



Developing the Football Training Program Based on Competition Game Analysis of the 2024 Men's European Football Championship

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Abstract

Background and Aim: The development of youth football players requires training programs that replicate the demands of elite competition. This study aims to develop a training program for youth players based on the analysis of the 2024 Men's European Football Championship.

Materials and Methods: The research followed a mixed-methods approach with three phases: (1) Analysis of the competition statistics of the 2024 Men's European Football Championship, with purposive sampling employed. As of November 29, 2024, 184 athletes from 8 teams of the quarterfinal round were selected as the research sample. (2) development of a football training program for youth players through a focus group of 9 experts. (3) The program's effectiveness was evaluated by 7 experts. Data analysis included mean, standard deviation, and percentages.

Results: Key findings include: (1) Variations in team performance during the 2024 Men's European Football Championship, with Spain leading in total goals (15) and Switzerland achieving the highest shooting accuracy (36.21%). (2) The expert focus group recommended training emphasis on passing precision, purposeful possession, attacking overloads, spatial exploitation, compact defending, quick transitions, technical versatility, and tactical understanding for youth players aged 13-14. (3) The developed training program received high evaluations, particularly in age-appropriate development (4.86 ± 0.38), attacking principles (4.86 ± 0.38), and defending principles (4.86 ± 0.38).

Conclusion: The study provides a football training program for youth players aged 13-14, derived from the 2024 Men's European Football Championship analysis and validated by expert evaluation, designed to improve youth football development.

Keywords: Football Training Program; Game Statistical Analysis; Youth Aged 13-14

Introduction

Recent research has shown that effective player development requires training programs that closely mimic the demands of elite competition, including physical, technical, and tactical aspects. Youth training must adapt to the fast pace, flexible positioning, and quick transitions seen in modern European football. Incorporating game analysis into training design offers a scientific way to connect training exercises with real match situations. This research aims to create a framework for youth training programs using data from the 2024 European Championship, specifically for Chinese youth development, where traditional methods have struggled to produce top international players (Zhou & Zhang, 2023).

Modern football is seeing a narrowing of the gap between elite and average performance, which requires new, evidence-based training methods. The 2024 Men's European Football Championship offers a valuable opportunity to study current tactical trends, physical demands, and technical requirements at the highest level. This study aims to develop a training program that uses data from the Euro 2024 competition to create evidence-based training protocols. Studies show that successful teams demonstrate specific patterns in high-intensity running, pressing, and transitions (Casamichana et al., 2019). Bradley et al. (2022) found that successful teams in major tournaments consistently show superior tactical periodization and position-specific conditioning. The Euro 2024 tournament displayed changes in playing styles, with successful teams having better physical abilities that aligned with tactical goals (Fernandez-Navarro et al., 2020). This research uses a mixed-method approach, combining quantitative GPS and tracking data with qualitative tactical analysis to identify key performance indicators from Euro 2024. The resulting training framework combines periodized physical development, tactical understanding, and technical skill development within realistic game scenarios (Clemente et al., 2020). By linking competition demands with



training design, this approach aims to bridge the gap between match analysis and practical coaching. The significance of this study is its translation of tournament analysis into structured development plans that can be used at various levels of play. As Castellano and Casamichana (2016) state, using match-derived insights is essential for improving player development.

Analyzing elite football competitions provides valuable information for creating evidence-based training programs (Rein & Memmert, 2016). This method allows coaches to move beyond traditional training methods and use preparation strategies that directly address the needs of the modern game (Casal et al., 2019). The tactical innovations seen during the tournament, along with advanced physical performance metrics, provide a comprehensive model for training design that balances technical skill development with the specific physical requirements of modern football (Aquino et al., 2017). Teams that demonstrate tactical flexibility, positional interchangeability, and effective transition play offer valuable models for training environments (González-Víllora et al., 2015). The goals of this research are to identify key performance indicators of successful Euro 2024 teams, examine the physical and technical demands of elite competition, and apply these findings to create a systematic training methodology. This connection between competition analysis and training design will enable coaches to develop more effective preparation programs that address the evolving nature of the game and enhance player readiness for the demands of modern football (Sarmiento et al., 2018). As sports science advances, youth football development requires evidence-based approaches that align with competition demands and age-appropriate development frameworks. When designing youth development programs, coaches must consider the individual readiness of athletes and follow Long-Term Athlete Development (LTAD) principles. The LTAD model emphasizes progressive, stage-appropriate training that progresses from basic movement skills to sport-specific excellence (Ford et al., 2021). Youth development plans that incorporate game analyses must balance technical preparation with physical and cognitive maturation. Recent research by Beato et al. (2023) shows that training models from elite competition analysis needs careful adaptation for youth contexts to prevent burnout and overtraining while maximizing potential. The physical, technical, and tactical demands observed in Euro 2024 matches reveal evolving patterns of play characterized by increasing intensity, positional fluidity, and rapid transitions (González-Víllora et al., 2022). However, youth coaches should avoid simply replicating professional models and instead focus on developmentally appropriate training that gradually introduces competitive elements (O'Sullivan & Atkins, 2021). Effective youth development programs should include small-sided games that simulate tournament patterns while adjusting factors like pitch size, player numbers, and rules to suit developmental stages (Clemente et al., 2020). By systematically integrating competition analysis within age-appropriate frameworks, coaches can create training programs that prepare young athletes for long-term progress without compromising their development.

This research aims to establish an evidence-based training framework derived from a thorough analysis of elite performance patterns in the 2024 Men's European Football Championship. By examining tactical innovations, physical demands, technical execution, and strategic approaches of successful teams, the study seeks to develop a systematic youth development program tailored for Chinese football academies. This methodological approach bridges the gap between elite competition analysis and practical training implementation, providing a scientifically grounded pathway to excellence that adapts European best practices to meet the developmental needs of young Chinese players pursuing high-level performance.

Objectives

The objectives of this study were as follows:

1. To study game competition statistics from the 2024 Men's European Football Championship.
2. To develop a Football Training Program based on competition analysis of the 2024 Men's European Football Championship.
3. To confirm the effectiveness of the Football Training Program derived from this analysis.



Literature review

The development of age-appropriate training programs for youth footballers represents a critical component in the long-term athlete development (LTAD) framework. This review examines contemporary research on designing training programs for U13-14 players based on competition analysis of elite football, specifically focusing on insights from the 2024 Men's European Football Championship. The integration of modern football principles with developmentally appropriate training methodologies can significantly enhance the technical, tactical, and physical development of young players in this crucial formative stage.

Modern Football Principles

Modern football has evolved significantly in recent years, characterized by increased game intensity, tactical sophistication, and technical demands. According to Fernandez-Navarro et al. (2016), elite football now features higher pressing, positional play, and rapid transitions between attack and defense phases. These elements were prominently displayed during the 2024 European Championship, where successful teams demonstrated exceptional tactical flexibility and technical execution under pressure. Rein and Memmert (2016) highlight that modern football tactics have shifted toward more fluid positional systems, requiring players to possess versatile skill sets and tactical understanding. This evolution necessitates youth training programs that develop adaptable players capable of functioning within complex tactical frameworks while maintaining technical proficiency.

Long-Term Athlete Development for U13-14 Players

The U13-14 age group represents a critical developmental period in youth football. Ford et al. (2020) identify this stage as the "Training to Train" phase, where players develop sport-specific skills and begin to understand tactical concepts more deeply. This period coincides with significant physical changes during puberty, requiring careful consideration of biological maturation in training design. O'Sullivan and Atkins (2018) emphasize that training programs for this age group should balance technical skill development with increasing tactical awareness while accounting for varying maturation rates among players. They advocate for a constraints-led approach that allows players to discover solutions within game-realistic scenarios rather than through overly prescriptive coaching.

Competition Game Analysis of the 2024 Men's European Football Championship

The 2024 European Championship provided valuable insights into contemporary elite football. Successful teams demonstrated:

1. Positional flexibility with players comfortable in multiple roles
2. Effective high pressing and counter-pressing systems
3. Rapid transitions between attacking and defensive phases
4. Technical excellence under pressure
5. Strategic set-piece execution

Castellano and Casamichana (2021) note that competition analysis at elite levels can inform youth development by identifying key performance indicators and evolving tactical trends. However, they caution against direct application without appropriate developmental modifications.

Developing Training Programs for U13-14 Players

Integrating insights from elite competition analysis into youth training requires careful adaptation to developmental needs. Práxedes et al. (2019) demonstrate that small-sided games modified to emphasize specific tactical principles can effectively develop decision-making abilities in young players while maintaining appropriate physical demands. Clemente et al. (2020) suggest that training programs for U13-14 players should:

1. Emphasize technical development in game-realistic contexts
2. Introduce tactical concepts progressively through modified games
3. Include appropriate physical conditioning integrated with technical-tactical work
4. Develop game intelligence through problem-solving scenarios
5. Maintain a positive learning environment that encourages creativity

Practical Applications

Based on the analysis of the 2024 European Championship and contemporary research, an effective training program for U13-14 players should include:

1. Small-sided games that replicate specific tactical situations observed in elite competition
2. Technical training under progressive pressure conditions
3. Position-specific training combined with positional rotation
4. Game-based conditioning that develops appropriate physical attributes
5. Video analysis sessions using simplified examples from elite competition
6. Guided discovery approaches to tactical understanding

Conclusion

The development of training programs for U13-14 players based on elite competition analysis represents a valuable approach when appropriately adapted to developmental needs. The 2024 European Championship highlighted the continued evolution of modern football principles that should inform youth development while respecting the LTAD framework. By carefully balancing technical, tactical, physical, and psychological development within age-appropriate contexts, coaches can prepare young players for the demands of contemporary football while fostering their long-term development.

Conceptual Framework

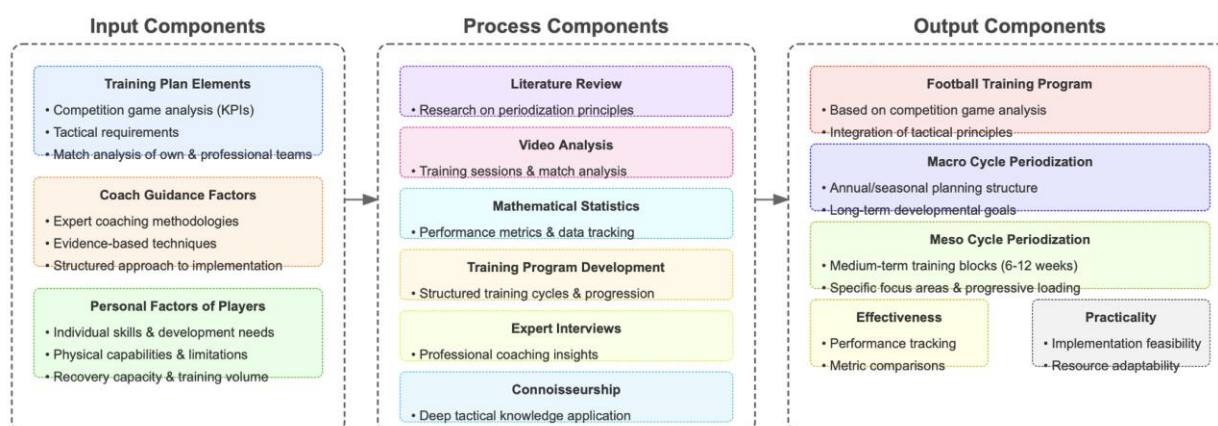


Figure 1 Conceptual framework for football training program development

Methodology

This study employed a mixed-methods research approach, combining a survey with the analysis of modern football factors to inform the training and development of football training programs. The research received ethical approval for human participation (Approval number 2567/164(14)) from the Office of the Committee for Research Ethics (Social Sciences), Faculty of Education, Bangkokthai University.

Population and Sample

Population: This study analyzed the performance of the sixteen teams that reached the quarterfinals in the 2024 European Football Championship. The analysis focused on an in-depth examination of these teams' technical abilities in both offensive and defensive play.

Sample:

1. Analysis of game statistics: Purposive sampling was employed. As of November 29, 2024, 184 athletes from 8 teams of the quarter-final round were selected as the research sample.
2. Focus Group Informants: Nine individuals participated in the focus group, comprising seven national-level football coaches and two sports scientists. These participants were recruited through the snowball sampling method. The inclusion criteria required that coaches have experience in youth football



training, and sports scientists have a minimum of ten years of training experience. That provided advice and information on creating a training program that was relevant and had training content that was appropriate for 13–14-year-olds.

3. Interview Informants: Seven individuals participated in the training program evaluation interviews. Two were selected from the focus group participants who were youth football coaches currently active in coaching. Three additional youth football coaches and two sports scientists working with sports teams were also included. All informants had a minimum of ten years of experience in youth football coaching. To evaluate whether the program was relevant to the objectives and training activities, and whether the training intensity was appropriate for 13–14-year-olds.

Research Instruments

The research instruments used in this study are as follows:

1. Record form of Game statistical analysis about football principles such as Attempts accuracy and effectiveness, score effectiveness, Distribution effectiveness, attacking effectiveness, defending statistics, and Goalkeeping statistics. In the part of game analysis with full match VDO with The Metrica Sports Play Base.

2. Semi-structured interview form for the Focus Group developed by the researcher regarding the development of football training programs for the 13-14 age group. The interview consisted of 5 parts: Part 1: Personal Information of the Interviewee, Part 2: Coaching Approaches and Philosophy, Part 3: Application of Football Principles in Training, Part 4: Youth Player Development, and Part 5: Coach Growth and Learning. The content validity of the interview form was evaluated by three experts, yielding a content validity value of .80.

3. Effectiveness and appropriateness evaluation form for the Connoisseurship method developed by the researcher. The evaluation criteria used a 5-level rating scale according to the Likert method. The content validity of the interview form was evaluated by three experts, yielding a content validity value of 1.00.

Data Collection

The researcher collected the following data:

1. Collected secondary data and analyzed competition statistics according to football principles from UEFA.com statistical reports of the eight teams competing in the quarterfinals.

2. Gathered results from full-match video analysis according to football principles of the eight teams that reached the quarterfinals.

3. Collected opinions and recommendations through a focus group meeting with nine experts to develop a football training plan for the U13-14 level by applying game analysis results to the training program. Data were recorded using interview and discussion forms.

4. Gathered evaluation results regarding the effectiveness and appropriateness of the football training program for U13-14 players through connoisseurship interviews with seven experts in youth football coaching and sports science.

Data Analysis

The statistics used in this research were Mean, standard deviation, and percentage for data analysis.

Research Process

This research employed a mixed-methods approach combining quantitative and qualitative methods to develop an effective football training program for youth players aged 13-14 years. The process followed these sequential steps:

1. Game Analysis Phase: Systematic analysis of UEFA Euro 2024 quarter-finalist teams' performance, Collection of secondary data of technical and tactical data using official UEFA statistics, In-depth video analysis using Metrica Sports Play Base software, Classification of findings according to established football principles.

2. Program Development Phase: Organization of focus group discussions with nine qualified experts, Synthesis of game analysis findings into practical training applications, Development of age-



appropriate training modules for U13-14 players, and Creation of progressive skill development sequences based on elite-level patterns.

3. Program Validation Phase: Connoisseurship evaluation by seven qualified youth football experts, Assessment of program effectiveness, appropriateness, and practicality, Rating of training components using standardized evaluation criteria, Collection of qualitative feedback for program refinement.

This methodological approach ensures that the resulting football training program for U13-14 players was both scientifically sound and practically applicable, representing a valuable contribution to youth football development practices based on current elite performance trends.

Results

The research findings are structured into three main parts: analysis of the 2024 Men's European Football Championship, development of a training program for youth athletes (13-14 age group), and evaluation of the training program's effectiveness.

1. Analysis of the 2024 Men's European Football Championship

The analysis of the quarter-final teams in the 2024 Men's European Football Championship revealed several key performance statistics:

1. Spain recorded the highest number of goals (15) and total attempts (123).
2. Switzerland demonstrated the highest shooting accuracy (36.21%) and effectiveness (38.10%), despite having the fewest total attempts (58).
3. Germany excelled in passing accuracy (91.16%).
4. Portugal dominated possession (64.80%).
5. Spain recovered the most balls (290) defensively.
6. England had the highest tackle success rate (46.91%).
7. France conceded the fewest goals (3) and had the lowest goal conceded percentage (19%).

The video analysis of the 2024 European Football Championship revealed key tactical approaches and principles. Teams employed diverse offensive strategies, including build-up play, playing over the press, and utilizing formations like 1-3-2-2-3 to create space. Chance creation involved finding space between lines and rotations between full-backs and wingers. Defensively, teams used high pressing, mid-block, and low-block strategies, with man-to-man pressing and formations like 1-4-4-2 and 1-4-3-3 for compactness.

Transitions between attack and defense were crucial, with teams employing rest defense structures and counterpressing. Set plays, such as corners and throw-ins, were significant for scoring. Key principles highlighted were creating space through formations and movement, defensive organization with compact shapes and pressing, effective transitions, and maximizing set-piece opportunities.

2. Development of Training Program

A focus group of 9 experts developed the football training program for youth athletes (13-14 age group). The experts emphasized several key football principles:

1. Passing precision and purposeful possession.
2. Intelligent movement patterns and tactical structures in attack.
3. Defensive organization and transitions.
4. Technical versatility in finishing and build-up plays.
5. Shooting efficiency and crossing precision.
6. Tackling technique and decision-making.

Based on the analysis of the 2024 European Football Championship, experts recommend focusing the training of youth players aged 13-14 on various aspects, including passing accuracy, purposeful possession, attacking overloads, exploiting space, compact defending, rapid transitions, technical versatility, and tactical understanding. The developed training program has been evaluated as highly effective, particularly in terms of age-appropriate development, attacking principles, and defending principles. This program aims to develop youth players by integrating insights from the competition



analysis into practical application and is designed to enhance the development of young players. The program is based on an analysis of the playing styles of successful teams in the 2024 European Football Championship.

In addition, this program takes into account the needs of youth players and focuses on developing their skills and abilities in an age-appropriate manner."

Table 1 The focus group conclusions for developing a football training program following the principles of football play for youth athletes in the 13-14 age group are presented in the table below.

Principles of Football play	Age Group	
	U13	U14
Formation 1-4-3-3	*****	*****
Attacking Focus		
1. Create 1v1, 2v1 and overload	*****	*****
2. Pass or dribble forward when possible, or hold the ball.	*****	*****
3. Push the defensive line up/support the attack, and take preventative action.	*****	*****
4. Utilizing space and creating triangles.	*****	*****
5. Create diagonal passing lines.	*****	*****
6. Move the ball from high pressure to low pressure	*****	*****
7. Look to play behind, around, and/or through. Break lines	*****	*****
8. Make runs behind lines, get numbers into the box, vary the type of runs (Near, far, cutback)	*****	*****
9. Create combinations and midfield rotations.	***	*****
Positive Transition Focus		
1. Pass or dribble forward.	*****	*****
2. Create passing lines.	*****	*****
3. Push the defensive line up/support the attack, and take preventative action.	*****	*****
4. Keep the ball when you cannot play forward.	*****	*****
Defending Focus		
1. Pressure the player with the ball.	*****	*****
2. Make it compact.	*****	*****
3. Keep it compact.	*****	*****
4. Always press in the identified situation.	*****	*****
5. Outnumber the opponent.	*****	*****
6. Provide cover and delay the opponent's attack when outnumbered	*****	*****
7. When necessary, switch from zonal marking to man marking.		***
8. Stay in the defensive zone when the opponent changes position.		***
9. Anticipating the long ball played behind the defensive line.	*****	*****
10. The defensive line moves as a collective unit.	*****	*****
11. Take anticipative attacking action.		***
Negative Transition Focus		
1. Apply pressure on the ball immediately after losing it, using the player closest to the situation.	*****	*****
2. Make a play prediction	*****	*****



Principles of Football play	Age Group	
	U13	U14
3. Get organized and balanced as quickly as possible.	*****	*****
4. Make it compact (Horizontal& Vertical)	*****	*****
5. Delay the opponent's attack and deny space behind when outnumbered.	*****	*****

Note. * =Training Volume

Table 2 The meso cycle phase of attacking focus

Monthly	week	Topic for training focus	
		Tactical	Technical
January	1	1. Create 1v1, 2v1 and overload 2. Pass or dribble forward when possible or hold the ball.	- Moving with the ball (Dribbling & feinting/Running with ball) - Turning - Passing - Receiving/first touch - Finishing
	2		
	3		
	4		
February	1	3. Push the defensive line up/support the attack, and take preventative action.	
	2		
	3		
	4		
March	1	4. Utilizing space and creating triangles. 5. Create diagonal passing lines.	- Turning - Passing - Crossing - Receiving/first touch - Control
	2		
	3		
	4		
April/ May	1	6. Move the ball from high pressure to low pressure	
	2		
	3		
	4		
June/ July/August	1	7. Look to play behind, around, and/or through. Break lines	
	2		
	3		
	4		
September	1	8. Make runs behind lines, get numbers into the box, vary the type of runs (Near, far, cutback)	- Moving with the ball (Dribbling & feinting/Running with ball) - Turning - Passing - Crossing - Receiving/first touch - Control - Finishing
	2		
	3		
	4		
October	1	9. Create combinations and midfield rotations.	
	2		
	3		
	4		
November/ December	1		
	2		



Monthly	week	Topic for training focus	
		Tactical	Technical
	3		
	4		

Table 3 The meso phase of positive transition focus

Monthly	week	Topic for training	
		Tactical	Technical
January/ February March/April	1	1. Pass or dribble forward.	- Moving with the ball (Dribbling & feinting/Running with ball)
	2		- Turning
	3		- Passing
	4		- Receiving/first touch - Finishing
May/June/July	1	2. Create passing lines.	- Passing
	2		- Receiving/first touch
	3		
	4		
August	1	3. Push the defensive line up/support the attack and take preventative action.	- Moving with the ball (Dribbling & feinting/Running with ball)
	2		- Turning
	3		- Passing
	4		- Receiving/first touch - Finishing
September/October	1		
	2		
	3		
	4		
November/December	1	4. Keep the ball when you cannot play forward.	
	2		
	3		
	4		

Table 4 The meso phase of defending focus



Monthly	week	Topic for training	
		Tactical	Technical
January	1	1. Pressure the player with the ball.	<ul style="list-style-type: none">• Pressing• Challenging
	2		
	3		
	4		
February/March	1	2. Make it compact.	<ul style="list-style-type: none">• Intercepting• Marking• Covering/recovering
	2	3. Keep it compact.	
	3		
	4		
April	1	4. Always press in the identified situation.	<ul style="list-style-type: none">• Intercepting• Pressing• Marking
	2		
	3		
	4		
May	1	5. Outnumber the opponent.	<ul style="list-style-type: none">• Challenging• Covering/recovering
	2		
	3		
	4		
June	1	6. Provide cover and delay the opponent's attack when outnumbered	
	2		
	3		
	4		
July	1	7. When necessary, switch from zonal marking to man marking.	
	2		
	3		
	4		
August	1	8. Stay in the defensive zone when the opponent changes position.	
	2		
	3		
	4		
September/October	1	9. Anticipating the long ball played behind the defensive line.	
	2		
	3		
	4		
November	1	10. The defensive line moves as a collective unit.	
	2		
	3		
	4		
December	1	11. Take anticipative attacking action.	
	2		
	3		
	4		

Table 5 The meso cycle of negative transition focus



Monthly	week	Topic for training	
		Tactical	Technical
January/ February/ March	1	1. Apply pressure on the ball immediately after losing it, using the player closest to the situation.	<ul style="list-style-type: none">• Intercepting• Pressing• Marking• Challenging• Covering/recovering
	2		
	3		
	4		
April/May	1	2. Make a play prediction	
	2		
	3		
	4		
June/July	1	3. Get organized and balanced as quickly as possible.	
	2		
	3		
	4		
August/ September	1	4. Make it compact (Horizontal& Vertical)	
	2		
	3		
	4		
October	1		
	2		
	3		
	4		
November/ December	1	5. Delay the opponent's attack and deny space behind when outnumbered.	
	2		
	3		
	4		

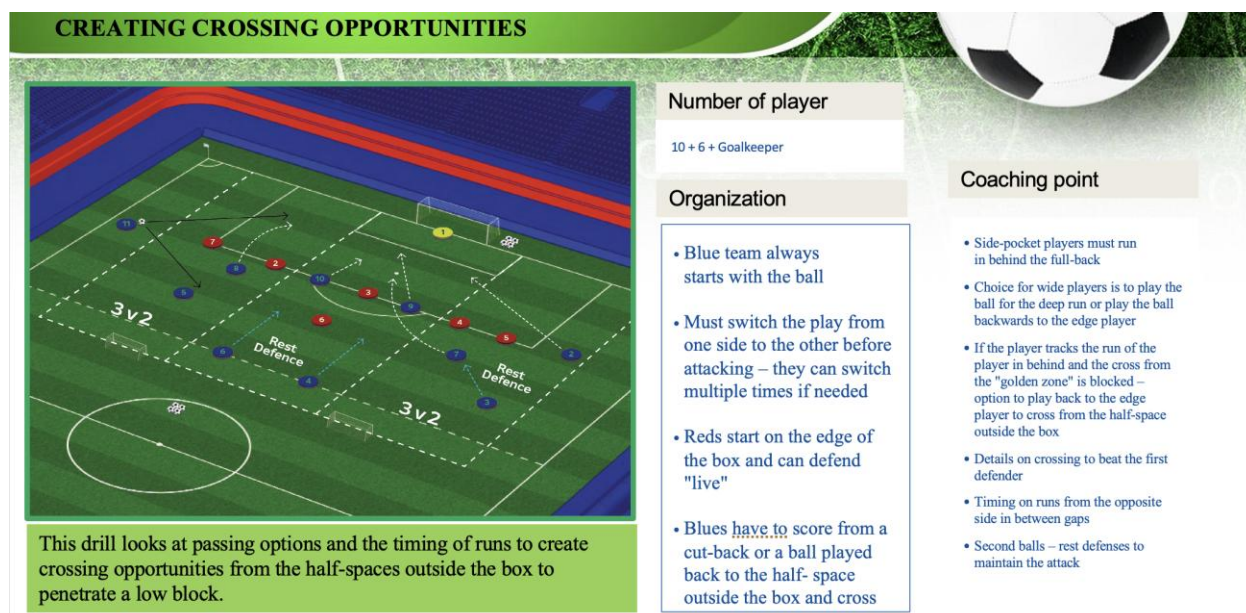


Figure 1 The attacking phase, training drill for creating crossing opportunities in the third zone.



Figure 2 The defense phase, training drill, the zone defending 6V5 attack vs defense: defending 2 goals.

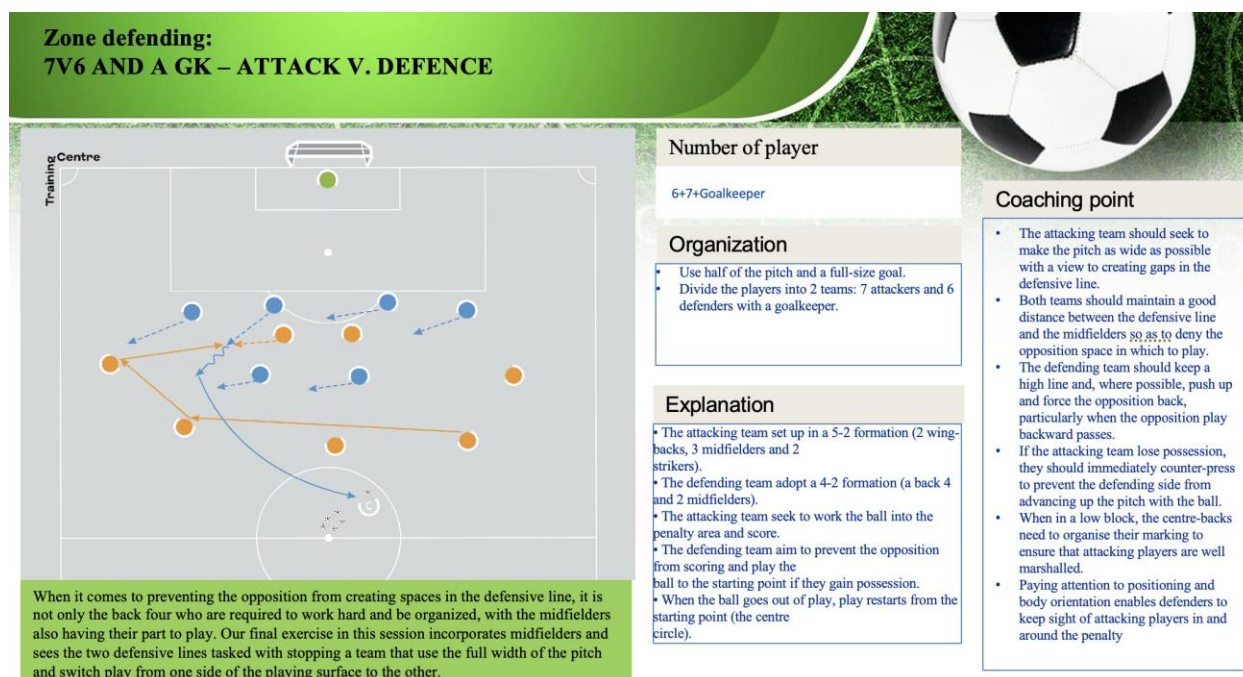


Figure 3 The defense phase, training drill 7V6 and a goalkeeper, attack VS defense.



Figure 4 The defense phase, training drill, counter pressing 7+1V6 possession game.

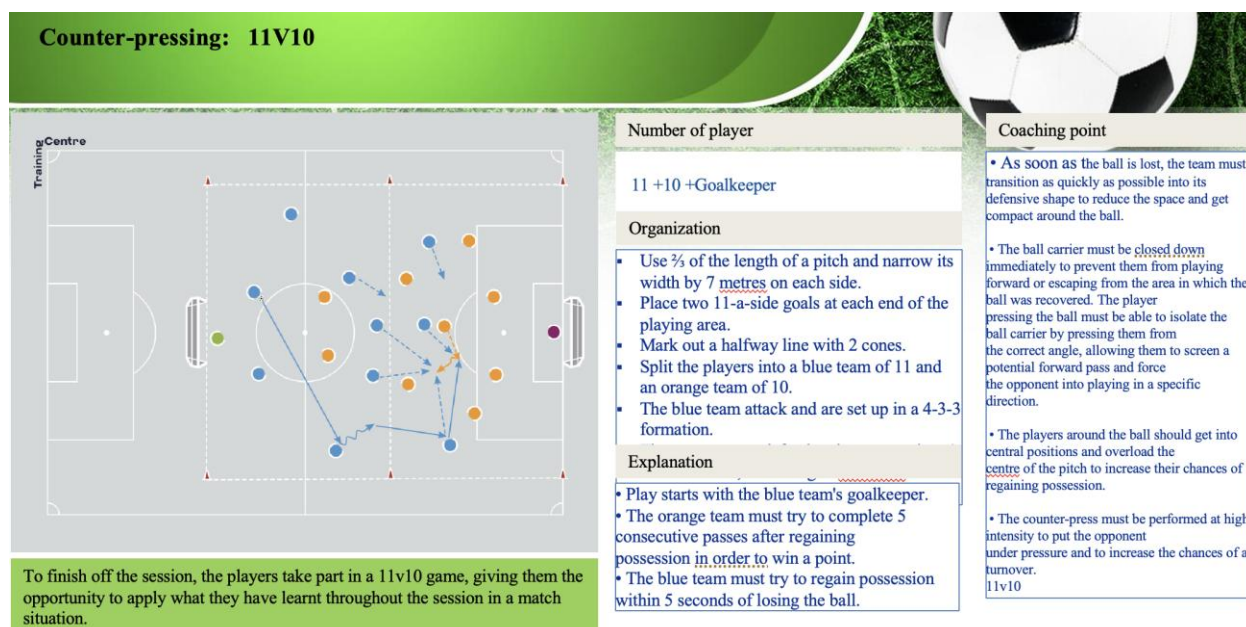


Figure 5 The defense phase, training drill, counter pressing 11V10.



Figure 6 The elements of a football training program for the 13-14 age group.

3. Evaluation of Training Program Effectiveness

The evaluation of the training program's effectiveness and appropriateness involved 7 experts. The results indicated that the program was generally well-received:

1. Age-appropriate development, attacking phase principles, and defending phase principles were rated as "most appropriate" (4.86 ± 0.38).
2. Macro planning elements, including player expectations (4.86 ± 0.38) and training methodology (4.71 ± 0.49), were also rated "most appropriate."
3. The overall effectiveness of the training program was rated 4.57 ± 0.53 .
4. Some areas, such as training load (4.00 ± 0.58), received slightly lower ratings but were still considered "very appropriate."

Discussion

The summary result of this study was as follows,



1. Study of the 2024 Men's European Football Championship: The analysis of the 2024 Men's European Football Championship quarterfinals revealed key performance indicators. Spain led in goals (15) and total attempts (123), while Switzerland had the highest shooting accuracy (36.21%). Germany excelled in passing accuracy (91.16%), and Portugal dominated possession (64.80%). Defensively, Spain recovered the most balls (290), England had the highest tackle success rate (46.91%), and France conceded the fewest goals (3). Tactical analysis showed diverse offensive and defensive strategies, emphasizing space creation, compact defending, and effective transitions.

2. Development of Training Program: A focus group of nine experts developed a football training program for 13–14-year-old youth players, emphasizing passing precision, purposeful possession, attacking overloads, spatial exploitation, compact defending, quick transitions, technical versatility, and tactical understanding. This program integrates insights from the 2024 European Championship to enhance youth player development. It focuses on age-appropriate skill and ability development, aiming to prepare young athletes by incorporating playing styles observed in successful elite teams.

3. Evaluation of Training Program Effectiveness: The training program's effectiveness was evaluated by seven experts, who generally rated it highly. Age-appropriate development, attacking principles, and defending principles all received "most appropriate" ratings (4.86 ± 0.38). Macro planning elements, including player expectations and training methodology, also scored well. The overall effectiveness was rated 4.57 ± 0.53 , indicating a robust and relevant program. While training load received a slightly lower rating (4.00 ± 0.58), it was still considered "very appropriate," suggesting minor areas for refinement.

The discussion of the research results can be divided into two parts as follows:

1. The training program demonstrates content validity and currency.

The football training program developed from the analysis of the 2024 Men's European Football Championship demonstrates significant content validity and aligns well with contemporary trends in football training. The program's emphasis on skill development, tactical understanding, and age-appropriate methodologies reflects current best practices in youth coaching. Content Validity The training program is grounded in empirical data derived from the performance metrics of elite teams, such as Spain and Switzerland, which highlights the importance of shooting efficiency, passing precision, and defensive organization. The focus on developing ambidexterity in finishing techniques and enhancing players' decision-making abilities is particularly relevant, as modern football increasingly demands versatility and adaptability from players (Lago-Peñas & Gómez-López, 2019). Furthermore, the integration of tactical scenarios that promote cognitive development aligns with the growing recognition of the mental aspects of the game, which are crucial for young athletes' overall development (Mackenzie & Cushion, 2012). Modern Football Trends: The program's structure incorporates progressive drills that emphasize quality over quantity, a principle that resonates with contemporary coaching philosophies. This approach is supported by research indicating that focused practice leads to better skill acquisition and performance outcomes (Macnamara & Maitra, 2019). Additionally, the emphasis on possession-based play and quick transitions reflects the tactical evolution seen in top-level football, where maintaining possession and exploiting defensive weaknesses are paramount (Roca et al., 2020). In conclusion, the training program not only adheres to the principles of effective youth coaching but also embraces the latest trends in football, ensuring that young athletes are well prepared for the demands of the modern game. By fostering a comprehensive understanding of both technical and tactical elements, this program was poised to enhance the development of youth players significantly.

2. The training program exhibits effectiveness and appropriateness. The football training program developed for youth athletes aged 13–14 demonstrates high effectiveness and appropriateness, as evidenced by the comprehensive analysis of performance metrics from the 2024 Men's European Football Championship. The program's design aligns with the developmental needs of this age group, focusing on both technical and tactical skills essential for their growth in the sport. One of the program's strengths is its emphasis on age-appropriate development, which received a high rating of 4.86 out of 5. This indicates that the



training methodologies are well-suited to the physical, mental, and social needs of young players (Bunchom Srisa-at, 2002). The incorporation of principles such as shooting efficiency, passing precision, and defensive organization reflects current best practices in youth training (Fernández et al., 2019). For instance, the focus on creating overloads and exploiting space through coordinated movement patterns is crucial for developing players' tactical understanding and decision-making skills (Hughes & Franks, 2005). Moreover, the program's structure, which includes drills for specific skills like crossing and defending, ensures that players not only practice but also understand the application of these skills in game situations. The positive feedback from expert evaluations regarding the effectiveness of drills for breaking through defensive lines and counter-pressing further supports the program's robustness (Bunchom Srisa-at, 2002).

Conclusion

This study successfully developed and validated a football training program for 13–14-year-olds. Based on the 2024 European Championship analysis and expert input, the program effectively enhances youth football development. Its high evaluation scores confirm its suitability and provide a strong framework for coaches, preparing young players for elite competition demands. Content Validity and Modern Football Trends: The training program boasts strong content validity, aligning with modern elite football trends. By integrating the 2024 European Championship data, it emphasizes shooting efficiency, passing precision, and defensive organization. This scientific grounding prepares young athletes for evolving game demands, fostering versatility and adaptability crucial for contemporary football. Effectiveness and Appropriateness for Youth Development, the program demonstrates high effectiveness and appropriateness for youth aged 13-14. Its design caters to developmental needs, focusing on essential technical and tactical skills. High ratings for age-appropriateness, attacking, and defending principles validate its suitability. Practical drills for skills like crossing and counter-pressing ensure comprehensive player growth.

Recommendation

In this study

1. Sample Size Limitations: The focus group consisted of only nine experts, which may not fully represent the diverse perspectives in football coaching and sports science.

Expanding the sample size could enhance the validity of the findings.

2. Data Collection Methods that rely solely on quantitative metrics may overlook qualitative insights. Incorporating player feedback and observational data could provide a more comprehensive understanding of training effectiveness.

3. Longitudinal Study Design: The research was cross-sectional, limiting insights into the long-term impact of the training program. A longitudinal approach could better assess the program's effectiveness over time and its influence on player development.

In future study

1. Longitudinal Studies: Future research should focus on longitudinal studies to assess the long-term impact of specific training methodologies on youth player development, particularly in skill retention and performance consistency over time.

2. Psychosocial Factors: Investigating the influence of psychosocial factors, such as motivation and teamwork, on youth athletes' performance and development can provide deeper insights into holistic training approaches.

3. Technology Integration that explores the integration of technology, such as performance analysis tools and wearable devices, in training programs could enhance data-driven decision-making and personalized coaching strategies for youth athletes.



References

- Aquino, R., Carling, C., Palucci Vieira, L. H., Martins, G., Jabor, G., Machado, J., & Puggina, E. (2017). Influence of situational variables, team formation, and playing position on match running performance in Brazilian professional soccer players. *Journal of Strength and Conditioning Research*, 31(8), 2159–2171. <https://doi.org/10.1519/JSC.0000000000001674>
- Beato, M., Stiff, A., Coratella, G., & Schena, F. (2023). Short-term effects of different tactical formations on physical and technical parameters in football players. *Biology of Sport*, 40(1), 111–118. <https://doi.org/10.5114/biolsport.2023.112209>
- Bradley, P. S., Ade, J. D., Di Mascio, M., & Sirdifield, S. (2022). The impact of tactical formations on physical and technical match performance in professional soccer. *Journal of Sports Sciences*, 40(3), 341–350. <https://doi.org/10.1080/02640414.2021.1970475>
- Bunchom Srisa-at. (2002). *Fundamental research* (7th ed.). Bangkok: Sukhothai Thammathirat Open University.
- Casal, C. A., Maneiro, R., Ardá, A., Marí, F. J., & Losada, J. L. (2019). Analysis of corner kick success in elite football. *International Journal of Performance Analysis in Sport*, 19(4), 575–591. <https://doi.org/10.1080/24748668.2019.1633397>
- Casamichana, D., Castellano, J., & Dellal, A. (2019). Influence of different training regimes on physical and physiological demands during small-sided soccer games: A pilot study. *Journal of Human Kinetics*, 69, 179–188. <https://doi.org/10.2478/hukin-2019-0016>
- Castellano, J., & Casamichana, D. (2016). What are the differences between the first and second halves in elite soccer? *International Journal of Performance Analysis in Sport*, 16(3), 907–914. <https://doi.org/10.1080/24748668.2016.11868935>
- Castellano, J., & Casamichana, D. (2021). Analysis of play in elite football using positional data: A systematic review. *International Journal of Environmental Research and Public Health*, 18(6), 2802. <https://doi.org/10.3390/ijerph18062802>
- Clemente, F. M., Afonso, J., & Sarmiento, H. (2020). The effects of small-sided soccer games on technical actions and skills: A systematic review. *Human Movement*, 21(1), 100–119. <https://doi.org/10.5114/hm.2020.93014>
- Fernández, J., Moreno, J. & García-Rubio, J. (2019). Influence of playing position and team formation on physical and technical match performance in professional soccer players. *Journal of Human Sport and Exercise*, 14(4), 888–900. <https://doi.org/10.14198/jhse.2019.144.06>
- Fernandez-Navarro, J., Fradua, L., Zubillaga, A., Ford, P. R., & McRobert, A. P. (2016). Attacking and defensive styles of play in soccer: Analysis of Spanish and English elite teams. *Journal of Sports Sciences*, 34(24), 2195–2204. <https://doi.org/10.1080/02640414.2016.1169309>
- Fernandez-Navarro, J., Zubillaga, A., Fradua, L., Ford, P. R., & McRobert, A. P. (2020). Influence of contextual variables and the team's style of play on goals scored in European professional soccer matches. *International Journal of Performance Analysis in Sport*, 20(1), 104–114. <https://doi.org/10.1080/24748668.2019.1709398>
- Ford, P. R., Carling, C., Garces, M., Marques, M., Miguel, C., Farrant, A., Stenling, A., & Williams, A. M. (2021). The developmental activities of elite soccer players aged under-16 years from Brazil, England, France, Ghana, Mexico, Portugal, and Sweden. *Journal of Sports Sciences*, 39(13), 1479–1487. <https://doi.org/10.1080/02640414.2021.1895830>
- Ford, P. R., Low, J., McRobert, A. P., & Williams, A. M. (2020). Developmental activities that contribute to high or low performance by elite soccer players. *Journal of Sports Sciences*, 38(1), 2–10. <https://doi.org/10.1080/02640414.2019.1697683>
- González-Víllora, S., Aranda, R., & García-Ceberino, J. M. (2022). Comparative study of technical and tactical actions in under-12 and under-16 elite football players. *International Journal of Environmental Research and Public Health*, 19(2), 705. <https://doi.org/10.3390/ijerph19020705>





- González-Víllora, S., Serra-Olivares, J., Pastor-Vicedo, J. C., & da Costa, I. T. (2015). Review of the tactical evaluation tools for youth players, assessing the tactics in team sports: Football. *SpringerPlus*, 4(1), 663. <https://doi.org/10.1186/s40064-015-1462-0>
- Hughes, M., & Franks, I. M. (2005). *Analysis of passing sequences, shots, and goals in soccer*. Routledge.
- Lago-Peñas, C., & Gómez-López, M. (2019). How important is it to score a goal? The influence of the scoreline on match performance in elite soccer. *Journal of Human Kinetics*, 66, 205–215. <https://doi.org/10.2478/hukin-2018-0058>
- 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>
- Macnamara, Á., & Maitra, M. (2019). The role of psychological characteristics in facilitating the pathway to elite performance in cricket. *Psychology of Sport and Exercise*, 45, 101546. <https://doi.org/10.1016/j.psychsport.2019.101546>
- O'Sullivan, M., & Atkins, C. (2018). The coaching process in soccer: An overview and practical strategies. In C. Collins & M. O'Sullivan (Eds.), *Contemporary Issues in Sport Coaching* (pp. 101–116). Routledge.
- O'Sullivan, M., & Atkins, C. (2021). Soccer coaching and the complexity of player development. *International Journal of Sports Science & Coaching*, 16(2), 378–387. <https://doi.org/10.1177/1747954120937351>
- Práxedes, A., Moreno, A., Gil-Arias, A., Claver, F., & Del Villar, F. (2019). The effect of a comprehensive teaching program, based on tactical principles, on physical and physiological variables in young football players. *Journal of Human Kinetics*, 69(1), 299–307. <https://doi.org/10.2478/hukin-2019-0013>
- Rein, R., & Memmert, D. (2016). Big data and tactical analysis in elite soccer: Future challenges and opportunities for sports science. *SpringerPlus*, 5(1), 1410. <https://doi.org/10.1186/s40064-016-3108-2>
- Roca, A., Ford, P. R., McRobert, A. P., & Williams, A. M. (2020). Perceptual-cognitive skills and their interaction as a function of task constraints in soccer. *Journal of Sport and Exercise Psychology*, 42(5), 339–347. <https://doi.org/10.1123/jsep.2020-0121>
- Sarmiento, H., Clemente, F. M., Harper, L. D., Teoldo, I., Owen, A., Figueiredo, A. J., & Praça, G. M. (2018). Small-sided games in soccer – a systematic review. *International Journal of Performance Analysis in Sport*, 18(5), 693–749. <https://doi.org/10.1080/24748668.2018.1517288>
- Zhou, C., & Zhang, T. (2023). Analysis of spatio-temporal patterns in football using GPS tracking data. *International Journal of Sports Science & Coaching*, 18(1), 56–68. <https://doi.org/10.1177/17479541221117103>