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Original article

TREND OF DEVELOPMENT OF COORDINATION AT FOOTBALLERS IN DIFFERENT COMPETITIVE AGE PERIODS

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Abstract*

Objective. The aim of this research was to establish coordination development as one of the basic motor skills in young footballers in the period from the beginning of football to seniority. The research was carried out on a sample of 92 amateur football players, members of the football club HNK "Rama" from Prozor, which were actively involved in the training process for three years.

Methods. Footballers are divided according to chronological age in 9 sub-groups representing U11 to U19. The body height and mass were measured for all subjects, and the battery of the evaluation coordination tests consisted of 12 manifest variables that hypothetically cover the coordinate space and have good metric characteristics (Metikoš et al., 1989). Differences and changes in dimensionality between groups representing different competition categories analyzed by one-way ANOVA and a presented graphically.

Results. The variance analysis and F-test values show that 11 of the 12 coordinator variables have a statistically significant value of the F-test at the level statistical significance of 95% (p =, 05) and 99% (p =, 01) and practically not belonging to the same population. The groups statistically only different significantly in the MKTOPS coordination coefficient variables (F = 1.653, p> 0.05). In most of the variables of developmental variables there is a continuous trend of growth from beginner to older age with flexion points and changes in the inclination most commonly in puberty (U12-U15). These changes and stagnation of development in puberty period are bound by the ontogenetic development of boys at this stage, when their growth is heightened, increases the lever at the extremities and angles between these levers, which is due to the poor coordination of the individual parts and the whole body. Such results confirm the previous theses of many authors (Fach, 1998; Guzalovski, 1984; Venturelli et al., 2008), which suggest this phase of childhood development as a sensitive stage in the development of co-ordination.

Conclusions. Based on the obtained results we conclude that the development of this ability should start in the earliest childhood, "Sensible" periods, when possible, the most optimal response of the organism to the applied coordinating training facilities. Complex actions and complex movement patterns are being trained and trained by the younger generation and training technology plays a major role in shaping training impulses if the methodical legacies of the development of young footballers are respected. Footballer's behavior manifested in the ability to rule the ball, aligning body movements and body parts with the ball , the ability to adapt and reorganize the movement to changing, unpredictable and complex conditions that dictate situations in the game and therefore its development in the younger ages, should pay special attention.

Key Words: football, coordination, trend of development, training.

Introduction

By watching football through the way and structure of movement, we can say that this is a complex collective sports game where there is constant change from one situation to another. One player can participate in such actions, and more than one player at the same time. The goal is to reach a goal and to prevent an opponent from doing the same, all by certain rules of the game and propositions. For this reason, each football player must have well-developed motor and functional abilities, the coordination of which is one of the most important. Coordination means the human ability to co-ordinate and effectively govern the body

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movements in new, more complex and unpredictable conditions.Coordination is a complex motor dimension, and Fleishman (1972) argues that co-ordination is a form of motor integration. Zaciorsky (1975) defines coordination as the ability to move quickly to respond to changes in circumstances - circumstances. There are three basic directions for co-ordination development:

- Systematic adoption of new movements always because the adoption of new coordination structures greatly influences the improvement of the level of training.
- Exercising of already-adopted movements that are given in altered form or transitions and links from one movement to another.
- Work in completely new and unpredictable conditions in which optimal moves should be made to the already adopted movements.

Soccer co-ordination is considered a fundamental ability in football. A well-coordinated footballer is considered to be a football player capable of performing complex situational-motor activities harmonized in a given space and as short as possible. In solving the situation in the game the ability of psychomotor coordination is conditioned by the successful completion of any motor activity, both in the movement of the ball and the ball. There are several ways to show co-ordination (Jovanović, Sporiš and Mihačić, 2011):

- speed coordination,
- rhythmic coordination,
- timeliness or timing,
- spatial-time coordination,
- the speed of learning motor tasks.

Soccer co-ordinator is always in close relationship with the technique of football game. It is reflected in the ability to rule the ball, aligning body movements and body parts with the ball, in the ability to adapt and reorganize the movement to the changing, unpredictable and complex conditions that govern the situations in the game. "Sensible" periods, when possible, the most optimal response of the organism to the applied coordinating training facilities. Fach (1998) points out that a sensible phase of co-ordination development is between 7 and 14, with the most vulnerable period between 10 and 13 years, and in girls between 7 and 9 years, while the maximum development is about 11 years.

According to Guzalovsky (1984), sensible developmental phases of co-ordination are constant both in boys and girls. Complex actions and complex patterns of movement are being trained and perfected by the youngest. and training technology have a major role in shaping training impulses if they respect the methodical legitimacy of the development of young footballers.

The most favorable time for such learning and the development of co-ordination skills is the pre-puberty period (10-12 years) (Venturelli, Bishop &Pettene, 2008). In this period, children with childhood admit and adopt a large number of nervous-muscular stimuli that create a foundation that will eventually lead to a football base at the highest level of competition through later upgrading and refinement. The most commonly used tools for coaching development are: various ball management, hunting with and without balls, running with changing direction of movement, running additional sports of different movement structures, various elementary games and various exercises with natural forms of movement. Coordination is a capability that has many different sub-capability that interact with each other and is associated with external and internal stimuli defining movement as a functional circuit.

This sense of space and movement is one of the key factors that is conducive to the degree of development of coordination or coordination capacity (Vanttinen, Blomqvist, Luhtanen&Hakkinen, 2010). Receptors (visual, vestibular, tactile, kinesthetic and auditory ...) make the first link in the complex process of athlete coordination and are responsible for the successful recognition of the stimuli needed to make decisions about optimal motor reactions. Vestibular and kinesthetic receptors are part of the internal regulation system, while the tactile and visual part of the adaptive mechanism conditioned by external stimuli. Kinesthetic receptors are most important for the development of motor skills, called proprioreceptors and are found in the muscles, ligaments, tendons and joints. They are constantly in direct interaction with the nervous system. It is important to emphasize that proprietor receptors are extremely sensitive, that is to distinguish extremely small changes, in other words possess a high degree of differentiation. This fact is crucial to the ef- fective movement control and is a basic assumption for achieving optimal movement structure in space and time. A good example is the co-ordination of ball-point kick movements, where kinesthetic receptors are responsible for control (Lees et al., 2010). The Vestibular Receptor also represents an important link that provides precise coordinates, direction and speed of movement in football. In this way, it helps the footballer to find space and time. Tactile receptors are placed in the skin and they give information about the environment in which the football player is located. Their task is to register changes in the surface where football activity is taking place and registering air resistance during movement. Of course, the importance of a visual receptor, that is, the eyes need not be emphasized.

This receptor plays a key role in the stochastic process such as football, a game in which to control and adjust their movements depending on changes in the playground (Jovanovic, Sporiš and Mihačić, 2011). Coordination capacity not only uses central vision but also peripheral vision that is crucial to establishing relationships that are important for creating motor responses. The last but not the least important hearing receptor is the last link that rounds up the coordinating unit. Information obtained from the auditory receptors is the last part of the jigsaw that is needed to form an optimal motor response. From the above, the complexity of the coordination capability is seen, so the way in which information is processed and decisions are only partially known.

What is known is enough to establish that co-ordination plays a crucial role in a large number of sports, including football (Jovanović, Sporiš and Mihačić, 2011). Learning of basic motional patterns of movement requires the trainer to know the method of regular running, jumping, climbing, rolling, throwing and catching the ball, but also the proper instructional way (Ford, Yates & Williams, 2010).The aforementioned motor movements represent the basis from which each athlete moves. Coordination capacities from 9 to 10 years include basic exercises of reaction, balance, spatial-temporal orientation and connection of various motor programs (running with jumping and throwing, running with different directions and intentions, reactions from different situations and positions, etc.).

The technique trained at this age is extremely important because of the fact that programs are being formed at this age which are the basis of future upgrades. The research conducted by Biec and Kuczynski (2010) on football players aged 13 years has shown that football training effectively improves control of one's own body compared to an untrained peoples population.

Young footballers of this age have all the prerequisites for further development of higher levels of coordination (Branta, Haubenstricker&Seefeldt, 1984; Ford et al., 2010). Among others, in this period, footballers develop the ability of space-time orientation, which is a crucial coordinating factor in the success of the soccer game. Likewise, during this period, assumptions are created for the anticipation and differentiation of different higher level stimuli (Williams, 2000).

Expected after the transition to the older cadet age and the younger junior age, the time devoted to the development of coordination capacities becomes shorter. More attention is paid to other motor skills whose influence and importance becomes more and more important (Malina et al., 2007). Upon completion of the junior career, the coordination takes up only 10% of the total amount of training impulses.

The reason for this is the growing complexity of technical-tactical exercises that in themselves require a high degree of coordination ability (Jovanović, Sporiš and Mihačić, 2011). It is important to emphasize the importance of co-ordination in the development of football players and the demands of football games, as well as to indicate which basic coordinating elements are and in which situations they are used.

In contemporary football, the recognition of co-ordination in the selection process of 11-year-old football players (Mirkov, Kukolj, Ugarković&Jarić, 2010) is becoming increasingly evident in which the parameters of body height and body composition that have hitherto been the carriers of the selected age are rejected. it goes to a model that attaches importance to skill (coordination). For this reason, the aim of this research was to determine the trend of development of co-ordination in different competition categories for footballers.

Methods

Time-view research is a transversal study where the current coaching capacity of football players of different ages is tested, which also represent different club competition categories.The survey includes football players who are members of the football club NK "Rama" from Prozor-Rama, who are actively involved in the training process for at least three years. They are good health status without any psycho-physical anomalies. The total sample consisted of 92 football players, divided into different age categories from 1995 to 2003 year.

Table 1. Basic characteristics of respondents by age

Group	N	Height (cm)		Weight (kg)	
		M	SD	M	SD

U 11	8	149,31	4,00	38,53	5,01
U 12	19	152,10	7,25	40,64	8,25
U 13	8	163,43	3,77	50,00	5,90
U 14	13	165,84	10,00	55,02	12,61
U 15	9	175,22	4,73	62,92	10,90
U 16	13	177,96	4,75	67,02	10,07
U 17	9	179,86	3,45	70,92	6,33
U 18	8	177,50	6,27	67,13	8,95
U 19	5	188,20	5,31	79,36	3,18

N, number; M, mean; SD, standard deviation

For all subjects, the height and mass of the body were measured by the body. The test series is composed of 12 manifested variables for assessment of co-ordination ability (Metikoš et al., 1989; Mikić, 1999.) that have good metric characteristics. After the measured height and weight for all subjects for the assessment of the co-ordinating factors, the following tests were applied and tested: Handball ball operationMKAVLR (sec); Running in the rectangle - envelope test BAGTUP (sec); Coordinate with MKTOPS (sec); Slalom with three medals MKSNL (sec); Pull and skip MBKPOP (sec); Polyphonic Back MREEPOL (sec); Steps to Side MAGKUS (sec); Osmosis with MAGOSS (sec); Slalom with two balls MKLSNL (sec); Backward Jump MRESDN (cm); Air rotation MKTOZ (sec) and Ground rotation MAGONT (sec). During testing, all test subjects had the same treatment. The study was conducted in the morning hours from 9ººh to 12ººh and at a temperature of 18ºC to 22ºC.

Methods of data processing

The results were processed in SPSS 12.0 for Windows with available subprograms. All manifest variables are treated with descriptive parameters at univariate level. Differences and changes in dimensionality between groups were analyzed by one-way variance (One way ANOVA) and presented graphically.

Results

Table 1 and Table 2 show the basic central and dispersion parameters of the tested variables in young footballers aged 11 to 19 divided into sub-classes according to competing categories. As can be seen from the table. Values of arithmetic averages per group and standard deviation are shown. Based on the result in the tables we see that the subjects for their chronological age have an average normal height and body mass, the growth trend of these two variables is within the framework of normal annual growth rate with the highest increase in height from 12 to 13 years, which is 10.73 cm. The mass increase is also proportional so that during this period it increases by 9.36 kg. These are expected values because it is a period of entry into the puberty phase of growth and development of boys. The development trend of the co-ordination explanation variable and is shown graphically in the following text of this paper.

Table 3 shows a variance analysis that tested whether the groups of respondents belong to the same population. The F-test tested the statistical significance of the variance of the variance between the groups and the variables within the group, ie the significance of the difference between group and intra group variance. If we look at the F-test values and their statistical significance (Table 3) we see that only the MKTOPS variable does not have a statistically significant value of the F-test (p = 122), that three variables MBKPO (p =, 024), MKTOZ (p = and MAGONT (P =, 015) have a statistically significant value of 95% F-test (p = 05), while other variables at 99% statistical significance (p =, 01). These results clearly show that there is no statistically significant difference in arithmetic environments in the different age categories of young footballers in MKTOPS coordination coefficients, ie that they are virtually belonging to the same population. All other variables do not belong to the same population, ie the age categories of young footballers differ statistically significant at the level of significance of 95% or 99%. From Table 3 we can conclude that 11 out of 12 observed variables have statistically significantly different value of co-ordination manifestations among footballers in different ages during the soccer career, with the exception of the Variable Coordination with the Stack (MKTOPS, F = 1.653, p> 0.05), observing significance of 95% .

Table 2. Central and dispersive parameters of variables by age

Variables	U11 (N=8)		U12 (n=19)		U13 (n=8)		U14 (n=13)	
	M	SD	M	SD.	M	SD	M	SD
MKAVLR	11,53	1,58	11,05	1,40	10,13	1,22	9,51	1,30
BAGTUP	31,17	3,04	27,5	2,20	26,11	2,41	27,06	2,49
MKTOPS	7,63	1,03	7,28	1,59	7,11	1,34	7,14	1,09
MKSNL	30,03	3,06	28,79	3,87	26,92	1,68	26,75	2,60
MBKPOP	15,47	2,63	14.41	2,52	15,5	3,61	17,28	3,34
MREEPOL	12,57	1,91	11,75	2,43	9,99	,58	9,51	,85
MAGKUS	12,83	1,00	11,35	2,04	11,52	,55	12,01	,73
MAGOSS	20,02	1,37	18,84	1,78	18,14	1,10	18,72	,92
MKLSNL	30,12	2,94	25,92	4,17	25,63	4,66	24,32	2,48
MRESDN	71,2	8,48	74,26	9,14	84,49	14,27	81,38	11,29
MKTOZ	5,54	,53	5,3	,84	4,95	,54	5,18	,36
MAGONT	19,07	2,71	18,89	4,76	14,42	1,43	15,6	3,79

Variables	U15 (n=9)		U16 (n=13)		U17 (n=9)		U18 (n=8)		U19 (n=5)	
	M	SD	M	SD	M	SD	M	SD	M	SD
MKAVLR	9,38	,98	8,78	,65	8,48	,26	8,98	,31	8,09	,15
BAGTUP	27,18	3,62	21,66	1,86	19,52	,50	20,51	1,58	19,21	,86
MKTOPS	6,47	,62	6,87	,65	6,32	,63	6,48	,82	6,33	,80
MKSNL	27,32	2,72	27,05	2,63	25,07	2,57	24,18	2,05	22,65	,48
MBKPOP	17,32	3,01	15,28	1,81	13,81	1,32	13,85	1,83	15,66	4,39
MREEPOL	10,04	1,45	10,38	,77	8,72	1,04	8,68	1,14	8,08	,73
MAGKUS	11,34	1,19	10,73	,49	10,09	,32	10,67	,82	9,83	,30
MAGOSS	18,14	1,69	16,58	,74	15,62	,33	16,07	1,08	15,7	,34
MKLSNL	22,91	,94	22	3,17	22,24	2,97	23,22	3,36	21,07	1,81
MRESDN	90,62	5,20	104,12	23,42	111,07	12,41	110,83	11,22	116,86	9,24
MKTOZ	5,09	,66	4,84	,68	4,65	,66	4,84	,45	5,72	,91
MAGONT	16,78	1,45	16,65	2,19	16,4	1,25	16,72	1,61	17	,77

N, number; M, mean; SD, standard deviation

Table 3. Variation Analysis (ANOVA) between the groups in the coordination area

Variables		SumofSquares	df	Mean Square	F	Sig.
HEIGHT	BetweenGroups	13594,406	8	1699,301	42,775	,000
	WithinGroups	3297,336	83	39,727		
	Total	16891,741	91			
WEIGHT	BetweenGroups	14922,651	8	1865,331	23,287	,000
	WithinGroups	6648,554	83	80,103		
	Total	21571,206	91			
MKAVLR	BetweenGroups	105,790	8	13,224	11,156	,000
	WithinGroups	98,384	83	1,185		

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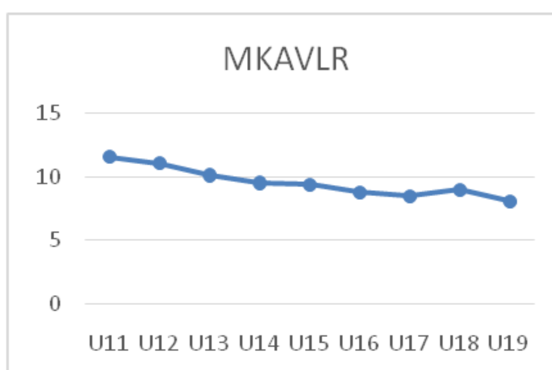
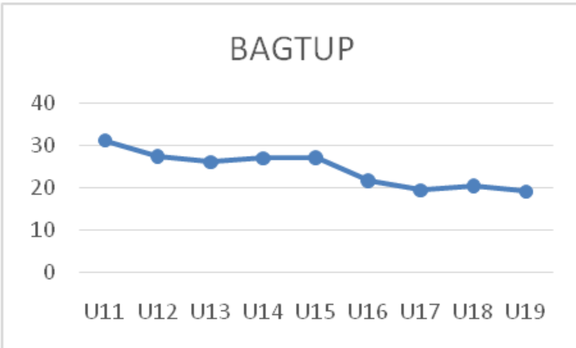
	Total	204,175	91			
BAGTUP	BetweenGroups	1274,933	8	159,367	30,258	,000
	WithinGroups	437,156	83	5,267		
	Total	1712,089	91			
MKTOPS	BetweenGroups	15,806	8	1,976	1,653	,122
	WithinGroups	99,219	83	1,195		
	Total	115,025	91			
MKSNL	BetweenGroups	327,352	8	40,919	5,118	,000
	WithinGroups	663,640	83	7,996		
	Total	990,992	91			
MBKPOP	BetweenGroups	140,831	8	17,604	2,370	,024
	WithinGroups	616,502	83	7,428		
	Total	757,333	91			
MREEPOL	BetweenGroups	157,819	8	19,727	8,750	,000
	WithinGroups	187,137	83	2,255		
	Total	344,956	91			
MAGKUS	BetweenGroups	56,629	8	7,079	5,288	,000
	WithinGroups	111,099	83	1,339		
	Total	167,728	91			
MAGOSS	BetweenGroups	180,779	8	22,597	14,605	,000
	WithinGroups	128,422	83	1,547		
	Total	309,201	91			
MKLSNL	BetweenGroups	520,626	8	65,078	6,062	,000
	WithinGroups	891,024	83	10,735		
	Total	1411,650	91			
MRESDN	BetweenGroups	22354,886	8	2794,361	16,306	,000
	WithinGroups	14223,835	83	171,372		
	Total	36578,721	91			
MKTOZ	BetweenGroups	7,759	8	,970	2,237	,033
	WithinGroups	35,985	83	,434		
	Total	43,744	91			
MAGONT	BetweenGroups	187,111	8	23,389	2,567	,015
	WithinGroups	756,211	83	9,111		
	Total	943,322	91			

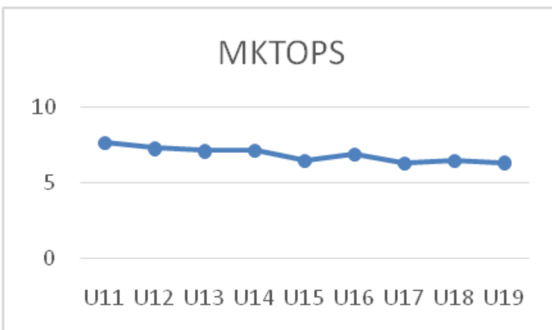
The trend of the development value (growth curve) of all variables in young footballers is shown in the graphs 1 through 12. In graph 1, the curve of development of ball bearings MKAVLR is shown. From the presented slope of the development curve, there is a continuous fall in the average value of the curve, which means that the time required to perform the task decreases the lowest age categories and all the U17 groups. From this group we record again the growth of the average time needed to perform the same task. After the U18 group, a fall in value or slope curve was again established. Curve development variables running in rectangle - envelope test BAGTUP does not have a continuous drop in the curve curve. From the presented slope of the development curve (Graph 2) it is apparent that there is a continuous fall in the average value of the curve up to the age of U13, after which there is a tendency to increase and increase the value up to the age of U15. After this age, the value has a significant drop up to U17, after which again there is a reversal of flexural development, mild stagnation up to age U18. After the U18 group, a slight drop in value and a slope curve were again established. In the MKTOPS coefficient coefficient variable (Chart 3), a slight but continuous slope of single point flexural development in the U15 age and increasing up to U16 is observed, after which we have a slightly downward decline in values, that is, an increase in the total body coordination capacity, which manifests itself through a variable coil coordination. As we have previously concluded, only in this variable we do not have a statistically significant difference between the groups although the guilty of development has a slight decline since the beginning of football. The Slope Variable Curve of Three Medical MKSNLs, which is marked as a complex coordination of the entire body, does not have a continuous drop in the slope curve. From the presented slope of the development curve (Graph 4), there is a continuous fall in the average value of the curve up to the U13 age, after which there is a tendency for flexibility and slight increase in values up to the age of U16. After this age the value has a significant fall to U19 senior age. After the U18 group, a slight drop in value and a slope curve were again established. The variable pulling and skip MBKPOP (Chart 5) has a discontinuous slope of uptick development at U12, U14 and U18 age points. The largest mean value of this variable is in the period of 14-15 years, which slides at the end of the puberty phase of the boy. Beginning increasing the overall body coordination capacity, manifested through variables, skip and skip begins with age U12, when the fault grows up to the U15 age, which coincides with the puberty phase in the development of boys. After that, there is a continuous decline in values up to the age of U18, when the value of this variable rises again until seniors age. The development curve of the variable polygon matrix MREEPOL also has no continuous slope curves. From the slope of the development curve (Graph 6), there is a noticeable drop in the average U11-to-U14 curve of the U11 curve, after which there is a degree of flexibility and increase in values up to the age of U16. After this age, the value has a significant drop up to the age of U17, followed by a slight drop in the value of U19. Seniors U19 are the average best value. The development curve curveside to side MAGKUS defined as the ability to quickly change the direction of motion of the entire body does not have a continuous drop in the value and slope of the curve. From the shown flow and inclination of the development curve (Graph 7), it is evident that from the age of U11 the fall of the mean value of the curve up to the U12, the mild stabilization and the increase of the value up to U14 occurs, after which there is a flexion and a continuous decrease of values up to the age of U17. After this age, the value increases significantly up to U18. After the U18 group, a slight decrease in value and decrease of the curve slope has been established again when the value of this variable has the lowest numerical value, or U19 has the best co-ordination capabilities manifested through variable step-by-step. Graph 8 shows the curve of the osmosis variance with MAGOSS saggling. From the presented slope of the development curve, there is a continuous drop in the average value of the curve, which means that the time required to perform the task decreases from the lowest ages and all U19 groups. In this variable we note the stagnation of the average time required to perform the same task in the period U13-U14 after which there is a continuous decline in value. After the U17 group, stabilization of the value was again established until U19. The development curve of the two-ball MKLSNK slider variable defining the good coordination of the whole body and especially the lower extremities, with its inclination shows a continuous drop in the average value of the curve, which means that the time required to perform the task decreases from the lowest age categories group U16. From this age we note a slight stagnation of this value and increase to age U18, when we note the growth of the average time needed to perform the same task. After the U18 group, a fall in value or slope curve is again established when the best time is reached to perform this task. Figure 10 shows the MRESDN backward variable development curve, which defines the coordination of the entire body motor reorganization and is expressed in centimeters (cm). From the shown slope of the development curve, there is a continuous increase in the average value of the curve, which means that the value of the jump backwards rises concurrently to the U19. We note only a slight stagnation in the period of U13-U14. The curve of the development of the entire body coordination coefficient, the air velocity of the MKTOZ, also has a falling value with a slight inclination. From the presented trend of the development curve, there is a continuous fall in the mean value of the curve, with two points of flexion and stagnation, in the period of U13 - U14, and the flexibility and increase in value after age U17 with the highest value of variables in the age of U19 senior. The variability of ground motion MAGONT has a variable slope of wrong development. The value of this variable is the largest period since the beginning of football with U12, followed by a sharp drop in the value of up to 13. Since this age we have a mild rise and stagnation of the value or slope of the wrong development that is up to the ages.



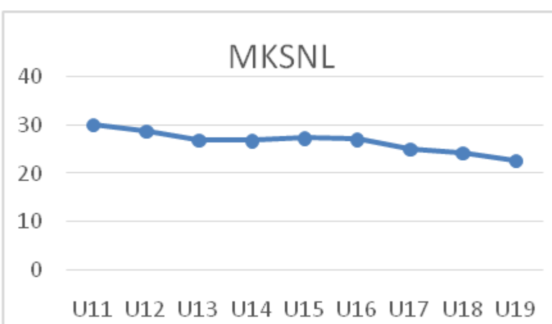
Graph 1. Curve development variables dribbleball by hand – MKAVLR



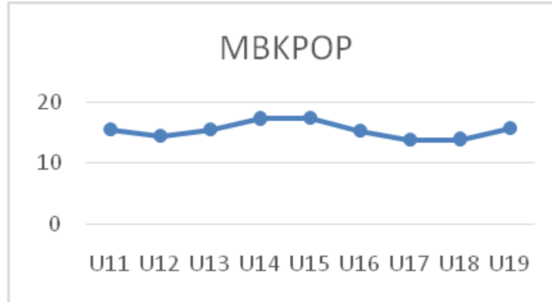
Graph 2. Curve development variables running in rectangle - envelope test – BAGTUP



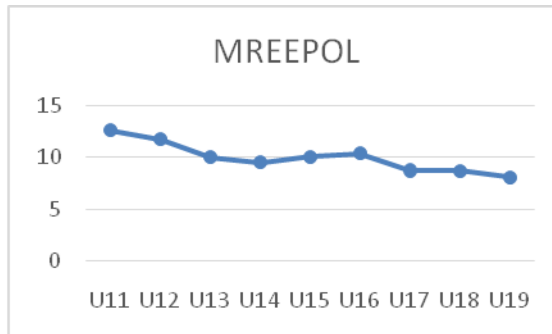
Graph 3. Curve development variables coordination with the baton – MKTOPS



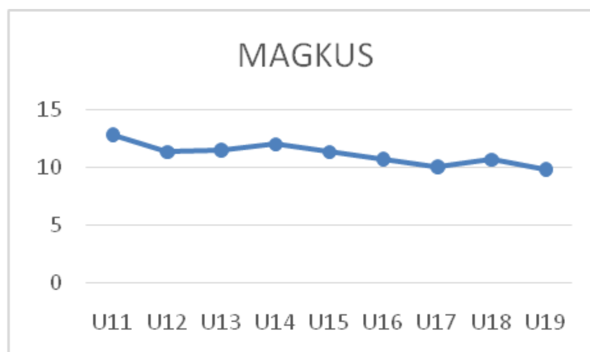
Graph 4. Curve development variables slalom with three medical balls – MKSNL



Graph 5. Curve development variables proving and skipping – MBKPOP



Graph 6. Curve development variablespolygon back – MREEPOL



Graph 7. Curve development variables side steps – MAGKUS

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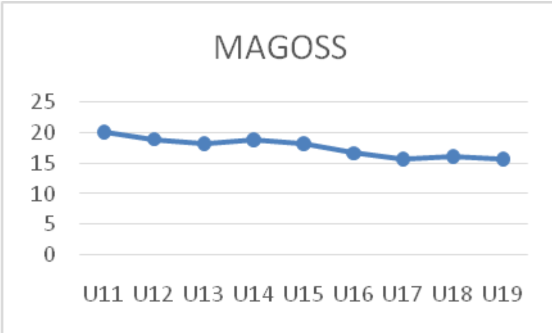
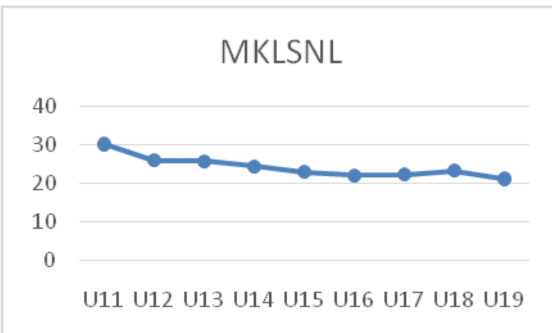
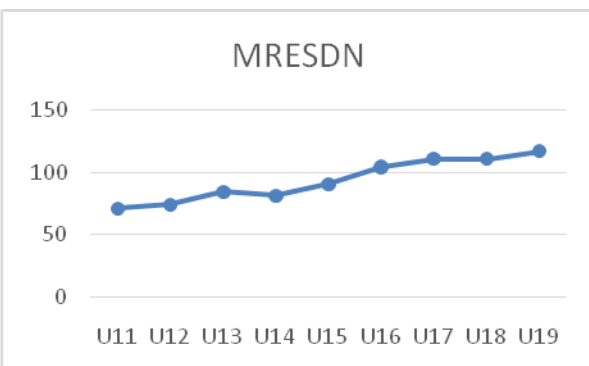


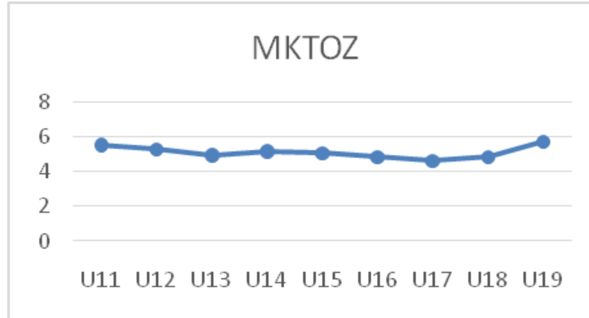
Graph 8. Curve development variables ofeight moving set down – MAGOSS



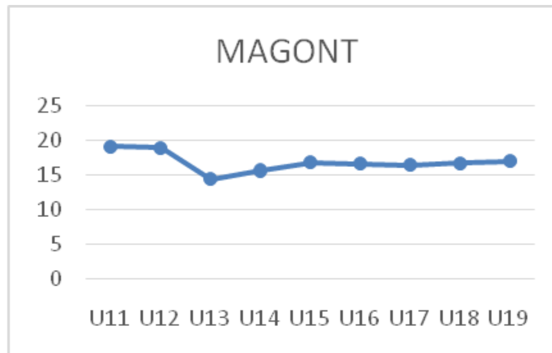
Graph 9. Curve development variables two-ball slalom legs - MKLSNL



Graph 10. Curve development variableslong jump back– MRESDN



Graph 11. Curve development variables ofairiness – MKTOZ



Graph 12. Curve development variablesagilityon the ground – MAGONT

Discussions

This research has determined the values and trends of co-ordination development among footballers in different ages. The obtained results show that co-ordination among footballers has largely continuous development from the youngest categories up to seniority. All variables that define co-ordination have the growth of this ability from the youngest age to the seniors. The termination of this continuous development or flexion point at most variables is also consistent with the period of admission to the puberty phase of the development of boys from 12 to 14 years. These results are certainly the result of co-ordination with players, but are associated with ontogenetic development of boys, who gain adulthood in puberty, increase their figurative or figurative angles at the extremities, so that during puberty footballers lose their co-ordination. The development of this ability should start in the earliest childhood, in the so-called. "Sensible" periods, when possible, the most optimal response of the organism to the applied coordinating training facilities. Complex actions and complex movement patterns are trained and perfected by the youngest generation. and training technology have a major role in shaping training impulses if they respect the methodical legitimacy of the development of young footballers. The most favorable time for such learning and the development of co-ordination skills is the pre-puberty period (10-12 years) (Venturelli, Bishop &Pettene, 2008). In this period, children with childhood admit and adopt a large number of nervous-muscular stimuli that create a foundation that will eventually lead to a football base at the highest level of competition through later upgrading and refinement. The most commonly used tools for coaching development are: various ball management, hunting with and without balls, driving with changing direction of movement, running additional sports of different movement structures, various elementary games and various exercises with natural forms of movement.

Conlusions

Emotional intelligence or coordination is of great importance for the success of sports in general, and so in football. With regard to the division of motor skills, coordination is part of qualitative motor skills. It can be concluded that it is one of the most significant motor skills for successfully performing motorcycle tasks. Specifically, in football, the most explored speed and strength, and little importance was given to coordination without which we can not be successful in collective sports so even in football. For this very reason this scientific research is of particular importance as it will provide the sports pedagogues and football trainers with quality literature for planning and performing sports and so on soccer training. Soccer is a complex sport with a large number and a constant change of body position, both individually and collectively, throughout the team. The athlete's co-ordination has always been related to the sport technique itself. It is for this reason that it contributes to the importance of this motor skills in order to make the athlete more successful and better at performing certain sports activities. Unfortunately, in practice, a large number of sports and football coaches do not even know the sensible periods of co-ordination development or the enormous importance of this motor skills that contributes most to the successful performance of sports activities. Precisely because of this fact, this work has a very large theoretical and practical value in football.

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