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The influence of basic motor abilities of the situation motor skills football players age 13-15 year

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Original scientific paper

Abstract
The aim is to determine the impact of basic motor abilities in motor skills of situational players ages 13-15. Age, which produces large changes in the body and can cause various phenomena. The sample of respondents in this study were children whose age distribution players ages 14, 13 ± 0.93 years. All respondents were members of a youth academy FC Krajina Cazin and members of the cadet selection. From this and take a sample of 120 subjects. Subjects were taken from the school football FC Krajina - Cazin, FC Jedinstvo - Bihać and FC Krajišnik - Velika Kladuša. For the assessment of basic motor skills applied to 17 tests the following skills: explosive power, speed, coordination, repetitive strength, flexibility and balance. The tests are standardized and published in the publications (Gredelj i sur.1975) of situational variables and motor skills as criteria (11). The method of processing data that was used In the paper scientific research paper regeresiona analysis, and based on whose statistics can be given to the conclusion that the situational-motoric abilities in a common motor base that is defined primarily coordination, explosive power, motion and its frequency, precision and equilibrium or balance on the basis of which we can see that each situational ability, but accuracy can significantly predict the size of which indicate multiple connections, the reliability of regression coefficients of risk factors and the importance of F-tests.

Key words: **basic motor skills, situation motor skills, influence, football players**

Sažetak
Cilj rada je utvrditi uticaj bazično motoričkih sposobnosti na situaciono motoričke sposobnosti nogometaša uzrasta 13-15 god. Dob koja proizvodi velike promjene u organizmu i koji mogu izazvati i različite fenomene. Uzorak ispitanika u ovom istraživanju su djeca nogometaši čija je uzrasna dob 14, 13 ±0,93 godina. Svi ispitanici su pripadnici omladinske škole FK Krajina Cazin i članovi kadetskih selekcija. Iz toga je i uzet uzorak od 120 ispitanika. Ispitanici su uzeti iz škole nogometa FK Krajina – Cazin, NK Jedinstvo – Bihać i NK Krajišnik – Velika Kladuša. Za procjenu bazično motoričkih sposobnosti primjenjeno je 17 testova slijedečih sposobnosti :eksplozivna snaga, brzina, koordinacija, repetativna snaga, fleksibilnost i ravnoteža. Testovi su standardizirani i objavljeni u publikacijama (Gredelj i sur.1975) i varijable situaciono motoričkih sposobnosti kao kriteriji(11). Metoda obrade podataka koja je korištena uovom naučno istraživačkom rau je regeresiona analiza, a osnovu čijih statističkih pokazatelja može se dati i zaključak da situaciono-motoričke sposobnosti imaju zajedničku motoričku osnovu koja je definisana prije svega koordinacijom, eksplozivnom snagom, pokretom i njegovom frekvencijom, preciznošću i ravnotežom ili balansom na osnovu ćega možemo uočiti da svaku situacionu sposobnost, osim preciznosti možemo značajno predvidjeti na što nam ukazuju veličine multipli veza, koeficijenti pouzdanosti regresijskih faktora i podatak o značaju F-testova.

Ključne riječi: **bazično motoričke sposobnosti, situaciono motoričke sposobnosti, uticaj, nogometaši**

Introduction

In the constant quest for knowledge and success in the football game is a series of factors (Boženko, 1978.) to be provided. The first factor to the success of the physical characteristics and functional abilities (Elsner, B. (1997). Individuals ability to perform exercise is the foundation, and the movement effect. Therefore, what athletes need is the ability to control this goal to come to a successful effect. Motor skills that are the basis of objective, are largely genetic or inherited abilities. (Jeleskovic, 2008). All this is true provided that the health of athletes who possess the capacity to fulfill the demands of modern football. In modern football all players activities in the game and outside can be estimated on the basis of runing distances at different pace and based on the number of performed technical and tactical elements (Verheijen, R. 1997). Football is one of the most widespread, popular and profitable sports industry today, (Bangsbo, Norregaard, thorou, 1991),. reasons as to why there are many. However, one reason why football is so popular is that the player should have proficiency in all areas (technical, tactical, biomechanical, physiological and psychological), but must have a reasonable level of competence in all areas so that his performance was in the best level. Modern training should go to a specific purpose (Michels, R. 2001) (for each training need improvement of technical and tactical resources), and within that, to implement activities that will focus on the development of at least one motor skills. This tells us that our planning and programming must be meaningful, that we should know what is in the equation specification influence of certain motor skills as other parameters of performance in football, are appropriate in relation to other abilities. (Bunce, Psotta, 2001) This opens the possibility to determine how much attention should be paid, in quantitative and qualitative level, individual abilities, and that the more primary need to develop at this age, so that performance was at the widest level in the continued construction of young players.The subject of this scientific work is an anthropological satatus players with special emphasis on basic motor skills and motor skills of situational players ages 13-15., Ie, the problem of this paper is the impact of basic motor skills in situational motor skills. A large number of researchers addressed this issue and proved a lot in this area, but what might

be interesting in this paper is a sample of respondents and characteristics of age, can still offer new and interesting facts. Age, which produces large changes in the body and can cause various phenomena. The aim is to determine the impact of basic motor abilities in motor skills of situational players ages 13-15. and based on the results to try to define priorities in working with this age category.

Methods

The sample of respondents in this study were children whose age distribution players ages 14, 13 ± 0.93 years. All respondents were members of a youth academy FC Krajina Cazin and members of the cadet selection. From this and take a sample of 120 subjects. Subjects were taken from the school football FC Krajina - Cazin, FC Jedinstvo - Bihać and FC Krajišnik - Velika Kladuša. The sample of variables of this study are the variables of basic motor skills (Mikić, B.1999) as predictors (17) and situational variables of motor abilities as a criteria (11). Basic motor skills: Variables to estimate the speed, MFE20V - run the 20 meters - high start, MBFTAN - tapping foot, MBFTAZ - tapping your foot on the wall; Variables for assessment of explosive strength, MFESDM - long jump with place, MFESVM - high jump with place, MFETRO - triple the place; Variables to assess the repetionary strength, MRESKL - push-ups (withdrawal of troops), MRCDTŠ - withdrawal of troops from lying; Variables to assess the balance, MBAU1O - standing on one leg on the bench for longitudinal balance, MBAU2O - standing on two legs on the bench for longitudinal balance with open eyes, MBAP2Z - cross standing on a low bench with two legs eyes closed; Variables to assess the coordination, MKLSNL - slalom leg with two balls, MAGKUS - steps to the side, MKTOZ - agility in the air; Variables to assess the flexibility, MFLPRK – bend on the bench, MFLPRR – bend with legs widely spread, MFLBOS – side split. Situational motor skills: The variables to estimate the speed of running the ball, SNBUPP - running speed with changes in direction at a right angle, SNBV20 - of keeping the ball speed at 20 meters from the start in place; Variables to assess the playing ball, SNKOST - refusal of the wall horizontally about 20 seconds, SNKSLA - running speed in slalom; Variables to assess the accuracy of shooting the ball, SNPPNV - precision foot straightforward - target vertical, SNPEGH - precision head (elevation) - target horizontal; Variables to assess the impact forces, SNESNO - power kicking, SNESGL - power rubble head; Variables to estimate the speed curve runs, SNBTPO - speed run by a semi-circle, SNBTPP - run with the change of direction at a right angle, SNBTSL - slalom run. Time and measurement was in accordance with football cells that had been placed in a circle. Was taken into the care of the rest that was adequate and long enough not to distort the work for the next test. Testing is always carried out the same group of timekeepers, experts-professor of sport and physical education, and the job of management and oversight of the main role is carried out by the authors of the paper. Dates of testing were 1030h to 1530h during the day.

Data processing methods

Certain predictive values were evaluated by regression analysis (Dizdar, 2006) The data were processed by SPSS 13.0. Level of significance was set at $p < 0,05$.

Results

Table 1. Regression analysis of basic motor skills and motor skills of situational

$RO = 0.73$, $RO^2 = 0.54$, $F_{(13, 100)} = 6.98$, $p < 0.00$, Std.Error of estimate: 0.69								
		Part-R	β	βe	B	Be	t(101)	p-level
	Intercpt				- 5,27	3,41	- 1,53	0,12
1.	MFESDM	- 0,06	- 0,07	0,10	0,00	0,02	- 0,71	0,46
2.	MFETRO	0,01	0,01	0,11	0,00	0,00	0,08	0,91
3.	MFESVM	0,02	0,02	0,07	0,00	0,01	0,20	0,83
4.	MFE20V	0,34	0,36	0,10	1,40	0,36	3,74	0,00
5.	MBFTAZ	- 0,08	- 0,06	0,08	- 0,04	0,05	- 0,85	0,38
6.	MBFTAN	- 0,04	- 0,04	0,08	- 0,03	0,04	- 0,43	0,65
7.	MKLSNL	0,23	0,22	0,09	0,08	0,04	2,29	0,03
8.	MAGKUS	0,01	0,01	0,08	0,01	0,13	0,06	0,94
9.	MKTOZ	0,13	0,11	0,09	0,25	0,19	1,29	0,19
10.	MRESKL	- 0,17	- 0,17	0,10	- 0,01	0,01	- 1,70	0,08
11.	MRCDTŠ	- 0,04	- 0,04	0,11	0,00	0,01	- 0,37	0,71
12.	MFLPRK	0,10	0,08	0,08	0,02	0,02	0,94	0,33
13.	MFLPRR	- 0,27	- 0,29	0,11	- 0,05	0,01	- 2,84	0,01
14.	MFLBOS	0,02	0,02	0,08	0,00	0,01	0,22	0,81
15.	MBAU2O	0,01	0,01	0,07	0,00	0,04	0,06	0,94
16.	MBAP2Z	0,04	0,03	0,07	0,04	0,08	0,40	0,67
17.	MBAU1O	0,03	0,02	0,07	0,02	0,07	0,26	0,78

In this study, all predictor variables to assess motor skills include the manifest variables for the assessment of motor skills: speed, coordination, explosive and repetative strength, flexibility and balance as the last. The first regression analysis predictor system which consists of basic-basic motor skills, which examines the most important skills in the best way to define the first criterion variable.

When assessing the table number 1 we see that a complete system of predictor variables are statistically significant and very significant impact on the criterion variable. Multiple correlation coefficient RO = 0.73.

Multiple correlation tests were performed F test. The error is at the 0.01 level. The whole prediction system has a very significant multiple correlation coefficient with the first criteria variable consisting of situational-motor skills. When analyzing the individual coefficients of multiple correlation were the highest of the following variables: Variable MFE20V - running at 20 meters from the start of high (0.36). MKLSNL variable - slalom leg with two balls (0.22). MFLPRR variable - bend with legs widely spread (- 0 , 29).

Multiple correlation, which is RO = 0.73, and quite high in predictor set of variables and criterion gives us the full right to say, situational-motoric abilities of football players are basically floor-motor skills, or training in the subjects of this age.

Discussion

Although football is a team sport, every football player operates separately and each has its specifics. In order to reach results, and that we have found of which depends on its success we must determine what are the specifics that would lead him to achieve the desired, and it is to achieve an optimal level that would enable them to excellence. Situational motor skills such as precision shooting the ball, ball handling, speed players with guiding a ball, power blows to the head and the ball and running speed with rapid changes of direction with the ball and without the basic facilities at the football game. On the basis of parameters that we specified and that reprezant results of this scientific work is the fact that the football game, or that the performance of the treated sample depends on the coordination and coordination skills. Based on the preceding considerations can be given to the conclusion that the situational-motoric abilities in a common motor base that is defined primarily coordination, explosive power, motion and its frequency, precision and balance, or balance. In other words, the football players who have better coordination, explosive power, have a better platform for performance at higher levels and achieve better results. For success football player is not crucial only basic motor skills, but also a host of other skills such as, technical characteristics, tactical knowledge, skills, etc. that are the condition for the success of players. These partial data only proves the complexity of the road to success in football and the need for further research and improvements in the training process, training in football. A greater variety of motor variables to be applied in future research, and their correlation with various indicators of situational efficiency in terms of football games in order to get the results arising from real situations that are interlaced during one match. Comparing the results with results of other researchers (Gabrijelić, Mekic, Talovic (2001) in his works in the best way to demonstrate the very substantial and significant multiple correlation coefficients of the latent dimensions of speed, coordination and flexibility. The population was also composed of children of various ages. Multiple correlation by many authors was satisfactory because they obtained a rather large coefficients for example.: multiple correlation explosive power with the criteria variable.

Previous research conducted mainly in the area of tests and in latent space. Predictor systems that are composed in part of the situational-motor variables also showed significant multiple correlation coefficient of explosive energy with criterion variables situational-motor skills.

The authors (Molnar, Popovic & Smajić, 2007), or in their works can be found information about the connection between situational-motor abilities of football players with physical disabilities. There are only a few analysis based on the correction ratio. In these analysis has shown that the efficiency in the performance of situational-motor tasks depends on the functioning mechanisms of the highest. These are situational-motor skills are defined as special agility, coordination legs, football motor information and special football precision (Mikic, Talovic & Radjo, 2003). All of them are dependent on general motor factors.

Conclusion

The overall success of this research in the football game of the respondents are most dependent on coordination and coordination abilities. Based on the preceding considerations can be given to the conclusion that the situational-motoric abilities in a common motor base that is defined primarily coordination, explosive power, motion and its frequency, precision and balance, or balance. Therefore, we can see that each situational ability except precision, but accuracy can significantly predict which indicate the size of multiple connections, the reliability of regression coefficients of risk factors and significance of F-tests.

What is characteristic of this and similar studies, in terms of implementation, application of the results obtained is the fact that coaches, sports officials who work with this age and younger, must know what are the priorities in their work, or what should pay more attention “Any seed is received only when the time during the year”, so that each child age related specificity of genetic influences on individual basic motor skills, that can be crucial to the success of the individual.

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Submitted: October 02, 2010.
Accepted: November 29, 2010.

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