

MOTIVATIONAL AND VALUE ORIENTATION IN SLOVENIAN TOP SPORT, ACCORDING TO DIFFERENCES BETWEEN SEX AND TYPE OF SPORT

Branimir Černohorski¹
Matej Tušak²
Rajko Šugman²

MOTIVACIJSKE IN VREDNOTNE USMERITVE V SLOVENSKEM VRHUNSKEM ŠPORTU Z VIDIKA RAZLIK MED SPOLOMA IN VRSTO ŠPORTA

Abstract

The purpose of the research was to find out the differences in some segments of motivational and value system of top sport according to the sex and type of sport. 341 male and female athletes with the status of the world, international and perspective class in the Republic of Slovenia and engaging in 34 sport activities participated in the research. We used four questionnaires to test the population. The questionnaires measured three areas of motivation: competitive-need achievement, sport orientation, self-motivation, and the area of values. We wanted to discover differences and similarities among male and female athletes and among individual and team sports in all three areas of motivation and values. We did this by using multifactor analysis of variance and discriminant analysis. The factor analysis served as the means to discover whether the selected population of top sport athletes differs in values from the non-selected population. The multifactor analysis of variance has showed that female athletes in competitive-need achievement significantly differ from male athletes only in the motive to avoid failure. The comparison of values between top male and top female athletes showed some gender-oriented differences that are induced by society. Team sports show significant differences in competitiveness and win orientation. The thesis that value system does not differ a lot was confirmed via factor analysis of values in top sport and in a non-selected population. Discriminant analysis demonstrates the existence of two typical discriminant functions which differentiate athletes according to the sport type and gender. This emphasizes the need for individual approach in the process of training and competing.

Key words: motivation, values, top sport, competitive-need achievement motivation, sport orientations, self-motivation.

Contact address

¹Branimir Černohorski
Osnovna šola Domžale
Bistriška 19
SI - 1230 Domžale
Slovenia
Tel.: + 386 1 721 1842
E-mail: branimir.cernohorski@telemach.net

²University of Ljubljana, Faculty of Sport, Slovenia

Izveček

Namen raziskave je bil ugotoviti razlike v nekaterih izsekih motivacijskega in vrednotnega prostora vrhunskega športa, glede na spol in vrsto športa. V raziskavo je bilo zajetih 341 športnikov in športnic 34. športov, ki imajo status svetovnega, mednarodnega in perspektivnega razreda v Republiki Sloveniji. Na tem vzorcu smo uporabili štiri vprašalnike, ki so merili tri področja motivacije (tekmovalno-storilnostno motivacijo, športne usmeritve in samomotivacijo) in področje vrednot. Za ugotavljanje razlik in podobnosti med športniki in športnicami ter razlik in podobnosti med individualnimi in moštvenimi športi na vseh treh področjih motivacije in področju vrednot, smo uporabili večfaktorsko analizo variance in diskriminantno analizo. S faktorsko analizo pa smo želeli ugotoviti, ali se selekcionirana populacija vrhunskih športnikov v vrednotnem prostoru razlikuje od neselekcioniranih vzorcev populacije. Večfaktorska analiza variance je pokazala, da se športnice v tekmovalno-storilnostni motivaciji od športnikov statistično značilno razlikujejo le v motivu za izogibanje neuspeha. Primerjava vrednotnega prostora vrhunskih športnikov in športnic je pokazala na nekatere razlike, ki so tipične za posamezni spol in so družbeno pogojene. Športniki moštvenih športov se statistično značilno razlikujejo v tekmovalnosti in usmeritvi na zmagovanje. Faktorizacija vrednotnega prostora vrhunskega športa je potrdila domnevo o podobni hierarhični urejenosti vrednot, kot je bila ugotovljena na vzorcu neselekcionirane populacije. Diskriminantna analiza nakazuje na obstoj dveh statistično značilnih diskriminantnih funkcij, ki razlikujeta celoten vzorec, glede na vrsto športa in glede na spol, kar še bolj poudarja potrebo po individualnem pristopu v procesu vadbe in tekmovanj.

Ključne besede: motivacija, vrednote, vrhunski šport, tekmovalno-storilnostna motivacija, športne orientacije, samomotivacija.

INTRODUCTION

It is well known that physical abilities are not the only ones to define success or failure in sport. Athletes are not only physical but intellectual and spiritual beings as well. There are, of course, some types of personality that need a distinctive individual approach. Motivational psychology offers us some answers to questions related to this subject, i.e. the psychological process in everyday strains and performance, motivation, relations among athletes.

The preparation of athletes is usually the coach's domain. Sport, however, is a very complex activity and that is why the coach cannot control all areas that influence sport achievements. How else can we interpret the statements about athlete's excellent physical condition, when later he or she completely fails on important or less important sports events? Thus psychology of sport and especially motivational psychology are still a vast field of the unknown. The first important thing is to highlight and define the areas of motivation which are decisive for the success of athletes.

Sport, especially top sport, can be without any doubt assigned to efficiency-oriented activities. Their typical characteristic is behaviour which could be named efficiency-oriented behaviour. McClelland et al. (McClelland, Atkinson, Clark, & Lowell, 1953), who are held to be the founders of need-achievement theory, claim that motivational states are the basic initiators of activity. The main features of these states are the motive to achieve success and the motive to avoid failure. Motive is influenced by stimulus from the environment. Stimulus evokes emotional reactions (pride, shame) and they trigger behaviour which aims at avoiding or approaching. The theory of perspectives (Dweck, 1986; Nicholls, 1989) explains the fact that the understanding of efficiency-oriented behaviour actually depends on the definition of success and failure. This theory defines them as special psychological states which are based on the explanation of the individual's efficiency. The concept of efficiency-oriented motivation is related to competing and need for a victory. Many researches claim that competitiveness is more eloquent with the male than with the female athletes (Gill, 1988; Nicholls, 1989).

Values are closely related to motivation. They play a great role in the formation of the individual's personality, at which sport should target. The basic as well as general values orientate and support the

athlete's experience. Rokeach (1973) claims, that values are standards which direct behaviour. They direct it in such a way that they influence our expression in front of others. Values represent a standard of our grades of ourselves towards others. Their links to sport are obvious.

The theory of values (Musek, 2000), on which our research is based, consists of a hierarchic system of values. Musek's theory was confirmed with the help of the research of two non-selected populations (1005 and 1975 subjects of both genders). On the highest levels all values of middle and broader range (hedonistic, potency, moral, fulfillment) join together in two major categories. The Apollonian major category combines all values pointing to orientation towards human effect and quantity. The Dionysian major category stands for perfection and quantity. The two categories match completely with similar findings of foreign researches (Bond, 1988; Hofstede, 1980) and they probably do not succumb to the selected samples of the population.

The role of the coach in the process of recognizing the reasons for success or failure and reasonable explanation is very important for the athlete's growth and satisfaction. Very often some other athlete's psychosomatic features which could help us understand his or her motivation more thoroughly are not included in the psychological research. In addition to this, there are some unknowns in psychometric tests regarding the motivation as well. That is why it would be unrealistic to say that motivational psychology offers all answers to questions about the sportsman's success or failure.

The research is meant to discover and explain some basic areas of motivational psychology (competitive-need achievement, sport orientation, self-motivation) as well as compare the system of values of the top athletes in Slovenia with a non-selected population. The research aims to highlight a part of motivational processes and values which are important for the understanding of special male and female athletes' needs. Their success cannot be based only on external factors and pure luck. Athletes as well as their coaches have to take full responsibility for their success or failure. This research is an opportunity for many sports experts to get an insight into the motivational factors and values of Slovene top sport (differences in sex and type of sport being emphasized), since it includes a big sample of top male and female athletes. It is also an oppor-

tunity for the coaches to relate their knowledge to the results of this research to the benefit of sport.

METHODS

Subjects

341 male and female athletes with the status of the world, international and perspective class (34 different types of sports) took part in the research. These athletes are categorized according to the standards of the Olympic Committee of Slovenia. Since the sample is very large, it may be treated as a population. The sample is subdivided according to:

- sex (223 male athletes and 118 female athletes) and
- type of sport (214 athletes of team sports and 127 athletes of individual sports).

Instruments

All subjects were acquainted with the confidentiality of data and results. The procedure of filling out the questionnaire was thoroughly explained. The time was not limited. The permission for the research was obtained at the time of the persons' training, which is when the research itself was carried out. The measuring instruments were made out of 4 questionnaires:

1. Sport Attitudes Inventory (Willis, 1982) which measures three main motives for competing:
 - motivation to achieve success
 - motivation to avoid failure
 - power motive
2. Sport Orientation Questionnaire (Gill, & Deeter, 1988) which measures:
 - competitiveness
 - win orientation
 - goal orientation

3. Self-motivation Inventory (Dishman, Ickes, & Morgan, 1980) which measures:

- self-motivation

4. Values Questionnaire (Musek, 2000):

The scale consists of 54 values. Each is graded from 0 to 100.

Procedure

The multifactor analysis of variance helped us to discover the differences and similarities among male and female athletes and among individual and team sports in the areas of competitive-need achievement, sport orientation, self-motivation and values. The factor analysis served as the means of discovering whether the selected population of top athletes and a non-selected population differ significantly in values. To determine a clear model of discriminant function which would differentiate among four groups (male athletes, female athletes, individual and team sports) we used the discriminant analysis for the areas of competitive-need achievement, sport orientation, self-motivation and values.

RESULTS

Results are presented in accordance with the goals of the research. The first part deals with the sex differences and differences between the athletes competing in the team and individual sports. The next part is about factor analysis of values and the last part is about the model of discriminate functions for motivation and values.

Male and female athletes differ significantly only as regards their motives to avoid failure, whereas they do not differ in sport orientation (see Table 1). The

Table 1: Differences between male and female athletes in competitive-need achievement motivation, sport orientation and self-motivation.

	MALE		FEMALE		F	Sig.
	Mean	St.Dev.	Mean	St.Dev.		
MOTIVE TO ACHIEVE SUCCESS	57.71	13.17	58.79	12.40	0.63	0.43
MOTIVE TO AVOID FAILURE	30.80	6.98	33.45	6.48	11.07	0.00*
POWER MOTIVE	40.70	8.61	40.44	6.15	0.00	0.98
COMPETITIVENESS	56.22	8.25	55.45	6.06	0.02	0.89
WIN ORIENTATION	23.36	5.10	23.13	4.80	0.15	0.70
GOAL ORIENTATION	26.52	3.75	26.68	3.02	0.45	0.51
SELF-MOTIVATION	149.8	17.90	151.8	16.67	1.22	0.27

* p ≤ 0.05

final goal is always success. There are no significant differences in self-motivation. Self-motivation is slightly higher with female athletes but this is probably the consequence of their position in sport and thus their constant need to prove themselves. Top male and female athletes differ significantly in 7 values which belong to the Dionysian major category (sense, patriotism, safety) and the Apollonian major category (societal). The first set of values was highly marked by male athletes and the second set by female athletes (see Table 2).

The analysis of competitive-need achievement motivation (see Table 3) cannot reveal any significant differences between individual and team sports. There are some significant differences, however, regarding competitiveness and win orientation. The differences originate from different types of sports. Higher level of competitiveness in team sports must be understood in the view of competitive system and type of sport training.

Self-motivation does not vary. We can explain this phenomenon with the fact that athletes in indi-

vidual as well as team sports have very good reasons for self-control (i.e. motivation control).

The value system of individual and team sports significantly varies in 12 values (see Table 4). Most of the values with significant variation were estimated higher by athletes in team sports. Ten values belong to the Dionysian major category and six of the ten values belong to the potency category (status).

By using the Factor Analysis we tried to follow Musek's research of the hierarchic system of values with a non-selected population and compare it with the values of top athletes. That is why we had to follow the same methodological approach. Our comparison was made in accordance with the theory of hierarchic structure of values (Musek, 2000). Our goal was to find the differences and similarities at the level of middle and broader range as well as at the level of major categories. Each difference at the higher level can be explained by means of lower level and vice versa. However, we are interested in all of the levels of the value system. Through the Principal Component Analysis (Varimax Rotation with Keiser Normalization) we discovered the

Table 2: Differences between male and female athletes in value system

	MALE		FEMALE		F	Sig.
	Mean	St.Dev.	Mean	St.Dev.		
COMFORTABLE LIFE	79.47	19.35	70.52	23.50	9.92	0.00*
PATRIOTISM	71.31	24.76	63.23	25.75	3.75	0.05*
WORLD PEACE	89.58	16.51	93.32	12.89	4.34	0.04*
GOOD SEXUAL LIFE	90.36	13.75	81.29	19.52	16.29	0.00*
SAFETY	89.03	14.54	92.90	12.23	4.65	0.03*
GOOD FOOD AND DRINK	80.02	20.37	71.79	26.00	8.31	0.00*
EQUALITY AMONG PEOPLE	79.07	22.82	85.40	17.73	8.12	0.01*

* $p \leq 0.05$

Table 3: Differences between individual and team sports in competitive-need achievement motivation, sport orientation and self-motivation

	MALE		FEMALE		F	Sig.
	Mean	St. Dev.	Mean	St. Dev.		
MOTIVE TO ACHIEVE SUCCESS	57.55	13.02	58.99	12.69	0.97	0.33
MOTIVE TO AVOID FAILURE	31.42	7.36	32.22	6.11	1.95	0.16
POWER MOTIVE	39.99	7.75	41.66	7.89	3.07	0.08
COMPETITIVENESS	54.76	7.28	57.95	7.64	12.96	0.00*
WIN ORIENTATION	22.05	4.95	25.35	4.35	30.99	0.00*
GOAL ORIENTATION	26.77	3.38	26.22	3.71	0.49	0.48
SELF-MOTIVATION	151.6	17.60	148.2	17.16	1.24	0.27

* $p \leq 0.05$

Table 4: Differences in values between individual and team sports

	MALE		FEMALE		F	Sig.
	Mean	St. Dev.	Mean	St. Dev.		
HARMONY WITH NATURE	79.31	19.31	71.90	18.75	12.51	0.00*
LONG LIFE	70.85	23.00	76.96	18.76	5.59	0.02*
REPUTATION IN SOCIETY	69.97	22.19	75.61	19.74	4.76	0.03*
COMFORTABLE LIFE	73.23	21.97	81.49	19.11	6.94	0.01*
PATRIOTISM	65.75	26.75	73.02	22.27	5.69	0.02*
GOOD SEXUAL LIFE	84.75	17.70	91.27	13.54	8.13	0.01*
POWER AND INFLUENCE	66.85	23.16	74.12	23.10	6.56	0.01*
MONEY AND POSSESSION	70.52	19.99	76.35	21.28	5.59	0.02*
EQUALITY AMONG NATIONS	76.73	24.89	83.59	20.06	7.00	0.01*
EQUALITY AMONG PEOPLE	79.79	22.86	83.72	18.51	4.26	0.04*
NATIONAL PRIDE	67.43	26.72	74.50	21.76	6.04	0.02*
FAME AND ADMIRATION	58.89	24.29	65.42	25.78	7.07	0.01*

* $p \leq 0.05$

basic latent structure of the value system. Thus, we are dealing with the analysis of middle range categories.

Nine components explain 52.4% of variance (see Table 5). Musek (2000) discovered a higher number of these dimensions ranging from eight to eleven which explain between 57.5% and 59.3% of system variance (two different samples).

The first factor is the strongest and explains 10.9% of the whole variance of the system. The values projected on this factor are strongly related to sport and athletes' status in the society.

The second factor does not vary that much. The highest projections on this factor have the following values: harmony among people, moral principles, honesty, justice, goodness, unselfishness, companionship and solidarity. These are values which are

supposed to be the highest values of every human being.

The rest of the factors contain the smallest amount of variance, the third factor being the values of cultural and aesthetic character. The fourth factor stands for the values which are similar to those with the second factor, except that in this case we are dealing with the clearer meaning (societal values). Sense value can be found with the fifth factor and spiritual values with the sixth factor. The seventh factor reflects very clear values of patriotism and the eighth family values. The last factor includes values whose denominator can be found in religious spheres.

To discover the following hierarchic fusion of values, it was important to decide for the extraction of factors. There had to be so many factors to discover the value categories of a broader range. On

Table 5: Factor Analysis of the questionnaire of values (nine components)

Component	INITIAL EIGENVALUES			ROTATION SUMS OF SQUARED LOADINGS		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.10	22.40	22.40	5.87	10.87	10.87
2	4.26	7.88	30.29	4.15	7.68	18.55
3	2.20	4.08	34.36	3.30	6.12	24.67
4	2.08	3.85	38.21	3.19	5.90	30.57
5	1.78	3.30	41.51	3.10	5.75	36.32
6	1.59	2.94	44.45	2.73	5.05	41.37
7	1.53	2.84	47.29	2.61	4.84	46.21
8	1.46	2.70	49.98	1.69	3.12	49.33
9	1.32	2.45	52.44	1.68	3.10	52.44

Table 6: Factor Analysis of the questionnaire of values (four components)

Component	INITIAL EIGENVALUES			ROTATION SUMS OF SQUARED LOADINGS		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.10	22.40	22.40	6.36	11.78	11.78
2	4.26	7.88	30.29	5.20	9.63	21.41
3	2.20	4.08	34.36	4.71	8.72	30.13
4	2.08	3.85	38.21	4.37	8.08	38.21

the basis of the theory of hierarchic structure of values and screen test we decided to extract four factors (Principal Component Analysis, Varimax Rotation with Keiser Normalization). These four factors explain 38.2% of variance (see Table 6). The hierarchic structure of broader range values with non-selected population ranges from 45.7% to 47.7% (Musek, 2000).

The first factor is the strongest and explains 11.8% of the whole variance. The highest projections on this factor are made from the values of the status-senses character. We are dealing here with the potency-hedonic category.

The second factor demonstrates less variance. Here we are dealing with the values of patriotism and societal values, belonging to the potency-moral category. There is more emphasis on the potency type.

The third factor consists of the values of culture and actualisation. We named this factor the category of fulfillment.

The fourth factor deals with the values of senses, family and safety, and thus directs us to the hedonic category.

We wanted to explain the hierarchic system of values on the basis of the major categories by extracting two factors (Principal Component Analysis, Varimax Rotation with Keiser Normalization).

Both factors explain 30.3% of system variance (see Table 7); the explained variance in Musek's analysis is between 37.3% and 39.7%.

The first factor is the strongest and its explained variance is 15.9%. The factor has the widest range and includes values such as perfection and harmony. They all belong to the Apollonian major category.

The second factor has a smaller explained variance (14.5%). The values associated with this factor are power, success, efficiency, pleasure and satisfaction. These values belong to the Dionysian major category.

Considering sport orientation, self-motivation, values, and competitive-need achievement, we tried to find out whether there was a possibility of establishing a clear model of discriminant functions which would differentiate between the four main groups of athletes (male athletes of individual and team sports, female athletes of individual and team sports). We used the discriminant analysis for the determination of four groups.

There are all the variables of the motivational field and those of the value system in a partly reduced model of the discriminant analysis. The variables of the value system are presented by factors which

Table 7: Factor Analysis of the questionnaire of values (two components)

Component	INITIAL EIGENVALUES			ROTATION SUMS OF SQUARED LOADINGS		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.10	22.40	22.40	8.55	15.84	15.84
2	4.26	7.88	30.29	7.80	14.45	30.29

Table 8: Canonical Discriminant Functions

Function	Eigenvalue	% of variance	Canonical correlat.	Wilks' lambda	Chi-square	df	Sig.
1	.319	65.3	.492	.646	141.169	48	.000*
2	.141	28.8	.351	.852	51.643	30	.008*
3	.029	5.8	.167	.972	9.096	14	.825

are extracted from the nine-component analysis of the questionnaire of values.

The analysis demonstrated three discriminant functions (see Table 8). The results show that the first and the second function significantly differentiate between all of the four main groups of athletes. The first function's variance is 65.3%, the second one is a lot lower (28.8%). The third function's explanatory role is not big and that is why we do not use it in our analysis.

The first discriminant function (see Table 9) includes sport orientation towards winning and competitiveness and the power motive. It includes the value system (generally pervaded by patriotism) as well. The function could be named competitive-winning efficiency. The position of centroids shows us that the function differentiates best in the area of type of sport (team and individual sports).

The second function involves the motive to avoid failure (very distinct) and the motive to achieve success (less distinct). This function includes a high degree of social and spiritual values as well. The group centroid shows differentiation between the sexes. One could name this function inner doubts and high societal orientation.

DISCUSSION

The analysis shows that the female athletes in competitive-need achievement motivation significantly

differ from the male athletes only in the motive to avoid failure. This becomes even more evident, if we look at the motive to achieve success. Even though the difference is not very significant, we may assume that female athletes want to succeed but their motives are expressed improperly or even overburdening. Motivation stemming from desire to avoid failure is negative in its basis (Atkinson, 1964). This motivation is based on fear or anxiety. It could be that female athletes perceive top sport differently from male athletes. The beginning itself can be very uncertain and this uncertainty becomes even bigger when the person engages in sport more actively. The reason is sociologically dependent, since female athletes express a smaller degree of self-confidence. (Lenney, 1977).

Male and female athletes do not differ significantly in sport orientation and self-motivation. There may be different paths to a goal (success) and they may depend on the level of motivation but the goal does not change. If things were different, top sport would not be called top sport and would not be efficiency-oriented.

Gill and Deeter (1988) claim that men possess a higher degree of competitiveness; their orientation towards personal goals is smaller and towards winning bigger. Our research, however, did not confirm this and neither did the research by Hayashi and Weiss (1994). Perhaps the character of top sport female athletes is shaped differently. Big pressures to achieve success from the very beginning force coaches to stimulate female athletes' competitiveness and desire to win at a very early stage. To some extent economical reasons may be blamed for this; they play a smaller role in the female top sport. Sport orientation is similar to that in male sports, which can bring about negative consequences such as anxiety, leading to negative motivation. In spite of the fact that the top sport male athletes are externally motivated by awards/prizes (Wankel, & Kreisel, 1985), it is obvious that self-motivation must be high as well. Self-motivation is higher with female athletes, which is probably the consequence of their top athlete status (constant desire to prove oneself).

The differences in the value system between the two sexes (societal and sense values) confirm the typical characteristics of both sexes. They are becoming less pronounced but they still distinguish the two sexes (Orlofsky, 1982). According to the number of differences we can claim that sexual stereotypes are less evident among athletes than among

Table 9: Structure Matrix

	DF 1	DF 2
WIN ORIENTATION	.589	-.083
COMPETITIVENESS	.321	-.166
CULTUR. AND AESTHET. VALUES	-.301	.004
PATRIOTISM	.216	-.192
POWER MOTIVE	.175	-.033
MOTIVE TO AVOID FAILURE	.152	.494
SOCIETAL VALUES	.270	.455
SPIRITUALITY	-.084	.218
MOTIVE TO ACHIEVE SUCCESS	.100	.108
SENSE VALUES	.263	-.289
STATUS VALUES	.155	-.433
FAMILY VALUES	-.087	-.127
GOAL ORIENTATION	-.145	.038
RELIGIOUS VALUES	.044	-.084
SELF-MOTIVATION	-.165	.159
TRADITIONAL VALUES	-.066	.072

the non-selected population. To succeed in sport one must (beside traditional values) appreciate the values assigned to masculine gender. The values connected to selflessness, emotional and spiritual life are not very important in training and competing. A certain degree of aggressiveness is needed as well. Many authors mention pleasure and entertainment as one of the leading elements of athletes' motivation (Gould, Feltz, & Weiss, 1985; Scanlan, Ravizza, & Stein, 1989). This is even one of the key values for young female athletes to persist in sport (Černohorski, 1998). Our research shows that this value is even lower with female than male top athletes. It can be explained by the fact that the importance of this value declines along with increasing engagement in sport. Physical stress and failure can have a negative effect on female athletes. Stress and failure lower the level of entertainment and satisfaction, which can lead to the point where they decide to quit top sport. We can understand this as the process of taking over the behaviour patterns of the opposite sex (Bem, Martyna, & Watson, 1976).

There are some differences in competitive-need achievement motivation between individual and team sports but they are not significant. The situation is different in the field of sport orientation. Due to the characteristics of team sports, significant differences in win and competing orientation are expected (Maehr, & Nicholls, 1980). The system of competitions and the nature of success forces athletes to constantly make comparisons, with victory as the only criterion of comparison. It is necessary to draw attention to the danger of excessive orientation towards winning, because it can lower the internal motivation (Deci, Vallerand, Pelletier, & Ryan, 1991).

The value systems of individual and team sports differ from each other. Most of the significant values were highly estimated by male and female athletes of team sports. Actually, there are two sorts of values, the former relating to status-sense symbols and the latter to patriotic-societal values. The nature of top team sports explains that these differences are completely normal. Team sports are given priority over individual sports in terms of number of TV viewers, media advertising and investments. It is understandable that athletes act according to the status they are given by the society. On the other hand, this may result in a loss of internal motivation. Awards, positions and comfort increase the external motivation (Wankel, & Kreisel, 1985).

If we look at the patriotic-societal values, we might be dealing with a deeper social phenomenon. It is only natural that team sports require individual's capability to adjust his or her abilities to a group (Maehr, & Nicholls, 1980). Thus we can say that team sports are sports where some segments of the athlete's abilities are subconsciously assigned to his or her group. The enthusiasm over national victory encourages athletes to change the object of affiliation. In our case, we are dealing with a special phenomenon where many athletes from other republics of the former Yugoslavia decided to stay in Slovenia after Slovenia gained independence. One could imagine that patriotic feelings are deeply rooted in man. A big proportion of this characteristic stems from the country's smallness. It would be better to stop being under the illusion that athletes highly praise patriotic values. Obviously personal experience of success is stronger than identification with the country.

The factor analysis and comparison of the value system of non-selected population and female and male athletes did not bring any surprising results. We can only see that the value system of athletes and non-selected population is very similar in terms of middle range category. There are neither any significant differences in the broader range. Perhaps we are dealing with a more specifically defined value system in the case of the non-selected population. At the highest hierarchic level there are two major categories, appearing in all researches all over the world, which do not discern between any selective patterns. It is clear, of course, that they are named differently since every research uses different scales and methodological approaches. Classification can be made from different perspectives. Differences are smaller from the contents' point of view. Thus we can compare the Apollonian major category to the values of Hofstede's (1980) collectivistic culture, and the individualistic culture values to the concept of Dionysian major category.

The results of the discriminant analysis lead us to conclude that real differentiation lies in the differences between sport types. Naturally, we cannot underestimate the differences between the two sexes. In spite of the fact that differences between males and females in top sport are diminishing, we must be concerned with each athlete and his individual achievements.

CONCLUSIONS

The research includes a large sample of Slovene male and female top athletes. The sample is representative and all the generalizations are within the allowed limits. Considering the number of athletes in the sample, this research is probably unique in the whole world (this may be due to the smallness of the country). The findings reflect the actual state in the field of motivation and values of top sport in Slovenia.

It would be logical to compare the results of this research to those of the sport-developed countries. In such a case one should be aware that each comparison would allow for some free (still controllable) space and trigger a comparison of other influential factors. Cultural, traditional and above all economical influences cannot be compared directly; however, we can make some indirect assumptions. When dealing with motivation, one must ask oneself about the origins of external motivation. It usually originates from the financial aspect of top sport. In the countries where financial status of top sport is defined motivational activities can be oriented more internally. Athletes can focus on training and are less burdened by the financial difficulties. The value system reflects different levels of motivational factors. We cannot say that the value system is completely different but every slightest difference could prove decisive in such a wide range of values.

REFERENCES

- Atkinson, J. W. (1964). *An introduction to motivation*. Princeton: Van Nostrand.
- Bem, S. L., Martyna, W., & Watson, C. (1976). Sex typing and androgyny: Further exploration of the expressive domain. *Journal of Personality and Social Psychology*, 34, 1016-1023.
- Bond, M. H. (1988). Finding universal dimensions of individual variation in multicultural studies of values: The Rokeach and Chinese value surveys. *Journal of Personality and Social Psychology*, 55 (6), 1009-1015.
- Černohorski, B. (1998). *Motivi in vrednote mladih športnikov* [Motives and Values of Young Athletes]. Unpublished bachelor's thesis, Ljubljana: Fakulteta za šport.
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychology*, 10, 325-346.
- Dishman, R. K., Ickes, W., & Morgan, W. O. (1980). Self-motivation and adherence to habitual physical activity. *Journal of Applied Social Psychology*, 10, 115-132.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.
- Gill, D. L. (1988). Gender differences in competitive orientation and sport participation. *International Journal of Sport Psychology*, 19, 145-159.
- Gill, D. L., & Deeter, T. E. (1988). Development of the Sport orientation questionnaire. *Research Quarterly for Exercise and Sport*, 59, 191-202.
- Gould, D., Feltz, D., & Weiss, M. (1985). Motives for participating in competitive youth swimming. *International Journal of Sport Psychology*, 16, 126-140.
- Hayashi, C. T., & Weiss, M. R. (1994). A cross-cultural analysis of achievement motivation in Anglo-American and Japanese marathon runners. *International Journal of Sport Psychology*, 25, 187-202.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly-Hills: Sage.
- Lenney, E. (1977). Women's self confidence in achievement setting. *Psychological Bulletin*, 84, 1-13.
- Maehr, M. L., & Nicholls, J. G. (1980). Culture and achievement motivation: A second look. In Warren, N. (Ed.), *Studies in cross cultural psychology* (vol. 3, pp 221-267).
- McClelland, D. C., Atkinson, J. W., Clark, R. W., & Lowell, E. L. (1953). *The achievement motive*. New York: Appleton-Century-Crofts.
- Musek, J. (2000). *Nova psihološka teorija vrednot* [New psychological theory of values]. Ljubljana: Educy.
- Nicholls, J. G. (1989). *The competitive ethos and democratic education*. Cambridge: Harvard University Press.
- Orlofsky, J. L. (1982). Psychological androgyny, sex-typing, and sex-role ideology as predictors of male-female interpersonal attraction. *Sex Roles*, 8, 1057-1073.
- Rokeach, M. (1973). *Nature of human values*. London: Free Press.
- Scanlan, T. K., Raviza, K., & Stein, G. L. (1989). An in-depth study of former elite figure skater: Introduction to the project, Sources of enjoyment. *Journal of Sport and Exercise Psychology*, 11, 65-83.
- Wankel, L., & Kreisel, P. (1985). Factor underlying enjoyment of youth sports: Sport and age group comparisons. *Journal of Sport Psychology*, 7, 51-64.
- Willis, J. D. (1982). Three scales to measure competition-related motives in sport. *Journal of Sport Psychology*, 4, 338-353.