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Original Article

Physical and technical training of 13–14-year-old football midfielders

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Abstract
Problem Statement: In football, the gameplay result largely depends on the players in the middle line, that is, on the midfielders. At the same time, the actions of wing-back and central defenders and midfielders have a significant difference. **The objective** of the research is to determine the features of the use of athletic running and jumping exercises for the development of motor skills and improving the quality of technical and tactical actions of young football midfielders aged 13-14. **Methods:** 40 young football players aged 13-14 of football club "Arsenal" in Kharkiv were divided to 20 players in control and 20 players in experimental groups. The indicators obtained by football players during 10 games of the previous competitive period were used as the initial data of football player's technical and tactical motor actions. The main difference between groups was that the experimental group additionally used special athletic jumping and running exercises. **Results:** Wing-back and central midfielders use mainly short (28.6 ± 1.16 and 29.4 ± 1.19 %) and medium (25.7 ± 1.15 and 26.6 ± 1.16 %). The long passes balls are used to a lesser extent (12.5 ± 0.59 and 13.2 ± 1.01 %). The correlation between performance quantitative and qualitative indicators of technical and tactical actions of young football players of 13-14 years of a different game role during game is established. Wing-back midfielders perform the largest amount of motor activity, performing both defensive and offensive actions, so the largest number of significant correlations (41), most of which relate to the impact of total running on eight indicators of technical & tactical actions (except for kicking and ball stopping), which is associated with running and jumping movements. Central midfielders first of all provide the organization of offensive actions, so they must have versatile training. The number of significant relationships between the quality of technical & tactical and motor actions and the number of performed motor actions is the largest (47) in relation to other players. **Conclusions:** It has been experimentally proved that the use of special athletic running and jumping exercises has a positive effect on improving the motor skills and technical & tactical actions of young football players aged 13-14 of the wing-back and central midfielders.
Key Words*:* **wing-back and central midfielders, motor skills, technical & tactical actions, running and jumping exercises**

Introduction

Among a number of factors that determine the possibility of achieving high sports results in football, the fundamental role belongs to the construction and content of the training process in the initial stages of training. In the process of training young football players, it is necessary to take into account their physical development, functional, psychological condition, physical fitness, age, qualification, player's role, training period.

The training process becomes more specialized as the sportsmanship of young football player grows. This is expressed by the increasing of competitive loads in the structure of year-round training of young players. It is great importance the competent selection of exercises (with and without the ball) during speed and strength training, especially during speed and moving exercises, most young players focus exclusively on the ball and therefore cannot show their physical potential.

Age 13-14 years is sensitive to the development of speed abilities. During the game, the football player performs more than 100 jerks and accelerations, mostly at intervals of 5-20 meters. Only a player with good explosive power and speed can outrun the opponent at a short distance. A high level of these qualities will save time, and therefore – the gain of space. Therefore, good speed and strength training is an integral quality of a

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football player. Scientists consider the specifics of the training of field players of different roles (defender, midfielder, striker), but it is obvious that the actions of wing-back and central defenders and midfielders have a significant difference. In the past, the USSR goalkeeper and after futsal coach Gennadii Lisenchuk, who is in the top 10 Ukrainian coaches in team sports, said "Show me your midfielders and I will immediately determine the level of your team" (Solomonko et al., 2019).

Improving the system of training young football players is impossible without finding fundamentally possible new approaches and methodological solutions in the organization of the training process, in particular, requires further improvement of methods of education of speed and strength, namely the use of special running and jumping exercises. Therefore, the development and implementation of modern innovative technologies for the use of special motor exercises in accordance with the football player's role players aged 13-14 is a relevant scientific study.

The objective of the research is to determine the features of the use of athletic running and jumping exercises for the development of motor skills and improving the quality of technical and tactical actions of young football midfielders aged 13-14.

Material & methods

Participants

The study involved 40 young football players aged 13-14 of the children and youth football club "Arsenal" in Kharkiv from May to October 2019. Young football players aged 13-14 were divided into control and experimental groups of 20 players each, who had no significant difference in testing the level of motor skills and elements of technics & tactics at the beginning of the research ($p>0.05$). Both the control and experimental groups included 2 left and 2 right midfielders and 4 central midfielders. The research involved 8 wing-back and 8 central midfielders in total. All participants were informed of the requirements prior to the research, and their parents and coaches gave their informed written consent for them to participate. The local research ethics committee in the spirit of the Declaration of Helsinki approved all procedures.

Procedure.

The indicators obtained by 40 football players during 10 games of the previous competitive period (May-October 2018) were used as the initial data of their technical & tactical and motor actions. During the annual macrocycle, the training process in the control group of young football players of the 13–14 years old was carried out according to the Youth Sports School program, in which classes were also held 4 times a week for 90 minutes. In the experimental group, complexes of special athletics exercises were used in each training session, which were also held 4 times a week. The main difference was that the experimental group additionally used special athletic jumping and running exercises, taking into account the technique of their performance and the development of the most important physical qualities of players of different game roles. At the end of the research, re-testing was conducted in order to test the effectiveness of the developed program of training individualization of young football players in accordance with their role in the game.

Statistical Analysis.

he descriptive statistics was used to determine the following parameters: arithmetic mean – $\overline{x}$, standard deviation – SD, m – standard error. The Shapiro Wilk test was used in testing for normality. As samples of technical & tactical actions were normally distributed t-test was used to determine the statistical significance of the differences between two independent samples. As samples on midfielders' physical qualities both the control and experimental groups were small ($n=4$) nonparametric Mann-Whitney U test was used to determine the statistical significance of the differences between groups' parameters. Correlation analysis made on data of 8 wing-back and 8 central midfielders during 3 games at the beginning of the research. Correlation matrices computed by Pearson correlation coefficient r as a linear relationship between the samples of motor actions and technical & tactical actions per the game of wing-back and central midfielders aged 13-14 years was observed via visual and calculated statistical analysis of scatterplots. A significance level (that is, the probability of error) was assumed to be $p = 0.05$. Statistical analysis was performed using the Statistica 10.0 (StatSoft, Inc).

Results

The obtained results show that the central and wing-back midfielders (23.7 and 23.8%) perform better game actions, mainly due to short (32.1 and 31.6%) and medium (27.6 and 28.2%) passes, dribbling (24.1 and 25.2%), slide tackles (34.0 and 20.1%), ball stops (25.8 and 30.2%) and kicks to the goal (26.0 and 32.0%) (Table 1). Wing-back midfielders mastered slide tackles (34.0%), short (32.1%) and medium (27.6%) passes. Central midfielders have the best performance in ball stops (30.2%) and kicks to the goal (32.0%), short (31.6%) and medium passes (28.2%).

Table 1. Parameters of technical and tactical actions performance of football players (n=40) aged 13-14 years with various player's role during game (according to average of 10 games, %), $\bar{x} \pm SD$

	Technical & tactical actions	*Player's position*						Total, %	Average, %
		Goalkeepers (n=4)	Full-back defenders (n=8)	Central defenders (n=8)	Wing back midfielders (n=8)	Central midfielders (n=8)	Forwards (n=4)		
1	Short pass	37.1±2.03	31.2±1.24	30.8±1.22	32.1±1.24	31.6±1.30	28.8±1.28	191.4	31,9
2	Medium pass	22.5±1.47	28.1±1.24	25.2±1.28	27.6±1.19	28.2±1.24	24.4±1.17	156.0	26,0
3	Long pass	12.3±0.51	9.6±0.42	10.1±0.44	10.2±0.44	11.4±0.47	9.1±0.51	62.7	10,5
4	Groundmove	11.4±1.18	14.0±0.58	15.1±0.59	13.7±0.46	14.6±0.48	20.1±1.04	88.9	14,8
5	Dribbling	20.3±1.05	26.2±1.03	25.8±1.17	24.1±1.17	25.2±1.19	24.8±1.02	146.4	24,4
6	Slide tackle	-	30.0±1.58	16.0±1.26	34.0±1.59	20.1±1.21	15.0±1.19	115.1	23,0
7	Ball stop	21.6±1.42	24.2±1.15	26.2±1.18	25.8±1.17	30.2±1.21	23.6±1.11	151.6	25,3
8	Kicks to the goal	-	25.0±1.08	25.0±1.08	26.0±1.09	32.0±1.24	29.0±1.07	137.0	22,8
9	Headers to the goal	10.6±1.04	20.3±1.05	20.8±1.07	20.6±1.05	20.6±1.05	21.1±1.06	114.0	19,0
Total, %		135,8	208.6	195.0	214.1	213.9	195.9	1163.1	-
Average, %		19,4	23.2	21.7	23.8	23.7	21.8	-	22.3

Central midfielders performed kicks to the goal (32.0%) significantly better than full-back and central defenders ($t = 4.27$; $p < 0.001$) and wing-back midfielders ($t = 3.64$, $p < 0.01$).

The correlation between the quantity of motor actions and the quality of their performance by young football wing-back midfielders (n=8) and central midfielders (n=8) of 13-14 years old has been determined via their parameters during 5 games (Table 2).

Table 2. Correlation matrices between the quantitative indicators of motor actions and the quality of technical and tactical actions per the game of wing-back and central midfielders aged 13-14 years

No	*Motor actions, quantity*	*Technical & tactical actions, quality*								
		Short pass	Medium pass	Long pass	Groundmove	Dribbling	Slide tackle	Ball stop	Kicks to the goal	Headers to the goal
Wing-back midfielders, n=24										
1	Jerks 15–20 m	0.54*	0.56*	0.58*	0.51*	0.60*	0.51*	0.41*	0.51*	0.50*
2	40–50 m acceleration	0.52*	0.42*	0.36	0.36	0.38	0.48*	0.32	0.54*	0.52*
3	Running backwards	0.42*	0.30	0.24	0.54*	0.36	0.47*	0.26	0.53*	0.51*
4	Cross-step running	0.51*	0.36	0.22	0.52*	0.31	0.48*	0.11	0.43*	0.57*
5	Shuffle running	0.50*	0.32	0.26	0.51*	0.32	0.49*	0.14	0.45*	0.50*
6	Tackle	0.52*	0.50*	0.51*	0.56*	0.46*	0.54*	0.17	0.51*	0.52*
7	Header	0.51*	0.51*	0.40	0.41*	0.40	0.18	0.12	0.41*	0.61*
8	Throwing the ball	0.48*	0.47*	0.50*	0.21	0.19	0.12	0.41*	0.37*	0.51*
9	Jumps	0.52*	0.53*	0.54*	0.50*	0.46*	0.26	0.28	0.49*	0.65*
10	Running per game, m	0.59*	0.60*	0.64*	0.58*	0.54*	0.46*	0.48*	0.51*	0.52*
Central midfielders, n=24										
1	Jerks 15–20 m	0.50*	0.53*	0.55*	0.51*	0.48*	0.37	0.48*	0.56*	0.52*
2	40–50 m acceleration	0.51*	0.48*	0.32	0.22	0.19	0.48*	0.51*	0.53*	0.49*
3	Running backwards	0.21	0.12	0.16	0.55*	0.53*	0.51*	0.41*	0.26	0.50*
4	Cross-step running	0.20	0.22	0.22	0.58*	0.50*	0.52*	0.32	0.30	0.53*
5	Shuffle running	0.53*	0.53*	0.58*	0.61*	0.58*	0.48*	0.51*	0.50*	0.52*
6	Tackle	0.52*	0.54*	0.56*	0.52*	0.48*	0.51*	0.28	0.58*	0.56*
7	Header	0.44*	0.52*	0.58*	0.26	0.24	0.20	0.23	0.40	0.65*
8	Throwing the ball	0.16	0.11	0.14	0.15	0.11	0.10	0.36	0.17	0.62*
9	Jumps	0.50*	0.50*	0.52*	0.15	0.26	0.24	0.20	0.45*	0.64*
10	Running per game, m	0.48*	0.52*	0.56*	0.50*	0.52*	0.51*	0.48*	0.51*	0.53*

Note: n – number of 8 wing-back and 8 central midfielders' measurements during 3 games; * – correlation coefficient is statistically significant at $p<0.05$

In wing-back midfielders, the number of jerks at 15-20 m affects all the researched motor actions ($r = 0.41$-0.60, $p<0.05$), along with this, the number of jumps correlates with the performance of short, medium and long passes of the ball ($r= 0.52; 0.53; 0.54$, $p<0.05$), as well as the number of jumps and headers ($r = 0.65$, $p<0.05$).

In central midfielders, the number of jerks affects the performance of short, medium and long passes (r = 0.50; 0.53; 0.55, p<0.05), as well as the performance of cross-step running and tackles, affects the performance of almost all technical and tactical actions (r = 0.48-0.61, p<0.05).

There are two groups of exercises in the training of football players. Those aimed at the development of physical qualities: non-specific (running, jumping, exercises on strength simulators) and specific (technical and tactical) exercises. Exercises of the first group promote the development of basic physical qualities (general endurance, general strength), while exercises of the second group transform these basic qualities into specific ones.

Taking into account the researched results, a program of training young football players aged 13-14 of various game roles with the use of special athletics running and jumping exercises was developed. This experimental program provides two-cycle annual planning: preparatory period (general preparatory stage – January, February; special preparatory stage – February, March); competitive period (stage of previous games – April and main competitions – May, June); preparatory period (special-preparatory stage – July, August; stage of previous games – August, September; main competitions – September, October) and transition period (rehabilitation-preparatory stage – November, December).

The main feature of the experimental program is the differentiated use of athletic running and jumping exercises and the technique of their performance in players according to the game role during the annual macrocycle.

In the preparatory period at the general preparatory stage track and field running and jumping exercises in shock microcycles on the 1st and 5th training day were used. At the special preparatory stage in the mezocycle of basic special physical training, athletic running and jumping exercises were used depending on the game role, mainly in the retracting microcycle and basic in special physical and technical training in the first striking microcycle on the second and fifth day of training and in the second striking microcycle on the 1st, 2nd and 5th days.

In the competitive period in the control-preparatory mezocycle, athletic running and jumping exercises were used, taking into account the player's role mainly in the regenerative (3rd and 6th day) and supporting (2nd and 5th day) microcycles. In the competitive microcycle, athletic exercises were used on the 3rd day (performance technique) and on the fifth day (development of motor actions). In the transition period, as well as in the process of annual training, running and jumping exercises were used during warm-up and in the final part of the training lesson. Introduction of experimental program with the use of specialized athletic running and jumping exercises allowed increasing significantly the physical qualities of wing-back midfielders (Table 3).

Table 3. Parameters of physical qualities and technical & tactical actions of wing-back midfielders aged 13-14 years of the control and experimental groups at the end of the experiment, $\overline{x} \pm m$

No	Parameter	Control group	Experimental group	Difference between groups	
		n=4	n=4	U	p
Physical qualities					
1	Running 30 m, s	4.26±0.03	4.22±0.03	5	0.39
2	Running 100 m, s	13.0±0.07	12.7±0.08	0	0.02
3	Standing high jump, cm	36.5±0.32	37.7±0.41	0	0.02
4	Standing long jump, cm	228.6±0.55	231.5±1.2	1	0.04
5	Throwing the ball, m	18.1±0.30	18.2±0.30	4	0.25
6	Multi-stage fitness test (MSFT) 4×10 m, s	11.01±0.19	10.31±0.18	0	0.02
7	Cooper test, m	2543.1±18.4	2603.2±19.6	1	0.04
8	Long-range ball shot, m	39.5±0.50	39.7±050	7	0.77
*Parameters of technical & tactical actions (*n – number of measurements during 10 games*), %*					
		n=40	n=40	t	p
1	Short pass	36.1±1.01	39.3±1.06	2.19	0.03
2	Medium pass	31.4±0.96	34.9±1.20	2.27	0.03
3	Long pass	10.8±0.44	12.0±0.48	1.85	0.07
4	Groundmove	16.8±0.45	18.5±0.49	2.58	0.01
5	Dribbling	28.0±1.08	31.4±1.20	2.11	0.04
6	Slide tackle	36.6±1.18	38.8±1.21	0.71	0.48
7	Ball stop	28.6±1.06	32.1±1.09	2.30	0.02
8	Kicks to the goal	30.1±1.07	33.4±1.10	2.14	0.04
9	Header	25.2±1.02	28.9±1.06	2.52	0.01

Higher results in the parameters of testing motor skills were obtained in the experimental group of young football players aged 13-14 than in the control group. Thus, the performance of short and medium passes of the wing-back midfielders of the experimental group is significantly better (t = 2.19; 2.27; p <0.05) in relation to the control group. Young footballers received higher quality in dribbling (t = 2.11; p <0.05), groundmove (t = 2.58; p <0.05), ball stops (t = 2.30); p <0.05), kicking to the goal (t = 2.14; p <0.05) and headers (t = 2.52; p

<0.05). This indicates that the use of the developed complexes of athletic running and jumping exercises allow improving significantly the quality of technical and tactical performance of young football players in experimental group compared to the control group, whose training process was carried out according to the traditional training program (Football: a training program, 2009). The obtained data testify to the effectiveness of the use of athletic running and jumping exercises, the use of which allows increasing the physical qualities of the central midfielders, which are necessary to perform technical and tactical actions (Table 4).

Table 4. Parameters of physical qualities and technical & tactical actions of central midfielders aged 13-14 years of the control and experimental groups at the end of the experiment, $\overline{x} \pm m$

No	Parameter	Control group	Experimental group	Difference between groups	
		n=4	n=4	U	p
Physical qualities					
1	Running 30 m, s	4.18±0.03	4.17±0.03	7	0.77
2	Running 100 m, s	13.1±0.09	12.8±0.07	1	0.04
3	Standing high jump, cm	37.4±0.42	38.8±0.46	1	0.04
4	Standing long jump, cm	233.6±0.56	236.3±1.03	0	0.02
5	Throwing the ball, m	16.7±0.22	16.4±0.23	4	0.34
6	Multi-stage fitness test (MSFT) 4×10 m, s	11.00±0.16	10.28±0.17	1	0.04
7	Cooper test, m	2531.1±17.3	2586.6±18.2	0	0.02
8	Long-range ball shot, m	40.6±0.45	42.1±0.49	0	0.02
*Parameters of technical & tactical actions (*n – number of measurements during 10 games*), %*					
		n=40	n=40	t	p
1	Short pass	35.2±1.09	38.9±1.12	2.37	0.02
2	Medium pass	31.8±1.02	35.1±1.06	2.24	0.03
3	Long pass	13.2±0.47	14.8±0.51	2.32	0.02
4	Groundmove	17.2±0.48	18.9±0.50	2.46	0.02
5	Dribbling	28.7±1.01	32.1±1.04	2.35	0.02
6	Slide tackle	22.9±0.57	25.6±1.04	2.27	0.03
7	Ball stop	33.4±1.20	34.8±1.25	0.81	0.42
8	Kicks to the goal	25.3±1.02	28.8±1.06	2.38	0.02
9	Header	24.7±0.58	27.2±1.03	2.12	0.04

Central midfielders perform technical and tactical actions during the game, providing both defensive actions and those related to the organization of offensive actions. They performed also the special running and jumping exercises in the preparatory period as addition. This allowed increasing both the number and quality of technical and tactical actions of the central midfielders. Significantly better, the central midfielders of the experimental group performed a groundmove of 1.7% ($t = 2.46$; $p < 0.05$), dribbling by 3.4% ($t = 2.35$; $p < 0.05$), slide tackles by 2.7% ($t = 2.27$; $p < 0.05$), as well as kicks to the goal by 3.5% ($t = 2.38$; $p < 0.05$) and headers by 2.5% ($t = 2.12$; $p < 0.05$). The average quality of technical and tactical actions of young central midfielders of the experimental group during the game is higher by 2.7% ($t = 2.13$; $p < 0.05$), which indicates the effectiveness of the use of athletics running and jumping exercises to improve the performance of technical and tactical actions.
The results of testing the physical qualities of the central midfielders of the experimental group at the end of the research, which did not have a significant difference at the beginning, are also higher ($p < 0.05$) than young players in the control group: in the running 100 m, standing high and long jump, multi-stage fitness test 4 × 10 m, Cooper test and the long-range ball shot ($p < 0.05$). Central midfielders of the experimental group performed short, medium and long passes, groundmoves, dribbling, slide tackles as well as kicks to the goal significantly better ($p < 0.05$) then central midfielders of the control group, which indicates the effectiveness use of athletic running and jumping exercises.

Discussion

Player development in soccer is a complex and composed process. Shamardin (2009), Krainyk et al. (2019) emphasize the need to take into account the sensitive periods of organism formation of young football players during the development of physical qualities and the assimilation of various elements of technology. During the period of active biological development of football players aged 13-14; the primary task is not to achieve maximum results, but comprehensive and harmonious physical development, which will ensure not only the active accumulation of technical and tactical arsenal, but also the creation of a foundation for qualitative increase of specific functional reserves (Forsman et al., 2016; Malina et al., 2004).
The role of a football player determines the required level of development of physical abilities (Suvorov, 2019; Krainyk et al., 2020). So the specialists (Dyachenko & Privalov, 2015; Lisenchuk et al., 2019) emphasize the need for differentiated physical training of football players depending on the game specialization, which is due to

the difference in the functional support of their special work. In this regard, in the development of physical abilities in the process of training it is necessary to take into account the role of young football players. It is advisable to use competitive and special training exercises, as the main means of special physical training (Bolotin & Bakayev, 2017; Figueiredo et al., 2009). Kunz et al. (2019) recommended using the training programs that include aerobic conditions and "small-sided games" as an alternative to classical physical exercises to improve the cardio-respiratory readiness of young football players.

The football player's readiness depends, first of all, on the peculiarities of the training process, taking into account by the coach and the athlete all the components of their training (Simpson, 2015). Therefore much attention is paid to the tactical, technical and physical components in the training of footballers.

In this regard, the ideas about the components of physical fitness are constantly being improved, taking into account a whole range of factors of the game and the abilities of football players (Halouani, 2017; Montesano & Mazzeo, 2019). Another important issue is to determine the optimal levels and ratios of the various components of physical fitness (Bangsbo, 1992). This is determined by the understanding that there is no need to strive in the process of preparation to maximize the development of all aspects of physical fitness (Gissis, 2012; Musalek & Kokstejn, 2019).

Coaches of different clubs – representatives of 5 regions of Brazil (Alvim et al., 2018) indicate that the total time of physical training is slightly higher than the amount of technical and tactical training. Technical and tactical training is on average in 5 clubs up to 350 minutes per week, physical training in general – up to 650 minutes per week. We believe that the basis for improving physical training is to increase the amount of hours for speed and strength training to 45% of that allocated for physical training (Krainyk et al., 2020). Our conclusions confirm those results of researches in football (Godik, 2006; Savchenko, 2018). Also, our data are consistent with the data of Schmid & Alejo (2002) on the periodization of the training process, providing for the use of two-cycle annual planning. We planed the competitive microcycles with the use of additional special running and jumping exercises in separate training sessions of young football players of different game roles.

Bairachny et al. (2018) found that on average, the largest number of technical and tactical actions per game is performed by midfielders – 94.2. Similar indicators for attackers and defenders are 61.4 and 81.2 respectively. This ratio is a consequence of the functional responsibilities of midfielders, which are to actively participate in both phases of the game (defensive and offensive), which is reflected in the higher intensity of the game. Averyanov et al. (2021) developed quantitative criteria for evaluation of the level of coordination abilities in 9-17 year-old football players. Bosco (1990) built the technology of physical training of young footballers with an emphasis on the use of exercises of strength. Gissis (2012) analyzed speed-strength nature of young football players' physical capacities. Philippaerts et al. (2006) researched the relationship between peak height velocity and physical performance in youth soccer players. Andreas Votteler & Oliver Höner (2014) examined complex relationships among relative age, physical development and motor performance by modelling the direct and indirect effects of relative age on single motor performance tests for sprint, running agility, dribbling and ball passing and control. Therefore the results of our research confirmed those data about the using exercises with weights, jumping exercises and performing competitive exercises or similar to it in the structure of movements in difficult conditions (Williams et al., 2005; Zibung et al., 2016).

Conclusions

Wing-back and central midfielders used mainly short (28.6 ± 1.16 and 29.4 ± 1.19 %) and medium (25.7 ± 1.15 and 26.6 ± 1.16 %) passes. The long passes balls were used to a lesser extent (12.5 ± 0.59 and 13.2 ± 1.01 %).

Wing-back midfielders performed the largest amount of motor activity, performing both defensive and offensive actions, so the largest number of significant relationships (64 of 90) in relation to other players. Most of correlations between performance quantitative motor actions and qualitative indicators of technical & tactical actions of young football players aged 13-14 years of midfielder's position related to the impact of total running on eight indicators (except for ball stopping), which was associated with running and jumping movements. The quality of short, medium and long passes was affected by the number of running movements, both specific and the total number of motor actions. Central midfielders first of all provide the organization of offensive actions, so they must have versatile training. The number of significant relationships between the quality of technical & tactical and the number of performed motor actions was 59 of 90. The greatest number of correlations was related to the quality of kicks to the goal and headers with all motor actions. So the most motor actions affected the quality of technical and tactical actions.

It has been experimentally proved that the use of special athletic running and jumping exercises had a positive effect on improving the motor skills and technical & tactical actions of wing-back and central midfielders of 13-14 years old.

Conflicts of interest

The authors have no conflicts of interest.

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