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Original research article

THE SOCIO-ECONOMIC STATUS OF PARENTS AND THEIR CHILDREN'S SPORTS ENGAGEMENT

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Abstract. *The number of overweight children, not satisfying the daily movement requirement, is increasing. It is a serious problem which should be prevented. The objective of this work is to get insight into the level of children inclusion (engagement) in different organized sports activities, as well as to find out how the parents' level of education and economic situation in the family influences that. Based on the literature review of previous similar studies, the results obtained may be considered in the right way. The data processing was carried out by means of the T-test and χ^2- test. The study covered 1630 parents of primary school children, from first to fourth grade in the following urban settings: Niš, Vranje, Knjaževac and Pirot. We covered schools both from urban and rural areas of the mentioned cities. The obtained results indicate that the increased educational level of the parents and a better economic situation influence the children's sports engagement.*

Key words: *education, sports, Serbia, parents, children.*

INTRODUCTION

The increase of the number of obese children doubled in European countries, in the period from 1980 to date (Branca, Nikogosian & Lobstein, 2007), as well as in the USA (Wang, & Dietz, 2002). Minimal physical activity, a sedentary lifestyle, unhealthy living habits, etc., may be the cause of body overweight in young people (Hills, King, Armstrong, 2007; Lavizzo-Mourey, 2007). A study conducted in 2010 showed that around 43 million children, less than 5 years old were obese (De Onis, Blo, & Borghi, 2010). The reduction of unhealthy habits and the increased level of physical activity has numerous advantages in

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preserving the health of children and obesity prevention. However, a big percentage of children do not meet the recommended optimum levels of regular physical activity (Pate et al., 2002).

We may define physical exercise as any movement of the body by means of the skeletal muscles, resulting in energy consumption (Caspersen, Powell & Christenson, 1985). Physical activity in children is constantly reducing and in the future, its tendency is decline even further (Starc & Sila, 2007), which will additionally increase the risk of being affected by various diseases (Boreham & Riddoch, 2001). Regular physical activity among children is an extremely important factor in the development, maintenance and strengthening of the level of physical condition, as well as acquiring habits for life-long sports engagement (Strong et al., 2005). Numerous studies have shown that sports activities increase the blood and oxygen flow, that they influence changes in neurotransmitters, and increase the level of endorphin, which prevents the stress and improves one's mood (Taras, 2005).

Parents greatly influence the physical activities of their children, in terms of the genetic potential (Bouchard & Malina, 1983) and the living environment (Heitzler, Martin, Duke, & Huhman, 2006; Sallis et al., 1992). Going in for sports and parental support help children in their socialization (Gustafson & Rhodes, 2006; Baranowski, 1997). Numerous studies have also shown that parents, through their active involvement in sports, greatly influence habit development in their children for engagement in physical activities. The results of an American study show that the children of physically active fathers are three to five times more active than the children of fathers who are not physically active (Kalish, 2000). The children whose both parents are physically active are six times more active, compared to their peers whose parents are not physically active. Physically active parents are more engaged in the sports activities of their children, compared to non-active parents.

THE METHOD

The sample of participants (Table 1) in this study consisted of randomly selected parents of primary school children, from the first to fourth grades, on the territory of Vranje (6 schools), Nis (7 schools), Pirot (8 schools), Bela Palanka (2 schools) and Knjazevac (1 school). The total number of the included schools was 24, and the number of participants was 1630 parents. Eight schools were from rural areas, and 16 schools from the urban environment. Of the total number of participants, 384 (23.6%) were the parents of children attending the first grade, 421 (25.8%) the parents of children attending the second grade, 423 (26%) the parents whose children attended the third grade and 402 (24.87%) the parents of children attending the fourth grade. The parents were surveyed at parent meetings at school, and it was interesting that of the total number of participants, 1180 (72.4%) were mothers, and 450 (27.6%) fathers. Out of the total number of participants (parents), 798 (49%) came to the meeting for their sons and 832 (51%) for their daughters. From the total number of surveyed parents, 123 (7.5%) finished only primary school, 923 (56.6%) - the secondary school, 197 (12.1%) had a college education and 387 (23.7%) completed higher education programs. Out of the total number of participants, 1460 (89.6%) were married to the biological parent of the child, 115 (7.1%) were divorced, 31 (1.9%) were married to a person who was not the biological parent of the child and 24 (1.5%) were widowers/widows.

The sample of measuring instruments consisted of a questionnaire with 25 questions, answered by the parents in the meetings organized in the schools of the mentioned towns.

The questionnaire was anonymous, and the participants had enough time to read and answer all the questions. The first part of the questionnaire referred to some basic data relevant for this study, such as: the grade of the child, the gender of the child, the parent's gender, marital status, the parent's education, monthly income per one family member. The second part of the questionnaire consisted of questions aimed at estimating the attitude of the parents toward the physical activity of their children and their involvement in sports.

Data processing method. The data processing was done using the statistic programme SPSS 20. The following were used:

1. The t-test for independent samples for establishing differences and
2. The χ^2 test of independence for establishing correlations among the variables,
3. Descriptive statistics - frequency for obtaining the essential percentages, important for this study.

Table 1 The sample of participants

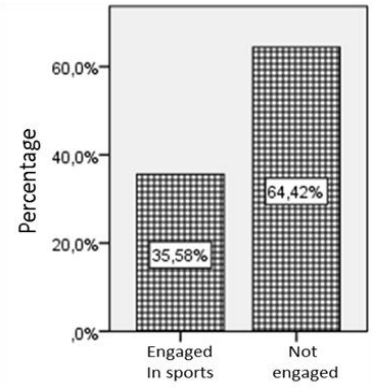
Total participants	1630			
Participant gender	*Mother* 1180 (72.4%)		*Father* 450 (27.6%)	
Child's grade	*First* 384 (23.6%)	*Second* 421 (25.8%)	*Third* 423 (26.0%)	*Fourth* 402 (24.7%)
Child's gender	*Male* 798 (49.0%)		*Female* 832 (51.0%)	
Father's education	*Primary school* 153 (9.4%)	*Secondary school* 986 (60.5%)	*College* 159 (9.7%)	*University* 332 (20.4%)
Mother's education	148 (9.1%)	915 (56.1%)	203 (12.5%)	364 (22.3%)
Marital status	*I* 1460 (89.6%)	*II* 115 (7.1%)	*III* 31 (1.9%)	*IV* 24 (1.5%)
Average earnings	*Less than 5* 168 (10,3%)	*From 5 to 10* 357 (21,9%)	*From 10 to 15* 378 (23,2%)	*From 15 to 20* 335 (20,6%)	*Over 20* 392 (24,0%)

Legend: * - Education of the other parent implies the education of the parent not attending the meeting. I – Married to the biological parent of the child, II - Divorced, III – Married to a person who is not the biological parent of the child, IV – Widow/widower. Average earnings – refers to the earnings per member of the household, in thousands of dinars (RSD).

RESULTS

From the total number of the surveyed parents, 35.6% stated that their children went in for sports within some sports club, while 64.4% of the parents declared that their children did not go in for sports (Graph 1).

The χ^2 independence test (with a continuity correction according to Yeats (Pallant, 2011) showed a significant relationship between gender and children's engagement in sports within some of the sport clubs χ^2 (n=1630) = 37.98, p=0.00,

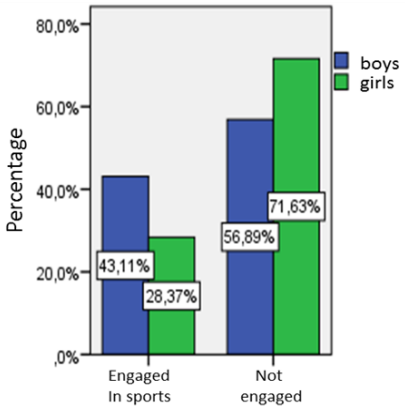


Graph 1 Children's sports engagement (left column – engaged in sports, right – not engaged)

fi=0.154 (Table 2). Based on the percentage of sports engagement, it may be seen that the boys (43.1%) were more engaged in sports activities within some sport club compared to the girls (28.4%) (Graph 2). It means that the proportion of boys engaged in sports significantly differs from the proportion of girls going in for sports. Based on the "fi" coefficient (fi=0.154) it may be seen that the difference is very small. According to Cohen's criteria (1988), the range from 0.10 to 0.29 represents a small impact, from 0.3 to 0.49, a medium impact and from 0.5 to 1 a very great impact (Pallant, 2011).

Table 2 The gander of the children and their sports engagement

Gender	Inclusion of children in sports		Continuity Correction		
	Yes	No	χ^2	p	fi
Boys	344 (43.1%)	454 (56.9%)			
Girls	236 (28.4%)	596 (71.6%)	37.981	0.000	0.154
Total	580 (35.6%)	1050 (64.4%)			



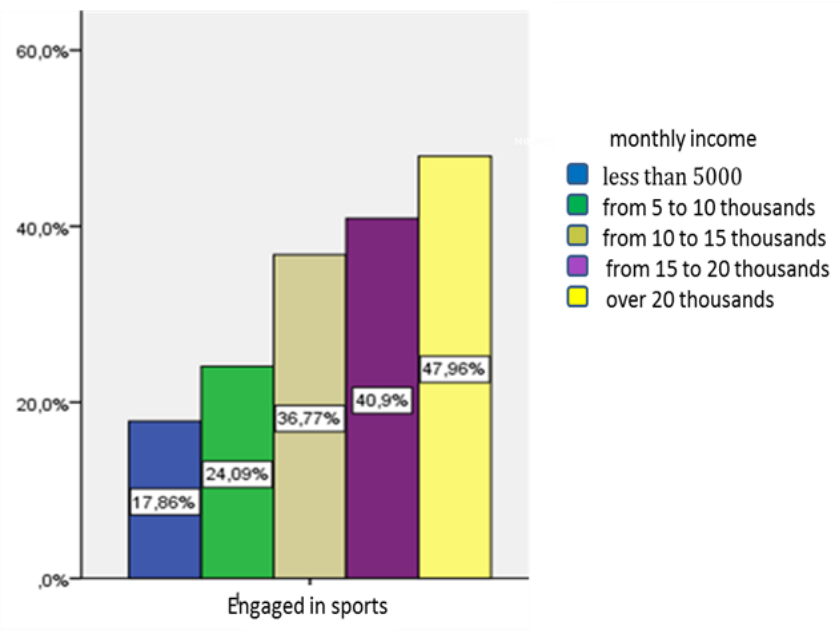
Graph 2 Relationship between the gender of a child gender and his/her engagement in sports

Table 3 Monthly income per household member and children's engagement in sports

T-test results for independent samples							
Monthly income per family member		N	Mean	Std. Deviation	t	p	Eta Squared
	Children engaged in sports	580	3,63	1,221	8,66	0,00	0.045
	Children not engaged in sports	1050	3,06	1,322			

Frequency of children's engagement in sports in regard to the monthly income of their parents		
Monthly income*	Sports engagement of children	
	Children going in for sports	Children not engaged in sports
Less than 5 thousand	17.9%	82.1%
from 5 to 10 thousand	24.1%	75.9%
from 10 to 15 thousand	36.8%	63.2%
from 15 to 20 thousand	40.9%	59.1%
over 20 thousand	48.0%	52.0%

From Table 3, it may be seen that the t-test for the independent samples has shown that there is a statistically significant difference between the children going in for sports and those who are not engaged in sports in terms of the monthly income per their family member (t=8.660; p=0.00). Based on the Mean value, it can be seen that the children, going in for sports, originate from families with greater income Mean=3.63), while the children, not engaged in sports come from families with a lower monthly income (Mean=3.06). Based on the Eta square from Table 3 (Eta Squared=0.045), it may be seen that the difference between the groups is very small. According to Cohen, 0.01 is a small impact, 0.06 is a medium impact, 0.14 and over, is a big impact (Pallant, 2011). Table 3 shows the frequency of the children's engagement in sports in regard to the monthly income per family member. Based on the percentage of sports engagement, it may be seen that children from families with an income lower than 5 thousand (per family member) are those who are the least engaged in the sports activities of some club (17.9%), and the children from families with an income exceeding 20 thousand (per family member) are those most engaged in some sports club (48%). With the increase in the monthly income (Graph 3) per family member, there is also the increase in the percentage of children going in for sports. These results indicate that the bad financial situation in the family may be the cause of the reduced sports engagement of the children.



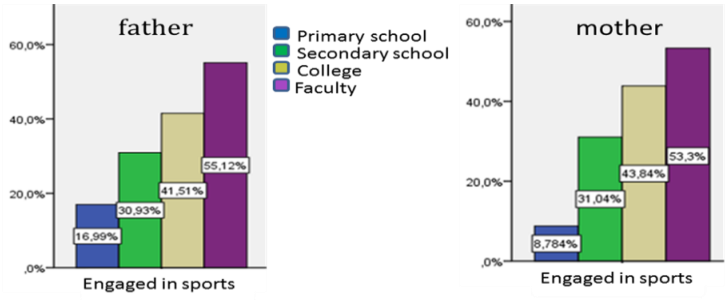
Graph 3 The monthly income of the parents and the sports engagement of their children

Table 4 The education of parents and their children's engagement in sports

T-Test results for independent samples							
Father's education		N	Mean	Std. Deviation	T	p	Eta Squared
	Children engaged in sports	580	**2.7**	.96556	9.38	**0.00**	0.055
	Children not engaged in sports	1050	**2.3**	.84534			
Mother's education		N	Mean	Std. Deviation	T	p	Eta Squared
	Children engaged in sports	580	**2.8**	.93558	10.43	**0.00**	0.068
	Children not engaged in sports	1050	**2.31**	.89063			

Frequency of children's sports engagement in regard to the education of their parents					
Father's education	Children engaged in sports	Children not engaged in sports	Mother's education	Children engaged in sports	Children not engaged in sports
Primary school	17.0%	83.0%	Primary school	8.8%	91.2%
Secondary school	30.9%	69.1%	Secondary school	31.0%	69.0%
College	41.5%	58.5%	College	43.8%	56.2%
University	55.1%	44.9%	Faculty	53.3%	46.7%

From the results indicated in Table 4, it may be seen that the t-test for independent samples showed a existed statistically significant difference in the father's education among the children engaged in sports and those not engaged in sports (t=9.38; p=0.00). Based on the mean value (Mean) it may be seen that the fathers of the children engaged in sports are better educated (Mean=2.7) compared to the fathers of children not engaged in sports (Mean=2.3). Based on the Eta Square (Eta Squared=0.055) it may be seen that the difference between the groups is small. Table 4, shows the frequency of the children's engagement in sports in regard to their parent's education. Based on the percentage of engagement in sports, it may be seen that the children whose fathers only had a primary education, are those with the lowest percentage of sports engagement within some club (17%), while the children whose fathers have a university degree have the biggest percentage of sports engagement (55.1%). The more educated the fathers, the greater the percentage of children engaged in sports within some sports club (Graph 4). The t-test showed similar results for independent samples in relation to the education of the mothers and the children's engagement in sports. There is a statistically significant difference in the mothers education regarding the children engaged in sports and those who were not (t=10.43; p=0.00). Based on the mean value, it can be noticed that the mothers of children going in for sports were better educated (Mean=2.8) compared to the mothers of children not engaged in sports (Mean=2.31). According to the Eta square (Eta Squared=0.068) it may be seen that the difference between the groups is moderate. Based on the percentage of engagement in sports it may be understood that children whose mothers only finished primary school were engaged in some sports club to the smallest extent (8.8%), while the children whose mothers had a university degree were engaged in sports to the greatest extent (53.3%). The more educated the mothers, the bigger the percentage of children engaged within some sports club. These results indicate that the education of the parents is closely related to the children's engagement in sports.

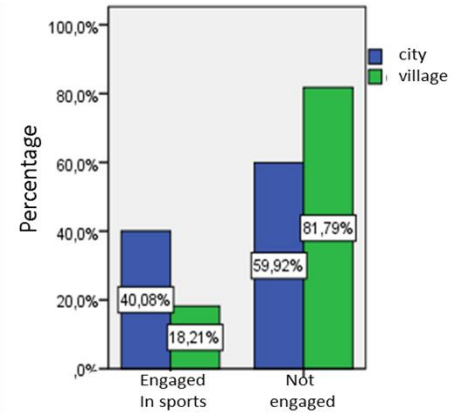


Graph 4 The parents education and the engagement of their children in sports

Table 5 The environment and children's engagement in sports

Child's environment	Sports engagement of the children		Continuity Correction		
	Yes	No	χ^2	p	fi
Town	519 (40.1%)	776 (59.9%)			
Village	61 (18.2%)	274 (81.8%)	54.578	0.00	0.185
Total	580 (35.6%)	1050 (64.4%)			

The results of the χ^2 test of independence, as in Table 5 (with the Continuity Correction according to Yeats (Pallant, 2011)) indicated a significant correlation between the environment of a child and the child's engagement within some sports club χ^2 (n=1630)= 54.578, p=0.00, fi=0.185. Based on the percentage of sports engagement, it may be seen that children from urban environments were more engaged in sports (40.1%) within some sports club when compared to children from the rural environment (18.2%) (Graph 5). This means that the proportion of children from urban environment who are engaged in sports, is significantly different from the percentage of children from the rural environment, going in for sports. Based on the "fi" coefficient (fi=0.185) it may be seen that the difference is small. According to Cohen's criteria (1988), from 0.10 to 0.29 it is a small impact, from 0.3 to 0.49 - a medium impact and from 0.5 to 1 - a big impact (Pallant, 2011).



Graph 5 The environment and children's participation in sport

DISCUSSION

Based on the obtained result, it may be seen that children's participation in sports within the sports clubs on the territory of southeast Serbia is not very high. On the sample of the primary school children of Novi Sad, 4th to 8th grade, Djordjic (2010) found out that 58% of the pupils were engaged in sports within some sports club, while 42% were not engaged in sports. In our study, the data show that there were 35.6% children engaged in sports within sports clubs, that being significantly less compared to the children from Novi Sad. However, the sample of participants in our study included children from the 1st to 4th grades, and that is most probably one of the reasons for the decreased sports engagement in our sample, compared to the research of the mentioned author. One more reason for this difference may also be the number of offered sport disciplines in the towns where the study was conducted. In the research of Djordjic, (2010) the subjects mention 45 sports they go in for, which suggests that there is a big choice of sports disciplines in Novi Sad, while in our study the children mention only 18 sports disciplines they go in for (Vranje, 11, Nis 16 and Pirot 13), indicating the low level of various sports disciplines offered in the territory of southeast Serbia.

There is a wide range of various influences that may arouse interest in sports and the wish of children to accept the challenge and try it for themselves: the media, schoolmates, sport stars, parents, teachers, etc. but numerous studies, however, show that the impact of the family is crucial (Bacanac, Petrovic and Manojlovic, 2009). Investigations have shown that parental support additionally motivates children to go in for sports (Doupona, 2001; Davison, Cutting & Birch, 2003; Trost et al., 2003; Norton, Froelicher, Waters, & Carrieri-Kohlman, 2003). In his study, Bačanac (2007) obtained data that 22.3 % of children start going in for sports upon the initiative of their parents. In our study, 95.5% parents think that the parents are those who should stimulate the child at this age to go in for sports. If so, it is not quite clear why the parents do not influence their children to go in for sports more intensively on the territory of southeast Serbia. Is it to do with the lack of financial resources, environment conditions, the motivation of children? Are these the reasons for the low interest of children in sports activities? The answer may possibly be found in the data obtained in the survey:

- 13.6% of the parents think that the sports programmes in the clubs are not suited for the age of their children. It is possible that the parents who belong to this group do not influence their children to engage in sports more intensely owing to their personal attitude.
- 8% of the surveyed parents think that sports make children forget about their school obligations. This may be one of the reasons for the decreased engagement of children in sports activities. Bacanac, Petrovic and Manojlovic (2009) state in their book *"Manual for the Parents of Young Sportsmen"* that going in for sports may be very useful, that it stimulates responsible social behaviour, the adoption of moral values and healthy living habits, as well as better school performance.
- 29.3% of the surveyed parents are not satisfied with the offered sport disciplines their children can choose in their home town. Bad environment conditions may frequently be the cause of the low sports engagement of children.
- 11.3% of the surveyed parents think that going in for sports may have some negative consequences for the children. The nature of sports is such that it is neither good nor bad for children. Hopefully, it has got a wonderful potential and

positive effect on the complete physical, psychological and social development of children, but it also has a dark side, reflected in many excesses and inappropriate conduct of adults towards the young athletes. The effects of non-professional and non-pedagogical work of the coaches may be quite serious and worrying (Bacanac,Petrovic and Manojlovic, 2009). The health of the children is the most important for their parents. In case they fear that it may contribute to some negative health effects, or negatively affect the children in any way, they will certainly be afraid to let their children take part in training.

- 23.7% of the surveyed parents think that nowadays, the role of sports is overestimated.

Up to date, many studies have focused on the inclusion of boys and girls in sports activities. In most of the studies, one could see that the boys were more physically active compared to the girls (Planinšec, 2003; Strniša, Planinšec, 2014). Djordjic (2010) found out that statistically a quite bigger percentage of boys were engaged in some sport club, compared to the girls (70% boys, versus 46% girls). In our study, as well, the boys are statistically much more engaged in sports activities than the girls (43.1% boys versus 28.4% girls). In this way, we confirmed the results of the studies carried out to date.

The parents economic standing also plays an important role in the children's inclusion in sports activities. The children of parents with a bigger income get better support to go in for sports (Videmšek, Štihec, Karpljuk, Vauhnik, & Tušak, 2008). The results of our study confirm this statement. In our sample, there is a statistically significant difference between the children going in for sports and those who are not, in view of the monthly income per family member of a given family. The children going in for sports come from families with a higher income, while the children not going in for sports originate from families with a lower monthly income. The results of our study have shown that with the increase in the monthly income per family member, the percentage of children going in for sports within some sport clubs also increases. These results indicate that the bad financial situation in the family may be the cause of low sports engagement of children.

The parents education is significantly related to the level of their children's sports engagement. Studies have indicated that the children of better educated parents are more physically active (Videmšek 2007; Videmšek et al., 2008; Strniša & Planinšec, 2014). The results of this study have shown that fathers and mothers of children going in for sports, have a better education than the fathers and mothers of children not engaged in sports. In our study, the smallest number of children engaged in sports are those of parents who only finished primary school, followed by those who finished secondary school and have a college education and the biggest number of children going in for sports have parents with a university education. These data do not match the data of Slamar (2009). In his study, the least physically active children have parents with a primary education (results matching those of our study), then the children of parents with a college and university education, while the most physically active children have parents with a secondary education. The results of our study showed that the parents education is related to the level of their children's sports engagement. The reason for the low sports engagement of the children in our sample may also be the low percentage of parents with a university education. From the total number of fathers, only 20.4% had a higher (university) education and 9.7% had a college education. From the total number of mothers, only 22.3% had a university education and 12.5% had a college education.

The physical activity of children from urban and rural areas also differs. It is interesting that many authors denied the theory that children from rural areas were less active than those from the urban ones (Planinšec, 1997; Petrovič et al., 2000; Pogorelčnik, 2006; Planinšec et al., 2006; Joens, et al., 2008; Matejek & Planinšec, 2008). Perhaps their oriented sports activities are at a lower level, but children from rural areas, spending much leisure time outside and playing games, gain better motor results than children from urban areas (Dollmann, Norton & Tucker, 2002; Pišot, Turk, & Trebižan, 2002; Rupar, 2006). The authors of this study explained that the reason for such results is the lack of arranged sports courts where children could play. The sports contents are poor, as well as the sports infrastructure. For that reason, parents from rural areas drive their children to the nearby town to train. In our study, it was found out that the percentage of children from urban areas engaged in sports (40.1%) was statistically significantly higher than the percentage of children from rural areas engaged in sports (18.2%), but we were not trying to establish the way children from rural areas spend their leisure time, whether they were more active from children in urban areas, in physical terms. We think that the consequence of such a difference is just poor sports content and sports infrastructure.

CONCLUSION

The results of this study show that the sports engagement of primary school children in lower grades in the territory of southeast Serbia has not been on a high level, as well as that the boys were more engaged than the girls. This study showed that the number of sports disciplines offered in the surveyed towns were not sufficient. In Vranje, the children mentioned only 11 sports disciplines, in Nis 16, and in Pirot 13. The parents stated that they were not satisfied with the offered sports disciplines in their towns. Having in mind these negative results, it is necessary to include all the authorities in charge in order to increase the percentage of children engaged in sports, because going in for sports could only have positive effects on children's health.

The study has also shown that children's sports engagement depends on the economic situation of the family the children come from, as well as on the parents education. The better the financial standing of the parents, the better the sports engagement of the children and also, the more educated the parents, the more sports engaged the children. The parents education cannot be altered, but in the case of finances, perhaps, something can be done. Nowadays, many sport schools and sports clubs have been privatized and it is necessary to pay a monthly membership fee in order children became a members of some club. In many clubs the situation is such that the children are being selected and those more talented children do not pay a membership fee, but they are part of the team. Those not selected make up the so-called recreational group, paying a fee. Now, we ask the following question: What we do with those not-selected children, whose parents have no money, but who would like to play and socialize with their mates within some sports club. We need to ensure the involvement of the state which would provide free sports activities for children in the development phase.

The study has shown that the children from urban environments are more engaged in sports activities than the children from rural areas. The lack of sports infrastructure and sports organizations should be an issue for discussion with the aim of enriching the sports infrastructure in the rural area sand providing free transport for children who would like to

go in for sports but are not able to do so due to the environment conditions. Many authors obtained data showing that children from rural areas, although less engaged in sports activities, showed better motor results than children of urban areas, owing to their daily activities. For that reason, it is necessary to include children from rural areas in sports activities and use their potentials in positive sense. Perhaps, new champions are hidden among them.

REFERENCES

Bacanac, Lj., Petrovic, N., Manojlovic, N. (2009). *Priručnik za roditelje mladih sportista. (Handbook for parents of young athletes.).* Beograd: The Republic Institute for Sport.

Bačanac, L. (2007). Specificities of motivation profile of young athletes of Serbia. *Serbian Journal of Sports Sciences*, 1 (1), 14-22.

Baranowski, T. (1997). *Families and health actions.* In Gochman, David S. Handbook of health behavior research 1: Personal and social determinants (pp. 179-206). New York, NY, US: Plenum Press.

Boreham, C., & Riddoch, C. (2001). The physical activity, fitness and health of children. *Journal of sports sciences*, 19 (12), 915-929.

Bouchard, C., & Malina, R. M. (1983). Genetics of physiological fitness and motor performance. *Exercise and sport sciences reviews*, 11 (1), 306-345.

Branca, F., Nikogosian, H., & Lobstein, T. (2007). *The challenge of obesity in the WHO European Region and the strategies for response*. Copenhagen: WHO Regional Office for Europe.

Caspersen, C.J., Powell, E.C., & Christenson, G.M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public Health*, 100 (2), 126-131.

Davison, K.K., Cutting, T.M., & Birch, L.L. (2003). Parents activity-related parenting practices predict girls physical activity. *Med Sci Sports Exerc*, 35 (9), 1589–1595.

De Onis, M., Blössner, M., & Borghi, E. (2010). Global prevalence and trends of overweight and obesity among preschool children. *The American journal of clinical nutrition*, 92 (5), 1257-1264.

Djordjic, V. (2010). Sportska aktivnost učenika osnovne škole (Sporting activity of elementary school pupils). *Menadžment u sportu* , (1), 31-35.

Dollman, J., Norton, K., & Tucker, G. (2002). Anthropometry, fitness and physical activity of urban and rural south Australian children. *Pediatric Exercise Science*, *14* (3), 297-312.

Doupona, M. (2001). Influence of some aspects of parental socio-economic status on the attitude towards sports. *Kineziologija*, 33 (1), 94-104.

Gustafson, S. L., & Rhodes, R. E. (2006). Parental correlates of physical activity in children and early adolescents. *Sports Medicine*, 36 (1), 79-97.

Heitzler, C. D., Martin, S. L., Duke, J., & Huhman, M. (2006). Correlates of physical activity in a national sample of children aged 9–13 years. *Preventive medicine*, 42 (4), 254-260.

Hills, A. P., King, N. A., & Armstrong, T. P. (2007). The contribution of physical activity and sedentary behaviours to the growth and development of children and adolescents. *Sports Medicine*, 37 (6), 533-545.

Joens-Matre, R. R., Welk, G. J., Calabro, M. A., Russell, D. W., Nicklay, E., & Hensley, L. D. (2008). Rural–urban differences in physical activity, physical fitness, and overweight prevalence of children. *The Journal of Rural Health*, *24* (1), 49-54.

Kalish, S. (2000). *Fitness za djecu – praktični savjeti za roditelje*. *(Fitness For Children – Practical Advices for Parents)*, Zagreb: Gopal, d.o.o.

Lavizzo-Mourey, R. (2007). Childhood obesity: what it means for physicians. *JAMA*, *298* (8), 920-922.

Matejek, Č., & Planinšec, J. (2008). Gibalna aktivnost in kakovost življenja mlajših otrok. (Physical Activity and Quality of Life of Young Children). In Vesna Štemberger, Rado Pišot, Kristina Rupert (Eds.). *V Otrok v gibanju*, (The children in the move), Koper: University of Primorskem, Faculty of Education. Ljubljana: University of Ljubljana, Faculty of Education.

Norton, D. E., Froelicher, E. S., Waters, C.M., & Carrieri-Kohlman, V. (2003). Parental influence on models of primary prevention of cardiovascular disease in children. *European Journal Cardiovascular Nursing*, 2 (4), 311–322.

Pate, R.R., Freedson, P.S., Sallis, J.F., Taylor, W.C., Sirard, J., Trost, S.G., & Dowda, M. (2002). Compliance with physical activity guidelines: prevalence in a population of children and youth. *Ann Epidemiol* , 12 (5), 303-308.

Petrovič, K., Ambrožič, F., Sila, B., Topič, M.D., & Bednarik, J. (2000). *Športnorekreativna dejavnost v Sloveniji 1999*, (Sports and Recreational Activities in Slovenia 1999). Ljubljana: Faculty of Sport, Institute of Kinesiology.

Pišot, R., Turk, R. N., & Trebižan, B. (2002). Primerjava gibalnih sposobnosti in vključevanja v gibalne/športne aktivnosti mestnih in vaških učencev (Comparison of Motor Abilities and Participation in Exercise / Sports Activities of Urban and Village Pupils). In Rado Pišot, Vesna Štemberger, Franc Krpač, Tjaša Filipčič (Eds.). *V Otrok v gibanju (The children in the move)* (342-346). Ljubljana: University of Ljubljana, Faculty of Education.

Planinšec, J. (1997). Razlike v motorični učinkovitosti predšolskih otrok z vidika kraja bivanja. (Differences in Motor Efficiency of Preschool Children from the Perspective of Their Place of Residence). In J. Bezenšek (Ed.), *V Včas Konjic vtkane sanje* (59–63). Slovenske Konjice: Javni vzgojno-varstveni zavod Vrtec (Public childcare institution Nursery), Slovenske Konjice.

Planinšec, J. (2003). Ugotavljanje gibalne dejavnosti mlajših otrok. *Zdravstveno varstvo*, 42 (2), 58–65.

Planinšec, J., Pišot, R., & Fošnarič, S. (2006). Gibalna aktivnost mlajših šolarjev v severovzhodni Sloveniji (Physical Activity of Young School Children in Northeastern Slovenia), *Pedagoška obzorja*, 21 (3–4), 3–14.

Pogorelčnik, T. (2006). *Vpliv športnih in drugih dejavnosti na motorične sposobnosti mestnih in vaških otrok*. (Impact of Sports and Other Activities for the Motor Skills of Urban and Rural Children), Bachelor thesis, Maribor: Faculty of Education.

Rupar, T. (2006). *Vpliv načina preživljanja prostega časa na funkcionalne sposobnosti otrok* (Influence of the Ways of Spending Free Time in the Functional Abilities of Children). Bachelor thesis. Maribor: Faculty of Education.

Sallis, J. F., Alcaraz, J. E., McKenzie, T. L., Hovell, M. F., Kolody, B., & Nader, P. R. (1992). Parental behavior in relation to physical activity and fitness in 9-year-old children. *American Journal of Diseases of Children*, *146* (11), 1383-1388.

Slamar, S. (2009). *Vloga staršev pri gibalno-športni aktivnosti otrok mariborskih vrtcev*. (The Role of Parents in Motor Sports Activities in Maribor Kindergartens.). Bachelor thesis, Maribor: Faculty of Education.

Starc, G., & Sila, B. (2007). Ura športa na dan prežene vse težave stran: tedenska športna dejavnost odraslih v Sloveniji (An hour of sport a day, keeps the difficulties away: tedenska sports activity of adults in Slovenia). *Šport – revija za teoretična in praktična vprašanja športa*, 55 (3), 27-36.

Strniša, K., & Planinšec, J. (2014). Gibalna dejavnost otrok z vidika socialno-ekonomskih razsežnosti (Physical Activities of Children in Terms of Socio-economic Dimension) *Journal of Elementary Education/Revija za Elementarno Izobraževanje*, 7 (1), 99-107.

Strong, W. B., Malina, R. M., Blimkie, C. J., Daniels, S. R., Dishman, R. K., Gutin, B., & Trudeau, F. (2005). Evidence based physical activity for school-age youth. *The Journal of pediatrics*, 146 (6), 732-737.

Taras, H. (2005). Physical activity and student performance at school. *Journal of School Health*, 75 (6), 214-218.

Trost, S.G., Sallis, J.F., Pate, R.R., Freedson, P.S., Taylor, W.C., & Dowda, M. (2003). Evaluating a model of parental in fluence on youth physical activity. *American Journal of Preventive Medicine*, 25 (4), 277–282.

Videmšek, M. (2007). Pasivni starši, zbudite se (Passive parents, wake up). *Polet*, 6 (4), 54–55.

Videmšek, M., Štihec, J., Karpljuk, D., Vauhnik, J., & Tušak, M. (2008). *Analysis of preschool physical education*. Ljubljana: Faculty of sport-Institute of kinesiology.

Wang, G., & Dietz, W. H. (2002). Economic burden of obesity in youths aged 6 to 17 years: 1979–1999. *Pediatrics*, 109 (5), e81-e81.

SOCIO-EKONOMSKI STATUS RODITELJA I UČEŠĆE NJIHOVE DECE U SPORTSKIM AKTIVNOSTIMA

Broj gojazne dece, dece koja se dnevno dovljno ne kreću je u porastu. To predstavlja ozbiljan problem koji bi trebalo sprečiti. Cilj ovo grada je da pruži uvid u stepen angažovanja dece u različitim sportskim aktivnostima, kao i uvid u to kako nivo obrazovanja roditelja i ekonomski status porodice utiču na aktivnost dece. Na osnovu pregleda literature iz prethodnih istraživanja, rezultati se mogu pravilno sagledati. Za analizu podataka korišćen je t-test i χ^2 test. U istraživanju je učestvovalo 1630 roditelja čija deca pohađaju osnovnu školu, od prvog do četvrtog razreda, u sledećim gradovima: Niš, Vranje, Knjaževac i Pirot. Istraživanjem su obuhvaćene škole iz urbanih i ruralnih oblasti koje su povezane sa ovim gradovima. Rezultati ukazuju na to da viši nivo obrazovanja roditelja i bolji ekonomski status porodice utiču na stepen sportskih aktivnosti dece.

Ključne reči: *obrazovanje, sport, Srbija, roditelji, deca*.