LEARNING STRATEGY, LEARNINGMOTIVATION AND PARENT SUPPORT TO UNTALENTED STUDENTS AND STUDENTS WITH SPORTS TALENT

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The main goal of the research was to determine if there were significant differences between untalented students and students with sport talentt in cognitive learning strategies, learning motivation and parent support as these variable had been considered by a number of authors as important personality and environmental factors for talent development in a variety of domains including sport. The samples used in the research were groups of N=30 students talented for team sports, N=23 students talented for individual/duel sports and N=7 untalented (control group). Students from the three groups were attending VII, VIII i IX grades in primary schools of Sarajevo County. The three groups of examinees were equal with respect to their school achievement (grades) and school conduct. On the account of the collected data, analyses showed that there were no differences between students in values of each of the analyzed variable. On the other hand, when the sort of sport was taken into account, the analyses showed that the students talented for individual/duel sports had the highest and the students talented for team sports had the lowest values in cognitive strategies of rehearsal, organization and critical thinking. The talented for individual/duel sports had the highest values and untalented students had the lowest values of intrinsic motivation and task value. No differences were found among the three groups in extrinsic motivation and parent suport.

Key words: talent, sport, cognitive strategies, motivation, parent support

Introduction

Abstract

Talented individuals are defined as persons who achieve above-average results in different domains and activities such as science, leadership, art and sports. According to contemporary models of giftedness and talent, giftedness is just a potential that is in time transformed into high achievements (talents or realized giftedness) in specific activities through the processes of maturation, learning and training (eg. Gagne, 2000; Ziegler i Heller, 2000; Heller i Schofield, 2000). Psychomotoric abilities without which are basic ingredients talent development and/or high levels of performance in sport are not possible (Gagné, 2000). According to Gardner (1983) a high level of bodily-kinestetic intelligence is needed so an individual could develop high achievements in sports, but high levels of some other abilities are also important in sport performance (Gagné, 2000). Psychologists lay a great emphasis on intelectual abilities in their talent research.

In the same way, sport experts (such as trainers, sport teachers in school and sport managers) pay a great deal of attention on motoric skills thus neglecting the importance of personality and environmental factors. No doubt that abilities are necessary, but talent cannot be realized without practice, efforts and adequate work conditions (Ziegler i Heller, 2000). Heller (1990) in his Munich Modelof Giftedness and Talent (MMGT)includes enviromental factors such as family climate, quality of instruction, classroom climate, critical life events and so on. This model also includes personality variables, especially the ones related to achievement motivation, expectation control, test anxiety, coping with stress and learning strategies.

The author calls these variables environmental and intrapersonal moderators as they moderate the process of the transormation of gifts into talents. In the same way, Gagné (2000, 2005) in his Differentiated Model of Giftedness and Talent (DMGT) includes macro-systemic environmental factors, important others (parents, teachers, menthors etc), provisions and important life events enviromental catalysts into and physical characteristics (appearence, motor skills, strenght etc), motivation, volition, self-regulation and personality traits into intrapersonal catalysts. These catalysts must operate in a coordinated and sinergic way to transform potentials into talents and high achievements. At primary school age, the students capacities of the included in extracurricular activities such as sports are additionally loaded aside from their school tasks, so high motivation, work great efforts, encouragement and support by their teachers and parents are needed to maintain high level of performance in the both activities. In their efort to excell in sports and school at the same time, these students must also possess adequate learning and work strategies.

Accordingly, the main purpose of the research in this paper is to examine if there are potential differences between untalented student and students talented in sports with respect to their (rehearsal, strategies elaboration, learning organization and critical thinking), learning motivation (intrinsic motivation, task value and extrinsic motivation) as these are important psychological (personal) and environmental moderators of talent development.

Methods

Participants

The research was conducted on a sample of N=125 primary school students (67 males and 58 females) from VII, VIII and IX grades. In total, participants from 23 primary schools in Sarajevo were examined. Within this sample there were N=71children untalented for sport (control), N = 30children talented for team sports (football. volleyball and basketball), N=23 children talented forindividual/duel sports(martial arts, tennis, table tennis and athletics). The main criterion for the selection of the talented participants were that they had taken part in sportcompetitions within a period of one year prior to the research and had won the three highest ranks in the competitions. The competitions had to be at least at municipality level. There were N=15 talented competitors at municipality level, N=23 talented competitors at county level, N=2 talented competitors at federal level, N=11 talented competitors at state level and N=3 talented competitors at international level. The both categories (talented and untalented) were equal with respect to their school grades and school conduct. Thus, there were N=41 talented and N=45 untalented children with the highest total school achievement grade 5 (A) at the end of the previous school year, N=8 talented and N=23 untalented children with a total school achievement grade 4 (B) at the end of the previous school year, N=5 talented and N=3 untalented childrenwith a total school achievement grade 3 (C) at the end of the previous school year .The differences between the two groups in school grades were not significant $(\chi^2 = 5.738 \text{ and } p = 0.057)$. There were N=2 untalented children with t grade 4 (B) for school conducwhile no talented child had lowered gradefor school conduct. Yet, this difference was not statistically significant (χ^2 =1.546 and p=0.214). Mean age of the participants was M=14.209for the talented and M=13.647for the untalented group and this difference was significant (t=3.478, df=115and p=0.001). There were N=39 male and N=26 female talented children. On the other hand, there were N=15 male and N=37 female untalented children. The gender differences were statistically significant, where more males were in the talented and more females in the untalented group. The objection to further data analyses is that the data interpretation is limited due to the fact the groups were not equalized with respect to gender and age.

Instrumentation

During the data collection, the next instrument were used: 1. Socio-demographic Data Questionnaire of Children (SDDQC); 2. Motivated Strategy for Learning Questionnaire (MSLQ) 3. Parent Support Scale (PSS).

Socio-demographic Data Questionnaire (SDDQ) The questionnaire contains 12 questions divided into two sections. The first section is related to general data on children such as school a child goes to, gender and age. The second section is related to the data concerning school grades and conduct, competitions and the domains of talent and activities the child had taken participation in. These questions also covered the data related to competition level and awards in case a child had competed.

Motivated Strategy for Learning Questionnaire (MSLQ)

The questionnaire was created by Pintrich and al. (1993) in order to measure motivation orientation and cognitive strategies for learning in children at school. Description. The construction of this instrument is based on Social Learning Theory. In its original form, the questionnaire contains 81 questions representing Likert-type 7-point rating scales (where 1 represents total disagreement and 7 total agreement). The questionnaire has two parts, first of which contains cognitive learning strategies scales, and the second one contains motivation scales. In total, there are 15 scales in the questionnaire. For the purpose of this research, only cognitive learning strategy scales (four scales-Rehearsal, Elaboration, Organization and Critical Thinking) and motivation orientation scales (three scales-Intrinzic Motivation, Extrinsic Motivation and Task Value) were used. In a pilot research conducted prior to the main phase of this research, this intrument was applied to a group of N=54 VII and VIII-graders in a primary school in Sarajevo, after which exploratory factor analysis (EFA) was performed. After EFA, all items which did not fit to the expected factor structure and which lowered reliability of the scales were removed from the questinnaire so we got shorter versions of some of the scales. Thus, scales Elaboration and Critical Thinking had only three instead of four items. All other cognitive scales and motivation scales maintained the same number of items as their original forms. Reliability. Medium a-Cronbach type reliability was determined for all of the cognitive strategies scales (a=0.556 and N=4 for Rehearsal, q=0.620 i N=3 for Elaboration.q=0.708 and N=4 for Organization and a=0.624 and N=3 for Critical Thinking). Medium to high reliability was determined for motivation scales (a= 0.704 and N=4 for Intrinsic Motivation, a=0.753 and N=6 for Task Value a=0.844 and N=3 for Extrinsic Motivation). Normality. The distributions of the results on the scales were analyzed. For the scales Rehearsal, Elaboration and Critical Thinking, the values of skewness and curtosis indices were within acceptable range and Kolmogorov-Smirnov Zvalues (K-S Z) were not significant (skewness=-0.245, kurtosis=-0.623, K-S Z=0.992and p=0.278 for Rehearsal, skewness=-0.503, kurtosis=-0.922, K-S Z=1.098 and p=0.180 for Elaboration and skewness=-0.317, kurtosis=-0.320, K-S Z=1.016 and p=0.253 for Critical Thinking). The values of skewness and kurtosis indices were acceptable for the scale Organization (skewness=-0.343 and kusrtosis=0.430), but its K-S Z value was statistically significant (K-S Z=1.483 i p=0.025), so data transformation with mathematical expression

$$3,230x(3-\sqrt{X_{maks.}+7,7-X})$$

was employed in order to gain normally distributed results. Finally, non-significant K-S Z-value was gained (-0.343 and p=0.110) with acceptable values of skewness and kurtosis (skewness=-0.007 andkurtosis=-1,054). The results on the scales of Intrinsic Motivation and Task Value were normally distributed according to the values of skewness, kurtosis and K-S Z-value (skewness=-0.697, kurtosis=-0.253, K-S Z=1.344 and p=0.054 for Intrinsic Motivation and skewness=-0.699, kurtosis=-0.102, K-S Z=1.262 and p=0.083 for Task Value), but the results on the scale of Extrinsic Motivation were not normally distributed (skewness=-1.265, kurtosis=1.201, K-S Z=1.921 different and p=0.001)even after data transformation were attempted. So, the results on the scale will be analyzed with non-parametric statistical methods.

Parent Support Scale (PSS)

This scale was specially designed for the purpose of this research. The basis for the scale construction were empirical studies of parental behaviours related to their support to children in different school and extracurricural activities. These studies were related to parental support to children in their problem-solving and parent-child communication (Liebkind, Jasinskaja-Lahti i Solheim, 2004), parents' help to their children in dealing with age related problems (Perry, Liu, i Pabian, 2010), parents' initiative in visiting schools and getting informed on their children's school activities and tasks (Anderson-Butcher, Amorose, Iachini i Ball, 2013) and parental surveillance over the time their children spend in studynig (Chen, 2008). Description. The items of the instrument were Likert-type five-point rating scales (1 - never, 2 rarely, 3 - sometimes, 4 - often i 5 - almost always). Each item described a behavior of parents related to help and support they are giving to their children in school and extracurricural activities. First form of the instrument consisted of 48 items. Each of the items was assessed by five independet evaluators/teachers from five different primary school in Sarajevo.

Following their professional experiencesand opinions, all the items that were not suitable for the population of the children in primary schools in Sarajevo were removed. Also, other items were modified and adjusted to VII-, VIII- and IX-graders with respect to their developmental stage and capacities to understand questions and answer correctly. Items were modified to be congruent to the cultural background, language and knowledge of children in B&H. The next form of the instrument contained 36 items, and was applied on a sample of N=54 VII- and VIII-graders in a primary school in Sarajevo. After EFA and reliability analysis were performed, the items whichcontributed to pure onedimensional factor structure and high reliability of the scale were maintained. The final version of the scale had only 12 items. Reliability.a-Cronbach for the scale in the main phase of the research wasa=0.873, indicating that the scale is highly reliable. Normality.

The values of skewness and kurtosis for the result on the PSS were acceptable (skewness=-0.841 and kurtosis =0.430), but K-S Z value proved to be significant (K-S Z=1.535and p=0.018). So, data transformation with mathematical expression

$$7 x [1 - \log_{10} (X_{maks} + 1 - X)]$$

was performed and normal distribution of the results on this scale was achieved (skewness=-0.023, kurtosis=-0.357, K-S Z=0.802 and p=0.541).

Data collection

The permission for data collection was officially given by the Ministry of Education, Science and Youth and sent to the N=31 primary schools of Sarajevo. In total, the cooperation in the research project was established with N=23 out of 31 schools. Managers in each of these 23 school gave out a written permission to the researchers to carry out psychological testing on the children in their schools. Afterwards, professional communication between researchers and school staff (school psychologists, pedagogists and teachers) and parents was set up. The goal and nature of the research were explained to the school staff and parents. Teachers, pedagogists and school psychologists gave their aid to correct samples selections and enabled adequate testing conditions in clasrooms. The selected students were informed on the testing dateseveral days in advance, so they could reorganize their activities in and out of school. The selected students were given instructions how to fill in questionnaires, and, if needed, they were given additional explanations related to the questions.

Results

Differences between untalented students and studentswith sports talent in the use of cognitive strategies for learning

Two analyses were done and presented in this section of the paper. In the first analysis, two groups were compared with regard to their results on cognitive strategies scales- the group of sport talents taken together (regardless of what kind of sport they participate in) and the group of untalented students. In the second analysis, three groups were compared on these scales-students talented for individual/duel sports, students talented for team sports and untalented students. When only the two groups (the group of sport talents regardless of the kind of sport and untalented students) are compared in the results on cognitive scales, no significant differences are found (t=0.175 and p=0.861 for Rehearsal, t=-0.319 andp=0.750 for Elaboration, t=0.951 and p=0.344forOrganizationand t=-0.593 and p=0.554 for Critical Thinking). So, another analysis was done with one-way ANOVA where the three groups talented in individual/duel sports, (students students talented in team sports and untalented students) were compared in the values of these variables.

On the account of the results of ANOVA, the three groups differ significantly in their results on Rehearsal(F=3,803, df=2 and p=0.025), Organization(F=5.615, df=2 and p=0.005) and Critical Thinking(F=3.371, df=2 and p=0.038), while there are no significant differenceson Elaboration (F=0.831, df=2 and p=0.438).

Table 1. Mean values and standard deviations of the groups on the cognitive strategies scales

Strategy	Group	X _{min.}	X_{mak}	Mea	St.
Rehearsal	Untalented	1,41	7,00	4,15	1,236
	Talented in individual/duel sports	1,75	7,00	4,61	1,329
	Talented in team sports	2,11	6,21	3,65	1,082
	Talented-total	1,75	7,00	4,08	1,279
	Total	1,41	7,00	4,12	1,251
Elaboration	Untalented	1,46	7,00	4,42	1,477
	Talented in individual/duel sports	1,93	7,00	4,69	1,401
	Talented in team sports	1,24	7,00	4,20	1,448
	Talented-total	1,24	7,00	4,42	1,435
	Total	1,24	7,00	4,42	1,452
Organizatio n	Untalented	1,49	6,54	4,35	1,291
	Talented in individual/duel sports	1,49	6,54	4,63	1,308
	Talented in team sports	1,98	5,80	3,51	1,190
	Talented-total	1,49	6,54	4,01	1,355
	Total	1,49	6,54	4,19	1,326
Critical Thinking	Untalented	2,71	7,00	5,10	0,955
	Talented in individual/duel sports	3,97	7,00	5,48	0,798
	Talented in team sports	2,91	6,71	4,84	1,047
	Talented-total	2,91	7,00	5,12	0,991
	Total	2,91	7,00	4,52	1,323

Differences between untalented students and studentswith sports talent in learning motivation

Table 2. :Mean values and standard deviations of the groups on the learning motivation scales

Motivation	Group	X _{min.}	X _{maks.}	Mean	St.
Intrinsic Motivation	Untalented	1,75	7,00	5,25	1,23
	Talented in individual/duel	1,00	7,00	5,72	1,45
	Talented in team sports	3,00	7,00	5,60	1,01
	Talented-total	1,50	7,00	5,10	1,50
	Total	1,50	7,00	5,19	1,35
Extrinsic Motivation	Untalented	3,25	7,00	5,77	1,15
	Talented in individual/duel	3,50	7,00	5,87	0,99
	Talented in team sports	3,00	7,00	5,82	0,87
	Talented-total	2,50	7,00	5,59	1,24
	Total	1,00	7,00	5,66	1,36
Task Value	Untalented	1,50	6,50	4,56	1,54
	Talented in individual/duel	2,50	7,00	5,37	1,38
	Talented in team sports	3,17	6,67	5,19	0,91
	Talented-total	3,00	7,00	5,47	0,94
	Total	3,00	7,00	5,55	0,98

Two analyses were done and presented in this section of the paper. In the first analysis, two groups were compared with regard to their results on motivation scales- the group of sport talents taken together (regardless of what kind of sport they participate in) and the group of untalented students. In the second analysis, three groups were compared on these scales-students talented for individual/duel sports, students talented for team sports and untalented students. In average, the students talented for individual/duel sports have the highest results while the students talented for team sports have the lowest results on the scales Rehearsal, Organization and Critical Thinkig (see table 1). When taken together, the both groups of talented for(individual/duel and team sports) do not differ significantly from the group of untalented students in the values on Intrinsic Motivation

(t=0.624 and p=0.534) and Task Value (t=0.750 and p=0.455). No significant difference was found between the two groups in the values on Extrinsic Motivation too (Mann-Whitney's U=1679.00and p=0.233). In the next step, ANOVA was employed in order to identify differences between groups when talents for team and individual/duel sports were treated separately. According to the results of ANOVA, there are signifcant differences between the three groups (talented for individual/duel sports, talented for team sports and untalented students) in the values on Intrinsic Motivation

students) in the values on Intrinsic Motivation (F=6.070, df=2 and p=0.003) and Task Value (F=3.120, df=2 i p=0.048). The students talented for indivudual/duel sports have the highest and untalented students have the lowest results on these two scales. The result of the analysis with Kruskal-Wallis'test show there are no significant differences among the three groups in the values on Extrinsic Motivation (χ^2 =2.630, df=2 i p=0.268).

Differences between untalented students and studentswith sports talent in parent support

Two analyses were done and presented in this section of the paper. In the first analysis, two groups were compared with regard to their results on Parent Support Scale- the group of sport talents taken together (regardless of what kind of sport they participate in) and the group of untalented students. In the second analysis, three groups were compared on this scale-students talented for individual/duel sports, students talented for team sports and untalented students.

Table 3. Mean values and standard deviations of the groups on the Parent Support Scale

Scale	Group	X _{min.}	X _{maks.}	Mean	St. dev
Parental Suport	Untalented	1,92	5,00	3,80	0,71
	Talented in	2,50	5,00	4,15	0,54
	Talented in	1,58	4,92	3,80	0,85
	Talented-total	1,58	5,00	3,96	0,74
	Total	1,58	5,00	3,87	0,73

According to the results of data analysis, there is no significant difference in the values on Parent Support Scale between the students talented for individual/duel and team sports, on one, and untalented students on the other hand (t=-1.347and p=0.181).ANOVA is used again to compare the groups when the talented for individual/duel and talented for team sports are separated. The results of the analysis show that there are no significant differences between students talented for individual/duel sports, students talented for team sports and untalented students in the values on Parent Support Scale. Difference between the three groups are present just at descriptive level but are not significant (see table 3).

Discussion

The goal of the research and data analyses was to determine if students talented for sports differ from untalented students in learning strategies, learning motivation and the perception of parental support. As the groups of untalented and talented students were equal in school achievement and conduct, it was expected that stronger learning and work motivation, adequate learning strategies and parental support played an important role in school and extracurricural achievements of the students with sports talent. According to the results of data analyses, students with sports talents generally do not differ from their untalented peers in these variables when they are generally compared with each others. But, when the characteristics of the sports are taken into account, significant differences are identified. Thus, the analyses showed that students talented for individual/duel sports more frequently used the learning strategies of rehearsal, organization and critical thinking, while the same strategies were least used by the students talented for team sports. These findings are to some extent similar to the research results of some other authors, in which the importance of personality for sports talent was confirmed. For instance, Gobet (2009) in his research determined that extraversion is more present at chess champions. Van Rossum (2009) conducted a study where it was found that neuroticism is less present in people talented for sport, compared to their untalented counterparts. The author also revealed that extraversion is more emphasized in people talented forteam sports, compared to people talented for individual sports or untalented individuals. As it can be seen, personality traits vary going from one to other sport discipline. The same pattern can be found with other personal moderators such as learning strategies or motivation. Accordingly, Moon (2005) presents the results of the studiesshowingsignificant effects of self-encouragement, visualization and rehearsal on the performance of top-level athletes. In this way, the author covered intrapersonal moderators related to learning strategies and motivation which are important for high levels of sport performance. In the same way, it was confirmed in our research that students talented for individual/duel sports the most frequently used the strategy of rehearsal as well as some other learning strategies. It seems that these strategies are important for the success not only in shool activities but in sports too. The results of our research showed that the students with talent for individual/dual sports had the highest values of intrinsic motivation and task value, while untalented students had the lowest values of these two variable. No differences between the groups were found in the values of extrinsic motivation. Greenspan and al. (2004) assert that extrinsic motivation is more present in children with talents for sports compared to children with talents in other domains and activities, due to their more frequent experience with outer insentives and awards for their sport accomplishments. Yet, more pronounced extrinsic motivation in students with sports talent was not confirmed in our study. The results of our study do not provide us with enough space for more reliable conclusions as the results are limited by small sample sizes and the use of non-parametric statistical methods, which affect the sensitivity to

identify potential differences with respect to sports talent. This is ecpecially the case when it comes to the differences in extrinsic motivation, whose significance was not confirmed in this study. Brent and Kazelis (2009) point out that self-regulation (cognitive strategies and learning motivation may be considered as some of the components of selfregulation) is important for sport success because sportists through self-regulatory strategies manage their achievement goals in a way of setting closer and more distant goals in sport activities. Further, according to Greenspan and al. (2004), children with sports talent are more prone to rely on the important persons support by from their enviroments. There is a large amount of different environmental factors important for the development of sports talent. Gagné (2005) mentions financial comfort, lack of one or both of parents, educational level of parents and parents' aspirations as some of these factors (these factors are related to all sorts of talents and not only for sport). Interestingly, Lee, Olszewski-Kubilius, i Peternel (2010) reported from their study that even parents with lower socio-economic status and incomes were more likely to encourage and materially support their children if they pecieved there were a chance that their children would progressinsome activities. It means that environment itself does not stimulate or hinder talent development but its interaction with abilities, personality and experience of achievement does. In this way, the motivation for accomplishments in the talented is closely related to their perception of enviroment. Bloom (1985a) conducted a research on samples of young people talented in art, science and sport and found out that abilities and giftedness itselves (no matter how pronounced they are at the beginnings of career) were not sufficient if they were not supported with encouragement, training and education. All these factors are enviroment dependent as they depend on those important persons who provide individuals with quality of instruction and training as well as with motivational and emotional support. But, in our research no differences among groups were found in the variable of parental support. Although this result is not in accorance with the most of theoretical models and empirical data gathered by other authors, it must be mentioned that the both groups, talented and untalented children in our study, excelled in school activities. They all can be considered as academically gifted. Parental support is very important in school activities as well as in extracurricural activites such as sport. This may be one of the factor why no significant difference in parent support was not confirmed. In the end, some methodological limitation in this research are identified and recommendations for futher given. researches are Alhouah motivation orientation and strategy use can be transferred from one to other activity (eq. from school to sport activities), it is recommended that more specific (sport related) measures of cognitive strategies, motivation and parent support should be used in some further researches, instead of the general measures of these variables used in this study.

The similar studies should be conducted on large samples as data analysis methods gain their sensitivity in this way. Yet, the results of this study implicate how important it is for children, their parents, trainers and teachers to work on childrens' motivation (especially intrinsic motivation and task value) and selective use of different learning strategies as these variables play important role in shool and out-shool accomplishments, sports in this case. In this way, parents, teachers and trainers give the most important support to the children striving for excellence in sport.

Conclusion

The results of this research show there are no significant differences between students with talent in sports and untalented students in the values of cognitive learning strategies (rehearsal, elaboration, organization and critical thinking), intrinsic motivation, task values, extrinsic

motivation and parent support. But, significant differences were found on the variables rehearsal, organization, critical thinking, intrinsic motivation and task values when the kind of sports was taken into account. Thus, the students with talent for individual/duel sports had the highest values on each of these variables.

On the other hand, students with talent for team sports had the lowest values on rehearsal, organization and critical thinking while the untalented students had the lowest values on intrinsic motivation and task values. No significant differences were found between the three goups on extrinsic motivation and parent support. Empirical significance of the study is that the importance of intrapersonal moderators of sports talent develompent is implicated. In order to gain some more reliable data in future research, more specific measures of these variables on larger samples should be employed.

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STRATEGIJA UČENJA, MOTIVACIJA ZA UČENJE I RODITELJSKA POTPORA ZA NETALENTIRANE UČENIKE I UČENIKE SA SPORTSKIM TALENTOM

Sažetak

Glavni cilj istraživanja bio je utvrditi postoje li značajne razlike između nedarovitih studenata i studenata sa sportskim talentom u kognitivnim strategijama učenja, motivacije za učenje i roditeljske potpore, jer su ove varijable bile tretirane od strane brojnih autora kao važni dio ličnosti i čimbenika okoliša za razvoj talenta u različitim domenama, uključujući sport. Uzorci koji su korišteni u istraživanju bili su skupine N = 30 učenika talentiranih za timske sportove, N = 23 učenika nadarenih za individualne / dvoboj sportove i N = 7 netalentiranih (kontrolna skupina). Studenti triju skupina su pohađali VII, VIII i IX razred u osnovnim školama Sarajevskog Kantona. Tri skupine ispitanika su bile jednake obzirom na njihov školski uspjeh (ocjene) i školsko ponašanje. Na račun prikupljenih podataka, analiza je pokazala da nema razlike između studenata nadarenih za individualni / dvoboj sport i onih u ekipnim sportovima (obje skupine uzete zajedno) i untalented učenici u vrijednostima svake od analiziranih varijabli. S druge strane, kada je uzeta u obzir vrsta sporta, analize su pokazaei da su studenti talentirani za individualne sportove imali najviši i studente talentirane za timske sportove najniže vrijednosti u testu kognitivnih strategija, organizacija i kritičnog razmišljanja. Talentirani za individualne sportive imali su najviše vrijednosti a netalentirani učenici najniže vrijednosti intrinzične motivacije i vrijednosti zadataka. Nisu pronađene razlike između tri skupine u ekstrinzičnoj motivaciji i roditeljskoj potpori.

Ključne riječi: talent, sport, Kognitivne strategiJe, motivacija, roditeljska potpora

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