# Differences in Attitude towards Sports by Intervention Police and Regular Police

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#### Purpose:

The aim of this paper is to determine the differences in attitude towards sports, level of dedication to sports, level of achievements in sports, sports preferences and general satisfaction with life, in police officers in intervention and regular police forces.

## Design/Methods/Approach:

The subjects of this research were police officers in the Ministry of Internal Affairs of the Republic of Croatia. Subjects completed questionnaires independently upon receiving instructions by the main researcher, and the following questionnaires were used: Attitude towards Sports (K1), Level of Dedication to Sports (K2), Level of Achievement in Sports (POSTS) Sports Preferences (PREFS) and Satisfaction with Life (SWLS).

## Findings:

The three groups of subjects, intervention police officers, junior police officers and senior police officers, differ significantly in their attitudes towards sports, level of dedication to sports, sports achievements, sports preferences and the level of satisfaction with life. For all variables examined, the best results were observed in the intervention police group.

#### Research Limitations/Implications:

Future research should focus on combat sports.

## Practical Implications:

Results of the paper should be the development of a new approach toward different models of lifelong learning and skills training of police officers according to their professional position.

## Originality/Value:

Originality of the paper are determined differences in attitude towards sports, level of dedication to sports, level of achievements in sports, sports preferences and general satisfaction with life in police officers in intervention and regular police forces. Results could be helpful for the implementation of changes into the education of police officer.

## UDC: 796:351.74/.76

**Keywords:** sports, police, attitude towards sports, sports preferences, sports achievement

## Razlike v odnosu do športa med policisti posebne policijske enote in policijskimi uradniki

#### Namen prispevka:

Namen prispevka je ugotoviti razlike v odnosu do športa, stopnjah predanosti športu, stopnjah športnih dosežkov, športnih preferencah in splošnega zadovoljstva v življenju med policisti posebne policijske enote in policijskimi uradniki.

#### Metode:

Populacijo so predstavljali policisti Ministrstva za notranje zadeve Republike Hrvaške, ki so na osnovi navodil raziskovalcev neodvisno izpolnili vprašalnike. Uporabili smo naslednje vprašalnike: Odnos do športa (K1), Stopnja predanosti športu (K2), Stopnja športnih dosežkov (POSTS), Športne preference (PREFS) in Zadovoljstvo z življenjem (SWLS).

## **Ugotovitve:**

Vse tri skupine policistov, policisti posebne policijske enote ter nižji in višji policijski uradniki, se med seboj razlikujejo v odnosu do športa, stopnji predanosti športu, športnih dosežkih, športnih preferencah in stopnji zadovoljstva v življenju. Najboljše rezultate pri vseh spremenljivkah dosegajo policisti posebne policijske enote.

## Omejitve/uporabnost raziskave:

Prihodnje raziskave naj bi se osredotočile na borilne športe.

## Praktična uporabnost:

Rezultati naj bi služili kot nov pristop k različnim modelom vseživljenjskega učenja in usposabljanja policistov skladno z njihovo poklicno usmerjenostjo.

## Izvirnost/pomembnost prispevka:

Izvirnost prispevka je v ugotovljenih razlikah v odnosu do športa, stopnji predanosti športu, športnih dosežkih, športnih preferencah in stopnji splošnega zadovoljstva z življenjem med policisti posebne policijske enote in policijskimi uradniki. Rezultati so lahko v pomoč pri uvajanju sprememb izobraževanja policistov.

#### UDK: 796:351.74/.76

Ključne besede: šport, policisti, odnos do športa, športne preference, športni dosežki

## 1 INTRODUCTION

Physical ability (motor and functional abilities and fitness disposition) of police officers is the foundation upgraded by specific police knowledge and specific police skills for the purpose of creating a quality individual. The importance of

assessing the current state has been recognized for a long time in military systems worldwide and in our country as well (Jukić et al., 2008). Examining the attitude of individuals towards sports involves examining attitudes and behaviour related to sports generally. Behaviour may be observed from two standpoints, i.e. how much time and effort a person invests in a sports activity, and how successful they are in it (Bosnar & Prot, 1995). Attitudes of adults are difficult to change, and it is much more efficient to develop preferable attitudes in childhood and adolescence. This very population should be paid special attention when it comes to attitudes towards certain sports or exercising in general (Prot, Bosnar, & Sertić, 1999).

Picarielo (2000) points out that conditioning is based on programs aimed at developing endurance, power and speed, as well as the development of mental skills, group cohesion and factors related to conditions in real situations. Even without additional environment factors, many police officers face considerable problems related to their own bodies, which are more problematic than the level of difficulty of tasks that they are to carry out (obesity and obesity-related problems, locomotor system problems, every-day exposure to stressful situations). Mišigoj-Duraković (2003) states that physical activity leads to a wide range of physical and biochemical changes in the organism, as well as to changes in the way people think and perceive themselves and their environment. The fundamental condition for achieving such a state is creating an exercising routine.

The notion of subjective welfare may generally be defined as the assessment of welfare, satisfaction and happiness. Satisfaction with life represents the basic element of subjective welfare, accompanied by positive and negative effects and, according to Diener (2000), the notion of subjective welfare includes optimism and the feeling of fulfilment. Several researchers (Diener & Biswas-Diener, 2000; Diener, Suh, & Oishi, 1997; Myers & Diener, 1995) have determined that people are generally satisfied with their lives. The first feature relates to satisfaction as being personal and subject to one's own perception. Definitions of subjective satisfaction do not list objective conditions, such as health, financial situation, comfort, which may affect subjective satisfaction, but are not directly connected to it. The second feature relates to subjective satisfaction as containing positive criteria. Therefore, determining satisfaction does not only refer to the lack of negative factors, but also to the presence of positive factors. The third feature of subjective satisfaction contains global assessments of all life aspects of an individual. Even though a person may achieve satisfaction in only one area of life, subjective satisfaction is an integrated assessment of a person's life.

The objective of this research was to determine differences in the attitude towards sports, the level of dedication to sports, the level of achievement in sports, sports preferences and general satisfaction with life in intervention and regular police officers. According to this objective, a hypothesis was developed that presupposes the existence of differences in the aforementioned features between intervention and regular police officers.

## 2 METHODS

## 2.1 Subjects

The sample included 318 police officers of the Ministry of Internal Affairs of the Republic of Croatia (82 intervention police officers, 93 senior police officers and 143 junior police officers). Subjects participated in the research voluntarily, and the results were collected anonymously. The fundamental condition for forming the sample was that all subjects were police officers. The largest number of subjects (39.9%) belong to the age group 41 to 45 (Table 1), and most of them (59.3%) finished a four-year high school (Table 2).

Table 1: Age of subjects

Age	percentage
Up to 25	7.8
26 to 30	8.9
31 to 35	15.5
36 to 40	29.5
41 to 45	39.9
46 to 50	16.7
51 to 55	4.7
Older than 55	0.4

Table 2: Level of education of subjects

Level of education	percentage
high school (level 4)	59.3
university degree (bachelor) (level 6)	18.2
professional specialist and university	
degree (master) (level 7)	22.5

#### 2.2 Variables

Attitude towards Sports (K1), (Bosnar & Prot, 1993, 1995; Mraković, 1970). The K1 scale of general attitude towards physical exercise and sports contains 30 items. The reliability of the overall scale result of standardized items presented by the Cronbach's alpha was 0.94 in this research.

*Dedication to Sports (K2)*, (Bosnar & Prot, 1995; Mraković, 1970; Prot & Mraković, 1988). The level of dedication to sports was measured by the Mraković's K2 scale in the version with four items of the Thurstone type. In each item there are eleven sub-items constructed by the ascending intensity sequence. The Cronbach's alpha in this research was 0.86.

*Sports Preferences (PREFS)*, (Prot & Bosnar, 2000). This is a five-degree scale of behavioural intentions containing 52 sports. Subjects were asked to determine to which extent they would go in for each sport. The sum of the results was taken as the final result.

*Level of achievement in sports (POSTS)*, (Bosnar & Prot, 1995). The level of achievement in sports was assessed using a six-degree scale.

The result is the scale value of the highest item circled by subjects, and the sum of the results was taken as the final result.

Satisfaction with Life Scale (SWLS), (Diener, Emmons, Larsen, & Griffi, 1985). Among various elements of the subjective feeling of welfare, this scale is narrowly aimed at measuring general satisfaction with life and is related to similar constructions, such as positivity, love and loneliness, and represents cognitive aspects of satisfaction with life. The results on the scale may be marked as a global assessment of life quality according to personal criteria. The scale includes five items, related to which subjects should mark an answer ranging from 1 (completely false) to 7 (completely correct) (Masten, Dimec, Ivanovski Donko, & Tušak, 2010). The overall sum result was taken as the final result, with a Cronbach's alpha of 0.85.

#### 2.3 Procedure

Data were collected during June, July and August of 2012 in various police units. Subjects completed the questionnaires independently upon receiving instructions by the primary researcher. Data were analyzed using the SPSS statistical program package (Discriminant Analysis and One way analysis of variance).

## 3 RESULTS

The descriptive statistics of the overall results shows that sports achievements are average (AM = 3.01; SD = 1.21), while the attitude towards sports is above average (AM = 90.97; SD = 21.15). The level of dedication to sports is average (AM = 22.19; SD = 7.55). Sports preference is a bit above average (AM = 136.43; SD = 39.32), while the satisfaction with life is above average (AM = 22.31; SD = 5.51).

Table 3 shows the differences between subject groups in observed variables. It is visible that differences are significant in all five variables.

Variable		Intervention police officers  Junior police officers		Senior po	Senior police officers			
	n =	82	n =	143	n	= 93		
	AM	SD	AM	SD	AM	SD	F	р
POSTS	3.35	1.39	2.80	1.10	3.03	1.15	5.69	.004
K1	99.79	22.33	89.02	20.56	86.17	18.73	10.76	.000
K2	26.30	8.37	20.41	6.85	21.31	6.47	18.61	.000
PREFS	151.71	39.39	131.82	41.47	130.05	32.01	8.81	.000
SWLS	23.72	5.13	21.13	5.87	22.88	4.91	6.67	.001

AM – arithmetic mean, SD – standard deviation, F – F test, p – F test significance

The results of discriminant analysis show a statistically significant (p < 0.05) difference between the three groups of subjects on each observed

Table 3:
Differences
between
intervention
police officers,
junior police
officers and
senior police
officers\*

<sup>\*</sup>Differences between intervention police officers, junior police officers and senior police officers in the level of achievement in sports (POSTS), attitude towards sports (K1), level of dedication to sports (K2), sports preferences (PREFS) and satisfaction with life (SWLS).

variable. It is assumed that these differences are due to level of education, which affects professional aptitude. Furthermore, it may be concluded that differences also arise from the difference in the scope of work activities of the observed groups. Intervention police officers perform activities that require a higher level of physical aptitude, while in regular police officers prevail abilities related to legal and criminalist regulations.

Table 4 shows between which groups of subjects and in which variables there are statistically significant differences. The results show that intervention police officers positively differ the most from junior police officers, on all measures, while they do not differ significantly from senior police officers only in variables related to sports achievements and satisfaction with life.

Table 4: Significance of differences in variables between subject groups

variable	group	Intervention p	olice officers	Junior police officers	
		F	р	F	р
POSTS	Junior police officers	10.98	.001		
	Senior police officers	2.81	.096	2.50	.116
K1	Junior police officers	13.43	.000		
	Senior police officers	19.24	.000	1.16	.283
K2	Junior police officers	32.74	.000		
	Senior police officers	19.72	.000	1.01	.315
PREFS	Junior police officers	12.43	.001		
	Senior police officers	16.08	.000	.12	.723
SWLS	Junior police officers	11.01	.001		
	Senior police officers	1.28	.271	5.67	.018

POSTS – level of achievement in sports, K1 – attitude towards sports, K2 – level of dedication to sports, PREFS – sports preferences, SWLS – satisfaction with life, F – F test, p –F test significance

The reasons for observed differences in all three groups are evident during the selection of staff for various police services. Based on the results obtained, it may be concluded that groups of subjects were not selected by chance for performing official tasks characteristic for the group they are in, which means that they were purposefully selected for jobs they hold in their departments.

Table 5 contains correlations between variables, and the results indicate that scale K1 is more connected with the level of dedication to sports than K2 with achievement in sports (Bosnar & Prot, 1995). The correlation between the level of sports achievement and dedication to sports is high, as was expected (r = 0.68), so based on this it may be concluded that a higher level of dedication to sports conditions better sports achievements, i.e. better results in sports.

**PREFS SWLS POSTS** K1 K2 **POSTS** 1.000 .490 1.000 K1 K2 .677 .594 1.000 **PRFFS** .099 394 .178 1.000 **SWLS** .129 .185 .126 .154 1 000

Table 5: Correlations\*

By analogy of achieving sports mastery, for which one requires between 15 and 30 years of sports training, more dedication to sports in police officers resulted in a higher level of sports achievement.

By means of discriminant analysis, two functions were obtained, which statistically significantly discriminate between the three groups (intervention police officers, junior police officers and senior police officers) (Table 6). The first discriminant function contains 80.5% and the second one the remaining 19.5% of the common variance.

Functions	Inherent value	% variance	Cumulative variance %	Canonical correlation	Wilk's lambda	Chi- squared	df	Sig.
1 2	.165	80.5	80.5	.376	.826	59.964	10	.000
	.040	19.5	100.0	.196	.962	12.243	4	.016

Table 6: Canonical discriminant function

df - degrees of freedom, Sig. - level of significance of the canonical discriminant function

The largest impact on the formation of the first discriminant function was made by the K2 variable – level of dedication to sports. It is followed by K1 – attitude towards sports, PREFS – sports preferences and POSTS – level of achievement in sports. The second significant canonical discriminant function was determined by the SWLS variable – satisfaction with life.

	Standardized coefficients of discr. function Function 1	Standardized coefficients of discr. function Function 2	Structure matrix Function 1	Structure matrix Function 2
POSTS	229	.610	.448*	.275
K1	052	905	.596*	494
K2	.925	.051	.847*	009
PREFS	.400	097	.566*	284
SWLS	.289	.649	.428	.552*

Table 7: Coefficients of standardized canonical discriminant function and structure matrix coefficients

The largest differences between the groups (intervention police officers, junior police officers, and senior police officers) appeared in the area that is related to physical exercise and sports, level of dedication to sports, attitude towards sports, sports preferences and level of achievement in sports, and then also in the area related to satisfaction with life (Table 7).

<sup>\*</sup>Correlations between variables, POSTS level of achievement in sports, K1 attitude towards sports, K2 level of dedication to sports, PREFS sports preferences and SWLS satisfaction with life.

<sup>\*</sup>High absolute correlations between variable and discriminant function

Centroids of groups refer to the arithmetic mean values of analyzed groups of subjects in the coordinate system of discriminant functions and show to which extent the groups differ according to each discriminant function. Table 8 shows the centroids of the three groups in the coordinate system of two discriminant functions. The intervention police group differs significantly from the groups of junior and senior police officers according to the first discriminant function. Observing the second discriminant function, there is a significant difference between the group of junior police officers and the other two groups, intervention police officers and senior police officers, which are, according to the second discriminant function, very similar.

Table 8: Centroids of groups in the discriminant function

	Function 1	Function 2
Intervention police officers	.676	054
Junior police officers	295	165
Senior police officers	142	.301

## 4 DISCUSSION

Groups of subjects in this research significantly differ in *the level of achievement in sports*. On average, all groups had achieved »the level of active training and competition in school sports«. However, a somewhat larger number of subjects in the group of intervention police, who had achieved the level of »doing sports and achieving the results at the state or international level«, increased the average of this group. The level of physical activity and achievements in sports at the beginning of a career in police has a significantly high correlation with the level of being fit, as well as a higher correlation with the level of being fit fifteen years later than it is the case with the level of physical activity at the same time (Smolander, Louhevaara, & Oja, 1984; Sorensen, Smolander, Louhevaara, Korhonen, & Oja, 2000).

All three groups of subjects have a positive *attitude towards sports*. By far the best attitude towards sports has the group of intervention police and they statistically significantly differ from other groups on the level of p < .000. In groups of junior and senior police officers there is no significant difference in the attitude towards sports. Subjects mostly engage in sports in order to develop and maintain their physical abilities, to stay healthy and in good shape. In this research, attitudes towards sports share a larger proportion of variance with the level of dedication than with the level of achievement in sports (Bosnar & Prot, 1995).

The largest difference between the observed groups of subjects was found in the *level of dedication to sports*. It determines the significant 72% of variance of the first canonical discriminant function. The group of intervention police officers has the highest level of doing physical exercise and dedication to sports. It is assumed that the positive selection of police officers for the intervention unit contributed to such results. The relation between the level of dedication to sports and the attitude towards sports is visible (35.3% common variance).

The most marked *sports preferences* are presented by the group of intervention police officers. All groups prefer the following sports the most: swimming, soccer,

and shooting, while the group of intervention police officers, on the same level, additionally prefers diving, alpinism and archery. All combat sports that were offered in the sports preference scale were marked with the middle grade (3) or »sport I would do occasionally or in convenient conditions«. This research also included the scale of attitudes towards combat sports SBS96 (Bosnar, Sertić, & Prot, 1999), but the scale reliability was too low due to the characteristics of the sample (Cronbach's alpha .407).

The research showed levels of *satisfaction with life* above average. The satisfaction with life variable is the one with the largest impact on generating the second significant canonical discriminant function, which, due to this, may be named satisfaction with life. It explains 19.5% of the total variance. At the level above average satisfaction with life, there are significant differences between the groups of intervention police officers and junior police officers, as well as between senior and junior police officers. However, between the groups of intervention police officers and senior police officers there is no statistically significant difference regarding satisfaction with life.

#### 5 CONCLUSION

Generally speaking, a statistically significant difference between all three groups of subjects (intervention police officers, junior police officers and senior police officers) was found in variables by means of which their sports achievements, attitude towards sports, the level of dedication to sports, sports preferences and satisfaction with life were diagnosed. Based on this the hypothesis was confirmed as well.

The three groups of subjects, intervention police officers, junior police officers and senior police officers, significantly differ in their attitudes towards sports, level of dedication to sports, sports achievements, sports preferences and the level of satisfaction with life. In all scales that were used for assessing the subjects, the best results were achieved by the group of intervention police officers, followed by the group of senior police officers, and finally the group of junior police officers. It is assumed that positive selection with respect to sports achievements and the level of dedication to sports had contributed to such results. Future research should focus on combat sports.

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