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DIFFERENCES IN SOME PERSONALITY TRAITS BETWEEN VOLLEYBALL AND FOOTBALL PLAYERS

Zoran Savić[1], Slađan Karaleić[1], Goran Nešić[2]

[1]Faculty of Sport and Physical Education, University of Pristina
[2]Faculty of Sport and Physical Education, University of Belgrade

Abstract

Scientific approach is used to study a man's personality, abilities and other characteristics, their interrelations, as well as the structure of numerous factors of the anthropological status necessary for success in sport. It is very important that children, during their first years in sports, are directed to practice those sports which match their psychosomatic status and in which they will achieve the best results. It is impossible in kinesiology and anthropology to measure those factors which are necessary for success in sports directly, but we deduce from Weg indicators, i.e. reactions, about them. It implies that science (kinesiology, anthropology, and others) is responsible for discovering methods which enable determination of factors which are essential for success in sport. This research should help solving some of these problems, and it should objectively determine conative status of volleyball and football players on the same level of competition as well as provide a contribution to improvement of these sports.

Keywords: conative features, personality dimensions, regulatory mechanisms, football players, volleyball players.

Introduction

Sport is an activity which generally involves people who positively valorize and prefer competitive situations and who are, for that purpose, capable and willing to endure certain physical and psychological strain.

Inadequate selection of the training contents and their wrong direction is most frequently caused by the lack of knowledge about the structure of motor, functional, cognitive, conative and other factors which limits certain sport achievements, as well as by the ignorance of qualitative characteristics of interrelations between these factors. Therefore, it frequently happens that too much work or unnecessary work is done to develop or improve one or another anthropological trait which is not always important for a certain sport activity or is even contradictory to the development of another trait or ability which is more important for that activity. This approach inevitably leads to stagnation of results and reduces overall efficiency of training.

In order to explain any motor activity, conative features, i.e. modalities of human behaviour, must be taken into account.

Conative features are specific, relatively constant and unchangeable structures of psychic characteristics of an individual, where each characteristic takes a specific place determined by the structure (*M. Zvonarević, 1975*). These are latent structures on which the response modalities relative to self depend, as well as to others and the society as a whole, and which are derived from the degree of ego intelligence in the dynamic communication of each individual with the surrounding. From the cybernetic point of view, conative features within biological system can be explained as functional and adaptive behaviour which is enabled by the integral functioning of CNS, along with the dominant manifestation of sound regulatory mechanisms (*S. Horga, 1979*).

Therefore, the emphasis in this paper is put on studying the structure of conative features in athletes who practice different sport activities and compete at the same level out of the total domain of anthropology.

Subject and Aim of the Research

The focus of this research is to determine differences between conative dimensions of volleyball and football players from Kosovo and Metohija who compete at the same level.

The **subject** of this research is the personality traits of volleyball and football players.

The **overall aim** is to determine differences between some conative features on the specified sample.

In order to achieve this overall aim, the following operational task can be set:

- to determine differences between personality traits of the group of football players and the group of volleyball players who compete at the same level.

Hypothesis

Having the focus and the subject of the research defined, as well as the overall aim and the operational task established the following hypothesis could be set:

H1 – differences between personality structure of the group of volleyball players and the group of football players who compete at the same level are expected to be significant.

Methods of Research

Test Group

The test group was defined as a sample of active volleyball and football players from Kosovo and Metohija who compete in Serbian league – south unit.

The test group was chosen by a deliberate selection method from the total population of players. This was done due to organization of competitions and work of clubs. The research was conducted on the sample of 140 subjects, 65 of which were volleyball players and 75 were football players.

Special requests for selection of the subjects were the following:

- The requested age of the subjects was 18 – 30 years chronologically;
- Subjects were required to be healthy and without any mental aberration at the testing time;
- The requested sex of the subjects was male;
- Subjects were to be involved into regular training process;
- Subjects were to be permanent members of their teams.

Sample of the Variables

Measuring instruments **for assessing conative personality dimensions** were chosen to involve dimensions of functioning model of conative regulatory mechanisms. This model assumes a hierarchical organization of the mechanisms for regulation and control of behaviour modalities and is designed to avoid the artificial dichotomy between normal and pathological conative factors.

The following measuring instruments were chosen:
- the regulator of activity (EPSILON),
- the regulator of biological functions (HI),
- the regulator of defense reactions (ALFA),
- the regulator of attack reactions (SIGMA),
- system for coordination of regulative functions (DELTA),
- system for integration of regulative functions (ETA).

Measuring Technique

Conative variable

For estimating the efficiency of the system for regulation of activity (EPSILON) the following tests were used:
- M16,EX1,EX2,CF, CH.

For estimating the efficiency of the system for regulation and control of biological functions (HI) the following tests were used:
- G11, K10, H13, E8, Z9.

For estimating the efficiency of the system for regulation and control of defense reactions (ALFA) the following tests were used:
- A1,O3,S5,F2,C.

For estimating the efficiency of the system for regulation and control of attack reactions (SIGMA) the following tests were used:
- N14,T15, SG3, CE SP3.

For estimating the efficiency of the system for coordination of regulative functions (DELTA) the following tests were used:
- L17, P18,DL2, D6, I7, SG2.

For estimating the efficiency of the system for integration of regulative functions (ETA) the following tests were used:
- DL1, DL3, SP5, CC, CQ4.

Methods for Processing Results

Significance of a research depends not only on a sample of subjetcs studied and sample of variables, that is on significance of basic information, but also on the applied processes for transformation and condensation of those information, too.

For determination of differences of particular segments of psychosomatic status in volleyball and football players of different competition level canonic discriminant analysis was

used. Canonic discriminant model is interpreted as a type of factor analysis which contains components which are best divided into groups in the range of variables. General statistical significance of discrimination of groups of subjects is determined by F-test. Discriminant variables are obtained from discriminant coefficients which depend on variance of each variable from the applied system of variables and have original results. Discriminant strength of the applied variables is determined by Wilk's lambda. Significance level of the discriminant equation is determined by Bartlett x^2 test. Result of x^2 test is tested with a number of degrees of deviation. Each discriminant variable explains a certain per cent of variability in discrimination domain of the applied variables. Data processed in the Centre for Multidisciplinary Research of the Faculty of Sport and Physical Education of Pristina University.

Results and Discussion

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Table 1 Canonic discriminant functions

Fcn	Eigen V.	Pct of Var	Cum Pct	Can Corr	Wilks L	X^2	DF	Sig
1*	.05	100.00	100.00	.22	.94	7.06	3	.06

Table 2 STRUCTURE MATRIX

	FUNC1
VOLLEYBALL PLAYERS	-.24
FOOTBALL PLAYERS	.21

Table 3 GROUP CENTROIDS

	FUNC1
ETA	.65
DELTA	.44
HI	.33
SIGMA	-.30
EPSILON	-.18
ALFA	.11

Connection between the type of sport and personality can have several different forms. The first assumption refers to the distinctive personality structure which motivates the individual to choose a sport discipline, and it is at the same time very important condition for endurance and success in that sport. The second assumption implies that such determined structure of conative features does not exist but that being engaged in certain sport activities modifies the structure of conative features in the direction which is suitable for that sport. Sport personality which motivates initial sport practice is the third possibility, but participation and selection within different sports disciplines causes modelling of ''sport personality"

into personality typical for a certain sport discipline. However, it is also possible that there are no special assemblies of conative dimensions which determine the choice of a sport activity nor the participation in it affects the formation of different patterns of personality.

A great number of researches indicate, though not always, the presence of differences in personality structure of athlets who are involved in different sports disciplines. Considering very different characteristics of certain sports disciplines, it is logical that as in many other activities, different requirements in terms of the structure of conative features are set for those that are involved. Therefore, it is partly surprising that the results of the researches of athletes' personalities have not pointed out these differences between some sports disciplines more strongly. However, as the majority of these researches was reduced to an isolated observation of certain personality features estimated in very different ways, the image of conative features of athletes in different sports disciplines was not and could not be obtained. Other methodological shortcomings were present in these researches, especially in the way the samples were defined as well as in the methods of analysis.

The results of canonic discriminant analysis between the groups chosen for our research show that there are no statistically significant differences between the observed conative dimensions because the significance of the isolated discriminant dimension is significant at the level p=.06. The reason for such results should be sought in the sampling because the subjects were athletes at the low level of competition and their training process did not bring to any significant changes of conative regulatory mechanisms or it had a similar impact on both samples of athletes.

Conclusion

The aim of this research, as previously mentioned, was to identify and determine latent structure of conative dimensions on the above specified sample.

Six measuring instruments were used to estimate conative features for this purpose.

Measuring was conducted on the sample of 140 subjects – active competitors in two sport disciplines who compete at the republic level in Serbian league in Kosovo and Metohija area – south unit, male aged 18 – 30. The whole sample was divided into two sub-samples. The first one was defined as the group of 65 volleyball players. The second sub-sample was defined as the group of 75 football players. The discriminant analysis was conducted with the aim to determine the differences between sub-sample of volleyball players and sub-sample of football players considering the same dimensions. Based on analyzed and interpreted results, the following can be concluded:

- Analyses conducted in discriminant procedure showed that there are no significant differences between two sub-samples.

Based on these results, hypothesis H1 is completely discarded.

References

1. Babijak, J. (1984). *The Impact of some Morphological, Motor, Cognitive, Conative, Social and Motivational Factors on the Students.* Belgrade: Success in Physical Education.
2. Đurić, Đ. (l977).: *Personality Theory (Automated Lectures for Postgraduate Studies)* Novi Sad: F.F.K.
3. Fulgosi, A. (1973).: *Personality Psychology – Research Theory*. Zagreb: Školska knjiga.
4. Hol, S.K, Lindzi, G. (1983).: *Personality Theory.* Belgrade: Nolit.
5. Kejn, Dž, (l984).: *Psychology and Sport*. Belgrade: Nolit.

6. Lazarević, Lj. (l994).: *Psychological Basis of Physical Education*. Belgrade: Faculty of Physical Education.
7. Malacko, J., Popović, D. (1997).: *Methodology of Kinesiological.* Priština: Anthropological Research.
8. Malacko, J. (1991).: *The Basis of Sport.* Novi Sad: Practice.
9. Milojević, A. (l994).: *Psychology of Sport*. Niš: Faculty of Philosophy.
10. Momirović, K., Horga, S., Bosnar, K. (1982).: *Enclosure to the Formation of a Cybernetic Model of the Structure of Conative Factors.* Zagreb: Kinesiology, vol.14, no. 5, pg. 83-108.
11. Momirović, K., Volf, B., Džamonja, Z. (1992). : *Kon 6, Cybernetic Battery of Conative Tests, Union of Serbian Psychological Society*. Belgrade: Centre for Applied Psychology.
12. Paranosić, V. (l982).: *Psychology of Sport*. Belgrade: Nip "Partizan".
13. Petković, M.: *Sports Competitions in the Function of Integral Development of Personality*
14. Petković, M. (1997).: *Theory and methodology of Sports Training.* Priština.
15. Popović, D. et all (1987).: *Canonic Correlation Analysis as the Optimal Method for Determining the Relationship between two Sets of Variables*. Niš: Naučni podmladak, Volume of Natural and Technical Science, Vol 19, no. 3-4, pg. 63-69.
16. Popović, D. (l990).: *Martial Arts (judo and self-defense)*. Niš: Naučni podmladak.
17. Popović, D. (1990).: Relations between Conative Capacity and Efficiency of Performance of Judo Techniques. Ljubljana – Bled: *4th Congress of Yugoslav Sport Pedagogists*.
18. Popović, D. (1990).: *Research Methodology in Physical Education*, Niš: Faculty of Philosophy.
19. Puni, A. C. (1965).: *The Experiments in the Psychology of Sport*. Belgrade: Zavod za izdavanje udžbenika Srbije.
20. Šamić, M. (1972).: *How Does Scientific Work Emerge*. Introduction to Methodology and Technique of Scientific Research (general approach). SR B&H: Zavod za udžbenike
21. Stefanović, V. (1981).: *Introduction to Research and Physical Education with Statistics.* Belgrade: Naučna knjiga.