

## PERSONALITY FACTORS AFFECTING IN DOPING BEHAVIOR OF ATHLETES

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### Abstract

**Problem Statement:** Understanding the phenomenon of doping from a psychological perspective may lead to learning a new dimension of some factors that may influence the athletes' behavior towards fair-play attitudes. **Purpose of the Study:** The main purpose of this study was to assess the possible correlations between psychological factors and doping behavior. **Research Methods:** The sampling was a simple random multi-strata cluster type pattern with random circulation. 500 athletes participated to this study (aged 14–28) and have been practicing sport for an average of 8.74 years. Type A and Type B Behavior Questionnaire and Tough-mindedness/Tender-mindedness were used in this study. All questionnaires have been processed in SPSS. **Findings:** Calculation of correlation coefficients did reveal significant values between the scores resulted in the type of personality AB. The Eysenck-Wilson questionnaire noticed that values greater than the average occur on the group's level, which shows a certain feature as predominant. **Conclusions:** The personality structure of the athletes to the research is featured by average values and the items of the applied tests, with plus and minus variations depending on the age or the experience in sport activity. Assertiveness and masculinity are expressed on superior level.

*Keywords:* Personality factors, doping behavior, athletes

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## **1. Introduction**

Understanding the phenomenon from an inter-disciplinary perspective may lead to learning a new dimension of the doping phenomenon, of some mechanisms and factors that may influence the athletes' behavior towards fair-play attitudes. Obtaining this information about doping phenomenon by the research performed on the athletes in Iran allows that operational structures to build a scientific base for the educational interventions.

The science of psychology considers personality the largest and the most complex concept. The human personality is a hyper complex system of functions, processes and psychic mechanisms, expressed in consciousness, thinking, memory, attention, communication, affectivity, motivation, will and its actions usually unitary in behavior adequate to one's own needs and to keep the balance with the social-cultural ambiance. Radovanovici, Jovanovic, and Rankovic, (1998) made a list of the reasons of doping use:

- a. Professional athletes: 1. doping exists and is an advantage for the performance; it is easy to purchase the substances; the legal background shows holes; addiction may be added; 2. reasons related to athlete's personality: personality's structure, discontent related to inefficiency and lack of progress, attempts of coping with anxiety and stress, belief that others use doping too, incomplete ethical values, under other people's influence, lack of self confidence, not knowing the side effects. 3. reasons coming from athlete's environment: coaches, family, friends, audience, supporters, mass-media, society, financial and material benefits, national and politic grounds etc.
- b. Amateur athletes: - some of the above-mentioned might be less significant or absent – unsatisfactory perception over the physical appearance; fight to become exceptional (macho), small progress of the results.

Type A Behavior Pattern is specific to that group of subjects, who share a well-structured behaviors' ensemble, which characterizes their way of understanding the daily life, a behavior that is marked particularly by the competition spirit, eagerness for social or professional success, hyperactivity, impatience, time compressing feeling and tension translated into the facial mimicry, which could be interpreted as hostility towards the others. Type B is opposed to Type A (Levy-Leboyer, 1993).

The targets of the educational interventions will be: high level amateur and professional athletes. The main purpose of this project was to assess the athlete's psychological factors towards the use of substances.

### *1.1. Structure of personality*

The psychological literature treats personality from different points of view. One is the one of structure, considered as having cognitive, affective-motivational, learning components, adaptive and development mechanisms, communication, moral development, intelligence and decision etc. There is another point of view, the one of the personologists who study the diachronic of personality development and the theories characterizing it, focusing on individual's traits and attributes. Supporters of behaviorism, dynamic psychology, the psychology of self, cognitivism, humanism, and phenomenology described many aspects of the hyper complex system that is human personality.

In our research theme we have decided to focus on the fundamental personality structure, especially on the theories of traits and types (Eysenck & Wilson, 1985) and Friedman and Rosenman (1974) and the way these interact with the social environment.

### *1.2. The personality of elite athletes*

The question asked in the middle of last century related to whether sport develops specific traits in the performer, or these are structured in his private structure hasn't been answered yet categorically. Many decades of researches revealed that elite athletes are characterized by some "stressed" traits, such as:

- Reduced pro-social behavior (such as giving help or cooperation) and increased anti-social tendencies. Both tendencies are affected especially by defeats. (Barnett & Bryan);

- Irrational rivalry (Kagen & Madsen, 1971);

- Reduced altruism and lack of fair-play, values subordinated to victory as experience in sport enriches (Web). Based on the results provided by the authors quoted above, Thelma Horn (1992) went to the following conclusion: "Therefore, literature shows that practicing sport leads to increased rivalry attitudes and anti-social behavior and does not build "characters" or personality traits valuable from the social point of view. This dark image has the power to draw our attention on the importance of educating the athletes as some of them live a risky life, for victory "no matter the costs" because of a supra-motivation supported by ambient factors with no cultural value.

In a few words each athlete is unique, with singular characteristics, with typical, common traits in his structure. Some of these traits may constitute risk factors for the use of prohibited substances. The traits characterizing the subjects with a strong Type A personality are:

1. Purpose orientation: individuals tend to be very critical and exigent with respect to their own objectives, without resenting, as compensation, the pleasure of the efforts made or

fulfilled. At the same time, they are characterized by a particular work commitment; 2. Pressure and emergency feeling: the individuals are permanently on time trial. Very often, they become impatient when the work rhythm is slowing or the agenda is changing. They are inclined to plan the works' final stages in a much to short time and try to accomplish multiple activities simultaneously; 3. Anger / hostility: Type A individuals tend to have anger or hostility feelings, which are not explicitly shown; 4. Fear of failure (Baron, Russell, & Arms, 1985; Carver & Glass, 1978; Chesney, Frautschi, & Rosenman, 1985; Friedman & Rosenman, 1974; Jenkins, 1976).

In addition to the traits above, Wiefferink et al. (2006) suggests another two factors that might contribute to Type A behavior pattern: the stress and the consolidation of some previous success attitudes, which might generalize and transform into behavioral archetypes that will be applied by the subject in domains that normally do not require a maximal resources' concentration, such as the recreative activities. Thus, the tension felt by the subjects with a strong Type A behavior is much bigger in comparison with other subjects in similar conditions. Also, Eysenck and Wilson (1985) show that the individual belongs to a class both attitudinal and behavioral and underlines traits we find in Type A of personality, among which the most significant are: aggressiveness, assertiveness, achievement orientation, manipulation, sensation seeking, dogmatism, and masculinity.

## **2. Method**

The sampling was a simple random multi-strata cluster type pattern with random circulation. Each member of the studied population is affiliated to a group or cluster than the clusters were selected randomly and all the members of the selected cluster were included in the pattern. The sociological research was performed on a pattern representative for the sport population in Iran. The pattern was different pending on the applied questionnaires. 500 athletes participated to this study (aged 14– 28) and have been practicing sport for an average of 8.74 years. Type A and Type B Behavior Questionnaire (Mirabeal, 1986) and Tough-mindedness/Tender-mindedness (Eysenck & Wilson, 1985) were used in this study. All questionnaires have been processed in SPSS.

The scores of the test AB. (Walker - Brokaw) reveal: 1 - 47 - Extreme Type B; 48- 94 - Type B; 95-141 - Both Type A and Type B; 142-188 - Type A; 189-235 - Extreme Type A. Generally, a score greater than 20 is Type A; a score less than 120 is Type B The analysis of the results reveals the following aspects. The scores obtained by the athletes on the test AB revealed an average of  $x=142.52$  points, which places the athletes within the area of both type

A and B of personality, preponderantly towards A. The table 1 shows the statistical indexes for the whole investigated population.

**Table 1.** The values of statistical indexes for the test AB

| Mean   | Variability | Std. deviation | Skewness | Kurtosis |
|--------|-------------|----------------|----------|----------|
| 142.52 | 12.26%      | 16.68          | .359     | 1.235    |

Calculation of correlation coefficients did not reveal significant values between the scores resulted in the type of personality AB and the results in competition or when sport was practiced, which enforces the idea that sport performance is determined by many factors. At the same time, there are not significant correlations with education level or the county of origin. Therefore, we may state that typology A or B does not depend on environment factors.

The original test suggests the following average scores of the seven scales: Aggressiveness - 12,5; Assertiveness - 15,5; Achievement - orientation - 14,5; Manipulation - 12,5; Sensation - seeking - 15,5; Dogmatism - 14,5; Masculinity - 11,5. As for the personality features revealed by the questionnaire Eysenck Wilson, it is noticed that values greater than the average occur on the group's level, which shows a certain feature as predominant.

**Table 2.** The values of statistical indexes for the questionnaire Eysenck-Wilson

|                | Aggressiveness | Assertiveness | Achievement | Manipulation | Sensation | Dogmatism | Masculinity |
|----------------|----------------|---------------|-------------|--------------|-----------|-----------|-------------|
| Mean           | 12.30          | 17.06         | 16.68       | 12.12        | 12.48     | 13.46     | 12.88       |
| Variability    | 27.00%         | 18.83%        | 19.67%      | 26.04%       | 28.32%    | 19.60%    | 30.05%      |
| Std. deviation | 3.83           | 3.42          | 3.49        | 3.51         | 3.82      | 2.84      | 4.18        |
| Skewness       | .160           | -.278         | -.238       | .173         | -.187     | -.050     | -.116       |
| Kurtosis       | -.191          | .149          | .114        | .104         | -.227     | -.088     | -.508       |

The assertive behavior is characterized by the fact that neither personal rights nor the rights of the others are breached in communication, the subjects expressing his needs, wishes, feelings and preferences in an open and honest way, in a social adequate manner. The assertive behavior proves self-esteem and the esteem for the others, promotes self-development, self-control and the positive appreciation of self-value. Most of the subjects have an assertive behavior (77% of the subjects). The distribution of data show a behavior oriented preponderantly towards the purpose. Most of the athletes have this behavior no matter the age, sport category, sport discipline or how long they have been practicing it, county or education level.

Manipulation is the action when a social actor (person, group, collectivity) is made to think and/or act in a way compatible with the initiator's interests, not with his own interests, by the use of persuasion' techniques, bending the truth under the impression of freedom of thinking and decision making. The difference between manipulation and persuasion is that in case of manipulation, the manipulated one is unaware of the intention of the one using this process. This type of behavior characterizes 26.04% of this research population. The average of the pattern has the value of  $x=12.12$  and is situated in the area of the same type, while the median and the module are on the edge between manipulation and empathy. The values in table 2 show a trend towards manipulation also in the persons who have the capacity to put themselves into another's shoes.

Sensation-seeking is a feature defined by looking for various, new, complex and intense experiences and feelings and taking physical, social, legal and financial risks aiming to live such experiences (Zuckerman, 2001).

By measuring "looking for sensations" and "looking for new" strong connections were done with the antisocial behavior, anti-social behavior and the abuse of substances (Zuckerman & Cloninger, 1996). This type of behavior characterizes only 28.32% of the investigated athletes. Most of the athletes reject an adventurous lifestyle, as the statistical data in table no. 2 show.

The dogmatic is a person characterized by rigidity and simplicity, with a mechanic or schematic behavior. The persons on the opposite pole are characterized by flexibility, having the capacity to adapt easily to new situations. These two typologies are equally seen in Iranian athletes. The group's average ( $x=13.46$ ) is also situated between the two types of behavior. As for the sport category, there are significant differences between junior athletes' trend towards dogmatism and senior athletes' trend towards flexibility.

Masculinity vs. Femininity is bended towards aggressiveness and characterized by interests of development exploration, holding the feelings' expression and low sensibility. The distribution of data shows the same low trend towards weaknesses and any type of sentimentalism – the curve of data distribution is oriented towards right and still.

### **3. Conclusion**

The main conclusion of this research confirms in general the formulated hypothesis that the element of the athletes' personality structure may represent risk factors for the doping behavior. The idea that the features of Type A of personality of Iranian athletes are part of the risk factors category is not confirmed well enough.

The personality structure of the athletes to the research is featured by average values and the items of the applied tests, with plus and minus variations depending on the age or the experience in sport activity. Assertiveness and masculinity are expressed on superior level. Most of the subjects show less aggressive trends (pacifism), reject adventurous lifestyle (sensation seeking, or risk taking) while their public self-consciousness is not involved in the relationships with others. Juniors trend towards dogmatism, they are less distract, while the seniors trend towards flexibility and they are more distract.

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