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Theoretical and Methodological Aspects on Doping Phenomenon in Elite Athletes

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Abstract

In a sports world where the trend to obtain high performance by any means is increasing, the National Anti-Doping Agency assumes an active role in initiating and developing educational programs aimed to prevent doping substances use. The educational programs can achieve their purpose only by learning the mechanisms underlying athletes’ trend to consume these substances and by proposing coherent and consistent solutions in order to prevent the occurrence of such behaviors. In this paper, we intend to emphasize the research methodology applied by ANAD in order to establish the pattern of risk factors on doping substances use in athletes.

Keywords: sport; anti-doping; athletes; ethics; personality.

1. Introduction

The phenomenon of using prohibited substances by athletes, with the purpose of artificially increasing the performance is rooted in antiquity and it strongly plays out nowadays, supported and feed by the professional sport, which became a trade and a public issue.

According to the humanist psychology, the individual is free to decide over his life, being capable of taking decisions and of self-commanding. The efforts towards a clean sport taken by the militants, including us, should be

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grounded on a good knowledge of the athletes’ personality features and the entourage influences’ impact over them. This approach is the premise of ANAD educational campaigns, whose main objective is to reduce and, ultimately, to eliminate doping from all sport disciplines. (Vâjială, 2007)

Risk factors are risk associated variables, in terms of probability, meaning that one or more variables may represent, in some situations, inputs for a deviant behavior of using prohibited substances, in athletes’ case.

Risk of adopting an anti-sportive attitude. "Who doesn’t take risks, doesn’t win" could be the slogan of some athletes who want to win the competition of the others’ appreciation with any costs. Searching the risk appears to be a particular feature of many “super” athletes. It is an attitude for confronting a “challenge” addressed by nature or by the technologized and artificialized condition of space, time or psychic-behavioral barriers while, in case of those who are tempted to use doping, by the frustrations of the relevant interdictions. (Epuran, Holdevici, Tonita, 2001)

The athletes who use doping substances are facing severe sanctions if they are found during doping controls, such as a time limited ineligibility or even lifetime ineligibility. The question is: why some athletes develop favorable attitudes towards using prohibited substances, why they accept the competitors who use doping, why they appeal to such practices? Usually, we are looking the explanation in the motivation of such behavior, in the sport related motivational psychology, in the cognitive mechanisms of the decision and in the determinant factors. The complete knowledge of the causes is more difficult, as it is obvious the presence of multiple factors involved in the phenomenon – individual, social-collective, cultural and situational factors. (Epuran, 2007, Vâjială et al., 2009)

Trying to understand the causes and conditions which have favored the dishonest practices of some athletes led to the formulation of some hypothesis, among which the one of the risk factors in doping seems to be the most appropriate and productive. The risk of being a victim (getting ill, physical and psychic degradation) is due to some specific influences exerted by different personal, social and situational factors, which may operate individually or by association, even multiple association. Some factors may operate concurrently, the winners being the ones with heavier weight and more powerful statistic and subjective significance. (Epuran, 2007, Vâjială et al., 2007)

The model “Risk and protection factors” has been developed by Find Youth Info (2009) within the program Tool Risk Factors, where he risk factors are also presented under the aspect or risk avoiding. Risk factors and protection factors are structured on five categories: * Individual; * Familial; * Scholastic; * Group of colleagues; * Community. The factors of this model are psycho-socially determined, including particularly anti-social behaviors, drugs’ acceptance, intellectual disabilities, low educational level of the parents, inappropriate scholastic climate, etc. In 2000, Linn Goldberg has proposed the introduction in USA of the educational program ATLAS/ Athletic Training and Learning to Avoid Steroids (Goldberg et al., 2000).

The Model Petroczi - Aldman (2008). The authors consider that risk factors are included in three categories:
1. Personality Factors (performance increase, commitment, reduced self-esteem, intensified anxiety);
2. Systematic Factors (motivational climate, authority structure), and
3. Situational Factors (interaction of the group members, role models, ambient factors).

Some personality factors may operate as inhibitors of doping practice (for example, a solid self-esteem, law awareness and tendency to take risks.) (Petroczí, Aldman, 2008)

The Model Wiefferink et al. (2006). The authors have initiated a behaviorist model, by using Ajen’s Theory of Planned Behavior and Bandura’s Self-efficacy Theory as doping determinant models. The integration of these two theories leaded the authors to three important constructs, which explain this behavior: attitudes, social influences and self-efficacy. In Wiefferink et al. Model, these constructs are influenced by basic variables such as: knowledge, personal goals, sport features and demographic features. (Wiefferink, Detmar, de Hon, Vogels, Paulussen, 2006)

The Model Strelan and Boeckman (2003). This model is based on the application of the intimidation theory, as explanation of using drugs for illegally enhancing the performance (DCP). The theory considers that the athlete’s decision to use DCP is a consequence of intimidation analysis (for example, sanctions) in relation with the benefits (for example, sponsorships), balanced by situational factors (for example, the type of drug or the perception of its extension). The empiric testing of this theory has confirmed the fact that the model has the merit of explaining the psychological factors, on which the athlete’s decision to use DCP is based. (Strelan, Boeckman, 2006)

Many models and theories that are trying to explain the way of using drugs in sport are limited to the athlete’s decision based on the costs and social-economic benefits of using these substances. However, this limitation narrows the debates on how sanctions could end this phenomenon. The authors suggest that by enlarging the
debates, the researches should include the examination of the context where drugs use appears and should unveil the situations where the presumptions, values and benefits that facilitate doping in sport are produced.

In view of this purpose, the authors have developed models of using drugs in sport, which combine the athlete’s micro-orientations and interpersonal behavior with the macro-orientation, structure and culture of the sport context. They use these contextualized methods to put face to face the policy of reducing doping use and the policy of minimizing its harmfulness. This allows athletes and sport organizations to control the use of doping and to encourage the competitions to take place in a safe and healthy environment.

2. Paper statement

2.1. Aim

With this paper, we intend to highlight the particularities of the research methodology applied with the aim of becoming aware of the risk factors for doping behavior in elite sport.

2.2. Risk factors models

For becoming aware of the doping phenomenon in Romania, we have started from analyzing the specific literature and developing a hypothetic-deductive model of risk factors for the intention and use of prohibited substances, which includes three groups of very complex elements: athlete’s personality, entourage and social conditions, specific sport situations (ANAD Model – Table 1). The latest elements are constituted as complex incentives operating simultaneously over the individual’s personality. The action of these incentives may be additive, with different weights. Some of them shall operate even in opposite directions, producing interference mechanisms such as the conflict between the family’s moral attitude and the opposite influences of friends, between the intention to cheat and the awareness regarding the unpleasant consequences. The risk factors described with negative connotation may be also analyzed with positive connotation, thus becoming factors for protection and adequate development of athletes’ behavior. (Epuran, 2007; Berbecaru et al., 2008; Potzaichin et al., 2008; Vâjială et al., 2009)

Table 1. ANAD Risk factors model

<table>
<thead>
<tr>
<th>1. Individual</th>
<th>2. Social</th>
<th>3. Situational</th>
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<tbody>
<tr>
<td>1.1 Personality types and features</td>
<td>2.1 Affiliation group</td>
<td>3.1 Competition and performance need</td>
</tr>
<tr>
<td>1.2 Performance motivation</td>
<td>2.2 Social ambience – mass-media, civil society</td>
<td>3.2 Rivalry, seen as a threat</td>
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<tr>
<td>1.3 Self-perception</td>
<td>2.2 Social ambience – mass-media, civil society</td>
<td>3.3 Uncertainty factors of the competition area</td>
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<td>1.4 Specific attitudes</td>
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<td>1.5 Level of culture and education</td>
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Starting from this model, there have been identified the main investigation tools able to provide information on its components, respectively the risk factors of doping behavior on athletes of different sport disciplines.

2.3. Research methodology

Our research represented a first social-human approach developed with the aim of understanding doping phenomenon. Its importance results from the perspective over the particularities of the Romanian sport environment,
the athletes’ motivations towards doping behaviors and the perception of doping as a practice for enhancing sport performance.

Subjects
The research was conducted in 2007 – 2009 and it consisted in applying a series of research instruments on 1383 athletes (aged from 14 - 30 years), from different sport disciplines, most of them with insignificant sport results. It was based on the combined use of two different methodologies – a qualitative one and a quantitative one.

Methods
The research instruments below were used in compliance with the elements composing the ANAD model of risk factors analysis:

- Type A and Type B Behavior Questionnaire (Mirabeal, 1986, quoted by Levy-Leboyer, 1993)
- Toughmindeness/ Tendermindeness Questionnaire (Eysenck, Wilson, 1985)
- Profile of Mood States (POMS) Questionnaire (McNair et al., 1992)
- The scale of self-conscience (Fenigstein,1984)
- Questionnaire for athletes (signaletic data, attitudes)
- Questionnaire for coaches (signaletic data, attitudes)

On theoretical level, in relation with our "model", the application of these tools allowed to establish relations between the athletes’ personality features and the entourage’s attitudes, information, decisions and influence.

2.4. Results

The analysis of the results achieved following the questionnaires application has been conducted correlatively, depending on age and performances. This approach has leaded to the identification of some specific elements of the doping phenomenon in our country.

The use of doping substances represents a temptation not only for juniors but also for seniors, mostly in situations of over-average tension and depression. These prohibited methods and means may be used both by athletes ranked on the first three positions in national and international competitions and athletes with lower results.

We may state that athletes with results on international level are less exposed to the risk of using prohibited substances. However, accentuated momentary states could lead to such decisions in athletes with lower results.

The use temptation is equal both among juniors and seniors, and particularly among athletes with lower results, who believe that the other competitors appeal to such prohibited substances. Regardless the result achieved until now, juniors are more exposed then seniors to the risk of using doping substances when they get the physician’s approval and when their teammates encourage them to do so.

The athletes who experience a great influence from the coach or the physician are tempted to use prohibited substances when they show over-average states in relation with the tension-anxiety and depression-dullness factors.

Having the parents’ consent, the juniors are more tempted to use prohibited substances, due to a greater influence of the family at this age. This influence is greater among the juniors who show accentuated momentary psychic states – tension, depression, exhaustion, anger.

20% of the athletes accepting to compete with those using doping are also tempted to use prohibited substances. The A type of personality is predominant, as it registers over-average values for the tension-anxiety and depression-dullness factors, particularly among senior athletes.

The senior athletes show a lower opposition towards the use of doping substances. This fact is also seen among the athletes ranked on the first three positions in national and international competitions. These athletes, with A or AB type of personality, show psychic states with values over the group average in terms of tension, depression, anger, exhaustion, confusion. Due to their experience, the senior athletes get to know coaches who incite to use doping substances. When confronted to such situation and having A type of personality features, senior athletes might think to use prohibited substances, in conditions of over-average tension, depression, anger or exhaustion.

Given the fact that up to the date of this research there weren’t any studies in Romania to investigate the use of prohibited substances from the perspective of a similar conceptual model, we might state that the results represent new, original and very important references to be taken into account by coaches and other sport specialists in the training process.
3. Conclusions

The main conclusion of our research confirms, in general, the enounced hypothesis, i.e. that elements of the athletes’ personality structure and social ambience may represent risk factors for doping behavior. Decisions on intentional doping are limited in relation to the set of individual, social and situational variables. Having powerful significance, the risk factors for doping behavior are found within the personality features system, particularly in the field of attitudes, knowledge and moral beliefs, all of them being linked to the specific aspects of practice and sport entourage.

The idea that the Romanian athletes’ A type of personality features represent risk factors is not sufficiently confirmed. During the initial formulation of the research tasks, we have presumed an equal weight between A type personality features, other personality features and social-ambient factors as potential risk for some athletes in relation with doping behavior. The analysis of collected data has revealed that the most important risk factors are the attitudes, while the intimate, temperamental and less conscious structures are less relevant in this regard.

The attitudes complex constituted of social-ambient influences, particularly the entourage (teammates, coach, physician, parents) and of specific sport situations experienced by the subjects is of utmost importance for our theme. Both from behavioral and actional point of view, the subjects – athletes, coaches, physicians – reject doping. The critical analysis of risk factors should determine us to change them, through relevant educational means, in factors for preventing and rejecting doping in sport. Starting from these results, ANAD designs its educational campaigns and endeavors towards preventing the use of prohibited substances in sport.

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References


