

STUDENTS MOTIVATION FOR SPORTS AND THEIR EVALUATION OF SCHOOL

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DOI: 10.5550/sgja.110701.en.035S

COBISS.BH-ID: 2102296

UDC: 371.3::796]:159.947.5

SUMMARY

In this survey a sample of 312 students of primary school aged 8 – 14 years was used to test the hypothesis if the motivational profile predetermines sport activities and a success in Physical Education (PE) classes. After a factorisation and crossing of the components of external and internal motivation, the author extracted three motivational profiles of actors in sports activities: internal motivated, joint motivated and external motivated. It turned out that these profiles significantly determine if the kids will play sports, but yet not significantly on their success in PE. These findings are not in favour of PE and they show the need for teachers to try to reduce external, and support the internal student's motivation. Significant finding of this survey is also the fact that as older they get the positive evaluation and experience of school is dropping down. This is especially important if we have in mind that by factorization is determined that for the students the first by its importance in PE is the enjoyment and self-improvement, and that two negative motivational factors are right after them. Besides significant findings, this survey offers some new dilemmas for further research and study.

Key words: motivational profile, internal (internal) motivation, external motivation, amotivation, evaluation of school.

INTRODUCTION

Playing sports is a part of healthy and happy life of every human being of today. We are living in a time of technology, and a part that is still left to a man is to manage the machines, and to spend the most of his life over a computer or a control desk, better said, passive. This state of body can be compensated by playing sports, and the need for that is growing together with the progression and improvement of machines. But, playing sports is not obligatory, so the motivation has the leading role for that. The research has showed that motivation significantly contributes to student's achievement in Physical Education (PE) and their sports involvement (Good & Brophy, 2000). The experience teaches us, and the self-determination theory (SDT – Self-Determination Theory; Deci & Ryan, 1985) confirms that in the basis of motivation for PE are not identical motives as the ones that affect sports involvement. Besides, the research has also showed that people defer by their motivation for playing sports (Vallerand, 1997). Guided by those findings I dedicated this research to finding of motivational profiles of our

primary school students, as also the students of early and mid – adolescence.

For proper understanding of this phenomenon, and for the finding of *motivational profiles*, it is necessary to start from the thesis that there are some different types of motivation. First of all, it is undeniable that several authors agree about external (external) and internal (internal) motivation (Brière, Vallerand, Blais, & Pelletier, 1995; Vallerand, 1997). Second, we have to have in mind that the same motivation is not valid for both PE and playing sports (Boiché, Sarrazin, Grouzet, Pelletier, & Chanal, 2008). Third, we should differentiate the individual motives of students for PE and playing sports in cognitive, emotional and behavioural plan. Fourth, we should consider the Paul Pintrich's thesis about continuum of motivation (Pintrich, 2003) that says that somebody's external motive is at the same time somebody else's internal one. When we have all these assumptions, it is clear that we will be able to look at the motives of our students for PE and sports involvement much easier and more complex.

The fact is that a small number of people do sports, and the fact is also that all of them have PE. Is there

any collision, and if yes, what is it all about? This is a question I intend to indirectly affect in this paper with the assumption that there will be more problems for further research and scientific review, more than this paper is going to give. We know that sometimes opening a new phenomenon for new research can be almost as valuable as the research itself, and that sometimes asked question can be a trigger for powerful changes. In example, when we ask a question why the school contributes so little to a student's involvement in sports, we address the problem to the praxis of today's schools, and that can be a motive for the management and the professional service of some school to explore and compare the curriculum and the number of PE classes in practice. So, these types of questions directly affect the education praxis and contribute to their progressive development.

Motivation in sports

Motivation in sports has its own specificity. For example, in math classes children are active only in some cognitive aspects, and in PE classes both cognitive and physical. So, at the very beginning PE has some motivational advantage. One of the special advantages of this kind of education is that it activates both sides of students' cortex. We are familiar with the fact that schools are primarily focused on the left side of the brain (Hannaford, 2007; Vitale, 2005), or better said they stimulate and rely on that left side. When we stimulate both sides of brain in our teaching, students show unhidden pleasure that is notable by their laughter and their moves (Hannaford, 2007). PE classes have a way to often stimulate both parts of students' brain. For example, there are some games based on motor skills, coordination, as also sports that equally engage left and right hand, like swimming and so. That is an extraordinary motivational advantage of PE, which is, unfortunately, insufficiently used by our teachers.

Other set of motivational variables of PE lies in the nature of motivational continuum. Throughout research Vallerand and his associates found three key motivators: 1) feeling of pleasure, 2) will for learning and discovering new things, and 3) self-improvement (Vallerand, Blais, Brière, & Pelletier, 1989). Not in one single subject self-improvement is obvious and measurable as in PE, and by that comes also feeling of pleasure and continuous learning and discovering of new things. So, all three of mentioned motives are present in PE.

Third brick of motivation in PE we can find in gregarious motives of youngsters. That is especially when it comes to team and collective sports. Through

working together, achieving group goal, in team sports young people accomplish their mi-identity that is severely threatened by atomized way of living in modern civilization. Even Aristotle pointed out that human being is "animal sociale", and Aldelfer developed that thesis in "gregarious motives" of people (Aldelfer – see in: Hellriege, Jackson, & Slocum, 2002), where he sees three needs as a gregarious motives: need to develop, need to connect and existential needs. Research has showed that social goals play important role in student's life (Suzić, 2001), and one other research discovered that students will remember even some absurd and insignificant details because of the good teaching interaction and satisfying of gregarious motives (Suzić, 2008a). Team achievement can be a greater motive for an individual than the one accomplished by himself, and that kind of motives are typical for a lot of sports.

Self-determination in sports

Theory of self-determination (SDT – Self-Determination Theory; Deci & Ryan, 1985) should be explained because we can expect that students who play sports are not at the same time the best ones in PE, and even do not value school with higher attributes than their fellow students. Teaching has its own rules and goes by some fixed curriculum. There are a lot of things students are not glad to learn. Besides, for someone to be great in PE, he must have a substantial dose of versatility: to be good in athletics, gymnastics, sports with ball, in coordination and rhythmic, to manage and overcome certain theoretical knowledge and so. If one student is, for example, talented for basketball, he can be regular at trainings, and also do basketball in his free time, but at the same time avoid PE classes. To be clear, that is, indeed, very rare case, but that student just has no chance to win high mark in PE. Most of physical culture teachers try to accept and even reward students who actively play some sports.

Other basis for evaluation of SDT in this paper is the need of students to determine their activities on their own, to make decisions and perform certain activities on their own as well. That kind of independence adolescents will accomplish a lot easier and much better through some individual or group sports, inside some club or team. The motivation here ranges from external or externally instructed, through introjected that implies that person has »internalized formal external source of motivation, but has not yet really accepted the given behaviour« (Boiché et al., 2008, p. 689), to intrinsic or internal motivation. According to SDT, every person tends to really decide

about their activities, to involve activities because of the real enjoyment, because she finds it worth doing, is able to give some personal contribution and appreciates it. The lowest level of self-determination is amotivation. Research has shown that people with high level of amotivation have a low level of control, because they find themselves not able to achieve desired goal (Deci & Ryan, 2000). These findings have determined me to, beside internal and external motivation, I also measure amotivation as well on taken sample of primary school students, and to offer data about number of amotivated participants in this sample. This is very significant for teachers, because they will be able to perceive better some performances of children amotivated for sports, and by that make some necessary measures to help their students.

Motivational profile compared to evaluation of school and sports

In the sense of value, sports have a high quota for some people, and yet for the others it has no special meaning and value. Besides, we should have in mind the fact that one number of people gives a high position but is oriented to passive experience and a role of spectator, unlike the ones that rather participate in sports activities. We should take all mentioned when we try to see motivational aspects of students. Namely, students will behave towards the school and PE in accordance with their values and their orientation. That means that motivational profile will significantly determine evaluation of school and sports.

What are the motivational profiles of students and how to recognize them? In this survey professor Nikos Ntoumanis from Athens discovered three motivational profiles on one English sample: 1) high level of self-determination and a low level of external regulation, 2) low score of self-determination, middle score on introjected motivation, and a high score of external regulation and amotivation, and 3) average score in all forms of regulation (Ntoumanis, 2002). This classification some authors take as motivational profiles, but do not deny it (Boiché et al., 2008, p. 690). To derivate his classification Ntoumanis used a Cluster analysis as adequate methodological procedure. Following his findings I used analysis of variance to derivate three motivational profiles that are valid for our primary school students. It showed that these profiles are an excellent reflection of student motives and that they may be related to their evaluation of sports and PE.

Evaluation of school and sports is very little discussed in contemporary pedagogical literature. One survey showed that students accredit more negative

than positive attributes to school (Suzić, 2009). Other survey has shown that students in their learning put their own performativ goals on first place, what means that the first thing they want to do is to be better than the others (Suzić, 2008b). These findings are not in favour of today's schools because we can notice that students in those samples were more likely to external (external) regulation and competing with others than to high level of self-determination, or, the most desirable pedagogical profile came second. The question here is how to change motivational profiles of students, or, how to reduce the influence of unfavourable negative profiles, and intensify the influence of positive ones. This is a problem that should be researched throughout experimental teaching and school design, what I address to new researchers, pedagogical starters. In the mean time, we should expect from this research to identify motivational profiles of students and methodological crossing of those profiles with significant parameters like: playing sports, the mark in PE, priority motives of students for playing sports, age and evaluation of school.

RESEARCH

Hypothesis

Basic hypothesis in this research is: motivational profiles of students significantly determine their playing of sports, but also not the mark in PE. Proofing of this hypothesis involves finding of evidence for several significant questions. To be concrete, it is necessary to establish motivational profiles of students, to connect these motives with marks and establish which one of them are the priority ones for engaging in sport activities. Regarding school mark, it is necessary to compare it with evaluation of school, with student's age and some parameters that represent involvement in sports. Besides, it is also necessary to determine the primary motives for doing sports and PE and the connection between motivational profiles and student's marks in PE classes.

Instruments

Two instruments and one protocol for gathering data were used in this survey. Instruments are: *SMS – Sports motivational scale* (EMS – Echele de Motivations dans les Sports; Boiché et al., 2008) and *CTE – Consistence of Teaching Evaluation* (Suzić, 2009). I will show these two instruments by their basic properties.

SMS – Sports motivational scale (EMS – Echele de Motivations dans les Sports; Boiché et al., 2008) has 18 points divided in six subtests, with three points per each. The examinees respond to questions that

determine what stimulates them to participate in PE classes. For example, one of these statements is: *I participate in PE classes because I find sports amusing*. The examinees responded by Lickert scale from 1 = *I strongly disagree* to 7 = *I strongly agree*. Second subtest was dedicated to intrinsic motivation, and measures the students' perception of knowledge and skills as a base for self-improvement. One item says: *I participate in PE classes because of the joy I feel when I have the experience of improving some sport ability*. Next subtest measures the quantity of identified regulation. One of three items says: *I participate in PE classes because I will have a great use of what I learn there later in life*. Next subtest measures introjected regulation. One of three statements is: *I participate in PE classes because I would feel guilty for possible failure in PE*. Fifth subtest measures external regulation: One statement says: *I participate in PE classes because that is something I need to do*. The last subtest of SMS – scale has three articles and measures amotivation. One of them says: *I do not see the use of PE classes*. Kronbah – alpha coefficients for internal consistence for these subtests are given in Table 1.

CTE – *Consistence of Teaching Evaluation* (Suzić, 2009) has two subtests: negative and positive evaluation of school. It's made of two subtests, with ten statements or attributes per each, that students reply

using Lickert scale: 1 = *I do not agree at all* to 5 = *I totally agree*. For example, for negative statements were questions like: *Too many classes are boring, they are all alike*. In opposite, students were asked the same question, only in positive context: *Classes in this school are mostly very interesting*. The students answered by Lickert scale, the numbers were added up and divided by number of statements, so at the end was gained average scale of value or student's decisions for negative or positive evaluation of school. To get the index of school evaluation consistence, it was necessary to reverse the statements of negative evaluation of school subtest, and then calculate the average value of those differences. The highest levels of consistence are the results congruent or very near zero, and the highest levels of inconsistency are the results away from zero. Internal consistence was measured by Kronbah – alpha coefficient given in Table 2.

Sample

The sample contains 312 students from two primary schools in the territory of Banja Luka: "Desanka Maksimović" school with 190 students and "Borisav Stanković" school with 122 students. The age of students is from eight to fourteen years old, with 161 male and 151 female involved and $\chi^2 = .32$ what indicates that this difference is not statistically significant ($p = .57$).

TABLE 1

Internal consistence of Sports motivational scale (SMS)

Subtest	Kronbah-alfa (α)
Intrinsic motivation: Stimulation	.68
Intrinsic motivation: Knowledge and skill	.74
Identified regulation	.83
Introjected regulation	.81
External regulation	.85
Amotivation	.85

TABLE 2

Data about calibration of CTE – scale

Subtest, variable	Kronbah-alpha (α) in earlier survey (Suzić, 2009)	Kronbah-alpha (α) in this survey
Negative evaluation of school	$\alpha = .86$	$\alpha = .87$
Positive evaluation of school	$\alpha = .81$	$\alpha = .77$

The way of doing this survey

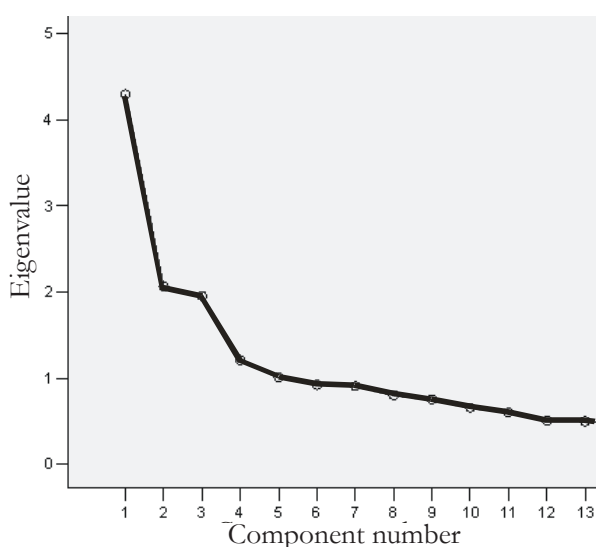
The research was implemented in February 2011, by giving the students sheets for answering and writing the level of their agreement/disagreement with the red statement. On the same sheet they filled some data about them: birth year, school success and so. Students were asked to answer sincerely, and if they have any doubt, to raise their hand and stop the testing person. In this way by the dynamics of reading we have secured the honesty of answers and removed potential indistinctness in case when students read the questions on their own. All data were processed by SPSS 13 Statistica programme for Windows.

RESULTS OF RESEARCH

Before answering the main problem set in the hypothesis, it is necessary to turn to some questions that significantly contribute to the review of facts relevant to more complex seeing and proofing of hypothesis. Such question is: What are the priority motives of students in evaluation of sports and PE. I looked for the answer by factorizing the *SMS – Sports motivational scale* (EMS – Echele de Motivations dans les Sports; Boiché et al., 2008). After factorizing this instrument several factors were abstracted. It was necessary to decide how many of them to keep. The best thing to do was the Katell method of landslide (Scree plot; see also: Suzić, 2007, p. 210). Figure 1 clearly shows that we can stop at five factors.

FIGURE 1

Number of factors by Katell method of landslide



After Oblimin rotation, *enjoy in PE and self-improvement* is extracted as first factor (Table 3). This is a

promising finding, because it shows that our students care about the self-improvement in PE and enjoy it. The research has showed that high evaluation of some activity intensifies the thrill, effort, interest, and achievement (Wagner, Kegan, Lahey, Lemons, Garnier, Helsing et al., 2006). The structure of first factor in Table 3 is composed of three items where dominates self-improvement, pleasure, and evaluation of sports for personal life. In accordance with findings of Wagner et al, we can state that the priority of our students is pedagogically and psychologically preferable. Pedagogues of physical culture can use this finding to motivate students, because it is quite clear what the students most want. Besides, in working with those students who do not take these variables as the most important ones, teacher can use interaction, coeducation, and group work to pass positive motives from one student to another.

The second in the range of motivation is *amotivation* (Table 3). This is not really the result to hope for, because pedagogically seen, more adequate would be if this factor was somewhere in the fifth place or lower – but not to be second in student priorities. The points inside this factor refer to statements that PE is a waste of time, that students do not know why they attend PE classes and that they do not see the use of PE. Research of Robert Vallerand showed that amotivation is followed by high level of external regulation and low level of other forms of motivation (Vallerand & Fortier, 1998). Beside the fact that in our sample amotivation comes second, it is clear that we have a lot of students who do not like sports and PE and do not see the point of that. It is very clear what teachers should do: throughout constructive interaction and cooperative discussion with students it is necessary to permanently think-out activities in PE teaching and use sports as their activities as also provide possibility for active playing of sports in school.

Third factor is *PE as a commitment and responsibility*. This also isn't very encouraging result. This factor is formed by four points: feeling of responsibility, feeling of guilt, fulfilling the expectations of some significant persons and personal consequences. For the first appearance, it is clear that two kinds of motives are involved, identified and introjected regulation. To simplify, it is about behaviour regulated by external motives. By that kind of motivation behaviour is predetermined by outside regulations, norms, and authorities, but is still not a part of personal value code (Boiché et al., 2008, p. 689). When we look at teaching of all subjects in general, we can state that it is basically based on teachers' authority, norm plans

and programs, sanctions for the ones who do not listen, and like. All of that encourages external motives of students like identified and introjected regulation, but just a little the internal ones like self-improvement. This should worry us in particular when we know that self-improvement, together with enjoy

in sports as the first motive of our students, is here identified as a first or priority factor (Table 3). Here we could use some new research about the types of motivation that dominates in our modern teaching of PE and other subjects.

TABLE 3

Primary motives of students for playing sports and for PE classes

Factor	Components after rotation				
	1	2	3	4	5
Enjoyment in PE and self-improvement	.75				
	.59				
	.56				
Amotivation		.82			
		.75			
		.71			
PE as obligation and responsibility			.79		
			.77		
			.76		
			.69		
Positive emotions and belief in value of PE				.74	
				.71	
				.55	
Importance of PE in life and the excitement					-.67
					-.65
					-.59
					-.54
					-.54

Extraction method: Analysis of principle components; Rotation method: Oblimin with Kaiser normalization; 24 iteration rotation.

The fourth in a role are *positive emotions and belief in values of PE*, and is constructed of three particles: fun in these classes, positive emotions, and PE and sports as a need. This factor belongs to stimulation as an intrinsic motive. Together with the first one, this factor presents an internal motive and second and third one the external motives. When we take the fact that external and internal motivation are orthogonal and that researches showed that external regulation does not depend on intrinsic motivation (Fairchild, Horst, Finnes, & Barron, 2005), it is clear that amotivation and external regulation must be changed in favour of strengthening of positive emotions and assure students in values of sports.

The fifth factor is negatively oriented towards the other four. It is *importance of PE in life and the excitement that comes with it*. It has five particles, which of two refer to flow experience that follows motives in sports activities and three on feeling brought by PE. So, here we deal with intrinsic and introjected motives, with combined motivational profiles.

When we know that there are students with combined motivation, our interest is to see if those students are more or less successful in PE than the others. True response to that question is in Table 4, where $\chi^2 = 12.41$ (is not statistically significant; $p = .13$) show that students with combined motivation do not defer from students with other motivational profiles. We could use some new research that would show, in experimental design, is it possible to change external in favour of internal motives of students, and under what circumstances is most effective to make those changes.

Motivational profiles in sports

In the search for motivational profiles of students I was oriented by classification of Nikos Ntoumanis, where he differs: mostly self-regulated, amotivated and external motivated, and the ones who combine these two options (Ntoumanis, 2002). This classification is too wide and too combined to present the profiles, as other authors noticed (Boiché et al., 2008,

p. 690). Besides, Cluster analysis is not the safest methodological procedure for classifying profiles, because each of these constructs needs to be orthogonal in compare to the other two. That was the reason for me to apply different methodology to abstract three student's motivational profiles for playing sports. I have summed and divided with their number all items that measure internal motivation in *SMS – Sports motivational scale* (EMS – Echele de Motivations dans les Sports; Boiché et al., 2008). Then I subtracted the average of amotivation and external regulation from the gained average. Now I have the ones that have high positive values, and those are the students with strong internal motivation, the ones with expressively negative values, those are the students with prevailed amotivation and external regulation, and all of those in a range of plus/minus one standard

deviation would be the ones with combined motivation. I called the first ones internal motivated, or self-determined, the second ones external motivated, and the third ones are the students with combined motivation. This could be a good classification because we have two opposites, positive and negative, and all others are in between or moderately motivated. We could use a check of these constructs by a new instrument specially designed for measuring of these profiles where would be shown the existence of orthogonal between them, because this classification is made by an instrument that is not made for that kind of measuring. Still, following the researches of other authors (Boiché et al., 2008) we can use this to see the motivational orientations of students. It showed that this classification gave some very useful data (Table 5).

TABLE 4*Motivational profile of students and PE mark*

Motivational profile	PE mark					Total	χ^2	<i>p</i>
	1	2	3	4	5			
Self-determined	0	0	5	11	31	47		
External motivated	1	3	5	52	159	220		
Combined motivation	0	2	2	14	27	45		
Total	1	5	12	77	217	312	12.41	.13

TABLE 5*Motivational profiles to sports playing indicators*

Variable	Motivacioni profili			Total	$\chi^2_{(2)}$	<i>p</i>
	IM	CM	OM			
Trainings	Yes	32	131	16	179	
	No	15	89	29	133	
	Total	47	220	45	312	11.39
Club membership	Yes	25	107	11	143	
	No	22	113	34	169	
	Total	47	220	45	312	10.01
Has some sport device	Yes	35	140	19	194	
	No	12	80	26	118	
	Total	47	220	45	312	10.84

Legend: **IM** - Internal motivated; **CM** - Combined motivation; **OM** - External motivated

Data in Table 5 clearly show that internal motivated students are significantly more active in doing sports comparing to the external motivated ones. There are more internal motivated who train (32) than

the ones who do not train (15), while this ratio is opposite for the external motivated students (Table 5). The difference in favour of internal motivated is significant for all three indicators of active playing of

sports: for active training $\chi^2_{(2)} = 11.39$ (level of significance .003), for club membership $\chi^2_{(2)} = 10.01$ (level of significance .007) and for owning of sport device $\chi^2_{(2)} = 10.84$ (level of significance .004). This agrees with the research of Luc Pelletier et al, and that research showed that internal motivated student do sports more for their soul than the external motivated ones (Pelletier, Fortier, Vallerand, & Brière, 2001). When we have in mind the results and the indicators I got in this survey, then comes the question why the ones who actively play sports are not at the same time the most successful in PE (Table 4), or how much does the PE contributes to student's active playing of sports and what other factors influence the efficiency of PE teaching and playing sports. Here should be expected some new survey as well, because resolving this question is of crucial importance for active playing of sports and getting the youngsters to do that.

Evaluation of school and sports

Its shown that positive evaluation of school goes down with students ageing ($F_{(6)} = 41.22$; level of significance .001; Table 6). This is the finding that agrees with one research made before (Suzić, 2009), but it would be good to check it again with one longitudinal research. Either way, results show that positive evaluation of school goes down with student's

age. Other controversial finding is that students who have high level of external motivation for sports together with the ones with combined motivation have higher score for positive evaluation of school than the internal motivated students ($F_{(2)} = 8,62$; level of significance .001; Table 6).

That proofs that motivational profiles of students significantly predetermines their playing of sports, but not the marks in PE, what is the main hypothesis in this survey. This actually proofs the main hypothesis.

DISCUSSION

The main hypothesis of this survey was set contradictory. On one side is the statement that motivational profiles predetermine playing sports, and on the other hand, statement that those profiles do not influence the school mark in PE. If some students love sports, why wouldn't they have higher marks in PE? Seen on the lay way, every man of practice will say that that is not correct, but this research showed that it is. This is a completely new and un-researched topic, and that is why I gave strong and methodologically assuring basis so this survey would be easily renewed and able to prove or dismiss data given in this paper.

TABLE 6

Analysis of variance (ANOVA) for the ratio of positive evaluation of school, age and motivational profile

Variable	Age	N	M	SD	F	p
Positive evaluation of school	8 years	23	3.26	.52		
	9 years	62	3.49	1.12		
	10 years	54	2.65	.88		
	11 years	23	2.65	.56		
	12 years	50	2.41	.78		
	13 years	74	1.55	.85		
	14 years	26	1.30	.51		
	Total	312	2.45	1.13	41.22	.000
Motivational profile	IM	47	1.83	1.14		
	CM	220	2.55	1.11		
	OM	45	2.62	1.15		
	Total	312	2.45	1.13	8.62	.000

Legend: **IM** - Internal motivated; **CM** - Combined motivation; **OM** - External motivated

First we needed to extract motivational profiles. Even though Cluster analysis is known as a good methodological base for grouping of data, I didn't take the approach of Nikos Ntoumanis (Ntoumanis, 2002) for granted, what seems to come from some other authors in a certain way (Boiché et al., 2008, p. 690). I rather chose to make my own categorization of motivational profiles. I gained three profiles: internal, combined and external motivated. This kind of classification or categorization is more similar with other findings of researches dedicated to this phenomenon (Biddle & Wang, 2003; Boiché et al, 2008; Wang, Chatzisarantis, Spray, & Biddle 2002). After statistical crossing of these profiles with accomplishment of students in PE classes, it seems that none of these profiles is followed with differences in PE marks (Table 4), but they significantly influence if students will play sports or not (Table 5) as also how students will evaluate school (Table 6). Especially indicated data is that external motivated students have the highest scale value in evaluation of school. The reason for that is probably the fact that our schools mostly support and reward external motivation. Those students who do not see school as a place where they will accomplish their sports activities, they do not see it as a place where they can fulfil their need for training, playing sports and enjoying in it, at the same time they do not value school with highest values on Lickert-type scale (Table 6, Table 4). This is pedagogically alarming result because indicates the need for changing of these values and attitudes of students. This change will not happen throughout just talking, reassuring and persuasion, but throughout concrete action as well. It is necessary to ensure children to train in school, to follow changes on their body, to follow the increasing of capabilities and endurance, and to feel personal gain from sports and school support.

Especially significant finding of this research is the divination about what are the priorities in evaluation of sports and school PE to our students. Factorization showed that those are enjoyment in PE and self-improvement (Table 3). This is an encouraging finding, but at the same time disappointing when we know that schools give so little of this to students. Second and third factor by its importance are amotivation and PE as obligation and responsibility (Table 3). Both of these factors have negative influence on real motivation, on internal motivation for playing sports and PE. We should look for positive teaching models that will encourage reduction of these factors, and in the first line bring self-regulation and internal motivation.

Interesting and valuable finding is also the knowledge that students reduce their positive evaluation of school in accordance to years spent in school. Namely, older students value school more negatively than the younger ones (Table 6). When school would be the place for enjoying, place where children would feel joy of divination and self-improvement, it is shore that with years, positive evaluation of school would also become higher. Finding of this research as also the one before this (Suzić, 2009) show that that is not the case. We should ask ourselves is it possible to organize the school where children would love to go in, where they will enjoy in learning, sports and art, school they will simply love. We do not need a lot of persuading to give a positive answer to this question because our practice already knows some of that kind of classes, and besides, the number of teachers who manage to get children to start to love learning, to do their teaching obligations with pleasure is growing.

In general, the main hypothesis of this research is proven, and that is that motivational profiles of students significantly predetermine their playing of sports, but not the school success in PE. This finding shows that teaching of PE should be approximated to internal motives of students, and to especially work on reduction of external motivation that treat sports as obligation and responsibility, or rewards obedience and submissiveness of students. Besides this general finding, this survey also left a number of new research topics, and I hope that those topics will prompt some other researchers, future master and doctoral studies students, to go on in that direction.

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Received: February 27, 2011

Accepted: April 15, 2011

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