

## PRE-ADOLESCENT SELF-CONCEPT ASPECTS AS DETERMINANTS OF ENGAGEMENT IN SPORTS ACTIVITIES

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**Abstract:** The aim of the research was to define gender differences in some aspects of self-concept at appropriate subsamples of examinees, as well as to determine particular dimensions of self-orientation which influence the general self-esteem of younger male and female preadolescents (athletes and non-athletes). An adapted version of the Harter's questionnaire *Self-perception profile for Children* was applied and it showed satisfactory metric characteristics. The obtained results were assessed by basic procedures of descriptive statistics and the multiple regression analysis method. They showed that athletes of both genders have more positive self-perception than their peers. Sports engagement positively contributes to the scores at subscales of self-orientation of younger male adolescents. The results of multiple regression analysis undoubtedly emphasize the domain of "physical appearance" as the most important partial contribution to global self-worth (as a criteria variable) in both genders, regardless of the fact if they are engaged in physical activities or not. Apart from important theoretical implications, the obtained results confirm the statistical significance of the self-concept of examinees in the period of early adolescence (athletes and non-athletes), as well as the prediction of the variance of their global self-worth.

**Key words:** self-concept, preadolescents, gender differences, global self-worth, sport

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## INTRODUCTION

The hypothetical construct of self-concept or self-understanding – is present in each mutual interaction, but also influences people's feelings and behavior. According to the research conducted by Marsh (2007), self-concept is defined as self-evaluation, formed through personal experience, but also through assessment done by other people (self – personally, independently). It includes self-assurance, self-evaluation, self-acceptance and competencies. Positive multidimensional self-orientation is very important for the development of an individual, and research done by Klomsten et al. (2004) shows that engagement in physical activities contributes to its development.

Numerous authors have been investigating self-concept in the domain of physical education and sports (Gašić-Pavišić et al., 2006; Lazarević et al., 2007; Marsh & Craven, 2006; Schneider et al., 2008). Research done by DuBois et al., (2000) emphasizes the dominant theoretical aspects of self-concept, as well as the difference between general self-assessment and self-evaluation in characteristic domains (school, society, etc.). Recent results of the research done by Tubić et al. (2012) emphasizes that male and female adolescents who are involved in sports activities have more positive self-evaluation concerning most of the examined aspects of self-concept, than their peers who are not involved in organized sports activities.

Most of the studies investigated the relations between physical self-orientation and the sports engagement of children and adolescents. The findings of empirical research conducted over the past twenty years on the conditions of physical activities engagement and psychological functions consequently show their mutual line, explanations and predictions. The study done by Scandan (Scandan & Lewthwaite, 1986) shows that more positive self assessment of motor abilities causes the feeling of a higher satisfaction, i.e. a lower level of anxiety during engagement in physical and sports activities. According to the study done by Harter (1990), self-concept is conditioned by social surroundings (family, school, sports club, etc.) that ensures positive conditions for self-development. Some authors (Weiss & Chaumeton, 1992) show that pre-adolescents who have a negative self-assessment of their own physical abilities show a tendency not to be involved in sports activities, whereas their peers who are involved in sports activities have a positive assessment of their own abilities. According to Brustad (1993), motor abilities perception, as one of the segments of self-concept, represents an important predictor of the physical engagement of young people. A higher level of assessed motor ability is related to the interests of adolescents, and they are willing to take part in physical and sports activities. Ryan et al. (1994) show that mutual self-assessment of

adolescents directed toward individual assessment of general characteristics represents a relatively permanent characteristic that is highly conditioned by relevant support from others.

The results obtained by Biddle (2000) suggest that involvement in moderate physical activities improves emotional functions, self-esteem and self-concept, as well as self-satisfaction. Alves-Martins et al. (2002) show that self-evaluation of the characteristic domains of self-concept shows individual feeling of accomplishment in certain fields (social, school), which is submitted to changes under certain conditions. Recent research and empirical findings gathered by Tubić et al. (2012) undoubtedly emphasize the importance of physical appearance perception in the general self-evaluation of adolescents of both genders, regardless of the fact whether they take part in physical activities.

According to the motivational theory, the basic goal of efficient behavior is the feeling of being competent, which, reflected in the domain of physical and sports activities shows that adolescents will take part in physical activities if they consider themselves to be physically competent, and vice versa. Harter (1992) defined a relatively high mutual interdependent relation between self-evaluation in important fields and self-evaluation, as well as low mutual relations between self-evaluation in unimportant fields and global self-worth. This pattern emphasizes objective abilities which represent a necessary condition for observed abilities. Recorded ability also conditions motivation rather than objective ability.

Positive or negative self-perception is different in different age. Research done by Wigfield & Eccles, 1994, show that global self-worth gradually lessens, as well as that it is the most delicate in female teenagers. The obtained results correspond with the results obtained by recent research (Nader et al., 2008), which showed that the level of physical activity lessens in the period from nine to eleven years, especially with female pre-adolescents.

The significance of gender in the process of self-evaluation has been proved by numerous research studies. Van Wersch et al. (1990) showed that girls give higher marks to their appearance and sports abilities than boys. Obtained empirical research corresponds with the results of a longitudinal study done by Lintunen et al. (1995), which emphasizes that the period of early adolescence is characterized by emotional, physical and social changes. It makes the differences between genders more noticeable, both in activities and self-evaluation. Kling et al. (1999) claim that boys show more positive global self-worth of their own appearance and sports abilities, whereas girls have better results in their own behavioral conduct and close friendship. The results of the research done by Lazarević et al. (2008) emphasize statistically

significant differences in characteristics of physical self-concept in favor of pupils who are additionally engaged in physical activities and sports, besides regular P.E. activities within the school curriculum. The differences were more noticeable in the dimensions of the physical self-concept of girls, according to the level of their engagement in physical activities and sports.

This overview of contemporary studies and references emphasizes the complexity of the problem. Therefore, its investigation is highly significant.

Regarding the rare studies on self-concept within the field of sports in this area, according to the stated and defined problem of research study, we have stated the following goals:

- (a) to examine if some components of self-orientation of male and female adolescents differ according to their engagement in sports activities,
- (b) to define what dimensions of self-concept significantly influence the global self-worth of male and female pre-adolescents who are, or are not involved in sports activities.

Bearing in mind the results of previous research, as well as the goals, this paper stated the initial hypothesis according to which the self-worth of athletes and non-athletes in early adolescence can be predicted according to the definition of statistically significant domains of self-orientation.

## METHOD

### Sample

The research included 210 examinees of both genders aged from 13-14 (AM = 13.7; SD = 1.15). Some 44.76% of examinees were actively engaged in physical activities, whereas 55.23% were not. The free choice method was applied in gathering the sample.

- Basketball players represented the subsample of the athletes (younger boys and girls) from 4 basketball clubs: BC Metalac – Super league (Valjevo), BC Zicer/Serbian quality league (Valjevo), BC Sodeks (Valjevo) – Serbian quality league and BC Železničar (Lajkovac) – Summer League.

- A filter questionnaire was applied to choose the subsample of pupils who are not involved in sports activities (pupils of the 7th and 8th grades of the First Primary School in Valjevo).

### Procedure

The groups included 20 to 30 examinees. Pupils who were not included in sports activities were tested in May 2012 during P.E. classes, whereas the subsample of athletes was tested before their regular basketball training activities. The testing was done by qualified staff, with the supervision

of psychologists. The examinees were told that they were not subjected to a knowledge test, as well as that there were no true or false answers, and thus it was important to answer the questions honestly. The examinees accepted to take part in the research after the school principal and the chairmen of their clubs approved it. The testing lasted 45 minutes.

### **Instruments**

An adapted version of the Self-perception Profile for Children (Harter, 1988) was applied. Furthermore, the Croatian translation of the original questionnaire was applied (Brajša-Žganec, Raboteg-Šarić and Franc, 2000). Harter constructed the scale starting with the assumption that pre-adolescents make a clear distinction between the fields of their competences, i.e. that they do not feel equally competent in all fields. The instrument contained five subscales, whereas each subscale contained items, clearly defined as complex, linked sentences. The first part of the sentence contained competent, and the second less competent behavior of teenagers (e.g. "Some teenagers are more successful in learning" - "Others are not too successful"). The task of the examinees was to decide if the first or the second sentence described them better. They also had to state if the statement referred to them absolutely or just partially. The examinees had to choose the sentence which describes them better, and to indicate with an X if the sentence described them absolutely, or just partially. The sum at each subscale represents the arithmetic mean of the examinees' answers to all statements marked with 1 to 4 on a four-level scale, whereas 1 refers to minimum competence within the analyzed domain, and 4 refers to maximum competence.

The applied measuring instrument consisted of eight fields:

- Scholastic competence – investigating the self-perception of one's own competence or ability in school surrounding (e.g. "Some teenagers are aware that they can successfully accomplish school tasks" - "Other teenagers are worried that they cannot successfully fulfill school tasks.");
- Social acceptance – investigating if teenagers have the feeling that they are popular or accepted by their peers (e.g. "Some teenagers do not make friends easily." – "Other teenagers make friends easily.");
- Athletic competence – investigating the perception of one's own sports accomplishment (e.g. "Some teenagers consider themselves successful in sports." – "Other teenagers do not consider themselves successful in sports.");
- Physical appearance – investigating if pre-adolescents are satisfied with their physical appearance (e.g. "Some teenagers are satisfied with their physical appearance." – "Other teenagers are not satisfied with their physical appearance.");

- Behavioral conduct – investigating if pre-adolescents are satisfied with their behavior (e.g. “Some teenagers are not satisfied with their behavior.” - “Other teenagers are mostly satisfied with their behavior.”);
- Business ability – investigating the estimation of competence to do a job, as well as the readiness to do it well (e.g. “Some teenagers are competent to do some jobs for which they are not paid.” - “Some teenagers doubt they are competent to do some job well.”);
- Romantic attraction – investigating if pre-adolescents feel that they are attractive to peers who are attractive to them (e.g. “Some teenagers consider themselves to be funny and interesting on a date with the person they find attractive.” - “Some teenagers doubt they are funny and interesting on a date.”);
- Close friendship – investigating the ability of pre-adolescents to find friends they can trust (e.g. “Some teenagers think it is difficult to find friends they can really trust.” - “Other teenagers can find friends they can trust.”).

Harter assumed that teenagers not only make a clear distinction between the above mentioned competence fields, but they also create an overall picture of themselves as individuals. That overall picture is the result of the self-worth process and surmounts the competence perception in some fields. Therefore, she included an additional subscale - Global self-worth, which investigates the level of pre-adolescent self-satisfaction, as well as satisfaction with life in general (e.g. “Some teenagers are satisfied the way they are“, but “Other teenagers would like to be different than they are.”).

Relatively high Cronbach alpha coefficients for each subscale were defined after the checking of metric characteristics of the original measuring instrument. They varied from .61 to .86. The lowest values of validity of internal consistency were obtained for subscales Close friendship ( $\alpha = .61$ ), Romantic attraction ( $\alpha = .65$ ) and Business competence ( $\alpha = .68$ ). Having in mind small measuring errors, there is great probability of a further application of applied measuring instruments in the interpretation and statistical conclusions.

### **Statistical procedure**

Basic procedures of descriptive statistics (arithmetic means and the standard deviation) were applied to assess the mutual correlation between the effects of sports engagement and the examinees' self-evaluation. The multiple regression analysis was applied to obtain information on the characteristic aspects of self-evaluation that significantly influence global self-perception of the examinees of both genders who actively participate, or do not participate in sports activities.

## RESULTS

### Male and female adolescents' self-worth related to sports engagement

Descriptive indicators of self-perception of male and female pre-adolescents, regardless of their sports engagement, are presented in Tables 1a and 1b.

**Table 1a.** *Pre-adolescents' (athletes) self-perception indicators according to gender*

| SELF-WORTH ASPECTS    | ATHLETES |     |      |     |
|-----------------------|----------|-----|------|-----|
|                       | M        |     | F    |     |
|                       | AM       | SD  | AM   | SD  |
| Scholastic competence | 2.98     | .67 | 2.93 | .56 |
| Social acceptance     | 3.12     | .49 | 3.15 | .50 |
| Athletic competence   | 2.91     | .60 | 2.89 | .52 |
| Physical appearance   | 2.95     | .81 | 2.93 | .69 |
| Business ability      | 2.66     | .57 | 2.54 | .59 |
| Romantic attraction   | 2.95     | .62 | 2.98 | .60 |
| Behavioral conduct    | 2.79     | .70 | 3.05 | .64 |
| Close friendship      | 3.06     | .65 | 3.27 | .68 |
| Global self-worth     | 3.17     | .66 | 3.06 | .74 |

**Table 1b.** *Pre-adolescents' (non-athletes) self-perception indicators according to gender*

| SELF-WORTH ASPECTS    | NON-ATHLETES |     |      |     |
|-----------------------|--------------|-----|------|-----|
|                       | M            |     | F    |     |
|                       | AM           | SD  | AM   | SD  |
| Scholastic competence | 2.97         | .68 | 2.99 | .70 |
| Social acceptance     | 3.10         | .56 | 3.09 | .64 |
| Athletic competence   | 2.51         | .70 | 2.49 | .60 |
| Physical appearance   | 2.73         | .81 | 2.78 | .72 |
| Business ability      | 2.67         | .62 | 2.53 | .59 |
| Romantic attraction   | 2.96         | .61 | 3.01 | .61 |
| Behavioral conduct    | 2.92         | .58 | 3.04 | .65 |
| Close friendship      | 3.02         | .63 | 3.26 | .65 |
| Global self-worth     | 3.31         | .60 | 3.24 | .71 |

Table 1 shows that athletes of both genders have a more positive judgment on the investigated aspects of self-orientation than non-athletes, with the exception of the domain of business competence, which is different. Female pre-adolescents involved in sports activities have the highest scores in the following variables: their own competence to make close friends (AM=3.27), social acceptance (AM=3.06) and global self-worth (AM= .18). On the other hand, male pre-adolescents who take part in sports activities emphasize the same aspects, but the order is different: they have the highest scores in the domain of global self-worth (AM=3.17), social acceptance (AM=3.12) and close friendship (AM=3.06). The subsamples of athletes show that male and female pre-adolescents have the most negative opinion of their own business competence (AM=2.66, AM=2.54). A comparison of arithmetic means shows that the variables – scholastic competence and social acceptance are equally important, as well as that young adolescents who take part in sports

activities have a more positive judgment in every other aspect, with the exception of behavioral conduct and close friendship.

The subsample of non-athletes (Table 1b) shows that male and female pre-adolescents have the most negative assessment of the following domains: athletic competence (AM = 2.51, AM = 2.49) and physical appearance (AM = 2.73, AM = 2.77). The athletic competence variable has the lowest scores. Female adolescents who do not take part in sports activities have lower results in all aspects of self-concept than their peer athletes, except for the business competence variable. On the other hand, the achieved results of younger adolescents (non-athletes) are higher than the results of male adolescents, except for the athletic competence variable.

The obtained values of arithmetic means and standard deviations of the individual dimensions of subscales in this sample are similar with the results of earlier research done by Tubić et al. (2012), which included athletes and non-athletes in the period of early adolescence.

**Sports engagement and self-worth of adolescents of different genders**

The multiple regression analysis (Tabachnik & Fidel, 2001) was applied to assess partial contributions of self-perception in the self-orientation dimensions on the sample of younger adolescents of both genders, as well as to explain and predict domains of global self-worth.

**Table 2.** *Effects of specific dimensions of self-concept on the global self-worth of both athletes and non-athletes*

| SELF-WORTH ASPECTS    | ATHLETES     |             |         |     |     |
|-----------------------|--------------|-------------|---------|-----|-----|
|                       | M            |             | F       |     |     |
|                       | $\beta$      | $p$         | $\beta$ | $F$ | $p$ |
| Scholastic competence | .17          | .03         | .10     |     | .53 |
| Social acceptance     | .12          | .41         | .18     |     | .03 |
| Athletic competence   | .09          | .54         | -.06    |     | .61 |
| Physical appearance   | .50          | .02         | .53     |     | .01 |
| Business ability      | -.09         | .38         | -.11    |     | .30 |
| Romantic attraction   | .15          | .19         | .13     |     | .30 |
| Behavioral conduct    | .28          | .05         | .32     |     | .01 |
| Close friendship      | -.05         | .50         | -.03    |     | .80 |
| Global self-worth     | $R = .68$    | $R = .71$   |         |     |     |
|                       | $R^2 = .48$  | $R^2 = .64$ |         |     |     |
|                       | $p = .01$    | $p = .01$   |         |     |     |
| SELF-WORTH ASPECTS    | NON-ATHLETES |             |         |     |     |
|                       | M            |             | F       |     |     |
|                       | $\beta$      | $p$         | $\beta$ | $F$ | $p$ |
| Scholastic competence | .09          | .30         | .07     |     | .61 |
| Social acceptance     | .18          | .03         | .09     |     | .05 |
| Athletic competence   | -.02         | .60         | -.17    |     | .03 |
| Physical appearance   | .60          | .02         | .59     |     | .03 |
| Business ability      | .19          | .03         | .13     |     | .18 |
| Romantic attraction   | -.05         | .81         | .15     |     | .17 |
| Behavioral conduct    | .17          | .05         | .20     |     | .05 |
| Close friendship      | -.03         | .54         | .09     |     | .52 |
| Global self worth     | $R = .69$    | $R = .69$   |         |     |     |
|                       | $R^2 = .71$  | $R^2 = .68$ |         |     |     |
|                       | $p = .001$   | $p = .001$  |         |     |     |



The results shown in the Table 2 show that the self-perception of characteristic aspects of self-concept greatly influences the global self-worth of the subsample of examinees of both genders (of both athletes and non-athletes) in early adolescence.

An analysis of the specific dimensions of self-concept in the subsample of athletes was applied to interpret 48% of the variability proportion of the aspects of global self-worth, i.e. 62% of the variability proportion in the sample of pre-adolescents. It shows that this regression model is statistically significant. Therefore, the physical appearance subscale in the sample of athletes of both genders represents the dominant predictor of the global worth criteria (male adolescents  $\beta = .50$ ;  $p < .02$ , female adolescents  $\beta = .53$ ;  $p < .01$ ). Subscales of behavioral conduct ( $\beta = .28$ ;  $p < .05$ ) and social acceptance ( $\beta = .18$ ;  $p < .03$ ) are significant for the global self-worth dimension in the subsample of female adolescents who do not take part in sports activities. The statistical significance of standard regression coefficients of individual factors shows that the athletic competence domain (in both subsamples) is not statistically significant. It also shows that this predictor is not significant for global self-worth variance explanation.

An analysis of the specific dimensions of self-concept in the subsample of non-athletes shows that the set predictor variables can explain and predict 71% of the proportion of the global self-worth aspect variance, i.e. 64% of the variability proportion in the sample of female pre-adolescents. The physical appearance subscale was the most significant predictor of global self-worth in the sample of examinees of both genders (male adolescents  $\beta = .60$ ;  $p < .02$ , female adolescents  $\beta = .59$ ;  $p < .03$ ). It is noticeable that the beta-coefficients of the non-athletes subsample are higher than the beta-coefficients of athletes. The obtained results show the statistical significance of independent variables' behavioral conduct ( $\beta = .17$ ;  $p < .05$ ) and business competence ( $\beta = .19$ ;  $p < .03$ ) for global self-worth, the criteria variable at the subsample of non-athletes. On the other hand, behavioral conduct ( $\beta = .20$ ;  $p < .05$ ) and negative correlation athletic competence ( $\beta = -.08$ ;  $p < .03$ ) are significant predictors of the criteria variability explanation in the subsample of female adolescents who do not take part in sports activities.

The obtained values of multiple determination coefficients, as well as standard partial regression coefficients show that they correspond with earlier research done by Tubić et al (2012), so that it is possible to compare them with their results, applying the same methodology.

The interpretation of the obtained results shows that the applied multiple regression analysis confirmed the fact that tested hypothesis in this research can be accepted.

## DISCUSSION

Even though the theoretical and practical significance of the correlation between self-concept aspects as determinants of sports engagement of pre-adolescent pupils has been acknowledged worldwide, investigations of this phenomenon have been rare and unsystematic in our surrounding. This research has been conducted on the subsamples of adolescent pupils and basketball players (younger pupils), with the idea to identify their self-concept and predict the variance of the dimensions of self-worth within the population of athletes and non-athletes in early adolescence.

The obtained results showed that younger male and female adolescents (athletes) have a more positive perception of themselves in most of the examined self-concept dimensions than their peers who do not take part in regular sports activities. Regardless of their gender, both subsamples showed better results concerning athletic competence and social acceptance domains. Athletes had better results at physical appearance, romantic attraction, close friendship and global self-worth subscales than non-athletes. Besides the above-mentioned similarities, female athletes showed a more positive perception in all aforementioned dimensions, as well as in the behavioral conduct dimension. Female non-athletes had significantly higher results only at the business competence subscale.

The obtained results show that sports engagement positively influences the self-orientation of younger adolescents. The analysis of applied predictors, i.e. specific self-worth dimensions and the criteria variable (global self-worth) at four subsamples, set the following order: male athletes have the highest scores, female athletes are in second place, female non-athletes come third, and male non-athletes are in the fourth position.

Significant differences were not observed only at the scholastic competence perception of all examinees that were included in this research. Statistical significance was observed in the athletic competence dimension. Male athletes ( $AM = 2.91$ ) and female athletes ( $AM = 2.89$ ) had the highest scores, whereas the differences between them are not significant. Female non-athletes have the lowest perception of their own athletic competence ( $AM = 2.49$ ). Numerous researches over the past two decades showed that female adolescents in early adolescence have a negative perception of themselves in the physical self-concept domain, primarily in the physical appearance and athletic competence dimensions.

Gašić-Pavišić et al. (2006), in their empirical research defined the gender differences between self-concept variables and sports engagement, which showed that sports engagement influences global self-respect and the control locus of adolescents through social reversible reactions and social evaluations of sports achievement and physical fitness.

Lazarević et al. (2008) in their research, state that adolescents who have obesity problems have significantly lower results in all subscales of PSDQ, except for the health and strength subscales, as well as that the differences were more significant in the female subsample. Bearing in mind that sport is primarily a “male domain”, Gentil et al. (2009) defined the differences between genders in the self-assessment of their athletic competence in early childhood, whereas they became more distinctive in early youth. Gender differences in the self-assessment of athletic competence caused a relatively better score of male examinees in comparison to women, since they are faster, stronger, more agile, etc. Social surroundings also emphasize male self-perception in sports fields, since boys’ engagement in sports activities is considered to be important. Empirical findings (Neisen et al., 2007) emphasize that boys are expected to be strong and active and are instructed to take part in sports activities where they can form and improve their sports abilities. Therefore, the study (Thron, 1993) emphasizes that females (younger adolescents) are directly or indirectly sent the message that active engagement in sports activities would make their body less feminine due to muscles. That is the main reason why females are less engaged in sports activities. Therefore, they are not given the opportunity to improve self-orientation dimensions. Research done by Lazarević et al. (2008) emphasizes statistically significant differences in the self-concept characteristics of pupils who are additionally engaged in sports and physical activities besides the regular P.E. curriculum. Differences in some characteristics of physical self-concept between boys and girls were noticed and results show more distinctive differences in physical self-concept characteristics in the sample of females than in the sample of males, regarding the level of their engagement in physical exercises and sport.

According to Gentil’s model, a muscled body represents a satisfaction generator of male physical appearance, but not female. They are under the influence of the pattern presented by the media, which favors models and the skinny look rather than an athletic appearance.

Research done by Tubić et al. (2012) shows that male and female adolescents who take part in sports activities have a more positive self-perception in many aspects of self-concept than their peers who do not take part in organized sports activities.

The results of this research emphasize that younger adolescents, athletes of both genders, have higher scores in their own physical appearance perception, than male and female adolescents who are not actively engaged in physical activities.

Female athlete adolescents, on the contrary, did not show a mutual correlation with a better self-assessment of their own physical appearance in comparison to their non-athletic peers, which is related to the differences in the traditional ideals of male and female beauty.

Harter (1992) stresses that self-perception of physical appearance is very important for the global self-worth of younger adolescents, since this self-characteristic, which is positioned highly in order to be perceived, represents a more positive dimension of self-worth in comparison to other assessment dimensions, e.g. scholastic or athletic competences, etc. It is interesting that only a subsample of younger adolescents (athletes) directly connects global self-worth with physical appearance, whereas all other subsamples of examinees show that their self-worth depends on more dimensions of self-concept. It is assumed that success in the field of sport is not very important for examinees (non-athletes). Therefore, they do not distinguish their global self-worth from competences in other dimensions, e.g. business competence or behavioral conduct.

The subsample of non-athletes shows the highest value of beta-coefficients for physical appearance ( $\beta = .59$ ), whereas statistically significant self-concept values for behavioral conduct ( $\beta = .20$ ) and athletic competence ( $\beta = -.17$ ) are much lower. Since there was no statistical significance of athletic competence for global self-worth in the subsample of female athletes, the obtained values of the standard regression coefficient in the subsample of female non-athletes can be explained by the prevailing women beauty standard, which emphasizes a slim, tall and gentle figure instead of muscles and a strong body, typical for athletes. On the other hand, according to research done by Kilpatrick et al. (Kilpatrick, Hebert, & Bartholomew, 2005), social acceptance, as an important segment of the global self-worth domain, was noticed only in the female athletes subsample, which stresses the connection with motives for female engagement in sports activities, where making friends, spending time together, etc. are more important than competitive aspects. The results of the research done by Tubić et al. (2012) undoubtedly emphasize the importance of a physical appearance assessment in the global self-worth of adolescents of both genders, regardless of the fact if they take part in sports activities or not.

The assumption of reciprocal two-directional contributions would most objectively explain the relation between self-orientation and sports engagement: physical activity can, through an improvement of motor skills and mutual social contribution, influence self-worth in different fields, especially in the domain of athletic competence, and contribute to the improvement of sports activities (Weiss & Amorose, 2008).

Basic methodological limitations in this transversal research refer to data gathering in a short period of time, demographic characteristics of the analyzed sample, a relatively small and specific sample – the subsample of basketball players comprised of younger male and female adolescents, which enabled results generalization within the global sports population.

In order to get a reliable insight in the causal relations of determinants of the examined constructs, it is necessary to conduct all-inclusive longitudinally designed studies, which would apply this scheme to larger and more representative sample of examinees of all ages who are engaged in other sports activities.

## CONCLUSION

Gender differences in some aspects of self-concept were investigated in this study on the sample of 210 younger male and female adolescents (athletes and non-athletes), as well as the influence of the characteristic dimensions of self-orientation on aspects of their self-worth. An adapted version of the Self-perception Profile for Children (Harter, 1988) was applied. It showed a satisfactory validity.

According to the results of both groups of examinees of the Self-perception Profile, there is a statistically significant difference between athletes and non-athletes in self-worth perception, whereas athletes more competently perceive most of the examined aspects of self-orientation than non-athletes. The differences between observed groups are noticed in the subsample of non-athletes, too. Female athletes have lower scores in all aspects of self-concept than their non-athlete peers, with the exception of business competence, whereas non-athletes have higher scores in all aspects of self-worth, except for the athletic competence perception, than their athlete peers.

The results show that there is no statistically significant difference between the self-respect of both examined groups, though its content is different. In the sample of athletes of both genders, the physical appearance subscale represents the dominant predictor of the global self-worth criteria, whereas the behavioral conduct and social acceptance subscales were dominant predictors in the sample of female pre-adolescents.

## REFERENCES

1. Alves-Martins, M., Peixoto, F., Gouveia-Pereira, M., Amaral, V., & Pedro, I. (2002). Self-esteem and academic achievement among adolescents. *Educational Psychology*, 22(1), 51–62.
2. Biddle, S. J. H. (2000). Emotion, mood and physical activity. In S. J. H. Biddle, K. R. Fox, & S. H. Boutcher (Ed.), *Physical activity and psychological well-being* (pp. 63–87). London: Routledge.
3. Brajša-Žganec, A., Raboteg-Šarić, Z., Franc, R. (2000). Dimenzije samopojmanja djece u odnosu na opaženu socijalnu podršku iz različitih izvora. *Društvena istraživanja*, 6(50), 897–912.
4. S. H. Boutcher (Ed.), *Physical activity and psychological well-being* (pp. 63–87). London: Routledge.
5. DuBois, D. L., Tevendale, H. D., Burk-Braxton, C., Swenson, L. P., & Hardesty, J. L. (2000). Self-system influences during early adolescence: Investigation of an integrative model. *Journal of Early Adolescence*, 20, 12–43.
6. Gašić-Pavišić, S., S. Joksimović & D. Janjetović (2006): General self-esteem and locus of control of young sportsmen, *Zbornik Instituta za pedagoška istraživanja*, 38(2), 385–400. Beograd: Institut za pedagoška istraživanja.
7. Gentile, B., Grabe, S., Dolan-Pascoe, B., Twenge, J. M., Wells, B. E., & Maitino, A. (2009). Gender differences in domain-specific self-esteem: A meta-analysis. *Review of General Psychology*, 13(1), 34–45.
8. Harter, S. (1988). *Manual for the self-perception profile for adolescents*. Denver, CO:University of Denver.
9. Harter, S. (1990). Causes, correlates and the functional role of global self-worth: A lifespan perspective. In J. Kolligan and R. Sternberg (Eds.), *Perceptions of competence and incompetence across the life-span* (pp. 43–70). New York, NY: Springer-Verlag.
10. Harter, S. (1992). Visions of self: Beyond me in the mirror. In J. E. Jacobs (Ed.), *Developmental perspectives on motivation* (pp. 99–144). Lincoln, NE: University of Nebraska Press.
11. Kilpatrick, M., Hebert, E., & Bartholomew, J. (2005). College students' motivation for physical activity: Differentiating men's and women's motives for sport participation and exercise. *Journal of American College Health*, 54(2), 87–94.

12. Kling, K. C., Hyde, J. S., Showers, C. J. & Buswell, B. N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin*, 125, 470–500.
13. Klomsten, A.T., E.M. Skaalvik & G.A. Espnes (2004): Physical self-concept and sports: do gender differences still exist? *Sex Roles*, Vol. 50, 119–127.
14. Lazarević, D., S. Radisavljević i I. Milanović (2007): Karakteristike fizičkog self-koncepta mladih sportista. *Međunarodna naučna konferencija »Analitika i dijagnostika fizičke aktivnosti«, Zbornik radova* (str. 304–349). Beograd: Fakultet sporta i fizičkog vaspitanja i Olimpijski komitet Srbije.
15. Lazarević, D., Radisavljević, S. i Milanović, S. (2008). Relacije fizičkog self-koncepta i fizičkog vežbanja učenika osnovne škole. *Zbornik Instituta za pedagoška istraživanja*, 40(2), 306–326.
16. Lintunen, T., Liskinen, E., Oinonen, M., & Salinto, M. (1995). Change, reliability, and stability in self-perceptions in early adolescence: A four-year follow-up study. *International Journal of Behavioural Development*, 18, 351–364.
17. Marsh, H.W., K.T. Hau, R.Y.T. Sung & C.W. Yu (2007): Childhood obesity, gender, actual-ideal body image discrepancies, and physical self-concept in Hong Kong children: cultural differences in the value of moderation, *Developmental Psychology*, 43, 647–662.
18. Marsh, H.W. & R.G. Craven (2006): Reciprocal effects of self-concept and performance from multidimensional perspective, *Perspectives of Psychological Science*, 1, 133 - 163.
19. Nader, P. R., Bradley, R. H., Houts, R. M., McRitchie, S. L., & O'Brien, M. (2008): Moderately-vigorous physical activity from ages 9 to 15. *Journal of American Medical Association*, 30(3), 295–395.
20. Neisen, M., Braun, C. A., & Shepherd, L. (2007). A school-based physical activity program tailored to adolescent girls. *Journal of Education and Human Development*, 1(1).
21. Ryan, R. M., Stiller, J. D., & Lynch, J. H. (1994). Representations of relationships to teachers, parents, and friends as predictors of academic motivation and self-esteem. *Journal of Early Adolescence*, 14, 226–249.
22. Scandam, T. K., & Lewthwaite, R. (1986). Social psychological aspects of competition for male youth sport participants: IV. Predictors of enjoyment. *Journal of Sport Psychology*, 8, 25–35.

23. Schneider, M., G.F. Dunton & D.M. Cooper (2008): Physical activity and physical selfconcept among sedentary adolescent females: an intervention study, *Psychology of Sport and Exercise*, 9, 1-14.
24. Tabachnick, B.G. i Fidell, L.S. (2001). *Using multivariate statistics*. MA: Allyn and Bacon.
25. Thorne, B. (1993). *Gender play: Girls and boys in school*. New Brunswick, NJ: Rutgers
26. Tubić, T., Đorđić, V., i Poček, S. (2012). Dimenzije self-koncepta i bavljenje sportom u ranoj adolescenciji. *Psihologija*, 45(2), 209–225.
27. Van Wersch, A., Trew, K., & Turner, I. (1990). Young people's perceived competence and its implications for the new PE curriculum. *British Journal of Physical Education*, 7, 1–5.
28. Weiss, M. R., & Amorose, A. J. (2008). Motivational orientations and sport behavior. In T. Horn (Ed.), *Advances in sport psychology* (pp. 115–156). Champaign, IL: Human Kinetics.
29. Weiss, M. R. & Chaumeton, N. (1992). Motivational orientations in sport. In T. S. Horn (Ed.), *Advances in Sport Psychology* (pp. 61–99). Champaign, IL: Human Kinetics.
30. Wigfield, A. & Eccles, J. (1994). Children's competence beliefs, achievement values, and general self-esteem: Change across elementary and middle school. *Journal of Early Adolescence*, 14(2), 107–138.