden, sondern auch der Eigenkonsum sollte strafrechtliche Konsequenzen haben.					
11. Erwachsene Sportler/innen sollten selbst entscheiden dürfen, ob sie dopen oder nicht – eine externe Kontrolle ist nicht notwendig.					
12. Meine Sportler/innen fühlen sich im internationalen Vergleich benachteiligt, da die Bestimmungen bei uns strikter gehandhabt werden als in anderen Ländern.					
13. Dopingkontrollen sind ein notwendiger Teil des Spitzensports.					
14. Dopingkontrollen schützen die sauberen Sportler/innen.					

F 16 **Nachfolgend geht es um Ihr Wissen und persönliche Einschätzungen zum Thema Doping.** *Bitte kreuzen* (**X**) *Sie wieder an, wie sehr die Aussagen zutreffen. An dieser Stelle möchten wir Sie nochmals darauf hinweisen, dass sämtliche Antworten vertraulich behandelt werden.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Bereits die kurzfristige Einnahme (z.B. einige Wochen) von anabolen Steroiden kann gesundheitsschädigend sein.					
2. Die langfristige Einnahme von anabolen Steroiden kann gesundheitsschädigend sein.					
3. Bereits die kurzfristige Einnahme (z.B. einige Wochen) von Erythropoietin (EPO) kann gesundheitsschädigend sein.					
4. Die langfristige Einnahme von Erythropoietin (EPO) kann gesundheitsschädigend sein.					
5. Bereits die kurzfristige Einnahme (z.B. einige Wochen) von Wachstumshormon (GH) kann gesundheitsschädigend sein.					
6. Die langfristige Einnahme von Wachstumshormon (GH) kann gesundheitsschädigend sein.					
7. Bereits die kurzfristige Einnahme (z.B. einige Wochen) von Schmerzmitteln kann gesundheitsschädigend sein.					
8. Die langfristige Einnahme von Schmerzmitteln kann gesundheitsschädigend sein.					
9. Unter medizinischer Aufsicht sind die Risiken und Nebenwirkungen von Doping gering.					
10. Wenn ich mich dazu entschließen würde meinen Sportler/innen Doping zu empfehlen, würde ich leicht an die entsprechenden Mittel und Informationen zur Anwendung kommen.					
11. Ich kann nachvollziehen, dass Sportler/innen dopen würden, wenn sie absolut sicher sein könnten, nicht überführt zu werden.					
12. Ich kann nachvollziehen, dass Sportler/innen dopen würden, wenn sie dadurch 1 Million Euro verdienen würden und sicher sein könnten, nicht überführt zu werden.					
13. Ich empfehle meinen Sportler/innen Nahrungsergänzungsmittel und bin der Überzeugung, dass sie ohne diese ihre Leistung nicht bringen könnten.					

Raum für Verbesserungsvorschläge/Anmerkungen/Kritik zur Anti-Doping Arbeit:

Vielen Dank für Ihre Teilnahme!

Das Projektteam

Sehr geehrte Sportlerinnen und Sportler!

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Ein Beispiel: **Wie sehr interessieren Sie sich für Smartphones?**
Geben Sie anhand der angeführten Skala (1=sehr geringes Interesse, 5=sehr großes Interesse) an, in welchem Ausmaß Sie Sich dafür interessieren. Kreuzen Sie die Ziffer an, die Ihrer Antwort am ehesten entspricht.

sehr geringes Interesse 1 2 **X** 4 5 ***sehr großes Interesse***

***Hinweis**: Eine Markierung (Kreuz) auf der Ziffer 3 bedeutet, dass Sie Sich in einem mittleren Ausmaß für Smartphones interessieren.* Entscheiden Sie Sich bitte immer nur für **eine** Ziffer (Antwort) und eine Markierung.

Sollte keine der vorgegebenen Antworten auf Sie zutreffen (z. B. bei Mehrfachantworten), dann wählen Sie bitte die Antwort aus, die am ehesten auf Sie zutrifft. Beachten Sie bitte auch, dass manche Fragen vielleicht entsprechend Ihrem Antwortverhalten **übersprungen** werden sollen. Wenn eine Frage von Ihnen übersprungen werden soll, werden Sie an der relevanten Stelle im Fragebogen darauf hingewiesen. In dem Fragebogen soll **Ihre ganz persönliche Meinung** und Auffassung erhoben werden. Vertrauen Sie in der Beurteilung Ihrem **ersten** Eindruck. Arbeiten Sie zügig der Reihe nach und seien Sie bitte bemüht, keine der für Sie bestimmten Fragen auszulassen.

Vielen Dank für Ihre Teilnahme!

Ao.Univ.-Prof. Dr. Konrad Kleiner
(Projektleitung)
Zentrum für Sportwissenschaft und Universitätssport der Universität Wien

Bitte geben Sie zu Beginn Auskunft über Ihre demografischen Daten.

F 1 Geschlecht: Männlich: O Weiblich: O

F 2 Alter: (in Jahren) _____

F 3 Was ist Ihre Hauptsportart? (Bitte nur Oberbegriffe anführen, z.B. Leichtathletik, Fußball, Rudern, ...)

(für Behindertensport bitte Hauptsportart (Behindertensport) angeben)

Sportart: _____

F 4 Wie lange treten Sie in dieser Sportart schon bei Wettkämpfen an?

A ○ Weniger als 1 Jahr (bzw. Saison)
B ○ 1 oder 2 Jahre (bzw. Saisonen)
C ○ Mehr als 2 aber weniger als 5 Jahre (bzw. Saisonen)
D ○ Fünf Jahre oder länger (bzw. Saisonen)

F 5 Was ist das höchste Niveau, auf dem Sie Wettkämpfe bestritten haben?

A ○ Olympische Spiele / Paralympische Spiele
B ○ Weltmeisterschaft
C ○ Europameisterschaft
D ○ Staatsmeisterschaft / höchste nationale Liga
E ○ Landesmeisterschaft
F ○ Regionaler Wettkampf

F 6 Was war ihr bisher größter sportlicher Erfolg?

A ○ Teilnahme an dem in der vorigen Frage genannten Wettkampf
B ○ Medaille bzw. Titel bei Landesmeisterschaft
C ○ Medaille bzw. Titel bei Staatsmeisterschaft / höchster nationale Liga
D ○ Medaille bzw. Titel bei Europameisterschaft
E ○ Medaille bzw. Titel bei Weltmeisterschaft
F ○ Medaille bzw. Titel bei Olympischen Spielen / Paralympischen Spielen

Bitte beantworten Sie nachfolgende Einstiegsfragen.

F 7 Hatten Sie jemals eine Dopingkontrolle? Falls ja, wie viele Dopingkontrollen hatten Sie in den letzten 12 Monaten?

Nein ○ Ja ○ etwa_____ Mal in den letzten 12 Monaten

F 8 Haben Sie jemals ein Informations- oder Präventionsangebot der NADA Austria genutzt? Falls ja, wie oft haben Sie in den letzten 12 Monaten?

Nein ○ Ja ○ etwa_____ Mal in den letzten 12 Monaten

F 9 **Nachfolgend geht es um Ihre persönliche Einstellung zum Sport.**
*Bitte kreuzen (**X**) Sie für jede Aussage an, wie sehr diese für Sie zutrifft.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Ich mache Sport aus Spaß an der Bewegung.					
2. Ich mache Sport, weil ich berühmt werden will / gerne berühmt bin.					
3. Ich mache Sport, um damit meinen Lebensunterhalt zu verdienen.					
4. Ich mache Sport, um viel Geld zu verdienen.					
5. Ich mache Sport um auszutesten, wo meine Grenzen liegen.					
6. Ich möchte dem Sport erhalten bleiben und als Trainer/in, Betreuer/in oder Funktionär/in arbeiten.					

F 10 **Nachfolgend geht es um Ihre persönliche Einschätzung zur Entwicklung des Sports.**
*Bitte kreuzen (**X**) Sie für jede Aussage an, wie sehr diese für Sie zutrifft.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Das Motto „Gewinnen um jeden Preis" hat sich im Spitzensport in den letzten Jahren verschärft.					
2. Im Spitzensport ist die Versuchung, zu Doping zu greifen, in den letzten Jahren gestiegen.					
3. Im Breitensport ist die Versuchung, zu Doping zu greifen, in den letzten Jahren gestiegen.					
4. Da in manchen Sportarten viel Geld zu verdienen ist, ist in den letzten Jahren auch die Gefahr von Doping, Korruption und Betrug gestiegen.					
5. Fairness hat in den letzten Jahren im Spitzensport an Bedeutung zugenommen.					
6. Spitzensport ist heute ohne sportmedizinische Betreuung nicht mehr möglich.					

F 11 **Nachfolgend geht es um Ihre persönliche Einstellung zur NADA Austria.**
Bitte kreuzen (**X**) *Sie für jede Aussage an, wie sehr diese für Sie zutrifft.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Die NADA Austria ist ein wichtiger Teil des Sportsystems.					
2. Die NADA Austria hindert Sportler/innen an Bestleistungen.					
3. Die NADA Austria ist eine unabhängige Organisation.					
4. Die NADA Austria schützt die sauberen Sportler/innen.					
5. Die NADA Austria fördert einen Bewusstseinswandel.					
6. Die NADA Austria ist vertrauensvoll.					
7. Die NADA Austria ist unterstützend.					
9. Sportler/innen in Kernsportarten werden von der NADA Austria besser und schneller informiert.					

F 12 **Nachfolgend geht es um Ihre Zufriedenheit mit Informationen von/über die NADA Austria.** *Bitte kreuzen* (**X**) *Sie für jede Aussage an, wie sehr diese für Sie zutrifft.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Wenn ich Informationen über die Anti-Doping Arbeit suche, benutze ich die Angebote der NADA Austria (Website, Apps, etc.).					
2. Ich fühle mich ausreichend über die Folgen von Doping informiert.					
3. Die Website der NADA Austria ist verständlich und übersichtlich.					
4. Ich weiß über Medikamentenabfrage der NADA Austria Bescheid.					
5. Ich weiß, dass es die Medikamentenabfrage der NADA Austria auch als App gibt?					
6. Die Informationen, die die NADA Austria bietet, sind ausreichend.					

F 13 **Nachfolgend geht es um Ihre Wissensquellen zum Thema Doping.**
*Bitte kreuzen (**X**) Sie für jede Aussage an, wie sehr diese für Sie zutrifft.*
(Mehrfachnennungen möglich)

	Website NADA Austria	Trainer/ in	Betreuer/ in	Funktionär/ in	Andere Sportler/ innen	TV / Internet	Sonstiges
1. Mein Wissen über die Anti-Doping Regelungen habe ich von							
2. Mein Wissen über verbotene Substanzen habe ich von							
3. Mein Wissen über Dopingkontrollen habe ich von							
4. Mein Wissen über gesundheitliche Folgen von Doping habe ich von							
5. Mein Wissen über die rechtlichen Konsequenzen von Doping habe ich von							
6. Mein Wissen über die NADA Austria habe ich von							

F 14 **Nachfolgend geht es um Ihre Zufriedenheit mit dem Angebot der NADA Austria.**
*Bitte kreuzen (**X**) Sie wieder an, wie sehr die Aussagen zutreffen.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Die NADA Austria informiert rechtzeitig über Änderungen der Regeln/Verbote/ Konsequenzen.					
2. Mit der Fülle an Informationen, die ich von der NADA Austria bekomme, bin ich zufrieden.					
3. Ich hätte gerne eine direkte Ansprechperson bei der NADA Austria.					
4. Ich fände es wünschenswert, wenn die NADA Austria einen speziellen Newsletter für Sportler/innen anbieten würde.					
5. Sportler/innen sollten möglichst früh über Doping-Prävention informiert werden.					
6. Für alle Kadersportler/innen sollte es zumindest alle zwei Jahre einen Anti-Doping-Vortrag geben.					

F 15 **Nachfolgend geht es um Ihre Zufriedenheit mit dem Dopingkontroll-Programm.**
*Bitte kreuzen (**X**) Sie wieder an, wie sehr die Aussagen zutreffen. Falls Sie noch keine Dopingkontrolle hatten, lassen Sie die betreffenden Fragen bitte aus .*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Ich bin mit der Häufigkeit der Dopingkontrollen zufrieden.					
2. Durch die Dopingkontrollen fühle ich mich in meinem Alltag eingeschränkt.					
3. Ich habe mich im Rahmen einer Dopingkontrolle in meiner Privatsphäre verletzt gefühlt.					
4. Bei meinen Dopingkontrollen waren die Kontrollore freundlich und korrekt.					
5. Ich wurde im Rahmen von Schulungen über den Ablauf einer Dopingkontrolle informiert, bevor ich meine erste Dopingkontrolle hatte					
6. Mir ist bewusst, dass ich mögliche Fehler bei der Dopingkontrolle auch anonym an die NADA Austria melden kann.					
7. Die Arbeit der NADA Austria hat einen hohen Qualitätsstandard.					
8. Ich wünsche mir strengere Strafen bei Verstößen gegen die Anti-Doping Bestimmungen.					
9. Mir ist bewusst, dass ich mich jederzeit vertraulich an die NADA Austria wenden kann.					
10. Nicht nur Besitz, Handel und Weitergabe verbotener Substanzen oder Methoden, sondern auch der Eigenkonsum sollte strafrechtliche Konsequenzen haben.					
11. Erwachsene Sportler/innen sollten selbst entscheiden dürfen, ob sie dopen oder nicht – eine externe Kontrolle ist nicht notwendig.					
12. Ich fühle mich im internationalen Vergleich benachteiligt, da die Bestimmungen bei uns strikter gehandhabt werden als in anderen Ländern.					
13. Dopingkontrollen sind ein notwendiger Teil des Spitzensports.					
14. Dopingkontrollen schützen die sauberen Sportler/innen.					

F 16 **Nachfolgend geht es um Ihr Wissen und persönliche Einschätzungen zum Thema Doping.** *Bitte kreuzen* (**X**) *Sie wieder an, wie sehr die Aussagen zutreffen. An dieser Stelle möchten wir Sie nochmals darauf hinweisen, dass sämtliche Antworten vertraulich behandelt werden.*

	stimme überhaupt nicht zu	stimme eher nicht zu	stimme teilweise zu	stimme eher zu	stimme völlig zu
1. Bereits die kurzfristige Einnahme (z.B. einige Wochen) von anabolen Steroiden kann gesundheitsschädigend sein.					
2. Die langfristige Einnahme von anabolen Steroiden kann gesundheitsschädigend sein.					
3. Bereits die kurzfristige Einnahme (z.B. einige Wochen) von Erythropoietin (EPO) kann gesundheitsschädigend sein.					
4. Die langfristige Einnahme von Erythropoietin (EPO) kann gesundheitsschädigend sein.					
5. Bereits die kurzfristige Einnahme (z.B. einige Wochen) von Wachstumshormon (GH) kann gesundheitsschädigend sein.					
6. Die langfristige Einnahme von Wachstumshormon (GH) kann gesundheitsschädigend sein.					
7. Bereits die kurzfristige Einnahme (z.B. einige Wochen) von Schmerzmitteln kann gesundheitsschädigend sein.					
8. Die langfristige Einnahme von Schmerzmitteln kann gesundheitsschädigend sein.					
9. Unter medizinischer Aufsicht sind die Risiken und Nebenwirkungen von Doping gering.					
10. Wenn ich mich dazu entschließen würde zu dopen, würde ich leicht an die entsprechenden Mittel und Informationen zur Anwendung kommen.					
11. Ich kann nachvollziehen, dass Sportler/innen dopen, wenn sie absolut sicher sein könnten, nicht überführt zu werden.					
12. Ich kann nachvollziehen, dass Sportler/innen dopen, wenn sie dadurch 1 Million Euro verdienen würden und sicher sein könnten, nicht überführt zu werden.					
13. Ich verwende Nahrungsergänzungsmittel und bin der Überzeugung, dass ich ohne diese meine Leistung nicht bringen könnte.					

Raum für Verbesserungsvorschläge/Anmerkungen/Kritik zur Anti-Doping Arbeit:

Vielen Dank für Ihre Teilnahme!

Das Projektteam

Treenerite teadlikkus ja hinnang antidopingu programmile Eestis

Head treenerid!

Spordikoolituse ja -Teabe Sihtasutus pöördub teie poole hindamaks antidopingu programmi tõhusust Eestis. Koostöös Viini ülikooli, Austria ning Sloveenia antidopingu agentuuridega on välja töötatud alltoodud küsimustik, millele palume vastata. Küsimustiku täitmine võtab aega 15 minutit, kõiki vastuseid kasutatakse üldistatult ning anonüümselt.

Täname teie aja eest,
Spordikoolituse ja -Teabe Sihtasutus

Uuringu väljatöötajate pöördumine:

Lugupeetud treenerid!

Viini ülikooli sporditeaduste ja ülikoolispordi keskus viib läbi uuringu teemal „Rahulolu dopinguvastase tööga“. Uuringu eesmärk on saada võimalikult selge ülevaade Austria sportlaste, treenerite, juhendajate ja sporditegelaste hoiakutest ning anda sellest lähtuvalt konkreetset teavet ja teha täiendusi.

Palume teil tungivalt osaleda. Uuringutulemuste kehtivus ja kasutatavus oleneb väga suurel määral korrektselt ja asjalikult täidetud ankeetide arvust. Seetõttu palume teil juuresolev ankeet juhiste järgi täielikult täita. **Selleks kulub aega ligikaudu 15 minutit.**

Me suhtume teie andmete kaitsesse väga tõsiselt. Andmete edastamine kõrvalistele isikutele on välistatud. Andmetöötlus toimub eranditult anonüümsel kujul ja koos kõikide teiste osaliste andmetega. Loomulikult võite oma osalusest igal hetkel loobuda. Siiski palume teil ankeet täita täies mahus, sest üksnes siis on korralik andmetöötlus tagatud.

Nõusolek: ma olen teabe hoolikalt läbi lugenud ja sellest aru saanud. Ma osalen uuringus vabatahtlikult. Käesolevaga kinnitan oma nõusolekut lubada selle uuringu raames saadud andmete kasutamist anonüümses vormis.

Juhised ankeedi täitmiseks

Palun lugege kõigepealt küsimus ja võimalikud variandid (vastused) läbi ning tehke rist (X) selle vastuse juurde, mis langeb teie arvamusega kõige paremini kokku.

Näide. Kui suurel määral olete huvitatud nutitelefonidest?

Märkige juuresoleval skaalal (1 = väga väike huvi, 5 = väga suur huvi), kui suurel määral olete sellest huvitatud. Tehke rist selle numbri juurde, mis ühtib kõige paremini teie arvamusega.

väga väike huvi 1 2 X 4 5 väga suur huvi

Juhis. Märk (rist) number 3 juures tähendab seda, et olete nutitelefonidest huvitatud keskmiselt. Palun märkige alati ainult üks number (vastus) ühe tähistusega.

Kui ükski antud vastustest ei vasta täpselt teie seisukohale (näiteks mitme vastusevariandiga küsimuse korral), siis valige palun see vastus, mis kattub kõige rohkem teie arvamusega. Pöörake tähelepanu ka sellele, et olenevalt teie valitud vastustest võivad vastamisel mõned küsimused ka vahele jääda. Kui te peate vastamisel mõne küsimuse vahele jätma, siis on vastavas kohas ankeedis toodud selge juhis. Vastused ankeedi küsimustele peavad kajastame teie isiklikku arvamust ja seisukohta. Otsuse langetamisel lähtuge esmamuljest. Vastake kiiresti kõikidele järjestikulistele küsimustele ja ärge jätke neist ühtki vahele.

Suur tänu osalemise eest!

Treenerite teadlikkus ja hinnang antidopingu programmile Eestis

Teatage alustuseks oma demograafilised andmed.

* 1. Sugu:

- ◯ mees
- ◯ naine

* 2. Vanus (aastates):

* 3. Mis on teie põhiline spordiala? (Palun kirjutage üksnes üldmõiste, nt kergejõustik, jalgpall, aerutamine, ...)

(Invasportlastel palume märkida põhiline spordiala (invasport))

* 4. Kui kaua olete treeninud või harrastanud seda spordiala?

- ◯ Alla 1 aasta (või hooaja)
- ◯ 1 või 2 aastat (või hooaega)
- ◯ Üle 2, kuid alla 5 aasta (või hooaja)
- ◯ Viis aastat (või hooaega) või kauem

* 5. Milline on kõige kõrgema tasemega võistlus, kus üks teie sportlastest on osalenud?

- ◯ Olümpiamängud/paraolümpiamängud
- ◯ Maailmameistrivõistlused
- ◯ Euroopa meistrivõistlused
- ◯ Riigi meistrivõistlused / riigi kõrgliiga
- ◯ Piirkondlikud võistlused

* 6. Milline on siiani parim sportlik saavutus, milleni on üks teie sportlastest jõudnud?

- ◯ Osalemine eelmises küsimuses mainitud võistlusel
- ◯ Medal või tiitel piirkondlikel tiitlivõistlustel
- ◯ Medal või tiitel riigi meistrivõistlustel / riigi kõrgliigas
- ◯ Medal või tiitel Euroopa meistrivõistlustel
- ◯ Medal või tiitel maailmameistrivõistlustel
- ◯ Medal või tiitel olümpiamängudel/paraolümpiamängudel

Treenerite teadlikkus ja hinnang antidopingu programmile Eestis

Palun vastake järgmistele sissejuhatavatele küsimustele.

* 7. Kas mõni teie sportlane on läbinud dopingukontrolli? Kui jah, siis mitu korda viimase 12 kuu jooksul?

- [ ] Ei
- [ ] Jah
- [ ] Kui jah, siis mitu korda viimase 12 kuu jooksul?

* 8. Kas olete kunagi kasutanud Eesti Antidopingu (EAD) teavitus- või ennetusteenuseid?

- [ ] Ei
- [ ] Jah
- [ ] Kui jah, siis mitu korda viimase 12 kuu jooksul?

* 9. Järgnev puudutab teie isiklikke seisukohti seoses spordiga.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Ma töötan spordivaldkonnas liikumisrõõmust.	○	○	○	○	○
2. Ma töötan spordivaldkonnas, sest tahan saada kuulsaks / mulle meeldib kuulus olla.	○	○	○	○	○
3. Ma töötan spordivaldkonnas, et ära elada.	○	○	○	○	○
4. Ma töötan spordivaldkonnas, et teenida palju raha.	○	○	○	○	○
5. Ma töötan spordivaldkonnas, et välja selgitada inimvõimete piire.	○	○	○	○	○
6. Ma soovin ka järgmistel aastatel töötada treeneri, juhendaja või sporditegelasena.	○	○	○	○	○

* 10. Järgnev puudutab teie isiklikku hinnangut seoses spordi arenguga.

Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Viimastel aastatel on loosung „Võit iga hinna eest“ muutunud tippspordis järjest aktuaalsemaks.	○	○	○	○	○
2. Viimastel aastatel on kiusatus tippspordis dopingut kasutada vähenenud.	○	○	○	○	○
3. Viimastel aastatel on kiusatus harrastusspordis dopingut kasutada suurenenud.	○	○	○	○	○
4. Kuna mitmel spordialal on võimalik teenida suuri summasid, on viimastel aastatel suurenenud ka dopingu kasutamise, korruptsiooni ja pettuse oht.	○	○	○	○	○
5. Ususe ja ausa mängu maine on viimastel aastatel tippspordis kasvanud.	○	○	○	○	○
6. Tänapäeval ei ole tippsport spordimeditsiinilise sekkumiseta enam võimalik.	○	○	○	○	○

Treenerite teadlikkus ja hinnang antidopingu programmile Eestis

Teie isiklik hinnang Eesti Antidopingule

* 11. Järgnev puudutab teie isiklikku hinnangut Eesti Antidopingule.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Eesti Antidoping on spordisüsteemi tähtis osa.	○	○	○	○	○
2. Eesti Antidoping takistab sportlastel tipptulemusi saavutada.	○	○	○	○	○
3. Eesti Antidoping on sõltumatu organisatsioon.	○	○	○	○	○
4. Eesti Antidoping kaitseb puhtaid sportlasi.	○	○	○	○	○
5. Eesti Antidoping soodustab teadlikkust antidopingust.	○	○	○	○	○
6. Eesti Antidoping on usaldusväärne.	○	○	○	○	○
7. Eesti Antidopingu tegevus on toetav.	○	○	○	○	○
8. Eesti Antidoping teavitab põhiliste spordialade sportlasi paremini ja kiiremini.	○	○	○	○	○

* 12. Järgnev puudutab teie isiklikku rahulolu Eesti Antidopingu ja sealt saadava teabega.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Kui ma otsin teavet dopinguvastase töö kohta, siis kasutan selleks Eesti Antidopingu pakutavaid võimalusi (veebileht, Facebook jne).	○	○	○	○	○
2. Ma arvan, et olen dopingu kasutamise tagajärgedest piisavalt teavitatud.	○	○	○	○	○
3. Eesti Antidopingu veebileht on arusaadav ja ülevaatlik.	○	○	○	○	○
4. Ma olen teadlik Eesti Antidopingu ravimite andmebaasist.	○	○	○	○	○
5. N/A	○	○	○	○	○
6. Eesti Antidopingu pakutav teave on piisav.	○	○	○	○	○

* 13. Järgnev puudutab teie teabeallikaid seoses dopinguteemaga.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta. (Võimalik ka mitu varianti)

	Eesti Antidopingu veebileht	Eesti Antidopingu töötajad	Treener	Muu juhendaja	Sporditegelane (nt alaliidu esindaja)	Teised sportlased	Meedia (internet, TV)	Muu
1. Minu teadmised dopinguvastaste eeskirjade kohta pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐
2. Minu teadmised keelatud ainete kohta pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐
3. Minu teadmised dopingukontrolli kohta pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐
4. Minu teadmised dopingu mõju kohta tervisele pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐
5. Minu teadmised dopingu kasutamise õiguslike tagajärgede kohta pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐
6. Minu teadmised Eesti Antidopingu kohta pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐

* 14. Järgnev puudutab teie isiklikku rahulolu Eesti Antidopingu tegevusega.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Eesti Antidoping teavitab õigel ajal muudatustest eeskirjades/keeldudes/tagajärgedes.	○	○	○	○	○
2. Ma olen rahul Eesti Antidopingult saadava teabekogusega.	○	○	○	○	○
3. Ma sooviksin vahetut kontaktisikut Eesti Antidopingus.	○	○	○	○	○
4. Minu arvates oleks soovitav, kui Eesti Antidoping annaks välja spetsiaalset treeneritele, juhendajatele või sporditegelastele mõeldud uudiskirja.	○	○	○	○	○
5. Sportlasi peab võimalikult vara teavitama dopinguvastastest meetmetest.	○	○	○	○	○
6. Kõik profisportlased ja nende treenerid, juhendajad või sporditegelased peavad vähemalt kord kahe aasta jooksul kuulama dopinguvastast loengut.	○	○	○	○	○

Antidopingu programm Eestis

15. Järgnev puudutab teie isiklikku rahulolu dopingukontrolli programmiga.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta. Kui te ei ole veel läbinud dopingukontrolli, siis jätke küsimused 1-7 vahele.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Ma olen dopingukontrolli sagedusega rahul.	○	○	○	○	○
2. Dopingukontrolli tõttu tunnevad minu sportlased oma igapäevaelus piiranguid.	○	○	○	○	○
3. Minu sportlased tunnevad, et dopingukontroll sekkub nende eraellu.	○	○	○	○	○
4. Minu sportlastele dopingukontrolli teostanud ametnikud (testijad) on käitunud sõbralikult ja korrektselt.	○	○	○	○	○
5. Mind teavitati koolituste ajal dopingukontrolli tegemise protseduuri käigust enne, kui minu sportlasi esimest korda kontrolliti.	○	○	○	○	○
6. Ma olen teadlik sellest, et võin dopingukontrolli käigus tehtud võimalikest vigadest teavitada Eesti Antidopingut ka anonüümselt.	○	○	○	○	○
7. Eesti Antidopingu töö vastab kvaliteedistandardi nõuetele.	○	○	○	○	○
8. Ma soovin dopingueeskirjade rikkumisega kaasnevate trahvide karmistamist.	○	○	○	○	○

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
9. Ma olen teadlik sellest, et võin igal ajal pöörduda konfidentsiaalselt Eesti Antidopingu poole.	○	○	○	○	○
10. Mitte üksnes keelatud ainete või meetodite kasutamine, nendega kauplemine või nende edastamine, vaid ka nende kasutamine isiklikul otstarbel peab olema kriminaalkorras karistatav.	○	○	○	○	○
11. Täiskasvanud sportlased peavad ise otsustama, kas nad kasutavad dopingut või ei – väline kontroll ei ole vajalik.	○	○	○	○	○
12. Minu sportlased tunnevad, et neil on rahvusvahelises kontekstis vähem õigusi, sest meil kehtivad teiste riikidega võrreldes rangemad eeskirjad.	○	○	○	○	○
13. Dopingukontroll on tippspordi hädavajalik osa.	○	○	○	○	○
14. Dopingukontroll kaitseb puhtaid sportlasi.	○	○	○	○	○

16. Järgnev puudutab teie isiklikku rahulolu antidopingu koolitustegevusega.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta. Kui te ei ole osalenud ühelgi antidopingu koolitusel, jätke küsimus vahele.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Koolitusel sain teada kõigest, mida treener peaks dopinguvastasest võitlusest teadma.	○	○	○	○	○
2. Mõistan, kuidas rahvusvaheline ja riiklik dopinguvastane tegevus on korraldatud.	○	○	○	○	○
3. Dopingukontrolliprotseduuri esitleti koolitusel selgelt.	○	○	○	○	○
4. Kui minu sportlast valitaks dopingukontrolli, tean protseduuri.	○	○	○	○	○
5. TUE (eriloa) taotlemise protseduur oli selgelt esitletud.	○	○	○	○	○
6. Kui mu sportlasel on vaja TUE-t (eriluba) taotleda, olen ma protseduurist teadlik.	○	○	○	○	○
7. Keelatud ainete nimekiri oli koolitusel selgelt esitletud.	○	○	○	○	○
8. Dopingu tagajärjed tervisele olid selgelt esitatud.	○	○	○	○	○
9. Enne loengut ma ei mõistnud, et dopingu ohud võivad olla nii tõsised.	○	○	○	○	○
10. Risk teadmatusest tingitud dopingu tarvitamisel oli selgelt esitatud.	○	○	○	○	○
11. Enne loengut ei olnud ma teadlik, et võib esineda teadmatusest tingitud dopingainete tarvitamist.	○	○	○	○	○
12. Loeng oli arusaadav.	○	○	○	○	○
13. Soovin, et antidopingu loenguid oleks rohkem.	○	○	○	○	○

Treenerite teadlikkus ja hinnang antidopingu programmile Eestis

Teadmised dopingust

* 17. Järgnev puudutab teie teadmisi ja isiklikke hinnanguid seoses dopinguteemaga.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta. Siinkohal soovime veel kord rõhutada, et kõiki vastuseid töödeldakse konfidentsiaalselt.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Juba anaboolsete steroidide lühiajaline manustamine (nt mõne nädala jooksul) võib olla tervisele kahjulik.	○	○	○	○	○
2. Anaboolsete steroidide pikaajaline manustamine võib olla tervisele kahjulik.	○	○	○	○	○
3. Juba erütropoetiini (EPO) lühiajaline manustamine (nt mõne nädala jooksul) võib olla tervisele kahjulik.	○	○	○	○	○
4. Erütropoetiini (EPO) pikaajaline manustamine võib olla tervisele kahjulik.	○	○	○	○	○
5. Juba kasvuhormooni (GH) lühiajaline manustamine (nt mõne nädala jooksul) võib olla tervisele kahjulik.	○	○	○	○	○
6. Kasvuhormooni (GH) pikaajaline manustamine võib olla tervisele kahjulik.	○	○	○	○	○
7. Juba valuvaigistite lühiajaline manustamine (nt mõne nädala jooksul) võib olla tervisele kahjulik.	○	○	○	○	○
8. Valuvaigistite pikaajaline manustamine võib olla tervisele kahjulik.	○	○	○	○	○
9. Meditsiini seisukohast on dopinguga seonduvad riskid ja kõrvaltoimed tühised.	○	○	○	○	○

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
10. Kui ma otsustaksin oma sportlastele soovitada dopingu kasutamist, saaksin vastavad vahendid ja vajaliku teabe kergesti kätte.	○	○	○	○	○
11. Kui sportlased oleksid absoluutselt kindlad, et nad ei jää vahele, kasutaksid nad dopingut.	○	○	○	○	○
12. Kui sportlased oleksid kindlad, et nad ei jää vahele ja võiksid seejuures teenida miljon dollarit, kasutaksid nad dopingut.	○	○	○	○	○
13. Ma soovitan oma sportlastel kasutada toidulisandeid ja olen veendunud, et ilma nendeta oleksid tulemused palju halvemad.	○	○	○	○	○

* 18. Järgnev puudutab teie teadmisi ja isiklikke hinnanguid anonüümse vihjeliini kohta.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta. Siinkohal soovime veel kord rõhutada, et kõiki vastuseid töödeldakse konfidentsiaalselt.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Ma tean, kus ja kuidas võin dopingu tarvitamisest teada anda.	○	○	○	○	○
2. Anonüümne vihjeliin on oluline osa dopinguvastasest võitlusest.	○	○	○	○	○
3. Kui mul oleks informatsiooni dopingu tarvitamise kohta, annaksin sellest vihjeliinil teada.	○	○	○	○	○

19. Ruum parandusettepanekute, märkuste ja kriitiliste seisukohtade jaoks dopinguvastase töö kohta:

Suur tänu osalemise eest!

Sportlaste teadlikkus ja hinnang antidopingu programmile Eestis

Head sportlased!

Eesti Olümpiakomitee pöördub teie poole hindamaks antidopingu programmi tõhusust Eestis. Koostöös Austria ning Sloveenia antidopingu agentuuridega on välja töötatud alltoodud küsimustik, millele palume vastata.
Küsimustiku täitmine võtab aega 15 minutit, kõiki vastuseid kasutatakse üldistatult ning anonüümselt.

Täname teie aja eest,
Eesti Olümpiakomitee

Uuringu väljatöötajate pöördumine:

Lugupeetud sportlased!

Viini ülikooli sporditeaduste ja ülikoolispordi keskus viib läbi uuringu teemal „Rahulolu dopinguvastase tööga“. Uuringu eesmärk on saada võimalikult selge ülevaade Austria sportlaste, treenerite, juhendajate ja sporditegelaste hoiakutest ning anda sellest lähtuvalt konkreetset teavet ja teha täiendusi.

Palume teil tungivalt osaleda. Uuringutulemuste kehtivus ja kasutatavus oleneb väga suurel määral korrektselt ja asjalikult täidetud ankeetide arvust. Seetõttu palume teil juuresolev ankeet juhiste järgi täielikult täita. **Selleks kulub aega ligikaudu 15 minutit.**

Me suhtume teie andmete kaitsesse väga tõsiselt. Andmete edastamine kõrvalistele isikutele on välistatud. Andmetöötlus toimub eranditult anonüümsel kujul ja koos kõikide teiste osaliste andmetega. Loomulikult võite oma osalusest igal hetkel loobuda. Siiski palume teil ankeet täita täies mahus, sest üksnes siis on korralik andmetöötlus tagatud.

Nõusolek: ma olen teabe hoolikalt läbi lugenud ja sellest aru saanud. Ma osalen uuringus vabatahtlikult. Käesolevaga kinnitan oma nõusolekut lubada selle uuringu raames saadud andmete kasutamist anonüümses vormis.

Juhised ankeedi täitmiseks

Palun lugege kõigepealt küsimus ja võimalikud variandid (vastused) läbi ning tehke rist (X) selle vastuse juurde, mis langeb teie arvamusega kõige paremini kokku.

Näide. Kui suurel määral olete huvitatud nutitelefonidest?

Märkige juuresoleval skaalal (1 = väga väike huvi, 5 = väga suur huvi), kui suurel määral olete sellest huvitatud. Tehke rist selle numbri juurde, mis ühtib kõige paremini teie arvamusega.

väga väike huvi 1 2 X 4 5 väga suur huvi

Juhis. Märk (rist) number 3 juures tähendab seda, et olete nutitelefonidest huvitatud keskmiselt. Palun märkige alati ainult üks number (vastus) ühe tähistusega.

Kui ükski antud vastustest ei vasta täpselt teie seisukohale (näiteks mitme vastusevariandiga küsimuse korral), siis valige palun see vastus, mis kattub kõige rohkem teie arvamusega. Pöörake tähelepanu ka sellele, et olenevalt teie valitud vastustest võivad vastamisel mõned küsimused ka vahele jääda. Kui te peate vastamisel mõne küsimuse vahele jätma, siis on vastavas kohas ankeedis toodud selge juhis. Vastused ankeedi küsimustele peavad kajastame teie isiklikku arvamust ja seisukohta. Otsuse langetamisel lähtuge esmamuljest. Vastake kiiresti kõikidele järjestikulistele küsimustele ja ärge jätke neist ühtki vahele.

Suur tänu osalemise eest!

Sportlaste teadlikkus ja hinnang antidopingu programmile Eestis

Teatage alustuseks oma demograafilised andmed.

* 1. Sugu:

- ◯ mees
- ◯ naine

* 2. Vanus (aastates):

* 3. Mis on teie põhiline spordiala? (Palun kirjutage üksnes üldmõiste, nt kergejõustik, jalgpall, aerutamine, ...)

(Invasportlastel palume märkida põhiline spordiala (invasport))

* 4. Kui kaua olete osalenud selle spordiala võistlustel?

- ◯ Alla 1 aasta (või hooaja)
- ◯ 1 või 2 aastat (või hooaega)
- ◯ Üle 2, kuid alla 5 aasta (või hooaja)
- ◯ Viis aastat (või hooaega) või kauem

* 5. Mis on kõige kõrgema tasemega võistlus, kus olete osalenud?

- ◯ Olümpiamängud/paraolümpiamängud
- ◯ Maailmameistrivõistlused
- ◯ Euroopa meistrivõistlused
- ◯ Riigi meistrivõistlused / riigi kõrgliiga
- ◯ Piirkondlikud võistlused

* 6. Milline on teie siiani suurim sportlik edu?

- ◯ Osalemine eelmises küsimuses mainitud võistlusel
- ◯ Medal või tiitel piirkondlikel tiitlivõistlustel
- ◯ Medal või tiitel riigi meistrivõistlustel / riigi kõrgliigas
- ◯ Medal või tiitel Euroopa meistrivõistlustel
- ◯ Medal või tiitel maailmameistrivõistlustel
- ◯ Medal või tiitel olümpiamängudel/paraolümpiamängudel

Sportlaste teadlikkus ja hinnang antidopingu programmile Eestis

Palun vastake järgmistele sissejuhatavatele küsimustele.

* 7. Kas olete läbinud dopingukontrolli?

- [ ] Ei
- [ ] Jah
- [ ] Kui jah, siis mitu korda olete läbinud dopingukontrolli viimase 12 kuu jooksul?

* 8. Kas olete kunagi kasutanud Eesti Antidopingu (EAD) teavitus- või ennetusteenuseid?

- [ ] Ei
- [ ] Jah
- [ ] Kui jah, siis mitu korda viimase 12 kuu jooksul?

* 9. Järgnev puudutab teie isiklikke seisukohti seoses spordiga.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Ma teen sporti liikumisrõõmust.	○	○	○	○	○
2. Ma teen sporti, sest tahan saada kuulsaks / mulle meeldib kuulus olla.	○	○	○	○	○
3. Ma teen sporti, et ära elada.	○	○	○	○	○
4. Ma teen sporti, et teenida palju raha.	○	○	○	○	○
5. Ma teen sporti, et püüda kindlaks määrata oma võimete piiri.	○	○	○	○	○
6. Ma soovin jääda spordiga seotuks ja töötada treeneri, juhendaja või sporditegelasena.	○	○	○	○	○

* 10. Järgnev puudutab teie isiklikku hinnangut seoses spordi arenguga.

Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Viimastel aastatel on loosung „Võit iga hinna eest“ muutunud tippspordis järjest aktuaalsemaks.	○	○	○	○	○
2. Viimastel aastatel on kiusatus tippspordis dopingut kasutada vähenenud.	○	○	○	○	○
3. Viimastel aastatel on kiusatus harrastusspordis dopingut kasutada suurenenud.	○	○	○	○	○
4. Kuna mitmel spordialal on võimalik teenida suuri summasid, on viimastel aastatel suurenenud ka dopingu kasutamise, korruptsiooni ja pettuse oht.	○	○	○	○	○
5. Ususe ja ausa mängu maine on viimastel aastatel tippspordis kasvanud.	○	○	○	○	○
6. Tänapäeval ei ole tippsport spordimeditsiinilise sekkumiseta enam võimalik.	○	○	○	○	○

Teie isiklik hinnang Eesti Antidopingule

* 11. Järgnev puudutab teie isiklikku hinnangut Eesti Antidopingule.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Eesti Antidoping on spordisüsteemi tähtis osa.	○	○	○	○	○
2. Eesti Antidoping takistab sportlastel tipptulemusi saavutada.	○	○	○	○	○
3. Eesti Antidoping on sõltumatu organisatsioon.	○	○	○	○	○
4. Eesti Antidoping kaitseb puhtaid sportlasi.	○	○	○	○	○
5. Eesti Antidoping soodustab teadlikkust antidopingust.	○	○	○	○	○
6. Eesti Antidoping on usaldusväärne.	○	○	○	○	○
7. Eesti Antidopingu tegevus on toetav.	○	○	○	○	○
8. Eesti Antidoping teavitab põhiliste spordialade sportlasi paremini ja kiiremini.	○	○	○	○	○

* 12. Järgnev puudutab teie isiklikku rahulolu Eesti Antidopingu ja sealt saadava teabega.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Kui ma otsin teavet dopinguvastase töö kohta, siis kasutan selleks Eesti Antidopingu pakutavaid võimalusi (veebileht, Facebook jne).	○	○	○	○	○
2. Ma arvan, et olen dopingu kasutamise tagajärgedest piisavalt teavitatud.	○	○	○	○	○
3. Eesti Antidopingu veebileht on arusaadav ja ülevaatlik.	○	○	○	○	○
4. Ma olen teadlik Eesti Antidopingu ravimite andmebaasist.	○	○	○	○	○
5. N/A	○	○	○	○	○
6. Eesti Antidopingu pakutav teave on piisav.	○	○	○	○	○

* 13. Järgnev puudutab teie teabeallikaid seoses dopinguteemaga.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta. (Võimalik ka mitu varianti)

	Eesti Antidopingu veebileht	Eesti Antidopingu töötajad	Treener	Muu juhendaja	Sporditegelane (nt alaliidu esindaja)	Teised sportlased	Meedia (internet, TV)	Muu
1. Minu teadmised dopinguvastaste eeskirjade kohta pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐
2. Minu teadmised keelatud ainete kohta pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐
3. Minu teadmised dopingukontrolli kohta pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐
4. Minu teadmised dopingu mõju kohta tervisele pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐
5. Minu teadmised dopingu kasutamise õiguslike tagajärgede kohta pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐
6. Minu teadmised Eesti Antidopingu kohta pärinevad:	☐	☐	☐	☐	☐	☐	☐	☐

* 14. Järgnev puudutab teie isiklikku rahulolu Eesti Antidopingu tegevusega.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Eesti Antidoping teavitab õigel ajal muudatustest eeskirjades/keeldudes/tagajärgedes.	○	○	○	○	○
2. Ma olen rahul Eesti Antidopingult saadava teabekogusega.	○	○	○	○	○
3. Ma sooviksin vahetut kontaktisikut Eesti Antidopingus.	○	○	○	○	○
4. Minu arvates oleks soovitav, kui Eesti Antidoping annaks välja spetsiaalset sportlastele mõeldud uudiskirja.	○	○	○	○	○
5. Sportlasi peab võimalikult vara teavitama dopinguvastastest meetmetest.	○	○	○	○	○
6. Kõik profisportlased peavad vähemalt kord kahe aasta jooksul kuulama dopinguvastast loengut.	○	○	○	○	○

Antidopingu programm Eestis

15. Järgnev puudutab teie isiklikku rahulolu dopingukontrolli programmiga.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta. Kui te ei ole veel läbinud dopingukontrolli, siis jätke küsimused 1-7 vahele.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Ma olen dopingukontrolli sagedusega rahul	○	○	○	○	○
2. Dopingukontrolli tõttu tunnen end oma igapäevaelus piiratuna.	○	○	○	○	○
3. Dopingukontrolli raames olen tajunud sekkumist oma eraellu.	○	○	○	○	○
4. Dopingukontrolliametnikud (testijad) on käitunud minu suhtes sõbralikult ja korrektselt.	○	○	○	○	○
5. Mind teavitati koolituste ajal dopingukontrolli tegemise protseduuri käigust enne esmakordset dopingukontrolli.	○	○	○	○	○
6. Ma olen teadlik sellest, et võin dopingukontrolli käigus tehtud võimalikest vigadest teavitada Eesti Antidopingut ka anonüümselt.	○	○	○	○	○
7. Eesti Antidopingu töö vastab kvaliteedistandardi nõuetele.	○	○	○	○	○
8. Ma soovin dopingueeskirjade rikkumisega kaasnevate trahvide karmistamist.	○	○	○	○	○
9. Ma olen teadlik sellest, et võin igal ajal pöörduda konfidentsiaalselt Eesti Antidopingu poole.	○	○	○	○	○

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
10. Mitte üksnes keelatud ainete või meetodite kasutamine, nendega kauplemine või nende edastamine, vaid ka nende kasutamine isiklikul otstarbel peab olema kriminaalkorras karistatav.	○	○	○	○	○
11. Täiskasvanud sportlased peavad ise otsustama, kas nad kasutavad dopingut või ei – väline kontroll ei ole vajalik.	○	○	○	○	○
12. Ma tunnen, et meil on rahvusvahelises kontekstis vähem õigusi, sest meil kehtivad teiste riikidega võrreldes rangemad eeskirjad.	○	○	○	○	○
13. Dopingukontroll on tippspordi hädavajalik osa.	○	○	○	○	○
14. Dopingukontroll kaitseb puhtaid sportlasi.	○	○	○	○	○

16. Järgnev puudutab teie isiklikku rahulolu antidopingu koolitustegevusega.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta. Kui te ei ole osalenud ühelgi antidopingu koolitusel, jätke küsimus vahele.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Koolitusel sain teada kõigest, mida sportlane peaks dopinguvastasest võitlusest teadma.	○	○	○	○	○
2. Mõistan, kuidas rahvusvaheline ja riiklik dopinguvastane tegevus on korraldatud.	○	○	○	○	○
3. Dopingukontrolliprotseduuri esitleti koolitusel selgelt.	○	○	○	○	○
4. Kui mind valitaks dopingukontrolli, tean protseduuri.	○	○	○	○	○
5. TUE (eriloa) taotlemise protseduur oli selgelt esitletud.	○	○	○	○	○
6. Kui mul on vaja TUE-t (eriluba) taotleda, olen ma protseduurist teadlik.	○	○	○	○	○
7. Keelatud ainete nimekiri oli koolitusel selgelt esitletud.	○	○	○	○	○
8. Dopingu tagajärjed tervisele olid selgelt esitatud.	○	○	○	○	○
9. Enne loengut ma ei mõistnud, et dopingu ohud võivad olla nii tõsised.	○	○	○	○	○
10. Risk teadmatusest tingitud dopingu tarvitamisel oli selgelt esitatud.	○	○	○	○	○
11. Enne loengut ei olnud ma teadlik, et võib esineda teadmatusest tingitud dopingainete tarvitamist.	○	○	○	○	○
12. Loeng oli arusaadav.	○	○	○	○	○
13. Soovin, et antidopingu loenguid oleks rohkem.	○	○	○	○	○

Teadmised dopingust

* 17. Järgnev puudutab teie teadmisi ja isiklikke hinnanguid seoses dopinguteemaga.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta. Siinkohal soovime veel kord rõhutada, et kõiki vastuseid töödeldakse konfidentsiaalselt.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Juba anaboolsete steroidide lühiajaline manustamine (nt mõne nädala jooksul) võib olla tervisele kahjulik.	○	○	○	○	○
2. Anaboolsete steroidide pikaajaline manustamine võib olla tervisele kahjulik.	○	○	○	○	○
3. Juba erütropoetiini (EPO) lühiajaline manustamine (nt mõne nädala jooksul) võib olla tervisele kahjulik.	○	○	○	○	○
4. Erütropoetiini (EPO) pikaajaline manustamine võib olla tervisele kahjulik.	○	○	○	○	○
5. Juba kasvuhormooni (GH) lühiajaline manustamine (nt mõne nädala jooksul) võib olla tervisele kahjulik.	○	○	○	○	○
6. Kasvuhormooni (GH) pikaajaline manustamine võib olla tervisele kahjulik.	○	○	○	○	○
7. Juba valuvaigistite lühiajaline manustamine (nt mõne nädala jooksul) võib olla tervisele kahjulik.	○	○	○	○	○
8. Valuvaigistite pikaajaline manustamine võib olla tervisele kahjulik.	○	○	○	○	○
9. Meditsiini seisukohast on dopinguga seonduvad riskid ja kõrvaltoimed tühised.	○	○	○	○	○

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
10. Kui ma otsustaksin kasutada dopingut, saaksin vastavad vahendid ja vajaliku teabe kergesti kätte.	○	○	○	○	○
11. Kui sportlased oleksid absoluutselt kindlad, et nad ei jää vahele, kasutaksid nad dopingut.	○	○	○	○	○
12. Kui sportlased oleksid kindlad, et nad ei jää vahele ja võiksid seejuures teenida miljon dollarit, kasutaksid nad dopingut.	○	○	○	○	○
13. Ma kasutan toidulisandeid ja olen veendunud, et ilma nendeta oleksid tulemused palju halvemad.	○	○	○	○	○

* 18. Järgnev puudutab teie teadmisi ja isiklikke hinnanguid anonüümse vihjeliini kohta.
Palun tehke rist (X) iga väite juurde, et näidata oma suhtumist/seisukohta. Siinkohal soovime veel kord rõhutada, et kõiki vastuseid töödeldakse konfidentsiaalselt.

	ei vasta üldse	pigem ei vasta	vastab osaliselt	pigem vastab	vastab täielikult
1. Ma tean, kus ja kuidas võin dopingu tarvitamisest teada anda.	○	○	○	○	○
2. Anonüümne vihjeliin on oluline osa dopinguvastasest võitlusest.	○	○	○	○	○
3. Kui mul oleks informatsiooni dopingu tarvitamise kohta, annaksin sellest vihjeliinil teada.	○	○	○	○	○

19. Ruum parandusettepanekute, märkuste ja kriitiliste seisukohtade jaoks dopinguvastase töö kohta:

Suur tänu osalemise eest!

Doping je nevarnost, ki ogroža zdravje športnikov, načenja integriteto športa in vrednostni sistem, ki varuje pošten in čist šport. Med cilji delovanja Olimpijskega komiteja Slovenije, združenja športnih zvez je tudi boj proti dopingu. V ta namen je bila ustanovljena Slovenska antidoping organizacija SLOADO, ki izvaja usklajen in učinkovit program boja proti dopingu na področju odkrivanja, odklanjanja in preprečevanja dopinga v športu, ki temelji na zaščiti temeljne pravice športnika, da trenira in tekmuje v okolju brez dopinga.

Učinkovitost njenega delovanja, predvsem pa zaupanje športnikov in njihovih spremljevalcev v nacionalni program preprečevanja dopinga v športu je za OKS in čist šport velikega pomena in je temeljni namen vprašalnika, ki vam ga v nadaljevanju posredujemo.

Prosimo vas, da si vzamete čas in odgovorite na vprašanja, ki smo jih pripravili.

Navodila za izpolnjevanje vprašalnika

Prosimo vas, da najprej preberete vprašanja in možne odgovore ter z (✔) označite tiste odgovore, ki najbolj odražajo vaše mnenje.

Primer: Ali vas zanima področje pametnih telefonov?
Ocenite z oceno na lestvici od 1 do 5, pri čemer 1 pomeni, da vas to področje sploh ne zanima in 5, da vas zelo zanima.

sploh me ne zanima 1 2 ✔ 4 5 zelo me zanima

Opomba: Oznaka (kljukica) na številki 3 pomeni, da vas pametni telefoni zanimajo srednje. Prosim, da se vedno odločite samo za eno številko oz. odgovor in ga pregledno označite.

V primeru, da vam noben od ponujenih odgovorov ne ustreza povsem (ali pa vam ustreza več odgovorov), označite tistega, ki vam ustreza najbolj.

Obstaja možnost, da boste glede na predhodne odgovore morali določena vprašanja preskočiti (npr. če še niste nikoli imeli kontrole dopinga) – to je jasno zapisano pred vprašanjem.

Vprašalnik naj bo odraz vaših stališč in osebnega mnenja. Pri odgovorih zaupajte svojemu prvemu vtisu. Odgovarjajte hitro in po vrsti ter bodite pozorni, da katerega od vprašanj ne izpustite.

Kadarkoli je v vprašalniku uporabljen izraz zapisan v moški slovnični obliki, se uporablja kot nevtralni za moške in ženske. Vzrok za uporabo samostalnika moškega spola je poenostavitev in ne diskriminacija pripadnic ženskega spola.

Hvala za sodelovanje!

Demografski podatki

1. Spol:

- ◯ moški
- ◯ ženski

2. Starost (v letih):

3. Vaša glavna športna panoga? *(Prosimo, da navedete samo nadpomenke npr. atletika, nogomet, veslanje, ...)*
(Športniki invalidi zapišejo: šport invalidov)

4. Kako dolgo delate kot trener oz. športni delavec v navedene športne panoge?

- ◯ Manj kot leto dni (oz. sezono)
- ◯ 1 ali 2 leti (oz. sezoni)
- ◯ Več kot 2 leti, a manj kot 5 let (oz. sezon)
- ◯ Pet let ali dlje (oz. sezon)

5. Najvišja stopnja tekmovanj, katerega so se udeležili vaši tekmovalci:

- ◯ Olimpijske oz. Paraolimpijske igre
- ◯ Svetovno prvenstvo
- ◯ Evropsko prvenstvo
- ◯ Državno prvenstvo oz. prva državna liga
- ◯ Regionalna tekmovanja

6. Največji športni uspeh vaših tekmovalcev?

- ◯ Uvrstitev na enega od zgoraj naštetih tekmovanj
- ◯ Medalja ali naslov na regionalnih tekmovanjih
- ◯ Medalja ali naslov na državnem prvenstvu oz. v prvi državni ligi
- ◯ Medalja ali naslov na Evropskem prvenstvu
- ◯ Medalja ali naslov na Svetovnem prvenstvu
- ◯ Medalja ali naslov na Olimpijskih oz. Paraolimpijskih igrah

Uvodna vprašanja

7. Ali je bil kdo od vaših tekmovalcev izbran za kontrolo dopinga v preteklosti? Če je odgovor da, koliko kontrol dopinga so imeli v zadnjih 12 mesecih?

- [ ] Ne
- [ ] Da
- [ ] Število kontrol v zadnjih 12 mesecih:

8. Ali ste se kdaj udeležili preventivnih protidopinških programov ozaveščanja in informiranja, ki jih je organizirala vaša zveza, šola oz. SLOADO? Če je odgovor da, kolikokrat v zadnjih 12 mesecih?

- [ ] Ne
- [ ] Da
- [ ] Koliko programov ozaveščanja in informiranja ste se udeležili v zadnjih 12 mesecih?

9. Kakšen je vaš osebni odnos in pristop do športa?
Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. S športom se ukvarjam, ker se rad gibam	○	○	○	○	○
2. S športom se ukvarjam, ker bi rad postal slaven	○	○	○	○	○
3. S športom se ukvarjam, ker se tako preživljam	○	○	○	○	○
4. S športom se ukvarjam, da bi zaslužil veliko denarja	○	○	○	○	○
5. S športom se ukvarjam, da preizkušam svoje meje	○	○	○	○	○
6. V naslednjih letih želim nadaljevati kariero kot trener, član spremljevalnega osebja ali športni funkcionar	○	○	○	○	○

10. Kakšno je vaše osebno mnenje o razvoju športa?

Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. Vodilo “zmagati za vsako ceno”, je v vrhunskem športu zadnja leta bolj izrazito čutiti	○	○	○	○	○
2. V vrhunskem športu je skušnjava po dopingu zadnja leta narasla	○	○	○	○	○
3. V rekreativnem športu je skušnjava po dopingu zadnja leta narasla	○	○	○	○	○
4. Ker je v nekaterih športnih panogah zadnja leta mogoče zaslužiti veliko denarja, je narasla tudi nevarnost dopinga, korupcije in drugih goljufij	○	○	○	○	○
5. Fair-play je v zadnjih letih pridobil na pomenu	○	○	○	○	○
6. Vrhunski šport brez športne medicine danes ne more obstajati	○	○	○	○	○

Delovanje SLOADO in viri informacij

11. Kakšen je vaš osebni odnos do SLOADO – nacionalne protidopinške organizacije?
Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. SLOADO je pomemben del športnega sistema	○	○	○	○	○
2. SLOADO omejuje športnike pri doseganju najboljših rezultatov	○	○	○	○	○
3. SLOADO je neodvisna organizacija	○	○	○	○	○
4. SLOADO ščiti “čiste” športnike	○	○	○	○	○
5. SLOADO pomaga pri spremembi miselnosti o dopingu	○	○	○	○	○
6. SLOADO je organizacija, vredna zaupanja	○	○	○	○	○
7. SLOADO je dobrodošla podpora	○	○	○	○	○
8. SLOADO bolje in hitreje obvešča večje športne zveze	○	○	○	○	○

12. Kako dobro ste obveščeni o delovanju SLOADO ter kako ste zadovoljni s podajanjem informacij?
Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. Ko iščem informacije o protidopinških ukrepih, mi pri tem pomagajo informacije, ki jih ponuja SLOADO (spletna stran, FB,Twitter itd.)	○	○	○	○	○
2. Menim, da sem o posledicah dopinga zadostno informiran	○	○	○	○	○
3. Spletna stran SLOADO je pregledna in razumljiva	○	○	○	○	○
4. Seznanjen sem z Listo prepovedanih snovi in postopkov na spletni strani SLOADO	○	○	○	○	○
5. Želim si, da bi imela SLOADO aplikacijo za preverjanje zdravil	○	○	○	○	○
6. Informacije, ki jih nudi SLOADO, mi zadostujejo	○	○	○	○	○

13. Od koga oziroma od kje pridobivate informacije, ki jih imate na področju dopinga?
Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate (možnih je več odgovorov).

	Spletna stran SLOADO	Trener	Spremljevalno osebje	Športni funkcionar	Starši oz. skrbniki	Drugi športniki	Mediji (internet, tv)	Drugi viri
1. Informacije o protidopinških pravilih pridobivam od	☐	☐	☐	☐	☐	☐	☐	☐
2. Informacije o prepovedanih snoveh pridobivam	☐	☐	☐	☐	☐	☐	☐	☐
3. Informacije o poteku odvzema vzorca pridobivam	☐	☐	☐	☐	☐	☐	☐	☐
4. Informacije o zdravstvenih posledicah dopinga pridobivam	☐	☐	☐	☐	☐	☐	☐	☐
5. Informacije o pravnih posledicah dopinga pridobivam	☐	☐	☐	☐	☐	☐	☐	☐
6. Informacije o delovanju SLOADO pridobivam	☐	☐	☐	☐	☐	☐	☐	☐

14. Ali ste zadovoljni s ponudbo informacij in delovanjem SLOADO?

Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. SLOADO me pravočasno obvešča o spremembah pravil, prepovedih ter posledicah	○	○	○	○	○
2. S količino informacij, ki jo posreduje SLOADO sem zadovoljen	○	○	○	○	○
3. Pri SLOADO bi želel direktnega sogovornika	○	○	○	○	○
4. Želim si, da bi SLOADO pošiljal posebne elektronske novice za športnike	○	○	○	○	○
5. Športniki morajo biti o preventivnih protidopinških ukrepih obveščeni kar se da hitro	○	○	○	○	○
6. Športniki, trenerji, člani spremljevalnega osebja in športni funkcionarji bi se morali udeležiti protidopinških predavanj enkrat letno	○	○	○	○	○

Programi SLOADO

15. Ali ste zadovoljni s programom testiranj SLOADO?

Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate. V primeru, da vaši tekmovalci še niso imeli kontrole dopinga s strani SLOADO, na podvprašanja 1 do 7 ne odgovorite.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. S pogostostjo kontrol dopinga sem zadovoljen	○	○	○	○	○
2. Kontrole dopinga moje tekmovalce v vsakdanu omejujejo	○	○	○	○	○
3. Pri kontrolah dopinga so imeli moji tekmovalci občutek, da gre za vdor v njihovo zasebnost	○	○	○	○	○
4. Uradniki za kontrolo dopinga so bili pri svojem delu z mojimi tekmovalci prijazni in korektni	○	○	○	○	○
5. V okviru izobraževanj so mi razložili postopek kontrole dopinga še preden so bili moji tekmovalci prvič testirani	○	○	○	○	○
6. Zavedam se, da lahko morebitne napake pri testiranju anonimno prijavim na SLOADO	○	○	○	○	○
7. Delo SLOADO poteka na visoki kvalitativni ravni	○	○	○	○	○
8. Želim si strožje kazni pri kršitvah protidopinških pravil	○	○	○	○	○
9. SLOADO je zaupanja vredna organizacija, do katere lahko kadarkoli pristopim z zaupnimi informacijami	○	○	○	○	○

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
10. S kazenskimi posledicami bi se morali soočiti ne samo v primeru posedovanja, prekupčevanja in posredovanja prepovedanih snovi, temveč tudi v primeru uporabe	○	○	○	○	○
11. Polnoletni športniki bi se morali sami odločiti ali se bodo posluževali dopinga ali ne, zunanji nadzor ni potreben	○	○	○	○	○
12. Moji tekmovalci menijo, da se protidopinška pravila pri nas izvajajo strožje in so zato v mednarodni primerjavi oškodovani	○	○	○	○	○
13. Kontrole dopinga so postale potreben del vrhunskega športa	○	○	○	○	○
14. Kontrole dopinga ščitijo “čiste” športnike	○	○	○	○	○

16. Ali ste zadovoljni s preventivnim protidopinškim programom ozaveščanja in informiranja SLOADO? *Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate. V primeru, da še niste imeli predavanja s strani SLOADO, to vprašanje izpustite.*

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. Na predavanju sem izvedel vse, kar mora trener vedeti o boju za čist šport	○	○	○	○	○
2. Razumem, kako poteka svetovni in nacionalni boj proti dopingu	○	○	○	○	○
3. Postopek kontrole dopinga je bil jasno predstavljen	○	○	○	○	○
4. V primeru, da bo moj športnik izbran za kontrolo dopinga, vem kako le-ta poteka	○	○	○	○	○

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
5. Postopek pridobivanja terapevtskih izjem (TI) je bil jasno predstavljen	○	○	○	○	○
6. V primeru, da bo moj športnik potreboval TI, vem, kako zanjo zaprosi	○	○	○	○	○
7. Lista prepovedanih snovi je bila razumljivo predstavljena	○	○	○	○	○
8. Zdravstvene posledice dopinga so bile jasno predstavljene	○	○	○	○	○
9. Pred predavanjem nisem vedel, da so zdravstvene posledice dopinga lahko tako hude	○	○	○	○	○
10. Tveganje za nenamerni doping je bilo jasno predstavljeno	○	○	○	○	○
11. Pred predavanjem nisem vedel, da obstaja tveganje za nenamerni doping	○	○	○	○	○
12. Predavatelji so bili razumljivi	○	○	○	○	○
13. Želel bi si več protidopinških predavanj	○	○	○	○	○

Osebna presoja na področju dopinga

17. Kakšno je vaše znanje in osebna presoja na področju dopinga?

Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. Kratkoročno uživanje anabolnih steroidov (npr. nekaj tednov) lahko škoduje zdravju	○	○	○	○	○
2. Dolgoročno uživanje anabolnih steroidov lahko škoduje zdravju	○	○	○	○	○
3. Kratkoročno uživanje (npr. nekaj tednov) hormona eritropoetin, (EPO) lahko škoduje zdravju	○	○	○	○	○
4. Dolgoročno uživanje hormona eritropoetin, (EPO) lahko škoduje zdravju	○	○	○	○	○
5. Kratkoročno uživanje (npr. nekaj tednov) rastnega hormona (GH) lahko škoduje zdravju	○	○	○	○	○
6. Dolgoročno uživanje rastnega hormona (GH) lahko škoduje zdravju	○	○	○	○	○
7. Kratkoročno uživanje (npr. nekaj tednov) protibolečinskih tablet lahko škoduje zdravju	○	○	○	○	○
8. Dolgoročno uživanje protibolečinskih tablet lahko škoduje zdravju	○	○	○	○	○
9. Tveganja in neželeni učinki dopinga pod zdravniškim nadzorom so majhna	○	○	○	○	○
10. Če se bi odločil, da svojim tekmovalcem priporočim določeno obliko dopinga, bi brez težav prišel do sredstev in informacij o uporabi	○	○	○	○	○

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
11. Razumem, da se športniki poslužujejo dopinga, kadar so popolnoma prepričani, da jim ne morejo dokazati krivde	○	○	○	○	○
12. Razumem, da se športniki poslužujejo dopinga	○	○	○	○	○
13. Tekmovalcem priporočam uporabo prehranskih dopolnil (vitamini, proteini, ...) in prepričan sem, da brez njih ne bi dosegali tako dobrih rezultatov	○	○	○	○	○

18. Kakšno je vaše mnenje o anonimni prijavi dopinga?

Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. Vem, kje in kako lahko podam anonimno prijavo	○	○	○	○	○
2. Anonimna prijava dopinga je pomemben del boja za čist šport	○	○	○	○	○
3. Če bi imel dopinške informacije o športniku ali članu spremljevalnega osebja, bi ga anonimno prijavil	○	○	○	○	○

19. Prostor za popravke, kritiko dela SLOADO in konstruktivne predloge:

Za sodelovanje se vam najlepše zahvaljujemo!

Doping je nevarnost, ki ogroža zdravje športnikov, načenja integriteto športa in vrednostni sistem, ki varuje pošten in čist šport. Med cilji delovanja Olimpijskega komiteja Slovenije, združenja športnih zvez je tudi boj proti dopingu. V ta namen je bila ustanovljena Slovenska antidoping organizacija SLOADO, ki izvaja usklajen in učinkovit program boja proti dopingu na področju odkrivanja, odklanjanja in preprečevanja dopinga v športu, ki temelji na zaščiti temeljne pravice športnika, da trenira in tekmuje v okolju brez dopinga.

Učinkovitost njenega delovanja, predvsem pa zaupanje športnikov in njihovih spremljevalcev v nacionalni program preprečevanja dopinga v športu je za OKS in čist šport velikega pomena in je temeljni namen vprašalnika, ki vam ga v nadaljevanju posredujemo.

Prosimo vas, da si vzamete čas in odgovorite na vprašanja, ki smo jih pripravili.

Navodila za izpolnjevanje vprašalnika

Prosimo vas, da najprej preberete vprašanja in možne odgovore ter z (✔) označite tiste odgovore, ki najbolj odražajo vaše mnenje.

Primer: Ali vas zanima področje pametnih telefonov?
Ocenite z oceno na lestvici od 1 do 5, pri čemer 1 pomeni, da vas to področje sploh ne zanima in 5, da vas zelo zanima.

sploh me ne zanima 1 2 ✔ 4 5 zelo me zanima

Opomba: Oznaka (kljukica) na številki 3 pomeni, da vas pametni telefoni zanimajo srednje. Prosim, da se vedno odločite samo za eno številko oz. odgovor in ga pregledno označite.

V primeru, da vam noben od ponujenih odgovorov ne ustreza povsem (ali pa vam ustreza več odgovorov), označite tistega, ki vam ustreza najbolj.

Obstaja možnost, da boste glede na predhodne odgovore morali določena vprašanja preskočiti (npr. če še niste nikoli imeli kontrole dopinga) – to je jasno zapisano pred vprašanjem.

Vprašalnik naj bo odraz vaših stališč in osebnega mnenja. Pri odgovorih zaupajte svojemu prvemu vtisu. Odgovarjajte hitro in po vrsti ter bodite pozorni, da katerega od vprašanj ne izpustite.

Kadarkoli je v vprašalniku uporabljen izraz zapisan v moški slovnični obliki, se uporablja kot nevtralni za moške in ženske. Vzrok za uporabo samostalnika moškega spola je poenostavitev in ne diskriminacija pripadnic ženskega spola.

Hvala za sodelovanje!

Demografski podatki

1. Spol:

- ◯ moški
- ◯ ženski

2. Starost (v letih):

3. Vaša glavna športna panoga? *(Prosimo, da navedete samo nadpomenke npr. atletika, nogomet, veslanje, ...)*
(Športniki invalidi zapišejo: šport invalidov)

4. Kako dolgo nastopate na tekmovanjih navedene športne panoge?

- ◯ Manj kot leto dni (oz. sezono)
- ◯ 1 ali 2 leti (oz. sezoni)
- ◯ Več kot 2 leti, a manj kot 5 let (oz. sezon)
- ◯ Pet let ali dlje (oz. sezon)

5. Najvišja stopnja tekmovanj, ki ste se jih udeležili:

- ◯ Olimpijske oz. Paraolimpijske igre
- ◯ Svetovno prvenstvo
- ◯ Evropsko prvenstvo
- ◯ Državno prvenstvo oz. prva državna liga
- ◯ Regionalna tekmovanja

6. Vaš največji športni uspeh do zdaj?

- ◯ Uvrstitev na enega od zgoraj naštetih tekmovanj
- ◯ Medalja ali naslov na regionalnih tekmovanjih
- ◯ Medalja ali naslov na državnem prvenstvu oz. v prvi državni ligi
- ◯ Medalja ali naslov na Evropskem prvenstvu
- ◯ Medalja ali naslov na Svetovnem prvenstvu
- ◯ Medalja ali naslov na Olimpijskih oz. Paraolimpijskih igrah

Uvodna vprašanja

7. Ali ste bili kdaj izbrani za kontrolo dopinga? Če je odgovor da, koliko kontrol dopinga ste imeli v zadnjih 12 mesecih?

- [ ] Ne
- [ ] Da
- [ ] Število kontrol v zadnjih 12 mesecih:

8. Ali ste se kdaj udeležili preventivnih protidopinških programov ozaveščanja in informiranja, ki jih je organizirala vaša zveza, šola oz. SLOADO? Če je odgovor da, kolikokrat v zadnjih 12 mesecih?

- [ ] Ne
- [ ] Da
- [ ] Koliko programov ozaveščanja in informiranja ste se udeležili v zadnjih 12 mesecih?

9. Kakšen je vaš osebni odnos in pristop do športa?

Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. S športom se ukvarjam, ker se rad gibam	○	○	○	○	○
2. S športom se ukvarjam, ker bi rad postal slaven	○	○	○	○	○
3. S športom se ukvarjam, ker se tako preživljam	○	○	○	○	○
4. S športom se ukvarjam, da bi zaslužil veliko denarja	○	○	○	○	○
5. S športom se ukvarjam, da preizkušam svoje meje	○	○	○	○	○
6. Po zaključeni tekmovalni karieri nameravam nadaljevati kariero kot trener, član spremljevalnega osebja ali športni funkcionar	○	○	○	○	○

10. Kakšno je vaše osebno mnenje o razvoju športa?

Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. Vodilo “zmagati za vsako ceno”, je v vrhunskem športu zadnja leta bolj izrazito čutiti	○	○	○	○	○
2. V vrhunskem športu je skušnjava po dopingu zadnja leta narasla	○	○	○	○	○
3. V rekreativnem športu je skušnjava po dopingu zadnja leta narasla	○	○	○	○	○
4. Ker je v nekaterih športnih panogah zadnja leta mogoče zaslužiti veliko denarja, je narasla tudi nevarnost dopinga, korupcije in drugih goljufij	○	○	○	○	○
5. Fair-play je v zadnjih letih pridobil na pomenu	○	○	○	○	○
6. Vrhunski šport brez športne medicine danes ne more obstajati	○	○	○	○	○

Delovanje SLOADO in viri informacij

11. Kakšen je vaš osebni odnos do SLOADO – nacionalne protidopinške organizacije?
Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. SLOADO je pomemben del športnega sistema	○	○	○	○	○
2. SLOADO omejuje športnike pri doseganju najboljših rezultatov	○	○	○	○	○
3. SLOADO je neodvisna organizacija	○	○	○	○	○
4. SLOADO ščiti “čiste” športnike	○	○	○	○	○
5. SLOADO pomaga pri spremembi miselnosti o dopingu	○	○	○	○	○
6. SLOADO je organizacija, vredna zaupanja	○	○	○	○	○
7. SLOADO je dobrodošla podpora	○	○	○	○	○
8. SLOADO bolje in hitreje obvešča večje športne zveze	○	○	○	○	○

12. Kako dobro ste obveščeni o delovanju SLOADO ter kako ste zadovoljni s podajanjem informacij?
Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. Ko iščem informacije o protidopinških ukrepih, mi pri tem pomagajo informacije, ki jih ponuja SLOADO (spletna stran, FB,Twitter itd.)	○	○	○	○	○
2. Menim, da sem o posledicah dopinga zadostno informiran	○	○	○	○	○
3. Spletna stran SLOADO je pregledna in razumljiva	○	○	○	○	○
4. Seznanjen sem z Listo prepovedanih snovi in postopkov na spletni strani SLOADO	○	○	○	○	○
5. Želim si, da bi imela SLOADO aplikacijo za preverjanje zdravil	○	○	○	○	○
6. Informacije, ki jih nudi SLOADO, mi zadostujejo	○	○	○	○	○

13. Od koga oziroma od kje pridobivate informacije, ki jih imate na področju dopinga?
Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate (možnih je več odgovorov).

	Spletna stran SLOADO	Trener	Spremljevalno osebje	Športni funkcionar	Starši oz. skrbniki	Drugi športniki	Mediji (internet, tv)	Drugi viri
1. Informacije o protidopinških pravilih pridobivam od	☐	☐	☐	☐	☐	☐	☐	☐
2. Informacije o prepovedanih snoveh pridobivam	☐	☐	☐	☐	☐	☐	☐	☐
3. Informacije o poteku odvzema vzorca pridobivam	☐	☐	☐	☐	☐	☐	☐	☐
4. Informacije o zdravstvenih posledicah dopinga pridobivam	☐	☐	☐	☐	☐	☐	☐	☐
5. Informacije o pravnih posledicah dopinga pridobivam	☐	☐	☐	☐	☐	☐	☐	☐
6. Informacije o delovanju SLOADO pridobivam	☐	☐	☐	☐	☐	☐	☐	☐

14. Ali ste zadovoljni s ponudbo informacij in delovanjem SLOADO?

Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. SLOADO me pravočasno obvešča o spremembah pravil, prepovedih ter posledicah	○	○	○	○	○
2. S količino informacij, ki jo posreduje SLOADO sem zadovoljen	○	○	○	○	○
3. Pri SLOADO bi želel direktnega sogovornika	○	○	○	○	○
4. Želim si, da bi SLOADO pošiljal posebne elektronske novice za športnike	○	○	○	○	○
5. Športniki morajo biti o preventivnih protidopinških ukrepih obveščeni kar se da hitro	○	○	○	○	○
6. Športniki, ki tekmujejo v članski konkurenci, bi se morali udeležiti protidopinških predavanj vsako leto	○	○	○	○	○

Programi SLOADO

15. Ali ste zadovoljni s programom testiranj SLOADO?

Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate. V primeru, da še niste imeli kontrole dopinga s strani SLOADO, na podvprašanja 1 do 7 ne odgovorite.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. S pogostostjo kontrol dopinga sem zadovoljen	○	○	○	○	○
2. Kontrole dopinga me v mojem vsakdanu omejujejo	○	○	○	○	○
3. Pri kontrolah dopinga sem imel občutek, da gre za vdor v mojo zasebnost	○	○	○	○	○
4. Uradniki za kontrolo dopinga so bili pri svojem delu prijazni in korektni	○	○	○	○	○
5. V okviru izobraževanj so mi razložili postopek kontrole dopinga še preden sem bil prvič testiran	○	○	○	○	○
6. Zavedam se, da lahko morebitne napake pri testiranju anonimno prijavim na SLOADO	○	○	○	○	○
7. Delo SLOADO poteka na visoki kvalitativni ravni	○	○	○	○	○
8. Želim si strožje kazni pri kršitvah protidopinških pravil	○	○	○	○	○
9. SLOADO je zaupanja vredna organizacija, do katere lahko kadarkoli pristopim z zaupnimi informacijami	○	○	○	○	○

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
10. S kazenskimi posledicami bi se morali soočiti ne samo v primeru posedovanja, prekupčevanja in posredovanja prepovedanih snovi, temveč tudi v primeru uporabe	○	○	○	○	○
11. Polnoletni športniki bi se morali sami odločiti ali se bodo posluževali dopinga ali ne, zunanji nadzor ni potreben	○	○	○	○	○
12. Mislim, da se protidopinška pravila pri nas izvajajo strožje in smo zato v mednarodni primerjavi oškodovani	○	○	○	○	○
13. Kontrole dopinga so postale potreben del vrhunskega športa	○	○	○	○	○
14. Kontrole dopinga ščitijo “čiste” športnike	○	○	○	○	○

16. Ali ste zadovoljni s preventivnim protidopinškim programom ozaveščanja in informiranja SLOADO?
Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate. V primeru, da še niste imeli predavanja s strani SLOADO, to vprašanje izpustite.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. Na predavanju sem izvedel vse, kar mora športnik vedeti o boju za čist šport	○	○	○	○	○
2. Razumem, kako poteka svetovni in nacionalni boj proti dopingu	○	○	○	○	○
3. Postopek kontrole dopinga je bil jasno predstavljen	○	○	○	○	○
4. V primeru, da bom izbran za kontrolo dopinga, vem kako le-ta poteka	○	○	○	○	○

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
5. Postopek pridobivanja terapevtskih izjem (TI) je bil jasno predstavljen	○	○	○	○	○
6. V primeru, da bom potreboval TI, vem, kako zanjo zaprositi	○	○	○	○	○
7. Lista prepovedanih snovi je bila razumljivo predstavljena	○	○	○	○	○
8. Zdravstvene posledice dopinga so bile jasno predstavljene	○	○	○	○	○
9. Pred predavanjem nisem vedel, da so zdravstvene posledice dopinga lahko tako hude	○	○	○	○	○
10. Tveganje za nenamerni doping je bilo jasno predstavljeno	○	○	○	○	○
11. Pred predavanjem nisem vedel, da obstaja tveganje za nenamerni doping	○	○	○	○	○
12. Predavatelji so bili razumljivi	○	○	○	○	○
13. Želel bi si več protidopinških predavanj	○	○	○	○	○

Osebna presoja na področju dopinga

17. Kakšno je vaše znanje in osebna presoja na področju dopinga?

Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. Kratkoročno uživanje anabolnih steroidov (npr. nekaj tednov) lahko škoduje zdravju	○	○	○	○	○
2. Dolgoročno uživanje anabolnih steroidov lahko škoduje zdravju	○	○	○	○	○
3. Kratkoročno uživanje (npr. nekaj tednov) hormona eritropoetin, (EPO) lahko škoduje zdravju	○	○	○	○	○
4. Dolgoročno uživanje hormona eritropoetin, (EPO) lahko škoduje zdravju	○	○	○	○	○
5. Kratkoročno uživanje (npr. nekaj tednov) rastnega hormona (GH) lahko škoduje zdravju	○	○	○	○	○
6. Dolgoročno uživanje rastnega hormona (GH) lahko škoduje zdravju	○	○	○	○	○
7. Kratkoročno uživanje (npr. nekaj tednov) protibolečinskih tablet lahko škoduje zdravju	○	○	○	○	○
8. Dolgoročno uživanje protibolečinskih tablet lahko škoduje zdravju	○	○	○	○	○
9. Tveganja in neželeni učinki dopinga pod zdravniškim nadzorom so majhna	○	○	○	○	○
10. Če se bi odločil za doping, bi brez težav prišel do sredstev in informacij o uporabi	○	○	○	○	○

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
11. Razumem, da se športniki poslužujejo dopinga, kadar so popolnoma prepričani, da jim ne morejo dokazati krivde	○	○	○	○	○
12. Razumem, da se športniki poslužujejo dopinga	○	○	○	○	○
13. Uporabljam prehranska dopolnila (vitamine, proteini, …) in prepričan sem, da brez njih ne bi dosegal tako dobrih rezultatov	○	○	○	○	○

18. Kakšno je vaše mnenje o anonimni prijavi dopinga?

Označite (✔) pri vsakem odgovoru glede na to, v kolikšni meri se z njim strinjate.

	Sploh se ne strinjam	Večinoma se ne strinjam	Deloma se strinjam	Večinoma se strinjam	Popolnoma se strinjam
1. Vem, kje in kako lahko podam anonimno prijavo	○	○	○	○	○
2. Anonimna prijava dopinga je pomemben del boja za čist šport	○	○	○	○	○
3. Če bi imel dopinške informacije o sotekmovalcu ali članu spremljevalnega osebja, bi ga anonimno prijavil	○	○	○	○	○

19. Prostor za popravke, kritiko dela SLOADO in konstruktivne predloge:

Za sodelovanje se vam najlepše zahvaljujemo!

NOTES


NADA
AUSTRIA


EAD
Estonian Anti-Doping Agency


SLOADO
SLOVENSKA ANTIDOPING ORGANIZACIJA
SLOVENIAN ANTI-DOPING ORGANISATION