PLAYERS OF DIFFERENT ROLES SELECTION FOR AN ELITE STUDENT FOOTBALL TEAM

Andriy Dulibskyy¹, Bogdan Vynogradskyi¹, Liubov Chekhovska¹, Maryana Luzhna¹, Bohdan Khorkavyy¹, Oleh Kolobych¹, Andriy Kazmiruk¹

ABSTRACT

The main position of players during a football match may vary, either fully or partially. This also applies to the tactical and strategic aspects of an attacking central midfielder's performance. The aim of the study is to improve the components of competitive activity of the attacking central midfielder during talent selection for an elite student football team. It is based on a method of specialized teaching and training for attacking central midfielders during the selection process. Methodology. Footballers (n = 23) from the elite student team were involved by the coaching staff to the attacking central midfielder position. This team participated in the Ukrainian Championship among higher educational institutions during the 2014–2023 seasons. Research methods included pedagogical observation of competitive activity and detailed analysis of the attacking central midfielder's performance.

Results. A significant correlation was found between shots on goal and overall effectiveness $(0.05 \le r \le 0.15)$, confirming that scoring depends on both the number and quality of shots. "Zigzag" movements without the ball correlated $(0.12 \le r \le 0.48)$ with goals scored, while "zigzag" movements with the ball also correlated positively $(0.11 \le r \le 0.29)$.

Conclusions. Individual tactical and strategic actions of attacking central midfielders are subordinated to team play, but improvisation remains essential, adding tactical surprise and disorienting opponents.

Keywords: tactics, talent, selection, strategy, students

Introduction

Tactics and strategy in modern sports, including football, have been widely studied (Ávila-Moreno et al., 2018). The questions of their deep interrelation as well as tactical and strategic actions are not fully studied (Aranda et al., 2019). This concerns the harmonious unity of tactics and strategy (Lago, 2009), which reflects high-level game intelligence (Dulibskyy et al., 2018). These components of football competitive activity are still understudied (Almeida et al., 2014).

¹Ivan Boberskyi Lviv State University of Physical Culture, Ukraine

The individual tactical and strategic actions of an attacking central midfielder (ACM) are subordinated to the collective game (Barreira et al., 2013). Yet, this does not diminish the impact of highly skilled individuals who playing lead their teams (Lepschy et al., 2018). At the same time, improvisation – both individual and collective – adds tactical surprise and disorients the opponent (Bush et al., 2015).

This work integrates contextualised, role-specific indicators into student-football selection, links micro-actions to outcomes for ACMs, and motivates standardized, mixed-method evaluation protocols tailored to university-level constraints.

Literature analysis

Elite football competitions reveal how situational variables – match location, opposition quality, and score-line – shape possession strategies and ball recovery (Aranda et al., 2019). Home teams, leading sides, or those facing weaker opponents tend to dominate possession and press differently, which alters role demands across defenders, midfielders, and forwards (Lago, 2009; Lago-Ballesteros et al., 2012; Almeida et al., 2014). Ball recovery patterns highlight collective pressing and role-specific contributions (centerbacks' cover balances, midfield screens, forwards' curved pressing) (Barreira et al., 2013). The status of the match further modulates the frequency and effectiveness of technical actions aimed at changing the outcomes, while micro-actions (such as passes into dangerous areas, shots, and ball-recoveries) vary depending on the role and positional context of the player's game actions. (Konefal et al., 2019; Liu et al., 2015; Yue et al., 2014).

Player positions reflect different physical loads and technical demands. Modern roles require repeated accelerations and precise specialized actions (Bush et al., 2015). Youth match data emphasize early role-specific training: defenders (aerial duels, tackling), midfielders (linking play, scanning, passing variety), wingers (Iv1 ability, dangerous passes), and forwards (unpredictable movements, effective finishing) (Pettersen & Brenn, 2019). Network analysis identifies how player additions or role changes shape the tactical-strategic orientation of passes and their threat to opposition structures, informing passing and connectivity patterns for evaluation by club and association staff (Praça et al., 2017).

Longitudinal evidence indicates that, under match conditions, speed-related qualities and technical proficiency in adolescent and youth footballers are stronger predictors of professional success than general motor abilities, underscoring the need for selection models prioritising specific, role-relevant attributes over broad athleticism (Höner et al., 2017; Sieghartsleitner et al., 2019). Football selection should emphasize role-specific qualities rather than broad physical ability. Process- and product-oriented assessments can yield divergent judgments, so coaches and scouts should triangulate observational data with metrics (Sgro' et al., 2016). Together, these findings advocate for a multi-criteria selection process that emphasizes technical performance specific to the role under conditions of strong opposition, quick changes in game situations, and fatigue, with clearly modelled development possibilities.

Mixed-method observational tools, such as REOFUT, enable reliable coding of offensive tactical behaviors, linking match events to tactical intentions and permitting role-by-role diagnostics that move beyond raw counts (Aranda et al., 2019). Critical reviews highlight limitations in traditional performance analysis – fragmented variables, context neglect, and limited external validity – while calling for integrated approaches that blend event, spatiotemporal, and tactical data (Mackenzie & Cushion, 2013; Sarmento et al., 2014). Systematic reviews confirm rising trends toward network metrics, contextualized indicators, and tactical-technical coupling, with invasion sport frameworks offering cross-fertilization for soccer role analysis (Sarmento et al., 2018; Ávila-Moreno et al., 2018; Tomanek & Lis, 2020).

Set plays during football matches remain crucial stages. Competencies such as delivery accuracy, timing in the air, and anticipation significantly affect the outcomes (Vynogradskyi et al., 2016). Ukrainian studies highlight the importance of speed qualities in set pieces, detailing tactical patterns for wide players in student teams (Dulibskyy et al., 2016; 2018). Selecting players who combine open-play value with set-piece specialization significantly impacts expected goals.

Despite advances, most evidence focuses on professionals, with little emphasis on student-elite constraints (academic workload, reduced training hours). Methodological heterogeneity also limits external validity, underscoring the need for standardized, mixed-method evaluation linking tactical intention, physical execution, and match context (Sarmento et al., 2014, 2018; Lepschy et al., 2018). Future work should validate selection models longitudinally in elite student cohorts, integrate network and set-piece micro-roles explicitly, and report context-stratified benchmarks to guide role-specific cut-offs.

This study focuses on ACMs within an elite student cohort competing in Ukraine, examining how micro-actions related to game creation and build-up associate with scoring outcomes under real competition constraints.

Hypothesis

The implementation of a specialized teaching and training method for attacking central midfielders during the sports selection process improve the competitive activity components of student football players, particularly through enhanced game creation and build-up play.

The **aim** is improving the components of competitive activity of the attacking central midfielder in student's football team. It based in offer a method of specialized teaching and training of the ACM in the process of sports selection.

Methodology

The research was conducted with youth players from FC Lviv and FC Karpaty (Ukraine) competing in the Ukrainian Youth Football League (U-19, U-21). At the same

time, these players were university students representing the Ivan Boberskyi Lviv State University of Physical Culture.

The study was carried out in cooperation with scientific groups of the University, FC Karpaty, and statistical platforms Wyscout and Stats Perform (Vynogradskyi et al., 2016).

Methods

Theoretical: analysis of specialized literature (Sarmento et al., 2018; Tomanek & Lis, 2020).

Empirical: pedagogical observation of highly qualified football teams (Yue et al., 2014; Liu et al., 2015), and the playing activity of ACMs (Lago-Ballesteros et al., 2012). Video and television materials from Ukrainian (Dulibskyy et al., 2016) and foreign elite teams (Konefal et al., 2019) were analyzed.

Each season, general and special training was monitored twice (autumn and spring). Players were tested two weeks before the start of official competitions. The battery included six variables:

- Sprint 15 m and 30 m
- 30 m "zigzag" run (90° change every 10 m)
- Long jump
- High jump
- Shuttle run $(7 \times 50 \text{ m})$.

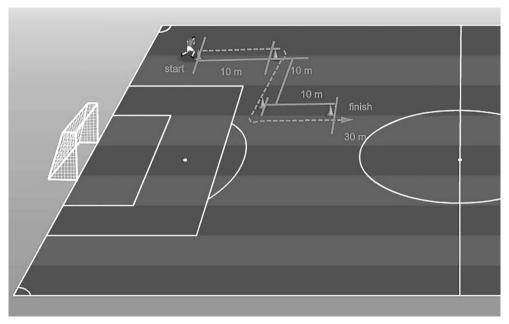


Figure 1 Running 30 m with a change of direction 90° every 10 m («zigzag»)

Three tests were conducted with a twin photoelectric sensor (Microgate, Italy) at the starting and finishing line. The first test was a 30 m sprint (r_{tt} = 0.16) (Höner et al., 2017). The second test was a running 30 m with a change of direction 90° every 10 m ("zigzag") (r_{tt} = 0.23) [6]. And the third test was a 7 × 50 m shuttle run (r_{tt} = 0.25) (Dulibskyy et al., 2016). The long and high jump was conducted with a professional kennel platform (Sgro' et al., 2016). This is Kistler Quattro Jump ©, equipped with Quattro Jump software © Version 1.08 Copyright © 2002, Kistler Instrumente AG.

During the "zigzag" test, in the first preparatory phase, the player takes a high start position. In the second, active phase, the player starts and tries to overcome the distance of 30 m in a "zigzag". The direction is changing by 90° every 10 m as quickly as possible ($r_{tt} = 0.23$) (see Figure 1).

A significant correlation was observed between shots on goal and the effectiveness of the game (0.05 \leq r \leq 0.15). This is proof that the number of goals scored on the number and quality of shots on goal. "Zigzag" without ball is correlated (0.12 \leq r \leq 0.48) with the number of goals scored in the opponents' goal. "Zigzag" with ball is correlated with the number of goals scored too (0.11 \leq r \leq 0.29).

The special training of players was determined by using three tests described by Sieghartsleitner R. et al. (2019). The special training was measured through additional three tests. A dribbling test was executed with the same trajectory as the agility test. The only difference being that it was performed with a ball instead of without a ball ($r_{tt} = 0.26$). A passing test was adapted from the passing test used by Höner et al. (2017). In this test, players passed the ball from a confined zone against four walls, in turn, one in each direction. After the fourth pass, the same sequence was repeated in reverse order (reaching nine passes). Time served as the test score and was measured manually with stopwatches ($r_{tt} = 0.28$).

In a shooting test, footballers kicking eight times into the target zones of the goal (2 targets, 2 attempts). Successful shots on the target were subjectively rated by speed on a three-stage scale. There are low, medium, or high speed and denote 1, 2 or 3 points. The test score was the total number of points ($r_{tt} = 0.21$). The protocol for the test battery was standardized (warm-up, order of tests, trained team of testers). It was executed on dry synthetic turf only. For the 30 m sprint, "zigzag", dribbling and passing tests, the better of two attempts was used for data analysis (p < 0.05). For the 7 × 50 m shuttle run intermittent recovery test, only one attempt was possible (p < 0.01).

It was determined the quantitative and qualitative indicators of the game creation and build-up of the ACM. It has been developed the methodical complex of means of teaching, learning and training of the attacking central midfielders. Players of this role were the main carriers of the creative potential of the team attack in modern football strategies. They based on the principles of tactical and strategic control of the playing space in the central areas of the pitch. This is the area of defence of the goal. And this is the areas of creation and completion of dangerous scoring chances at the goals of the opposing team.

We have developed and proposed a complex of means aimed at the development and improvement of the game of ACM. Emphasis was placed into individual and

individual-team thinking in the process of tactical and strategic actions of ACM. An algorithmic set of tasks has been offered for teaching, training and improving tactical and strategic actions of ACM. The algorithmic was used on the above mentioned students' team in the training process during individual and team training sessions. The training sessions were in a certain sequence and with a certain dosage (see Table 1).

 Table 1
 Conditional algorithm using technical-tactical and tactical-strategic tasks

Task Task conditions

- A group of footballers is organised into three distinct subgroups, each identified
 by a specific kit colour. One designated player from each subgroup is positioned on
 the perimeter of a smaller, notional circle marked with cones, situated within a larger,
 similarly marked circle.
 Players stationed on the outer circle engage in ball circulation using one or two-touch
 passing. Their objective is to maintain possession while moving laterally from right to
 left. Meanwhile, the designated players inside the smaller circle act as receivers. Upon
 receiving the ball, the inner-circle player executes a turn and distributes the ball in
 the opposite direction, facilitating dynamic play and directional change.
 This exercise encourages players on the outer circle to evade individual marking by
 a hypothetical opponent, simulating scenarios of spatial awareness, quick decision-making, and off-the-ball movement under pressing.
- 2. A structured n × n positional exercise is employed to facilitate ball progression into high-threat zones adjacent to the opposition's goal. The sequence is initiated by the goal-keeper, who plays out from the back via a goal kick or short distribution. The ball is then circulated through the defensive line, with the centre-back tasked with advancing possession through designated channels of play.
 Progression continues through the midfield, culminating in a pass to the attacking central midfielder (ACM), who is responsible for executing the final ball into a predefined danger area typically the half-space, edge of the penalty box, or central attacking zone. The subsequent phase introduces active defensive pressure, simulating realistic opposition behaviour. This stage emphasises offensive tactical cohesion and strategic decision-making under duress, reinforcing principles of positional play, spatial exploitation, and transitional dynamics
- 3. An $n \times n$ small-sided game is conducted on a reduced-size pitch featuring four mini goals positioned at each corner or flank. The exercise mandates high-intensity tactical and strategic movement, both on and off the ball, across all zones of the playing area. Ball retention and circulation are prioritised in the central zone, with players encouraged to transition possession into designated danger areas typically wide channels or the final third through incisive passing and positional rotation. A goal is officially recorded only when the attempt is executed with a first-time finish, reinforcing principles of quick decision-making, spatial awareness, and technical precision under pressure.
 - This format promotes fluid attacking play, encourages overload creation, and enhances players' ability to operate within tight spaces while maintaining tactical discipline
- 4. A small-sided game of $n \times n$ on four small goals in a reduced-size court, with six "neutral" players off the pitch. A vital requirement is the rapid tactical and strategic movement of players and the ball in all areas of play. Possession and distribution of the ball into high-risk tactical and strategic zones are key. The "neutral" players are restricted to one-touch play. The "neutral" goalkeepers safeguard two of their team's goals by adjusting the goal line. A goal is considered scored if it is directed towards the goal in a single touch

Task Task conditions

- 5. An $n \times n$ small-sided game on two large goals on a reduced-size pitch divided into three playing zones. Introducing the ball into play through the goalkeeper, engaging players in various positions. The execution of coordinated tactical and strategic maneuvers is conducted through the ACM. The ACM delivers the final pass to the central striker of their team. A goal is scored when the ball is directed towards the goal in a single touch following the pass from the ACM
- 6. A small-sided game of $n \times n$ on two large goals on a reduced-size court. A key requirement is the quick tactical and strategic movement of players and the ball in all playing areas. Ball control and the speedy transition of the ball into dangerous playing areas for the opponent. Upon the coach's signal, two players execute an acceleration outside the playing area and circumnavigate the pre-installed obstacles. At this juncture, the ball must be fed into the danger zone in front of the goal. The final pass "under pressing" to one of the attackers is executed by an ACM. A goal is scored when it is directed towards the goal in a single touch after the pass from the ACM
- 7. A small-sided game of $n \times n$ involving four "neutral" players on two full-size goals within a scaled-down pitch. A fundamental requirement is the swift tactical and strategic maneuvering of players and the ball across the entire playing field. Emphasis is placed on ball possession and the relocation of the ball into potentially perilous positions for the opposing team's goal. A goal is recognized when it is executed directly towards the goal in a single touch following a pass from the ACM
- 8. An $n \times n$ small-sided match with goalkeepers involving four "neutral" players, two positioned behind each goal, on two full-sized goals located within the penalty area. A key requirement is the swift tactical and strategic movement of players and the ball across all playing zones. Emphasis is placed on ball control and the prompt transfer of the ball into opponent-threatening playing regions. A goal is considered valid if it is scored in one touch following a pass from the ACM
- 9. A small-sided game of $n \times n$ dimensions, involving one goalkeeper stationed across two large goals positioned at the center of the pitch. Each goal lies behind the other. Emphasizing rapid tactical and strategic movements of both players and the ball across all playing zones, the objective is to maintain control of the ball and swiftly advance it into high-threat areas near the opponent's goal. A successful goal is credited when the ball is directed towards the goal within a single touch following a pass from the ACM
- 10. An $n \times n$ small-sided game with one goalkeeper covering the one full-size goal. Breaking through the two lines of defensive formation of the opponent's team. A key requirement is the quick tactical and strategic maneuvering of players and the ball across all areas of gameplay. Possession of the ball and swift transition of the ball into threatening zones towards the opponent's goal. A goal is considered valid when scored with a single touch following a pass from the ACM. Following offensive tactical and strategic plays, the teams switch roles
- 11. An 11-a-side match on two large goals on one half of the pitch. Key requirements include quick tactical and strategic player and ball movement across all areas of play. Maintaining ball possession and swiftly moving it into areas threatening the opponent's goal. The crucial final pass under pressure to a forward is executed by an attacking midfielder. A goal is awarded when a one-touch shot is aimed at the goal following a pass from the attacking midfielder

These tasks describe the elements of the game of ACM, according to an algorithm using technical, tactical and strategic tasks.

Participants

Thirty official matches were played by footballers (n = 23) who played in the position of the attacking central midfielder. They were footballers of the student's team of Ivan Boberskyi Lviv State University of Physical Culture (further – the University). They were representatives of youth teams of FC Lviv (Lviv, Ukraine) and FC Karpaty (Lviv, Ukraine) at the club level. The vast majority of these youth elite players were graduates of the Lviv Football Academies. As well as children and youth football school of the FC Karpaty (Lviv, Ukraine).

Detailed testing of the proposed approaches was carried out in the course of official matches of the University team. The aimed at developing game and combination thinking in the process of tactical and strategic actions of attacking central midfielders. These matches were part of Ukrainian National Football Championship among the teams of higher educational institutions in the seasons 2014–2023. The tournament was held under the auspices of the All-Ukrainian Students Football Association.

Statistical Analysis

All obtained data were statistically processed using the STATISTICA 10.0 for Windows software package. The significance level was set at = 0.05. The data is represented as the mean average \pm standard deviation (SD). The relation between basic characteristics was estimated using the Brave-Pearson correlation coefficient.

Informed consent

Informed consent has been obtained from all individuals included in this study. The participants have been informed of the experimental design and were made aware about monitoring training process and tests. They have been also informed of the potential implications, risks, and benefits of the research.

Results

Quantitative indicators of ACM tactical and strategic interactions with other roles were analyzed. First of all, the tactical scheme 1 + 4 + 2 + 3 + 1 was studied. The data of ACM interactions with players of other roles are schematically shown (see Figure 2).

Figure 2 show how in different schemes and variants of the game ACM most interacts in the game (exchanging passes). It was interacting with the players of the attack (RW, LW, CF) and the central zone (CM) (11–15%). The lower level of interacts with central and flank players of defence (RCB, LCB, RL, and LL) (8–9%). The ACM interaction with the goalkeeper (GK) had least level of during the game (3%).

Depending on the game situation, tactical and strategic necessity any player can be in the central part of the pitch. However, the ACM is directly responsible for the effectiveness of offensive tactical and strategic interactions of the team.

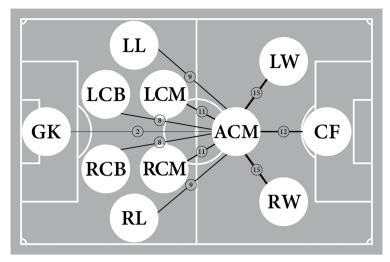


Figure 2 Passes from and to the ACM to and from other players during the game "first number" (in %)

Note: ACM – attacking central midfielder, GK – goalkeeper, RCB – right central back (defender), LCB – left central back (defender), RL – right lateral, LL – left lateral, RCM – right central midfielder, LCM – left central midfielder, RW – right-winger, LW – left-winger, CF – central forward.

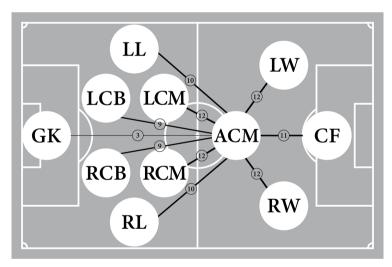


Figure 3 Passes from and to the ACM to and from other players during the game "second number" (in %)

Note: ACM – attacking central midfielder, GK – goalkeeper, RCB – right central back (defender), LCB – left central back (defender), RL – right lateral, LL – left lateral, RCM – right central midfielder, LCM – left central midfielder, RW – right-winger, LW – left-winger, LW – left-winger, LW – central forward.

Playing the "first number" involves mainly conducting offensive tactical and strategic actions. The game of the "second number" provides a significant emphasis on the successful defence (see Figure 3).

Table 2 Correlations between testing indicators and the number of goals scored in the opponents' goal

Testing	The special training			The general training				
indicators Seasons and results	Dribbl- ing sec*	Pass- ing (points)	Shoot- ing (points)	Long jump (sm)	High jump (sm)	30 m sprint (sec*)	"Zig- zag" (sec*)	7 × 50 m shuttle run (sec*)
2014/2015 (Group Stage)	-0.03	0.08	0.05	0.11	0.04	0.50	0.12	0.01
2015/2016 (Final four)	-0.11	0.06	-0.12	-0.12	0.05	0.23	-0.10	-0.14
2017/2018 (Final four)	-0.12	-0.04	0.15	0.29	-0.05	0.07	0.48	-0.08
2018/2019 (Final four)	-0.10	-0.03	0.11	0.23	-0.01	0.03	0.46	-0.07
2022/2023 (Final four)	-0.11	-0.01	0.12	0.25	-0.03	0.05	0.44	-0.09

Note: Positive correlations express better test performance with higher percentage of predicted; * = p < 0.05

The materials in Figure 3 show how in different schemes and variants of the game ACM most often interacts in the game (exchanging passes). It was interacting with the players of the attack (RW, LW, CF) and the central zone (CM) (11–12%). The lower level of game contacts with central and flank players of defense (RCB, LCB, RL, and LL) (8–9%). The ACM interaction with the goalkeeper (GK) had least level of during the game (2%). Table 2 present the results of correlations between testing indicators and the number of goals scored in the opponents' goal (see Table 2).

Table 2 presents correlations between the percentage of testing indicators and the number of goals scored. The goals scored were taking in the opponents' goal in the Championship of Ukraine among student's teams. The study also revealed that quantitative indicators of successful ACM actions had great importance:

• Central area actions: 3.5 ± 0.8

• Opponent's half: 11.3 ± 3.2

• Long passes: 2.1 ± 1.9

• Cross/back passes: $2.3 \pm 0.3 / 1.0 \pm 0.7$

• Short/medium forward passes: 14.5 \pm 1.2 / 12.9 \pm 1.2

Back passes: 5.3 ± 2.1
Cross passes: 11.3 ± 1.1

Discussion

The ACM is the playmaker, characterized by vision, anticipation, agility, and courage (Praça et al., 2017). He dictates attack directions, creates effective passes, and often determines scoring chances (Mackenzie & Cushion, 2013).

The most important indicators of ACM performance include:

- Accurate passes (80.9 \pm 14.7 per game, $p \le 0.05$)
- Assists (0.36–0.71 per game, $p \le 0.01$)
- Chances created (0.35–0.80 per game, $p \le 0.01$)
- Progressive passes (3.95–5.45 per game, $p \le 0.05$)
- Goals scored (0.35–0.56 per game, $p \le 0.01$)

Experts highlight ACMs as "creative depth dispatchers" acting from deep tactical structures, orchestrating attacks, creating scoring chances, and finishing themselves when necessary.

Indicators of ACM competitive activity include:

- Total contribution
- · Chances created
- Passing accuracy (%)
- Assists
- Goals
- Successful take-ons (%)
- Shot accuracy (%)

Players with these qualities complement each other on the pitch, combining defensive and offensive game intelligence.

Conclusions

Modern football requires flexible, dynamic tactical and strategic concepts in an ever-changing environment. Innovative strategic thinking is key at professional, student, and youth levels.

Individual tactical and strategic actions of ACMs are subordinated to team play, but improvisation remains essential, adding tactical surprise and disorienting opponents.

ACKNOWLEDGMENTS

This study was supported by the Football Department of Ivan Boberskyi Lviv State University of Physical Culture. Special thanks to FC Lviv, FC Karpaty, and specialists from Wyscout and Stats Perform, as well as all participating athletes and scientists.

REFERENCES

- Almeida, C. H., Ferreira, A. P., & Volossovitch, A. (2014). Effects of match location, match status and quality of opposition on regaining possession in UEFA Champions League. *Journal of Human Kinetics*, 41(1), 203–214. https://doi.org/10.2478/hukin-2014-0048
- Aranda, R., González-Ródenas, J., López-Bondia, I., Aranda-Malavés, R., Tudela-Desantes, A., & Anguera, M. T. (2019). "REOFUT" as an observation tool for tactical analysis on offensive performance in soccer: Mixed Method perspective. *Frontiers in Psychology, 10.* https://doi.org/10.3389/fpsyg.2019.01476
- Ávila-Moreno, F. M., Chirosa-Ríos, L. J., Ureña-Espá, A., Lozano-Jarque, D., & Ulloa-Díaz, D. (2018). Evaluation of tactical performance in invasion team sports: A systematic review. *International Journal of Performance Analysis in Sport, 18*(2), 195–216. https://doi.org/10.1080/24748668.2018 .1460054
- Barreira, D., Garganta, J., Guimarães, P., Machado, J., & Anguera, M. T. (2013). Ball recovery patterns as a performance indicator in elite soccer. Proceedings of the Institution of Mechanical Engineers Part P *Journal of Sports Engineering and Technology*, 228(1), 61–72. https://doi.org/10.1177/1754337113493083
- Bush, M., Barnes, C., Archer, D. T., Hogg, B., & Bradley, P. S. (2014). Evolution of match performance parameters for various playing positions in the English Premier League. *Human Movement Science*, 39, 1–11. https://doi.org/10.1016/j.humov.2014.10.003

- Dulibskyy, A., Vynogradskyi, B., Khorkavyy, B., & Kolobych, O. (2016). The impact speed displays qualities of footballers on the effectiveness of the standard position (in Ukraine). *Sports Science of Ukraine*, 5(75), 28–39. http://sportscience.ldufk.edu.ua/index.php/snu/article/view/451/436
- Dulibskyy, A., Vynogradskyi, B., Hutsulyak, O., Zatorskyi, V., Pavelchak, R., & Shandor, A. (2018). Tactical and strategic patterns of the flank and midfielder-winger in football (in Ukraine). Sports Science of Ukraine, 5(87), 10–19. http://sportscience.ldufk.edu.ua/index.php/snu/article/view/783/757
- Höner, O., Leyhr, D., & Kelava, A. (2017). The influence of speed abilities and technical skills in early adolescence on adult success in soccer: A long-term prospective analysis using ANOVA and SEM approaches. PLOS ONE, 12(8), e0182211. https://doi.org/10.1371/journal.pone.0182211
- Konefał, M., Chmura, P., Rybka, K., Chmura, J., Huzarski, M., & Andrzejewski, M. (2019). What frequency of technical activity is needed to improve results? New approach to analysis of match status in professional soccer. *International Journal of Environmental Research and Public Health*, *16*(12), 2233. https://doi.org/10.3390/ijerph16122233
- Lago, C. (2009). The influence of match location, quality of opposition, and match status on possession strategies in professional association football. *Journal of Sports Sciences*, 27(13), 1463–1469. https://doi.org/10.1080/02640410903131681
- Lago-Ballesteros, J., Lago-Peñas, C., & Rey, E. (2012). The effect of playing tactics and situational variables on achieving score-box possessions in a professional soccer team. *Journal of Sports Sciences*, 30(14), 1455–1461. https://doi.org/10.1080/02640414.2012.712715
- Lepschy, H., Wäsche, H., & Woll, A. (2018). How to be successful in football: A systematic review. *The Open Sports Sciences Journal*, 11(1), 3–23. https://doi.org/10.2174/1875399x01811010003
- Liu, H., Gomez, M., Lago-Peñas, C., & Sampaio, J. (2015). Match statistics related to winning in the group stage of 2014 Brazil FIFA World Cup. *Journal of Sports Sciences*, 33(12), 1205–1213. https://doi.org/10.1080/02640414.2015.1022578
- Mackenzie, R., & Cushion, C. (2012). Performance analysis in football: A critical review and implications for future research. *Journal of Sports Sciences*, 31(6), 639–676. https://doi.org/10.1080/02640414. 2012.746720
- Praça, G. M., & Greco, P. J. (2017). Network analysis in small-sided and conditioned soccer games. *Kinesiology*, 49(2), 185–193. https://doi.org/10.26582/k.49.2.8
- Pettersen, S. A., & Brenn, T. (2019). Activity profiles by position in youth elite soccer players in official matches. *Sports Medicine International Open*, *3*(1), E19–E24. https://doi.org/10.1055/a-0883-5540
- Sarmento, H., Clemente, F. M., Araújo, D., Davids, K., McRobert, A., & Figueiredo, A. (2017). What performance analysts need to know about research trends in association football (2012–2016): A systematic review. *Sports Medicine*, 48(4), 799–836. https://doi.org/10.1007/s40279-017-0836-6
- Sarmento, H., Marcelino, R., Anguera, M. T., Campaniço, J., Matos, N., & Leitão, J. C. (2014). Match analysis in football: A systematic review. *Journal of Sports Sciences*, 32(20), 1831–1843. https://doi.org/10.1080/02640414.2014.898852
- Sieghartsleitner, R., Zuber, C., Zibung, M., Charbonnet, B., & Conzelmann, A. (2019). Talent selection in youth football: Technical skills rather than general motor performance predict future player status of football talents. *Current Issues in Sport Science (CISS)*. https://doi.org/10.15203/ciss_2019.011
- Sgro', F., Quinto, A., Pignato, S., & Lipoma, M. (2016). Comparison of product and process oriented model accuracy for assessing countermovement vertical jump motor proficiency in pre-adolescents. *Journal of Physical Education and Sport*, 16(3), 921–926. https://doi.org/10.7752/jpes.2016.03145
- Tomanek, M., & Lis, A. (2020). Managing information on the physical education research field: Bibliometric analysis. Physical Education of Students, 24(4), 213–226. https://doi.org/10.15561/20755279.2020.0404

- Yue, Z., Broich, H., & Mester, J. (2014). Statistical analysis for the soccer matches of the First Bundesliga. International Journal of Sports Science and Coaching, 9(3), 553–560. https://doi.org/10.1260/1747-9541.9.3.553
- Vynogradskyi, B., Dulibskyy, A., Khorkavyy, B., & Kolobych, O. (2016). The effectiveness of standard provisions in football (in Ukraine). *Sports Science of Ukraine*, 3(73), 9–14. http://sportscience.ldufk.edu.ua/index.php/snu/article/view/421/405 (in Ukrainian).