

Personality Characteristics of Indian Wrestlers and Basketball Players

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Abstract:

The aim of this study was to investigate personality of elite wrestlers and basketball players. Participants were 50 male basketball players and 50 wrestlers from India. Participants had completed a Cattell's 16PF Questionnaire. Data analysis was done with basic descriptive statistics. Significance of differences between two groups was calculated with t – test. The result shows that the wrestlers and basketball players differ in the expression of certain forms of behaviour within certain dimensions of personality. Wrestlers had lower scores at factors: B-Reasoning, E-Dominance, F-Liveliness, G-Rule Consciousness, H-Social Boldness, N-Privateness and Q3- Perfectionism. In other words they exhibit: lower developed ability of abstract thinking, higher level of reliability and sense of duty to the obligations, lower "super ego" strength, threat-sensitivity, and impulsivity. Basketball players had lower scores only at factor I – Sensitivity, it means that they are more independent, and realistic.

I. INTRODUCTION

Structure of athletes' personality was often subject of sport psychologists' researches. Understanding personality structure, basically, is to determine prominent individuals' disposition: specific, which control behaviour of one type situation, and general, which are in the base of behaviour in broad class situations (Havelka & Lazarević, 1981). Architecture of athletes' personality is significantly different compared with non-athletes. But, it is not been confirmed that individuals with a specific structure or specific set of personality traits more disposed to be successfully engaged in professional sports or a specific structure and organization of personality dispositions acquire and develop during long-term participation in sports activities (Havelka and Lazarevic, 1981). In relation to this dilemma is prevalent notion that there is a mutual dependence in relationship between sports and personality structure: some personality traits determine success of the sport, and sport influences as formation and development of specific characteristics, that further behaviour become inseparable components of personality athletes (Havelka and Lazarevic, 1981). Coaches and sport psychologists, more than half century, discuss about specific psychological structure of athletes' personality. According to Weiberg & Gould (2003), more than 1000 papers in the field of the personality of the athletes were published until 1992. On the other hand, it can be said that in recent years appears unduly small number of studies of athletes' personality, and even notes that studies of athletes' personality should grow from its own ashes (Auweele et al., 2001). Modern sports psychologists are more concerned with specific conditions, mental functions or dispositions, and coping skills that athletes are manifested in various sports and situations that significantly determine quality of their competition performances. The reason for this is, probably complexity of personality's make-up as general individual characteristics. Inside sport is a large number of different sports branches and disciplines, which themselves expose athletes to different situations and specific requirements.

Especially important is difference between individual and team sports, as well as differences among sports in relation to contact activity and nature contact. Wrestling is a typical representative of individual contact martial art. During the match different catches, turns, holdings and throwing are expressed. Fast and explosive attacks were performed every 6 to 10 seconds (Lansky, 1999). This kind of activities request static and dynamic force generating, explosive power, coordination, flexibility, aerobic and anaerobic endurance (Kraemer, Wescovi & Dihon, 2004). Wrestler's body is exposed to different loads, and wrestler activities request engagement of almost all muscles (Steward, 1998). Also, some psychological dimensions (personality, anger, coping strategies) are important for wrestlers' success (Dwyer & Carron, 1986; Gould, Eklund & Jackson, 1993; Kristiansen, Roberts & Abrahansen, 2008; Robazza, Bertollo & Bortoli, 2006). On the other hand, basketball is a typical representative as sort of team contact sport, where the goal is reached through cooperation and interaction more individuals, and to contact which occurs during game is permitted, as defined and sanctioned by the basketball rules. Basketball has complex demands that require a combination of individual skills, team plays, tactics, and motivational aspects (Trinic & Dizdar, 2000). Also, basketball has a great request for specific energy mobilization, cooperation between players, and responsibility in critical game situations, etc.

Success in basketball depends mostly of the levels of specific basketball motor abilities and skills, but also of the particular psychological factors, like cognitive abilities and personality dimensions (Becker, 1981; Karalejić, and Jakovljevic, 2008; Svoboda, 1993). Studies of psychological profiles and personality of athletes is present in many sports (Banana & Mihajlovic 1995; Bacanac, 2001; Bacanac & Juhas, 2004; Han, 1996; Junge, Dvorak, Rösch, Graf-Baumann, Chomiak & Peterson, 2000) and then in basketball and wrestling as

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well (Becker, 1981; Craighead, Privette, Vallianos & Byrkit, 1986; Dwyer & Carron, 1986; Gould et al., 1993; Maddi & Hess, 1992; Svoboda, 1993). Maddi & Hess (1992) refer about connection between personality hardiness and basketball performance. Svoboda (1993) has shown significant difference in personality characteristics between excellent (stars) and poor quality (feeble) basketball players. Also, Dwyer and Carron (1986) refer about some differences in personality characteristics between excellent and poor quality wrestlers. The aim of this study was to investigate and compare personality characteristics of elite Serbian wrestlers and basketball players due to approve or deny our hypothesis that the personal profiles of elite wrestlers are significantly different from personal profiles of elite basketball players.

II. METHODS

Participants

Participants were 50 male elite basketball players from national tournaments and 50 elite wrestlers. The mean age of basketball players was 23.84 years (SD = 4.02), and the average senior playing experience in basketball, was 5.77 years (SD = 3.97). The mean age of wrestlers was 22.27.5 years (SD = 3.13), and the average senior competition experience was 4.57 years (SD = 2.95).

Instruments and procedure

For the purposes of this study, wrestlers and basketball players were asked to complete Cattell 16PF questionnaire (Fifth edition) based on the Raymond Cattell’s theory of personality. This questionnaire was very often used in clinical, counselling, industrial-organizational, educational, and research settings (Cattell and Schverger, 2003). Also, this questionnaire (early editions) was often used in the past few decades in testing athletes' personality in Serbia (Havelka and Lazarević, 1981; Bacanac, 2001; Jakovljevic, Karalejic and Lazarevic, 2010). Cattell’s theory implies existence of different kinds of personality traits, as characteristic individuals’ tendency to determine extent and manner of his behaviour (Cattell and Schverger, 2003). The primary factors that the Cattell 16 PF test measure are bipolar dimensions of personality:

- A - Warmth;
- B - Reasoning;
- C - Emotional Stability;
- E - Dominance; F - Liveliness;
- G - Rule-Consciousness;
- H - Social Boldness;
- I - Sensitivity;
- L - Vigilance;
- M - Abstractedness;
- N - Privatness;
- O - Apprehension;
- Q1 - Openness to Change;
- Q2 - Self-Reliance;
- Q3 - Perfectionism;
- Q4 - Tension.

The 16PF global scales have even higher reliabilities; 2-week test-retest estimates ranged from .84 to .91 with a mean of .87, and 2-month test-retest estimates ranged from .70 to .82 with a median of .80 (Cattell and Schverger, 2003).

III. DATA ANALYSIS

Standard descriptive statistics was calculated: mean (M), standard deviation (SD), minimal (Min) and maximal (Max) values. Significance of differences between two groups was calculated with Independent Samples t-test for small samples.

IV. RESULTS

Table 1 shows descriptive parameter of the results in applied questionnaire for evaluation of personality factors of senior wrestlers and basketball players, and also scale scores of other Serbian elite athletes founded by Havelka and Lazarević (1981). Basically, distributions of results are not different from normal. Values of means of particular variables are almost equal, compare with results of population of top athletes (Bacanac 2001; Havelka and Lazarevic 1981). Results shown in Table 1 approved hypothesis that there are in level of expression of particular personal factors among elite wrestlers and basketball players’ statistically significant differences conditioned by different kind of these two sports and some other socio-cultural factors. In relation with basketball players, wrestlers indicate statistically significant lower average values on factors B, E, F, G, H, N and Q3 and higher values on factor I.

Table-1: Means, standard deviations, minimal and maximal values of the results on 16 Personality factors of senior wrestlers and basketball players with t-test results

Cattell	Wrestlers (N=50)			Basketball players (N=50)			t test
	Mean ±SD	Min	Max	Mean ±SD	Min	Max	
16PF							t
A	11.28±3.34	3	18	11.59±2.68	6	17	0.58
B	6.70±3.11	1	16	8.22±2.01	1	12	**3.35
C	15.50±4.30	6	24	16.19±2.71	10	21	1.09
E	13.53±3.21	6	20	15.29±3.15	8	22	**2.98
F	14.28±3.58	4	22	15.89±3.62	7	24	**2.44
G	13.08±3.88	3	20	15.06±2.73	8	20	**3.36
H	13.25±4.28	2	23	15.49±4.35	2	24	**2.81
I	7.79±2.68	0	12	6.61±2.68	0	13	*-2.38
L	10.55±3.17	5	18	10.90±2.79	4	18	0.64
M	11.49±4.00	2	19	10.89±2.74	4	17	-1.01
N	9.45±2.62	4	15	10.46±2.49	6	15	*2.18
O	10.17±3.00	3	16	9.37±3.83	1	18	-1.22
Q1	8.91±2.64	4	16	9.24±2.43	3	16	0.70
Q2	9.17±3.29	2	16	10.10±2.48	3	16	1.80
Q3	11.49±3.27	3	18	12.64±2.61	5	18	*2.17
Q4	11.48±4.00	3	20	11.47±3.65	2	20	0.01

V. DISCUSSION

Observing the average values of personal factors we can say that personal profiles of the elite wrestlers and basketball players are highly compatible with personal profiles of other Serbian elite athletes, compared with data from Bačanac (2001) and Havelka and Lazarevic (1981). Wrestlers had lower scores at factor B - Reasoning. They exhibit lower developed ability of abstract thinking, understanding of ideas, speed of learning and problem solving compared to basketball players. Essentially, nature of all sport games sets up highlighted demands for quick recognition and analysis of the current situation as well as fast adequate respond on the current situation. There are similar demands for wrestlers during the fight. Still it is necessary to emphasise significant difference in the way of information reception related to the current situation during the wrestling fight. In fact, great number of information during the fight, body position and rival performed activities, a wrestler gets through tactile sense and -prospection This kind of reception and information processing is extremely specifically and it is not in correlation with indicators of general intelligence, with reference to general ability in quick navigate in situations when information is received by audio and visual senses. Wrestling is sport that demands extremely motorical intelligence and many studies shows that motorical intelligence is not significantly related with general intelligence. Basketball demands good cooperation and communication among players, understanding of needs, intentions and motives of others - essential component of social intelligence and Cattell's B - factor of Reasoning.

Wrestlers achieved statistically lower score on a scale E. In other words, basketball players are more self confident, feistier, perform stronger need for drawin attention of others, asking for admiration, like to impose, to dominate, to manage and organize others. On the other hand, wrestlers are more modest, obedient, steady, loyal to the leader, less seditious and obstructive. Though in every sport there is aspiration for recognition and self-confirmation as one of the essential premises of success, in wrestling it is not manifested in the same way like in basketball. More chance to be successful have those wrestlers with less desire to dominate, impose and to be listened by others, but they are more forbearing, focused on their goals, more prepared to confirm their selves through long and patient work. On the others hand, a basketball player can own significant qualities, but simply he does not fit the coach conception of the athlete who can obtrude and that way get the real chance to show his qualities. On the scale F professional basketball players showed more readiness for cooperation, they are more energetic, carefree and impulsively lively than wrestlers. Wrestlers are less ready for teamwork and collaboration and are upset. Basketball as team sport provides possibility to basketball players to share their responsibilities and problems with their co-players, i.e. there is a possibility that team to bear and take up all potential problems.

Naturally, the sport success is taken together too! On the other side, wrestlers are alone and there are little possibilities to share any kind of responsibilities or problems with others and then, success in result is dominantly individual. Basketball players compared to wrestlers, have statistically

significant higher level of "super ego" strength (factor G). It can be related to the fact that basketball as team sport request high level of confronting with demands and rules. Since this scale examines the personality traits that are responsible for moral behaviour or, according to the interpretation of the Cattell's personality theory, - "reliable character", we may say that basketball players compared to wrestlers, exhibit significantly higher level of diligence, perseverance, reliability, responsibility, sense of duty to the obligations, thoughtfulness towards other people, etc. Basketball requests from all players to be responsible and to fulfil their tasks in purpose for good team cooperation. Hence consciousness is more emphasised in basketball, responsibility toward oneself and toward others, commitment and confronting with social rules, whereas in wrestling this level of characteristics is lower, but still satisfied, as this characteristic will not provide direct consequences. And on the factor H basketball players gained significantly higher scores than wrestlers. Characteristics of basketball players is higher eagerness, heartiness and social non inhibited attitude, certainly related to the characteristics of the sport they practice. In basketball and other team sports there is highly emphasised need among team co-players for good united and harmonic relationship. These models of behaviour are in compatibility with higher eagerness of basketball players in the game. Still, a wrestler does not have to be communicative or open-armed to be very successful. It is not rare that some elite wrestlers and competitors in other individual sports focus their concentration on fight and need half isolated conditions. Namely in individual sports ambitions and goals of competitor form the same team does not have to be identical. In team sports co-players share responsibilities of eventual failure and in individual sports that kind of allocation is not possible. Score on a scale I shows that wrestlers exhibit a "tender temper". Based on the interpretation of this result, it means that basketball players are more independent, tough, realistic, self reliant, and emotionally mature, they manage feelings, they are unsentimental to the rival in competitive situations, they are more practical in achieving the set tasks compared with wrestlers. Characteristics of basketball players are maturity and realisticness. They are solid financial effects of training this sport provide them independence. On the other side, wrestling is sport that is more chosen by those whose priorities are not in financial favour which is reached by successful training of some profitable sport (wrestling is, certainly, not), but those who are emphasised art interests, who enjoy in improving their wrestling skills, who their sport skilfulness experience more like art achievement than like tool by which they can solve some practical problem. Then, somehow, is logical why wrestlers in comparison with basketball players are more obliging, ecstatically piscine, introspective, creative, sentimental, dependant of attention and support of the others and more sensitive. Also, on the scale N is noticed statistically important difference. Basketball players gained distinctively higher results on this scale than wrestlers. That makes them socially more scrupulous, sprier, and more polite in communication with others, more sordid, emotionally more distant and calculated. This behaviour is motivated by strong desire for social raise and promotion and it is favoured by their developed communicative skills, higher level of

education, ambitiousness, flexibility in viewpoints and emphasised material and Machiavellian orientation. Differences in these personal characteristics are caused by essential determination of basketball players to practice basketball as a profession while wrestlers practicing sport is only a few pages in their life stories. Elite basketball players are aware of the fact that in period of active playing basketball is solution for their life existence, so any kind of sentimentality is not expected. Scores on the factor Q3 also indicate on specificity of basketball players and wrestlers personal profiles. While basketball players are characterized by higher level of sense for self-esteem, emphasised need for social image, perfectionism, self-control and strong will, those characteristics are less emphasised in wrestlers. Wrestlers do not attach significance for demands posed by social environment, but they are more likely to pursue their own needs, attitude of others is less important to them cause they don't ask for social recognition and importance. They are not much occupied what kind of impression they left on others, they do not care much about social rules, they do not draw attention to themselves. We could say that the nature of wrestling, as a typical representative of one of hardest Martial Arts, is precisely the challenge of attracting people who find some kind of balance between the personal satisfaction in perfecting wrestling skills by themselves on one side and the confirmation of social sentiment of self-esteem on the other side.

VI. CONCLUSION

Results of the 16 PF test show that the elite wrestlers are significantly different from elite basketball players. These differences are basically consequence of characteristics of wrestling, as individual sport, and basketball as team sport. Although the psychological profiles of wrestlers and basketball players show normal levels of development of all 16 factors of personality that is very similar to the results of other elite athletes, they are still statistically significantly differ on 8 of 16 personality factors (B, E, F, G, H, I, N, Q3). Wrestlers achieve average, but compared to basketball players slightly lower values of factors: B, E, F, G, H, N, Q3. This means that they: prefer concrete thinking, are less assertive, intrusive, aggressive; they are more restrained and less ready for team work; they are more sensitive, sentimental, refined, and more anxious; they are more socially naive, natural, open, spontaneous, less subtle and less calculated; they less take into account their social image, they are not primarily directed to confirmation and recognition of social environment, but follow their needs and interests. Basketball is characterized by tendency of emphasized abstract thinking, higher level of verbal skills, a stronger need for dominance, managing and organizing others; greater respect and appreciation of social rules and norms of teamwork, and no-sentimental utilitarian approach, more pronounced integration with the social standards, a stronger sentiment of self-esteem and emphasized the need for social recognition. The study results confirm that the psychological profiles of elite wrestlers and basketball players are not uniformed, but to possess significant characteristics which are at the very beginning that individuals with certain psychological characteristics opt for

one or the other. Therefore, in the process of sport orientation, primary and secondary selections, as well as pedagogical and psychological work with athletes, we should bear in mind the compatibility of their psychological traits with specific requirements for successful achievement in a chosen sport.

VII. REFERENCES

- Auweele, Y.V., Rzewanic, R., & Van Mele V. (2001). Personality and the Athlete. In R. Singer, H. Hausenblas & C. Janelle (Eds.) *Handbook of Sport Psychology* (2nd ed.). New York: Wiley & Sons (pp. 239-268).
- Bačanac, Lj., & Mihajlovic, M. (1995). Characteristics of Personality Profile of Yugoslav Soccer Players with Different Levels of Performance. Paper presented at 9th Congress of Association of Sport Medicine of Balkan, Belgrade.
- Bacanac, Lj. (2001). The Psychological Profile of Yugoslav Boxers. *Facta Universitatis – Series Physical Education and sport*, 1, 13-24.
- Bacanac, Lj., & Juhas, I. (2004). Level of Sport Competitive Anxiety Trait as a Function of Sex, Age and Sport Experience. In *Proceedings of Third International Scientific Congress Sport, stress, Adaptation*, (pp. 19-21). Sofia: NSA.
- Becker, M.B. (1981). An Investigation into the Cognitive and Personality Dimensions of Basketball Athletes. Unpublished doctoral dissertation, School of Human Behavior, US International University, San Diego.
- Cattell, H.E.P., & Schverger, J.M. (2003). *Essentials of 16PF Assesment*. Hoboken: J. Wiley & Sons.
- Craighead, D.J., Privette, G., Vallianos, F., & Byrkit, D. (1986). Personality Characteristics of basketball players starters and non-starters. *International Journal of Sport Psychology*, 17, 110-119.
- Dwyer, J.J., & Carron, A.V. (1986). Personality status of wrestlers of varying abilities as measured by a sport specific version of a personality inventory. *Canadian Journal of Applied Sport Sciences*, 11, 19-30.
- Gould, D., Eklund, R.C., & Jackson, S.A. (1993). Coping strategies used by U.S. Olympic wrestlers. *Research Quarterly for Exercise and Sport*, 64, 83-93.
- Han, M.W. (1996). Psychological profiles of Korean elite judoists. *The American Journal of Sports Medicine*, 24, 67-71.
- Havelka, N., & Lazarevic, Lj. (1981). Sport i licnost [Sport and Personality. In Serbian.]. Beograd: Sportska knjiga.
- Jakovljevic, S., Karalejic, M., & Lazarevic, Lj. (2010). The latent structure of cognitive dimensions of elite senior and junior basketball players. *Facta Universitatis, S: Physical Education and Sport*, 8(1), 21-30.
- Junge, A., Dvorak, J., Rösch, D., Graf-Baumann, T., Chomiak, J., & Peterson, L. (2000). Psychological and Sport-Specific Characteristics of Football Players. *American Journal of Sports Medicine*, 28(S. 5), 22-28.
- Karalejic, M., & Jakovljevic, S. (2008). Teorija i metodika košarke [Theory and methodics of basketball. In Serbian.]. Beograd: FSFV.

- Kraemer, W.J., Wescovi, J.D. & Dixon, P. (2004). The Physiological Basis of Wrestling: Implications for Conditioning Programs. *Strength & Conditioning Journal*, 26, 10-15.
- Kristiansen, E., Roberts, G.C., & Abrahamsen, F.E. (2008). Achievement involvement and stress coping in elite wrestling. *Scandinavian Journal of Medicine & Science in Sports*, 18, 526-538.
- Lansky, R. (1999). Wrestling and Olympic – Style Lifts: In – Season Maintenance of Power and Anaerobic Endurance. *Strength & Conditioning Journal*, 21, 21-27.
- Maddi, S.R., & Hess, M.J. (1992). Personality hardiness and success in basketball. *International Journal of Sport Psychology*, 23, 360-368.
- Robazza, C., Bertollo, M., & Bortoli, L. (2006). Frequency and direction of competitive anger in contact sports. *Journal of Sports Medicine and Physical Fitness*, 46, 501-508.
- Steward, T. (1988). Strength training for wrestlers. *Strength & Conditioning Journal*, 10, 32-35.
- Svoboda, B. (1993). Analysis of personality studies of top basketball players. *Acta Universitatis Carolinae: Kinanthropologica*, 29, 57-61.
- Trninic, S., & Dizdar, D. (2000). System of the performance evaluation criteria weighted per positions in the basketball game. *Collegium Antropologicum*, 24, 217-234.
- Weinberg, R., & Gould, D. (2003). *Foundation of sport and exercise psychology*. Champaign: Human Kinetics.