

MODEL VALUES OF THE INTEGRAL ASSESSMENT OF THE TECHNICAL AND TACTICAL ACTIVITY OF HIGHLY QUALIFIED FOOTBALL PLAYERS OF DIFFERENT GAMES

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Annotation. Control and analysis of competitive activity is an important component of the athlete training system. One of the effective scientific and methodical approaches to the control of competitive activity is the integral assessment of technical and tactical activity.

The purpose of the study is to determine the model values of the integral assessment of the technical and tactical activity of highly qualified football players of various playing roles.

Research material and methods. The research was conducted during 2018-2023. The competitive activity of football players of national teams was analyzed. The scientific search was carried out on the basis of such methods as: theoretical analysis of literary sources, pedagogical observation of competitive activity, video analysis of competitive activity, methods of mathematical statistics.

Research results. The structure of the integral assessment of technical and tactical activity consists of six specific coefficients – intensity (KI), mobility (CM), aggressiveness (KA), efficiency (KE), martial arts efficiency (KEE), creativity

(KK). Model values of the integral assessment of technical and tactical performance have been determined for highly qualified football players in various playing positions: for full-backs (n=20) – 5.26 ± 0.77 points; for center-backs (n=20) – 5.11 ± 0.54 points; for defensive midfielders (n=18) – 5.61 ± 0.86 points; for wide midfielders (n=18) – 5.59 ± 0.91 points; for inside forwards (n=18) – 5.71 ± 0.77 points; and for strikers (n=18) – 4.90 ± 0.84 points. Based on specific coefficients of technical and tactical performance, it has been established that the most dynamic gameplay is characteristic of defensive midfielders, wide midfielders, and inside forwards.

Conclusions. An integral assessment of technical and tactical activity most fully reflects the characteristics of highly qualified football players of various playing roles.

Keywords: football, national national teams, specific coefficients of technical and tactical activity, modes of coordination complexity.

МОДЕЛЬНІ ЗНАЧЕННЯ ІНТЕГРАЛЬНОЇ ОЦІНКИ ТЕХНІКО-ТАКТИЧНОЇ ДІЯЛЬНОСТІ ВИСОКОКВАЛІФІКОВАНИХ ФУТБОЛІСТІВ РІЗНИХ ІГРОВИХ АМПЛУА

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Анотація. Контроль і аналіз змагальної діяльності є важливою складовою системи підготовки спортсменів. Одним із ефективних науково-

методичних підходів, щодо контролю змагальної діяльності є інтегральна оцінка техніко-тактичної діяльності.

Мета дослідження – визначити модельні значення інтегральної оцінки техніко-тактичної діяльності висококваліфікованих футболістів різних ігрових амплуа.

Матеріал і методи дослідження. Дослідження проводилося упродовж 2018 – 2023 р.р. Аналізувалася змагальна діяльність футболістів національних збірних команд. Науковий пошук здійснювався на основі таких методів, як: теоретичний аналіз літературних джерел, педагогічне спостереження за змагальною діяльністю, відео-аналіз змагальної діяльності, методи математичної статистики.

Результати дослідження. Структура інтегральної оцінки техніко-тактичної діяльності складається з шести специфічних коефіцієнтів-інтенсивності (КІ), мобільності (КМ), агресивності (КА), ефективності (КЕ), ефективності єдиноборств (КЕЄ), креативності (КК).

Визначено модельні значення інтегральної оцінки техніко-тактичної діяльності висококваліфікованих футболістів різних ігрових амплуа для крайнього захисника ($n=20$) – $5,26 \pm 0,77$ бал.; для центрального захисника ($n=20$) – $5,11 \pm 0,54$ бал.; для опорного півзахисника ($n=18$) – $5,61 \pm 0,86$ бал.; для крайнього півзахисника ($n=18$) – $5,59 \pm 0,91$ бал.; для інсайда ($n=18$) – $5,71 \pm 0,77$ бал.; для нападника ($n=18$) – $4,90 \pm 0,84$ бал. За окремими специфічними коефіцієнтами техніко-тактичної діяльності встановлено, що найбільш динамічна гра характерна для опорного півзахисника, крайнього півзахисника та інсайда.

Висновки. Інтегральна оцінка техніко-тактичної діяльності найбільш повно відображає особливості висококваліфікованих футболістів різних ігрових амплуа.

Ключові слова: футбол, національні збірні команди, специфічні коефіцієнти техніко-тактичної діяльності, режими координаційної складності.

Statement of the problem. Competitive activity in football is multifactorial. Various methodical approaches are used to control the competitive activity of highly qualified football players (Matkovich, & Davis, 2009; Basilevich, 2011). One of the most effective is the control of the competitive activity of football players based on an integral assessment of technical and tactical activity (Kostiukevych, 2010; Konnov, 2021). Determining the model values of the integral assessment – technical and tactical activity of highly qualified football players of various playing roles allows for more purposeful management influences in the competitive process.

Analysis of recent research and publications. The problem of control and analysis of competitive activity in team sports was the subject of a scientific basket of domestic (Stasiuk, 2009; Bezmylov, & Shynkaruk, 2013) and foreign (Weiin, 2004; Batista, 2007; Matkovich, & Davis, 2009; Shchepotina, 2018) scientists

In particular, the scientific and methodical bases of control of the competitive activity of athletes in team game sports (Bezmylov, & Shynkaruk, 2013; Mitova, 2016; Oliinyk, Doroshenko, Melnyk, Sushko, Tyschenko, & Shamardin, 2021) and

defined methods of control of the competitive activity of game teams and players on the basis of an integral assessment of the performance of technical and tactical actions (Kostiukevych, 2010; Vozniuk, Halaidiuk, & Svirshchuk, 2020; Konnov, 2021) and an integral assessment of team tactics in game sports (Tyschenko, 2013; Serebriakov, 2017; Kostiukevych, Shchepotina, Adamchuk, Abalasei, Vozniuk, Bohoslavskaya, Drachuk, & Mezhvynskyi, 2023).

Therefore, conducting a study on determining the model values of the integral assessment of the technical and tactical activity of highly qualified football players will allow to expand knowledge on the specified problem. On the other hand, it is important to determine the model values of the integral assessment of the technical and tactical activity of highly qualified football players of various playing roles.

The purpose of the study is to determine the model values of the integral assessment of the technical and tactical activity of highly qualified football players of various playing roles.

Research material and methods. The research was conducted during 2018-2023. The competitive activity of football players of national teams was analyzed.

The research used the following methods: theoretical analysis of literary sources; pedagogical observation of competitive activity, video analysis of competitive activity; methods of mathematical statistics.

The theoretical analysis of literary sources made it possible to determine the actual problem of scientific research, to develop a working research hypothesis.

The methods of pedagogical observation of competitive activity and video analysis of competitive activity became the basis for conducting the main study, i.e., determining the model values of the integral assessment of the technical and tactical activity of highly qualified football players of various playing roles.

The analysis of technical and tactical activity of football players only by quantitative and qualitative indicators is not always objective and sufficiently informative for management impact. This is caused by several reasons. First of all, by different tactical functions of the players in the game and by different conditions of execution of technical and tactical actions. It goes without saying that the striker is practically constantly under the tight control of the defenders of the opposite team in the course of the game and it is quite difficult for him to perform the same number of actions with appropriate efficiency, as, for example, a defender. Secondly, it is necessary to consider the level of the opposing team in the analysis of competitive activity. Games can be against weaker, equal or stronger opponents. Thirdly, taking into account only quantitative indicators does not always reflect the true contribution of the player to the team result. It is always easier to make three holding passes back than one long-range, sharpening forward. Thus, the integral estimation should be based on a complex regard of the technical and tactical activity of football players.

The main statements that were taken into account in the development of the integral estimation:

1. Registration of technical and tactical actions should be made taking into account the coordination complexity and game intensity of their performance.
2. The analysis of technical and tactical activity procedure should consider the

direction and importance of technical and tactical moves (passes, dribbling, groundmoves, etc.).

3. Quantitative indicators of technical and tactical activity should be analyzed together with their qualitative characteristics.

4. A differentiated approach to determining the integral estimation of technical and tactical activities for football players of different roles is needed.

5. The integral estimation should objectively reflect the athlete's skills manifested in play, and be the basis for composing models of competitive activity. Based on the statements above, the following methodological approaches regarding the control and analysis of players' technical and tactical activities have been made:

1. Performance of technical and tactical actions was fixed in 3 modes of coordination complexity and game tension:

- *The first coordination complexity mode (1st CCM)* – TTA is performed on-the-spot or at a convenient speed of movement (traps, passes, performance of a set piece, etc.);

- *2nd CCM* – TTA is executed in the process of movement being restricted in space and time (traps, dribbling, passes, interceptions, shots on goal);

- *3rd CCM* – TTA is performed in terms of active interference of the opponent (traps, groundmoves, passes, interceptions, shots on goal).

2. Passing the ball is registered with keeping in mind the purpose for which the player performs the handoff. As a technical and tactical move, it can be done for: holding on to the ball, the development of the attack, aggravation of a playing situation. On this basis, passes are classified into holding, developing and aggravating ones.

3. Integral estimation must reflect quantitative and qualitative indicators of the players' technical and tactical activity. For this purpose, six specific indicators have been developed: quantitative – the intensity coefficient, the mobility coefficient, the aggressiveness coefficient; qualitative – the efficiency coefficient, the face-off efficiency coefficient, the creativity coefficient.

1. *Intensity coefficient (IC)*

$$IC = \frac{\sum_{i=1}^n TTA}{t}, \quad (1)$$

where t is the time played by the player in the match

2. *Mobility coefficient (MC)*

$$MC = \frac{\sum_{i=1}^n TTA (2\text{-nd CCM} + 3\text{-rd CCM})}{t} \times 2, \quad (2)$$

where 2 is an indicator of coordination complexity

3. *Aggressiveness coefficient (AC)*

$$AC = \frac{\sum_{i=1}^n TTA (3\text{-rd CCM})}{t} \times 3, \quad (3)$$

where 3 is an indicator of coordination complexity

4. *Re efficiency coefficient (EC)*

$$EC = \frac{\sum_{i=1}^n TTA}{t} \quad (4)$$

5. *Re face-off efficiency coefficient (FEC)*

$$FEC = \frac{\sum_{i=1}^n \text{exact TTA (traps, interceptions, tackles, groundmoves, passes – 3-rd CCM)}}{\sum_{i=1}^n \text{total TTA (traps, interceptions, tackles, groundmoves, passes – 3-rd CCM)}} \quad (5)$$

6. *Re creativity coefficient (CC)*

$$CC = \frac{\sum_{i=1}^n \text{exact TTA (DP} \times 1 + \text{AP} \times 2 + \text{AP} \times 5 + \text{SG} \times 5 + \text{G} \times 10)}{t}, \quad (6)$$

where *DP* – developing passes;

AP – aggravating passes;

AP – assist passes; *SG* – shots on goal; *G* – goals.

Integral estimation (IE) of a field player is calculated by the formula:

$$IE = IC + MI + AC + EC + FEC + CC$$

A special protocol is used for the integral estimation of technical and tactical activity of football players (table 2.).

Mathematical analysis of research results based on descriptive statistics with determination of arithmetic mean (), root mean square deviation (S), coefficient of variation (V) (Vincent, 2005). MS Excel software was used.

Research results. Long-term observation and analysis of the players' competitive activity has driven the conclusion that the objective assessment of technical and tactical activity of each football player in the game should be based on the following statements:

- it is necessary to take into account the performance of all major TTA by a player: passes, traps, dribbles, ground- moves, interceptions, tackles and shots on goal;
- the performance of each playing technique should be considered in different modes of coordination complexity;
- the ball passing should be analyzed as a technical-tactical move in order to hold the ball, develop the attack or aggravate it;
- not only quantitative, but also qualitative indicators of technical and tactical activity should be taken into account.

On the basis of the above-mentioned statements, integral estimation of technical and tactical activities of players has been developed. Integral estimation displays quantitative and qualitative indicators of technical and tactical activity of the players. With this purpose, six specific indicators of competitive activity have been developed – quantitative (the intensity coefficient, the mobility coefficient, the aggressiveness coefficient) and qualitative (the efficiency coefficient, the face-off efficiency

coefficient, the creativity coefficient).

Specific indicators of integral estimation of technical-tactical activities of players of different playing roles are presented in table 1. Each of the indicators of IE of TTA characterizes individual components of competitive activity. The intensity coefficient determines the overall activity in the game. The highest recorded IC belongs to the holding midfielder ($x \pm S$; $1,15 \pm 0,20$), the lowest – to the attacker ($0,75 \pm 0,16$). The IC of other players ranges from $1,11 \pm 0,18$ (a wing back) to $1,05 \pm 0,17$ (a centre-back). The mobility coefficient characterizes the overall mobility of the player during the match, his desire to perform TTA in motion in different parts of the field. The MC indices are approximately the same for the players of these three roles: the holding midfielder - $1,39 \pm 0,12$, the outside midfielder – $1,36 \pm 0,25$ and the insider - $1,36 \pm 0,24$. A little lower indicators are observed in the extreme ($1,29 \pm 0,19$) and central ($1,22 \pm 0,18$) defenders. The value, characterizing the forward, is $1,03 \pm 0,25$ points.

A very important indicator in the structure of the players' technical and tactical activity is the aggressiveness coefficient of the player in the match, his participation in face-offs, activity in groundmoves, interceptions and tackles of the ball, shots on goal. As expected, the highest values of the AC are observed in the forward - $1,09 \pm 0,24$, that is 22.0% more than the outside midfielder's ones ($0,85 \pm 0,34$). Other playing roles have even lower AC: the outside and the central defenders - $0,69 \pm 0,15$ and $0,65 \pm 0,19$; the holding midfielder and the insider - $0,76 \pm 0,16$ and $0,76 \pm 0,24$.

Based on the analysis of the three quantitative indicators of the TTA IE, it can be concluded that the most difficult conditions for performing TTA in playing are observed in the outside halfback (winger) and the forward. It should be assumed that, on the one hand, the footballers of these playing roles perform the greatest amount of high-speed work during the match, and on the other hand, they spend the greatest amount of energy.

As regards the qualitative indicators the footballers' TTA IE, the efficiency of the TTA performance ranges from $0,83 \pm 0,07$ (outside midfielder) to $0,88 \pm 0,06$ (insider) for almost all roles, except the forward. The forward's EC makes up $0,72 \pm 0,08$ points, which is 13.2% less than the outside midfielder's one.

Table 1

Model values of integral estimation of technical and tactical activity of players performing different playing roles

Playing roles	Specific indicators of integral estimation of technical and tactical activity, points						
	IC	MC	AC	EC	FEC	CC	IE
1	2	3	4	5	6	7	8
Wing back (n=20)	1,11	1,29	0,69	0,84	0,54	0,79	5,26
	0,18	0,19	0,15	0,06	0,12	0,14	0,77
	0,46	1,68	0,99	0,94	0,83	1,06	6,57
	0,20	0,97	0,43	0,71	0,40	0,52	3,69
	15,9	14,7	21,7	7,3	21,3	18,3	14,6

Central defender (n=20)	1,05	1,22	0,65	0,86	0,61	0,72	5,11
	0,17	0,18	0,19	0,90	0,14	0,12	0,54
	1,33	1,55	1,26	0,96	0,88	0,92	6,39
	0,69	0,88	0,53	0,61	0,37	0,48	4,38
	16,3	14,7	30,1	10,9	22,4	16,4	10,5
Holding midfielder (n=18)	1,15	1,39	0,76	0,86	0,59	0,86	5,61
	0,20	0,12	0,16	0,05	0,13	0,11	0,86
	1,64	1,46	1,20	0,91	0,89	1,06	7,61
	0,88	1,02	0,60	0,73	0,40	0,66	4,39
	17,7	8,4	21,2	5,6	22,2	12,5	15,4
Outside midfielder (n=18)	1,06	1,36	0,85	0,83	0,67	0,82	5,59
	0,18	0,25	0,34	0,07	0,11	0,29	0,91
	1,42	1,91	1,73	0,93	0,86	1,72	7,78
	0,78	0,97	0,46	0,68	0,47	0,66	4,47
	16,5	18,9	41,0	8,4	15,9	35,5	16,2

Continuation of table 1

1	2	3	4	5	6	7	8
Insider (n=18)	1,06	1,36	0,76	0,88	0,74	0,89	5,71
	0,21	0,24	0,24	0,06	0,12	0,26	0,77
	1,60	1,82	1,33	0,95	0,91	1,60	7,30
	0,84	0,93	0,46	0,73	0,45	0,62	4,49
	19,8	17,9	31,4	6,8	17,1	30,2	13,5
Forward (n=18)	0,75	1,03	1,09	0,72	0,61	0,70	4,90
	0,16	0,25	0,24	0,08	0,14	0,23	0,84
	0,98	1,51	1,67	0,81	0,82	1,24	6,21
	0,38	0,58	0,79	0,50	0,29	0,40	3,08
	21,9	24,8	22,2	11,8	23,8	32,9	17,2

Notes.* 1) IC - the intensity coefficient; MC - the mobility coefficient; AC - the aggressiveness coefficient; EC - the efficiency coefficient; FEC - the face-off coefficient; CC - the creativity coefficient; IE - integral estimation; 2) first row – $\bar{x}$; second row – S; third row – xmax; fourth row – xmin; fifth row – V.

As regards the qualitative indicators the footballers' TTA IE, the efficiency of the TTA performance ranges from $0,83 \pm 0,07$ (outside midfielder) to $0,88 \pm 0,06$ (insider) for almost all roles, except the forward. The forward's EC makes up $0,72 \pm 0,08$ points, which is 13.2% less than the outside midfielder's one.

What generates interest is the highest rates of the TTA IE among highly qualified players, who can be referred to the elite of world football (table 2).

To some extent, these indicators of the TTD IE can be considered as model for players of different roles. It should be noted that in the structure of the TTA IE of such a player like Messi (insider), the highest ratio falls on the MC – 24,0% and the CC – 22.1%. The outside midfielder Robin has got approximately the same indicators, namely the MC – 23,2% and the CC – 19.5%. As could be expected, the forward Villa's highest ratios of the TTD IE are expressed through the AC – 24.6% and the CC – 17,3%. The highest TTA IE of the holding midfielder of the Germany national team Schweinsteiger is identified in terms of the IC – 1.27 (19,3%) and the MC – 1,58 (24,0%). A similar trend in the ratio of specific indicators of the TTA IE

is considered in the outside defender Maicon: IC - 1.22 (20.2%); MC - 1.51 (25.0%) and the central defender

Pique: IC – 1.19 (20,7%); MC – 1,46 (25.3%).

If we compare the model indicators of the TTA IE of players performing different roles in leading club teams of Ukraine with the indicators of elite players, we can establish that the model indicators of the TTA IE of highly skilled players of leading Ukrainian clubs are characterized by lower values in comparison to the fixed indicators of the TTA IE of elite players. In particular, the TTA IE of the right defender of the Brazil national team is 12.9% higher than the model values of the TTA IE of a wing back of leading Ukrainian club teams.

Consequently, the indicators of the elite footballers' TTA IE of other roles are higher than the values of highly skilled players of Ukrainian club teams: the central back – by 11.2%; the holding midfielder – by 14.6%; the wing back – by 24.0%; the insider – by 30.7%; the forward – by 21.1%. This difference to some extent can demonstrate the reserves for increase of the players' competitive activity indicators in Ukrainian club teams.

Table 2

Ke highest rates of integral estimation of footballers' competitive activity at the World Cup 2010

Surname	Role	Match, score	Specific indicators of integral estimation of competitive activity						
			Intensity coefficient	Mobility coefficient	Aggressiveness coefficient	Efficiency coefficient	Face-off efficiency coefficient	Ke creativity coefficient (reliability)	Integral estimation
Neuer	Goalkeeper	Germany – Argentina (quarter-final): 3:0	0,48 (8,9)	0,57 (10,6)	0,39 (7,3)	0,86 (15,9)	1,0 (18,6)	2,08 (38,7)	5,38
Maicon	Wing back	Brazil – Holland (quarter-final): 0:2	422 (20,2)	1,51 (25,0)	0,54 (8,9)	0,89 (14,7)	0,72 (11,9)	1,16 (19,3)	6,04
Pique	Central defender	Spain – Paraguay (quarter-final): 1:0	1,19 (20,7)	1,46 (25,3)	0,69 (11,9)	0,85 (14,7)	0,68 (11,8)	0,89 (15,6)	5,76
Schweinsteiger	Holding midfielder	Germany – Argentina (quarter-final): 3:0	1,27 (19,3)	1,58 (24,0)	0,96 (14,6)	0,89 (13,5)	0,72 (10,9)	1,16 (17,7)	6,57
Messi	Central midfielder (insider)	Argentina – Germany (quarter-final): 0:3	1,62 (19,6)	1,98 (24,0)	1,17 (14,2)	0,90 (10,9)	0,76 (9,2)	1,82 (22,1)	8,25
Robben	Outside midfielder	Holland – Uruguay (semi-final): 2:1	1,38 (18,8)	1,71 (23,2)	1,39 (18,9)	0,81 (11,0)	0,63 (8,6)	1,44 (19,5)	7,36
Villa	Forward	Spain – Paraguay (quarter-final): 1:0	0,96 (15,4)	1,24 (19,9)	1,53 (24,6)	0,80 (12,9)	0,62 (9,9)	1,06 (17,3)	6,21

Note. * in parentheses – the percentage ratio.

In general, considering model values of specific indicators of TTA performed by highly-skilled players of different roles, it should be concluded that the highest value for all roles in the general structure of the TTA IE is expressed by the quantitative specific indicators. The ratio of quantitative and qualitative specific indicators of the TTA IE of players performing different roles is as follows: for the

wing back – 3.09 points (58.7 %) and 2.17 points (41,3%); for the central back – 2.92 points (57.1%) and 2.21 points (42.9%); for the holding midfielder – 3.30 points (58.8%) and 2.31 points (41,2%); for the outside midfielder – 3.27 points (58,5%) and 2.32 points (41.5 %); for the insider – 3.18 points (55,7%) and 2.53 points (44.3%); for the attacker – 2.87 points (58.6%) and 2.2 points (41.4%).

Quantitative values of the TTA IE, on the one hand, characterize the motor activity of the players, and, on the other hand, the coordination complexity of the TTA performance in the process of playing (fig. 1.).

The holding midfielder, the outside midfielder and the insider are the roles which are characterized by the most dynamic playing. For the forward, it is important to perform TTA in conditions of active interference by the opponent. Therefore, out of all roles it is the forward who has the highest value of the AC – 1.09 (see fig. 1.).

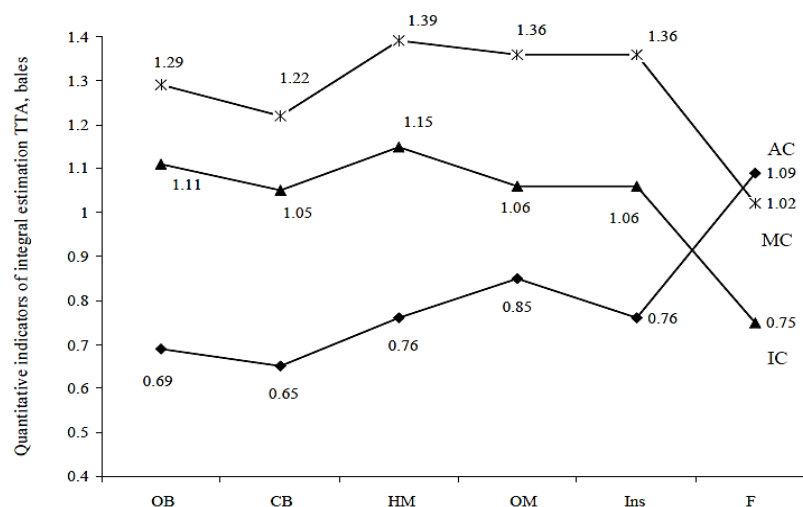


Fig. 1. Quantitative indicators of integral estimation of technical and tactical activity of highly qualified players performing different playing roles.

Note. * OB — the outside back; CB — the centre-back; HM — the holding midfielder; OM — the outside midfielder; Ins — the insider; F — forward; IC — the intensity coefficient; MC — the mobility coefficient; AC — the aggressiveness coefficient.

Quite important information can be obtained in the analysis of qualitative indicators of footballers' TTA IE (Fig. 2.). The more complex are the conditions for performing the TTA by the player in the game, the lower is the value of such qualitative indicators of the TTA IE as the EC and the FEC. The most important qualitative indicator of the players' TTA IE is the CC, which to the utmost characterizes the creativity of the player, his ability to effectively participate in the playing combinations of developing and aggravating character. The CC greatest value of the TTA IE is inherent in such playing roles as the holding midfielder and the insider (see fig. 2.).

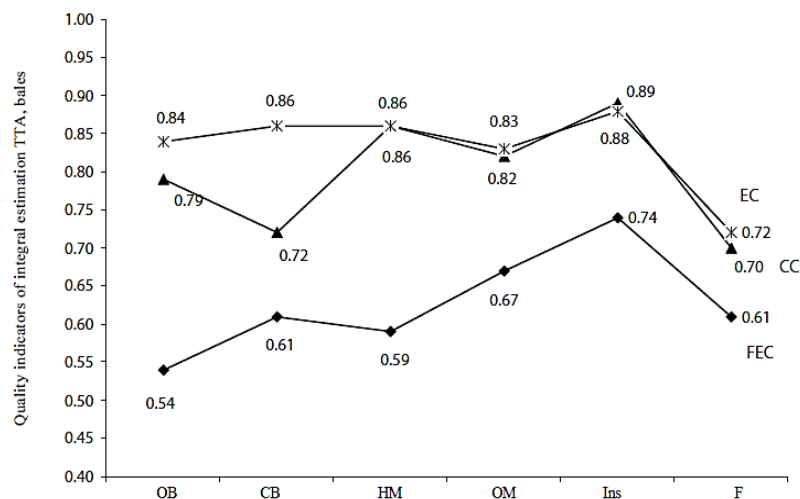


Fig. 2. Quantitative indicators of integral estimation of technical and tactical activity of highly qualified players performing different playing roles:

Note.* OB — the outside back; CB — the centre-back; HM — the holding midfielder; OM — the outside midfielder; Ins — the insider; F— forward; EC — the efficiency coefficient; FEC — the face-off efficiency coefficient; CC — the creativity coefficient.

Thus, the analysis of competitive activity in football on the ba-sis of the TTA IE contributes to more purposeful management of the players' training.

Discussion. Each scientific research involves, first of all, the expansion of knowledge of the global problem of scientific research.

It is important to note that the effectiveness of the athlete training system is determined by various factors, the most important of which are indicators of competitive activity (Imas, Borysova, Shlonska, Kogut, Marynych, & Kostiukevych, 2017; Doroshenko, Sushko, Shamardin, Prykkodko, Shapovalova, Yeliera , & Yakovenko, 2020).

Our study was based on an integral assessment of the technical and tactical activity of football players. IO TTD reflects the comprehensive indicators of the players' competitive activity. Model values of IO TTD can be guidelines for football players of various playing roles. In particular, the article presents the highest IO TTD indicators of star footballers in individual matches, such as goalkeeper Neuer (5.38 points), winger Maicon (6.04 points), central defender Schweinsteiger (6.57 points), central midfielder Messi (8.25 points), fullback Robben (7.36 points), striker Villa (6.21 points).

Therefore, the results of this study allow us to expand knowledge about the indicators of competitive activity of highly qualified football players. Model values of IO TTD of highly qualified football players of various roles will allow to increase the efficiency of management of club and national football teams.

Conclusions. 1. Football is one of the most multi-vector team sports games, which determines the complexity of control and analysis of competitive activity in this sport. The most effective is the method of control and analysis of competitive activity in football based on an integral assessment of the performance of technical and tactical actions.

2. The integral assessment of technical and tactical activity is characterized by quantitative and qualitative specific indicators of the football players' game in the phases of ball possession and selection: Intensity coefficient (KI), Mobility coefficient (CM), Aggressiveness coefficient (KA), Efficiency coefficient (KE), Coefficient Martial Arts Efficiency (KEE), Creativity Coefficient (KK).

3. The model values of the integral assessment of technical and tactical activity for highly qualified football players of various roles were determined: fullback – 5.26 ± 0.77 points; central defender – 5.11 ± 0.54 points; defensive midfielder – 5.61 ± 0.86 points; extreme midfielder – 5.59 ± 0.91 points; insider – 5.71 ± 0.77 points; striker – 4.90 ± 0.84 points.

Prospects for further research will be determined by the definition of model values of the integral assessment of the technical and tactical activity of football teams of various qualifications.

The authors declare no conflict of interest.

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