

The impact of sports manager 'sport science education' to business and sporting success of football

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Abstract

The purpose of this paper is viewed through the analysis of the impact of sports manager 'sports science education', as well as sports manager with education outside of sports science, to football organizations in Sarajevo Canton as it pertains to business and sporting success for the season 2003/2004. Research has been conducted on a stratified sample of 27 football clubs of Sarajevo Canton, the number of respondents (N = 405) with a total of 81 variable. Scale estimates of samples were created based on the Likert model, Terstons and Bogardus scales with higher numbers of stages 1-10, 1-100, which gave a stronger discriminative force to the instrument.

Data were analyzed with SPSS 12.0 statistical package for Windows, using the regression analysis. Based on the results obtained, it is found that business success in football is directly affected by 'sports science education' of sports managers, specifically those with a minor in coaching and training school. The sporting success, as it turns out, is also directly affected by 'sports science education' of sports managers, specifically with a coaching and training minor or a sport science and physical education degree. Interestingly, statistically significant correlation was found attributing to the impact of managers whose education is outside the sports orientation to both business and sporting success, which can be interpreted as a consequence of engaging licensed managers in football clubs. Research results could be used for identifying current market mechanisms with respect to the institutions that educate sports managers, innovating existing curricula and significantly linking education with practice. Moreover, research results indicate the need for creation of a new managerial philosophy in football organizations that are to be based on continuous organizational learning and education.

Key words: **sports education, business and sporting success and impact**

Introduction

It was confirmed that the sports organizations development, economic and social, was determined by the level of education and innovation skills of managers in the sport on the basis of research results in the area of Canton Sarajevo (Mašala 2008). However, the lack of serious discussion about the impact of education in sports, seeks above all, a deeper consideration of the accepted perspective of sports professionals and professionals and the impact of rapid changes in today's environment. (Smith, Hans, 2009). Because of that, this study is based on this assumption that the *business and sporting success* in football is determined by a number of managers with targeted education relating to sports affiliations. The aim of this study is related to determining the impact of sports programs for managers on one, as well as determining the impact of education managers whose education is beyond the sporting orientation on the other side, in relation to *business and sporting success* in football. With the conducted statistical analysis procedures, obtained data was used in detection of the impact of managers educated with sports

Sažetak

Cilj ovog rada je analiza utjecaja obrazovanja menadžera sportskog usmjerenja, kao i obrazovanja menadžera izvan sportskog usmjerenja nogometnih klubova Kantona Sarajevo u odnosu na ostvareni poslovni i sportski uspjeh za takmičarsku sezonu 2003/04.

Istraživanje je provedeno na stratificiranom uzorku 27 nogometnih klubova Kantona Sarajevo, broja ispitanika (N=405) sa ukupno 81 varijablom. Skala procjene uzoraka kreirana je na osnovu modela Likertove, Terstonske i Bogardusove skale sa većim brojem stupnjeva 1-10; 1-100 što je dalo jaču diskriminativnu snagu instrumentu.

Podaci su analizirani na osnovu statističkog paketa SPSS 12.0 for Windows i u tu svrhu je korišten postupak Regresione analize. Na osnovu dobivenih rezultata, uočava se da na poslovni uspjeh u nogometu utiču obrazovanja menadžera na nivou završene više trenerske škole. Uticaj na sportski uspjeh u fudbalu, prisutan je kod obrazovanja menadžera na nivou završene Više trenerske škole i završenog Fakulteta sporta i tjelesnog odgoja. U slučaju poslovnog kao i u slučaju sportskog uspjeha, obrazovanje izvan sportskog usmjerenja ima svoj statistički utjecaj, što se može tumačiti posljedicom angažmana licenciranog menadžerskog kadra u nogometnim klubovima.

Rezultati istraživanja mogu poslužiti u svrhu prepoznavanja aktuelnih tržišnih mehanizama sa aspekta potreba institucija koje obrazuju menadžere sporta, te značajnijeg povezivanja obrazovanja sa praksom. Osim toga rezultatima istraživanja se ukazuju na potrebu kreiranja nove menadžerske filozofije u fudbalskim organizacijama zasnovane na kontinuiranom organizacijskom učenju i obrazovanju.

Ključne riječi: **sportsko obrazovanje, poslovni i sportski uspjeh i uticaj**

orientation in relation to the *business and sporting success* in football. This effect is explained by the consequence of engaging licensed managers in football clubs who do not have to have formal sports education/degree. By definition, the professional status of managers in the UK is a relatively new phenomenon, which marked the creation of FIFA's "Pro license" in 1997 and the first graduates emerged after 1998. year (Crust, Lawrence, 2006). Furthermore, the research illuminates a need for engaging managers targeting specific sports not only in football, but also in other sports organizations. This highlights the dependence of mandatory organizational learning and education (Šunje, 2002).

Method

A stratified sample was applied for this study. The sample includes a set of 27 football clubs and 405 managers/participants of the Sarajevo Canton in a competition season 2003/2004. As a basis for drawing the sample, we used the monograph "Strategy of development of the Sarajevo Canton by 2015" (Canton Sara-

jevo, 1999). This pattern seemed appropriate because it ensured the representation of managers with the lowest and highest organizational responsibilities (elementary, middle and top level). Scale sample estimates were created based on the Likert model, Terstons and Bogardus scales with larger number of stages 1-10, 1-100 with higher numbers of stages 1-10, 1-100, with a stronger discriminative force to the instrument (Bala, 2007; Jurišić, 2005; Fajgelj, 2004; Supek, 1981 and later). The questionnaire was approved by the Ministry of Culture and Sport of Canton Sarajevo in 2003 for the purpose of scientific research. To construct the questionnaire, following instruments were used as a template: Collection of existing urban cantonal and municipal regulations in the field of sport (Vujmilović, Rašidagić, Zubović, Masala, 2004)., Economics and Management in Sports (Bartoluci 1999)., Sport Governance in the Global Community, Morgantown: Fitness Information Technology (Thoma, JE, Chalip, L. 1996) In the procedure of conducting the survey, the participants/managers are asked to answer what type of educational background they had, namely: a) sports education with a degree in sport science and physical education, b) sports education with a minor degree in sports coaching and training, c) sports education with a degree in high school of sports (i.e. high school equivalent of associate degree in sports), d) education outside of sports orientation. The remaining questions were related to sports club reports pertaining to: e) the total level of revenue achieved financially, f) the best sport result achieved in the domestic competition, and g) the best sport results achieved at the international level in football for season 2003/2004.

Variable sample included a total number of 81 variables. A set of 75 variables related to attitudes of the total number of surveyed managers (presidents, directors, consultants, general officers, sports directors, directors of marketing and PR team managers - A scout, heads of professional staffs, coaches A, Coaches B, coaches C, team leaders of youth facilities, school sports leaders, heads of departments and heads of the monitoring of maintenance

facilities) depending on which types of sports education they had. In addition to the views expressed on the type of education, the set of variables included in the results also reported the amount of clubs' earned income, the best sport results achieved in the domestic international competition in football for season 2003/2004. In the final process of defining the sample, based on the vault analysis, six collective variables were isolated that determine the educational profiles of the total analyzed managerial personnel, namely: education manager with a degree in high school of sports (MGTSPG), education manager with a minor degree in sports coaching and training (MGTVSS), education managers with a degree in sport science and physical education (MGTSPO), education manager with a degree outside the sporting orientation (MGTDISM), then a variable of *business success* (POUSP) and a variable of *sporting success* (SPUSP) in the competitive football season 2003/2004.

The method of data processing was based on the statistical regression analysis procedure and the computational outcome of SPSS - statistical analysis software program. In the completion of the statistical procedures, presented were the values of correlation coefficients in the regression model predictions, then their values displayed with significance levels of F-ratio in the variance analysis and significance tests of model predictions based on the predictor variables and display parameters of regression analysis.

Results and Discussion

THE IMPACT OF SPORTS MANAGER ŽSPORT SCIENCE EDUCATION' TO BUSINESS SUCCESS OF FOOTBALL

Tables: 1.a., 1.b. and 1.c.: The parameter display regression analysis of variable of education managers with a minor degree in sports coaching and training (MGTVSS) in relation to variable success in football (POUSP) for the 2003-2004 seasons.

Table:1.a. Correlation and determination coefficient

| Model | R | R ² | Adjusted R ² | Std. Error R ² |
|-------|-------|----------------|-------------------------|---------------------------|
| 1 | 0.504 | 0.254 | 0.224 | 473837.1217 |

Table: 1.b. Omnibus test for testing the significance of the model predictions

| Model | Variable choice | Sum of squares | df | Mean square | F | Signf. |
|-------|-----------------|-------------------|----|-------------------|-------|----------|
| 1 | Regression | 1910741297585.989 | 1 | 1910741297585.989 | 8.510 | 0.007 ** |
| | Residual | 5613040446949.160 | 25 | 224521617877.967 | | |
| | Total | 7523781744535.150 | 26 | | | |

** F-ratio is statistically significant at less than 1%

Table: 1.c. Value and significance level of standardized and unstandardized regression coefficients

| Model | | Unstandardized coefficients | | Standardized coefficients | t-test | Signf. |
|-------|------------|-----------------------------|------------|---------------------------|--------|----------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 50020.348 | 103523.052 | | 0.483 | 0.633 |
| | MGTVSS | 175446.949 | 60141.459 | 0.504 | 2.917 | 0.007 ** |

** B-coefficient is statistically significant at less than 1%

Based on the results presented in the table 1.a., one can see that the coefficient of determination R^2 has a value of 0.224. Practically, this means that managers with a minor degree in sports coaching and training (MGTVSS) can be attributed to 22.4% variability of *business success* (POUSP) of football clubs. In this case, the adjusted coefficient of determination is taken as a better measure assessment of the shared variability between the predictor and criterion. The results of this analysis indicate that the profile of education managers with a minor degree in sports coaching and training significantly affects the *business success* of football clubs in Canton Sarajevo, and with this in mind, one can consider their involvement within analyzed clubs is not at all random.

F-ratio, table: 1.b., which is referring to significance model prediction testing, is statistically significant at levels far less than 1%. This means that the whole model achieves significantly better and more successful prediction of football club *business success* (POUSP) in relation to the base-line prediction. Therefore, this model is possible and applicable in practice. Thus, this provides additional information to the general observation and recognition of the importance of this type of education managers and their overall share of the labor market.

Based on the results presented in the table: 1.c., one can see that the regression coefficient is statistically significant at a level less than 1%. So, after the base-line prediction and the constant value, the input for predictor manager with a minor degree in sports coaching and training (MGTVSS) variable significantly improves prediction power of models that has been singled out. The regression coefficient is a positive sign, which means that if a football organization hires more managers with a minor degree in sports coaching and training, the greater the chance of higher *business success* measured in earnings.

Tables: 2.a., 2.b. and 2.c: The parameter display regression analysis of a variable outside of sports training orientations (MGTDORM) in relation to *business success* in football (more successful) for the 2003/2004 season.

From the table: 2.a, one can see that the value of the coefficient of determination adjusted R^2 is 0.190, which indicates that the predictor variable that refers to the number of analyzed frames with education beyond sport orientation (MGTDORS) explains 19% of variability of *business success* (POSUP) in football. Such a statistical significance of education of managers outside the sporting orientation can be interpreted through the publicity and the attractiveness of the football market and the marketing and entrepreneurial potential of football in Sarajevo Canton (Mašala, 2003; Mašala, 2008; Mašala, Šunje, Rado, Čičić 2008).

Table: 2.b., presented an analysis of the model prediction, which makes a constant value of *business success* (POSUP) and predictor variables of education managers outside the sporting orientation (MGTDORM). F-ratio is statistically significant at less than 5%, and it can be concluded that the model is fully applicable and statistically significant. Based on the analysis results it is possible to bring a very similar conclusion as in the previous case, the impact of education managers outside the sports orientation in relation to *business success* in football clubs conditioned competitiveness and attractiveness of the football market in Canton Sarajevo.

Based on the results table 2.c., the regression coefficient is statistically significant at less than 5%. This means that the variable education of managers outside the sporting orientation (MGTDORM) significantly contributes to predictability of power models. Since the coefficient is negative, it can be concluded that the greater involvement of managers outside the sporting orientation to football clubs reduces *business success* and vice versa.

Table: 2.a. The correlation coefficients and determination

| Model | R | R^2 | Adjusted R^2 | St. Error R^2 |
|-------|-------|-------|----------------|-----------------|
| 1 | 0.470 | 0.221 | 0.190 | 484199.4414 |

Table: 2.b. Omnibus test for testing the significance of the model predictions

| Model | Variable source | Sum of Squares | df | Mean Square | F | Signf. |
|-------|-----------------|-------------------|----|-------------------|-------|---------|
| 1 | Regression | 1662554269194.786 | 1 | 1662554269194.786 | 7.091 | 0.013 * |
| | Residual | 5861227475340.370 | 25 | 234449099013.615 | | |
| | Total | 7523781744535.150 | 26 | | | |

* F-ratio is statistically significant at less than 5%

Table: 2.c. Value and signif. level of standardized and unstandardized regression coefficients

| Model | | Unstandardized coefficients | | Standardized coefficients | t-test | Signf. |
|-------|------------|-----------------------------|------------|---------------------------|--------|----------|
| | | B | Std. error | Beta | | |
| 1 | (Constant) | 2159187.512 | 744213.852 | | 2.901 | 0.008 ** |
| | MGTDORM | -142326.221 | 53446.748 | -0.470 | -2.663 | 0.013 * |

* B-coefficient is statistically significant at less than 5%

** B-coefficient is statistically significant at less than 1%

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Tables: 1.d., 1.e. and 1.f. The parameter display regression analysis of variable education managers with a degree in sport science and physical education (MGTSP0), in relation to *sporting success* (SPUSP) in football for the 2003-2004 seasons.

Table: 1.d. Correlation coefficients and determination

| Model | R | R ² | Adjusted R ² | St. Error R ² |
|-------|-------|----------------|-------------------------|--------------------------|
| 1 | 0.409 | 0.168 | 0.134 | 15.2925 |

Table: 1.e. Omnibus test for testing the significance of the model predictions

| Model | Variable source | Sum of Squares | df | Mean Square | F | Signif. |
|-------|-----------------|----------------|----|-------------|-------|---------|
| 1 | Regression | 1176.700 | 1 | 1176.700 | 5.032 | 0.034 * |
| | Residual | 5846.543 | 25 | 233.862 | | |
| | Total | 7023.243 | 26 | | | |

* F-ratio is statistically significant at less than 5%

Table: 1.f. Value and significance level of standardized and unstandardized regression coefficients

| Model | | Unstandardized coefficient | | Standardized Coefficient | t-test | Signif. |
|-------|------------|----------------------------|------------|--------------------------|--------|----------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 9.614 | 3.139 | | 3.063 | 0.005 ** |
| | MGTSP0 | 9.447 | 4.211 | 0.409 | 2.243 | 0.034 * |

* B-coefficient is statistically significant at less than 5%

** B-coefficient is statistically significant at less than 1%

Based on the results presented in the table 1.d., we notice a significant correlation between *sporting success* (SPUSP) predictor variable of education managers with a degree in sport science and physical education (MGTSP0). According to the adjusted value of coefficient of determination R² equal to 0.134, it can be concluded that the predictor variable of education managers with a degree in sport science and physical education (MGTSP0) and criterion variable *sporting success* (SPUSP) in football share 13.4% of common variability. These results indicate that the profile of education managers with a degree in sport science and physical education statistically affects *sporting success*, but at the same time the *sporting success* is conditioned by the commitment of managers.

F-ratio, Table: 1.e., shows statistical significance at less than 5%, which means that the model predictions made by the constant value of *sporting success* (SPUSP) and predictor variables education managers with a degree in sport science and physical education (MGTSP0) is significant in its entirety. In this regard, the results indicate the applicability of this model into practice through its share in achieving *sporting success*, which is considered to be fully expected. In this way, the connection between quality education and good sporting practice is almost entirely confirmed.

Regression coefficient table: 1f, which refers to the predictor variable of education managers with a degree in sport science and physical education (MGTSP0) is statistically significant at less than 5%. This means that this variable significantly contributes to the model predictions for *sporting success* (SPUSP) in football. The regression coefficient, given the positive sign, indicates a positive correlation between the profile of education and *sporting success*. On average, the more managerial staff with a degree in sport science and physical education in football clubs, the more *sporting success*, i.e. the sporting clubs/organizations will have a higher value.

Tables: 2.d., 2.e. and 2.f. : The parameter display regression analysis of variable of education managers with a minor degree in sports coaching and training (MGTVSS) in relation to *sporting success* (SPUSP) in football for the 2003-2004 season.

Table: 2.d. Correlation coefficients and determination

| Model | R | R ² | Adjusted R ² | St. Error R ² |
|-------|-------|----------------|-------------------------|--------------------------|
| 1 | 0.386 | 0.149 | 0.115 | 15.4593 |

Table: 2.e. Omnibus test for testing the significance of the model predictions

| Model | Variable source | Sum of Squares | df | Mean Square | F | Signif. |
|-------|-----------------|----------------|----|-------------|-------|---------|
| 1 | Regression | 1048.482 | 1 | 1048.482 | 4.387 | 0.047 * |
| | Residual | 5974.761 | 25 | 238.990 | | |
| | Total | 7023.243 | 26 | | | |

* F-ratio is statistically significant at less than 5%

Table: 2.f. Value and significance level of standardized and unstandardized regression coefficients

| Model | | Unstandardized coefficients | | Standardized coefficients | t-test | Signif. |
|-------|-----------|-----------------------------|------------|---------------------------|--------|---------|
| | | B | Std. Error | Beta | | |
| 1 | (Contant) | 8.714 | 3.378 | | 2.580 | 0.016 * |
| | MGTVSS | 4.110 | 1.962 | 0.386 | 2.095 | 0.047 * |

* B-coefficient is statistically significant at less than 5%

** B-coefficient is statistically significant at less than 1%

Based on the results in the table 2.d., it can be noted that the adjusted coefficient of determination R² is 0.115, which indicates that the predictor variable education managers with a minor degree in sports coaching and training (MGTVSS) shared 11.5% variability with *sporting success* criterion variable (SPUSP). In this connection, it is possible to conclude that the profile of an education manager with a minor degree in sports coaching and training has a statistical impact on the *sporting success* of football clubs, but at the same time, the *sporting success* is conditioned by the commitment of managers. In this case, this type of managerial staff may be considered as a selective choice of football clubs.

F-ratio, table 2.e., shows statistical significance at less than 5%. This means that the model predictions for *sporting success* (SPUSP) based on constant values and the predictor variables of education managers with a minor degree in sports coaching

and training (MGTVSS) is statistically significant and applicable in practice. As the underlying essence is to look at *sporting success*, the connection of the manager with this type of education to *sporting success* is entirely natural and expected.

The regression coefficients table: 2.f., pertaining to predictor variable of education managers with a minor degree in sports coaching and training (MGTVSS) and *sporting success* in football are statistically significant at less than 5%. The regression coefficient is a positive sign, so in this case it is recommended that the football organizations engage more managers with targeted education of minor degree in sports coaching and training.

Tables: 3.d., 3.e., and 3f. The parameter display regression analysis of variable of education managers with a degree outside the sporting orientation (MGTDORM) in relation to athletic success (SPUSP) in football for the 2003/2004 season.

Table: 3.d. Correlation coefficients and determination

| Model | R | R ² | Adjusted R ² | St. Error R ² |
|-------|-------|----------------|-------------------------|--------------------------|
| 1 | 0.488 | 0.239 | 0.208 | 14.6262 |

Table: 3.e. Omnibus test for testing the significance of the model predictions

| Model | Variable Source | Sum of Squares | df | Mean Square | F | Signif. |
|-------|-----------------|----------------|----|-------------|-------|----------|
| 1 | Regression | 1675.092 | 1 | 1675.092 | 7.830 | 0.010 ** |
| | Residual | 5348.151 | 25 | 213.926 | | |
| | Total | 7023.243 | 26 | | | |

** F-ratio is statistically significant at less than 5%

Table: 3.f. Value and significance level of standardized and unstandardized regression coefficients

| Model | | Unstandardized coefficients | | Standardized coefficients | t-test | Signif. |
|-------|------------|-----------------------------|------------|---------------------------|--------|----------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 74.474 | 22.480 | | 3.313 | 0.003 ** |
| | MGTDRSM | -4.518 | 1.614 | -0.488 | -2.798 | 0.010 ** |

* B-coefficient is statistically significant at less than 5%

** B-coefficient is statistically significant at less than 1%

From the table: 3.d., it is noted that the value of the coefficient of determination R^2 adjusted amounts 0.208, meaning that the predictor variable of education manager with a degree outside the sporting orientation (MGTDORM) explains 20.8% of variability *sporting success* (SPUSP) in football. This high level of variability of predictor variables with *sporting success* in football is in this case justified because football clubs hire trained, licensed managers who are, as already determined in earlier research, associated with the business and *sporting success* in football (Mašala, 2008; Mašala, Šunje, Rađo, 2008).

Based on results from the table 3.e., the variance of regression is nearly eight times greater than the variance of the error, which makes the F-ratio statistically significant at 1%. This means that the model which includes a constant value of *sporting success* (SPUSP) predictor variable of education manager with a degree outside the sporting orientation (MGTDORM) is statistically significant and applicable in practice.

From the table: 3.f. one can see that both regression coefficients are statistically significant at the level of 1%. In this respect, we can say that the predictor variable of education manager with a degree outside the sporting orientation (MGTDORM) significantly contributes to predictive power of the model in predicting the value of *sporting success* (SPUSP) of football organizations. However, the sign of the coefficient is again negative, which means that the profile of education manager with a degree outside the sporting orientation and *sporting success* is at a negative correlation. This brings us to the conclusion that the more managerial staff with education outside of the sporting orientation in football clubs, the *sporting success* reaches low values and vice versa.

Discussion and Conclusion

SPORTS EDUCATION AND BUSINESS SUCCESS IN FOOTBALL

Analyzing corrected coefficient of determination R^2 results, F-ratios and regression coefficients results, education managers with a minor degree in sports coaching and training (MGTVSS) variable and *business success* (POUSP) variable, it is possible to conclude that:

- The educational profile of managers with a minor degree in sports coaching and training has a statistically significant impact on the *business success* of football clubs in Sarajevo Canton area, considered as expected.
- Furthermore, the assumed model, consisting of predictor variability of education managers with a minor degree in sports coaching and training and a constant value to *business success* in football, is found to be statistically significant as a whole and as such is fully applicable in practice.
- Positive values of the regression coefficient (the value without a negative sign) significantly improves the prediction power of the model and it suggests that if a football club hires more managers with a minor degree in sports coaching and training, it has a higher *business success* measured in earnings. This confirms the connection between sports education attained at the Department of Sport Science and Physical Education with a good sporting practice.

Analyzing corrected coefficient of determination R^2 results, F-ratios and regression coefficients results, education managers with a degree outside of the sporting orientation (MGTDORM) variable and *business success* (POUSP) variable, it is possible to conclude that:

- The educational profile that refers to the education of managers with a degree outside of the sporting orientation is statistically more significant on impact of *business success* in football. The presence of such an effects can be explained with significant marketing and entrepreneurial potential of football in Sarajevo Canton, which places this sport as one of the more attractive market segments engaging various educational profiles of managers (Mašala, 2008; Mašala, Šunje, Rađo, Čičić 2008, Masala, Šunje, Rađo 2008)
- The assumed model, consisting of predictor variability of education managers with a degree outside of the sporting orientation and constant values of *business success*, is statistically significant and entirely possible in practice. However, by analyzing the values of the regression coefficient, we are observing that the predictor and criterion variables are negatively correlated. It directs us to believe that with the involvement of a larger number of managers in football clubs with education beyond the sporting orientation does not increase but reduces the chance of *business success*.

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Analyzing corrected coefficient of determination R^2 results, F-ratios and regression coefficients results, education managers with a degree in sport science and physical education (MGTSPO) variable and *sporting success* (SPUSP) variable, it is possible to conclude that:

- Statistical significance of correlation, educational profile of managers with a degree in sport science and physical education variable and football *sporting success* variable is almost equal in this case, indicating that without a formal education in sports there is no *sporting success*, and vice versa.
- The predictor model, which is composed of a constant value of *sporting success* and a predictor variable for education managers with a degree in sport science and physical education (MGTSPO) is significant in its entirety and fully effective in practice. In this way, it is possible to confirm the connection between sports education attained at the Department of Sport Science and Physical Education with a good sporting practice.
- The values of the regression coefficients without the negative correlation, significantly improves the prediction power of the model and significantly affect the *sporting success* football clubs have in the Sarajevo Canton. In this case, the educational profile of managers in the surveyed clubs can be considered as obligatory selective choice. From the above, it is possible to infer that if a football organization hires more managers with a degree in sport science and physical education, they will achieve greater *sporting success*.
- Taking into account the results of further analysis, we notice that this profile of education is more connected with *sporting than with business success* in football, which provides additional information for further consideration of the importance of this type of education managers.

Analyzing corrected coefficient of determination R^2 results, F-ratios and regression coefficients results, education managers with a minor degree in sports coaching and training (MGTVSS) variable and *sporting success* (SPUSP) variable, it is possible to conclude that

- Statistical significance of correlation, educational profile of managers with a minor degree in sports coaching and training variable and football *sporting success* variable is almost

equal in this case, indicating that without a formal education in sports there is no *sporting success*, and vice versa.

- The predictor model, which is composed of a constant value of sports success and a predictor variable for education managers with a minor degree in sports coaching and training (MGTVSS) is significant in its entirety and fully effective in practice. In this way, it is possible to confirm the connection between sports education attained at the Department of Sport Science and Physical Education with a good sporting practice.
- The regression coefficient values, without the negative correlation, significantly improves the prediction power of the model and significantly influences *sporting success* in football, and as such, football clubs are encouraged to hire more managers with targeted education of this profile.

Analyzing corrected coefficient of determination R^2 results, F-ratios and regression coefficients results, education managers with a degree outside of the sporting orientation (MGTDRS) variable and *sporting success* (SPUSP) variable, it is possible to conclude that:

- The educational profile, which refers to the analysis of managers with education beyond the sports orientation, shows a high level of statistical significance in relation to *sporting success* in football, which is considered particularly interesting. The high level of statistical significance in the *sporting success* of football clubs is justified by the involvement of licensed personnel managers who do not have to have sports education, but do significantly affect the success of the football sports organizations (Mašala, 2008; Mašala, Šunje, Rađo 2008). Besides this, the high statistical significance could be attributed to high quality educational programs for licensing of coaches of different levels (A, B license, etc.) implemented under the auspices of UEFA Football Association of Bosnia and Herzegovina.
- The assumed model, consisting of predictor variability of education managers with a degree outside of the sporting orientation and constant values of *sporting success*, is statistically significant and entirely possible in practice.
- Looking at the values of the regression coefficient, it is observed that the predictors and criterion variable are in negative correlation. This suggests that, on average, the more staff with this type of education is present in football organization, *sporting success* attains lower values and vice versa.

With this research conducted, the hypothesis has been confirmed in its entirety, with additional information obtained regarding how football labor markets work. Also, the results indicate a relationship between *sporting* and *business success* on one hand and predictive variables of education managers in football clubs on the other, which is considered an essential potential of football organizations. The practical value of this work is reflected in the provision of new information for more efficient linking of sports education with practice. In addition, research findings have significant informative value not only for football clubs but also for their professional associations at national and international levels.

References

Aaron, C.T. Smith, Hans M. (2009). "Professional" Sport Management Education and Practice in Australia; Westerbeek Journal of Hospitality, Leisure, Sport and Tourism Education, La Trobe University, Melbourne, Australia, Vol. 3, No. 2.

Bartoluci, M. (1997). Ekonomika i menadžment u sportu. Zagreb: Fakultet za fizičku kulturu.

Fajgelj, S. (2004). Metode istraživanja ponašanja. Beograd: Centar za primenjenu psihologiju.

Fajgelj, S. (2005). Psihometrija – Metod i teorija psihološkog merenja. Beograd: Centar za primenjenu psihologiju.

Supek, R. (1981 i kasnije). Ispitivanje javnog mnjenja. Zagreb: Sveučilišna naklada Liber.

Lee Crust, Lawrence A. (2006)., Review of Leadership in Sport: Implications for Football Management, Athletic Insight, The Online Journal of Sports Psychology, York St. John University College, Volume 8, Issue 4

Malacko, J., Rađo I. (2006.). Menadžment ljudskih resursa u sportu, Fakultet sporta i tjelesnog odgoja u Sarajevu, „Štamparija Fojnica" d.o.o. Fojnica.

Mašala, A., A. Šunje, I. Rađo, M. Čičić, (2008). Correlation between the generic segment of media exposure of team sports and the business and sporting achievements, Acta kinesiológica, Vol. 2, Issue 2; 112-117.

Mašala, A. (2008). Modeli menadžmenta sportskih organizacija održivog razvoja, (doktorska disertacija), Fakultet sporta i tjelesnog odgoja Univerziteta u Sarajevu, Sarajevo.

Mašala, A. (2002). Mogućnost i opravdanost tranzicije sportskog pod-sistema Kantona Sarajevo na konceptu savremenog marketinga, (magistarski rad), Filozofski fakultet – Odsjek fizička kultura, Tuzla.

Ministarstvo kulture i sporta Kantona Sarajevo(2003).: Obavijest o provođenju ankete od 01.11.2003.godine, Sarajevo.

Skupština Kantona Sarajevo (1999).Strategija razvoja Kantona Sarajevo do 2015.godine, Sarajevo.

Supek, R. (1981). Ispitivanje javnog mnjenja.Zagreb:Sveučilišna naklada Liber.

Vujmilović D, F.Rašidagić, M.Zubović, A.Mašala (2004). Zbirka važećih kantonalnih gradskih i opštinskih propisa iz oblasti sporta, Ministarstvo kulture i sporta Kantona Sarajevo, Sarajevo.

Šunje, A., (2002). Top menadžer, vizionar i strateg, Sarajevo, Tirada.

Thoma, J. E., Chalip, L. (1996). Sport Governance in the Global Community, Morgantown: Fitness Information Technology.

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