# The Holistic and Partial Approach in Soccer Training: Integrating Physical, Technical, Tactical, and Mental Components: A Systematic Review

# El enfoque holístico y parcial en el entrenamiento de fútbol: integrando componentes físicos, técnicos, tácticos y mentales: una revisión sistemática

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**Abstract.** This systematic review was conducted to understand holistic soccer training that integrates physical, technical, tactical, and mental components in a training model. Systematic reviews were conducted using the Web of Science, Scopus, SPORTDiscus, and PubMed databases following the PRISMA guidelines. The reviewed articles were searched from 2021 to 2024. Twelve articles were considered eligible for systematic review. The review found nine articles analyzing the impact of the physical component, two articles analyzing the impact on the technical and physical components, and one article analyzing the impact of the physical and mental components. Small-sided games (SSG) and high-intensity interval training (HIIT) were the most researched models for the studied training methods. The study concludes that the partial approach focusing on the physical is dominant compared to the holistic approach. Although debate exists, both approaches favorably affect the long-term development of athletes. Then further research is needed that applies a holistic approach to add insight into soccer coaching.

Key words: soccer, holistic training, physical, technical, tactical, mental.

Resumen. Esta revisión sistemática se realizó para comprender el entrenamiento de fútbol holístico que integra componentes físicos, técnicos, tácticos y mentales en un modelo de entrenamiento. Se realizaron revisiones sistemáticas utilizando las bases de datos Web of Science, Scopus, SPORTDiscus y PubMed siguiendo las pautas PRISMA. Se buscaron artículos revisados entre 2021 y 2024. Se consideraron doce artículos elegibles para la revisión sistemática. La revisión encontró nueve artículos que analizan el impacto del componente físico, dos artículos que analizan el impacto en los componentes técnico y físico y un artículo que analiza el impacto de los componentes físico y mental. Los juegos reducidos (SSG) y el entrenamiento en intervalos de alta intensidad (HIIT) fueron los modelos más investigados para los métodos de entrenamiento estudiados. El estudio concluye que el enfoque parcial centrado en lo físico es dominante frente al enfoque holístico. Aunque existe debate, ambos enfoques afectan favorablemente el desarrollo a largo plazo de los atletas. Entonces se necesita más investigación que aplique un enfoque holístico para aportar conocimientos sobre el entrenamiento de fútbol.

Palabras clave: fútbol, entrenamiento holístico, físico, técnico, táctico, mental.

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## Introduction

The abilities required by soccer players can vary significantly due to factors like match intensity, duration, formation, team tactics, and player roles. As a result, tailored and well-planned physical training is considered crucial in preparing athletes for the demands of the game. This aligns with a study conducted by Pillitteri et al. (2023) on 19year-old footballers who found different loads and performances related to their playing position during training and match simulations. Coaches should consider the different physical demands of playing positions to design the most appropriate training program for players (Pillitteri et al., 2023). In addition, the study by Oliva-Lozano et al. (2022) shows that soccer players ideally have excellent physical abilities to play during matches. Physical components needed include cardiorespiratory endurance, muscle endurance, strength, speed, agility, power, and coordination. When attacking, transitioning, and defending, these physical components are very important and crucial. Therefore, proper physical training is needed to prepare players to avoid possible injuries while practicing and to have optimal physical abilities (Harsono, 2018; Sidik et al., 2019; Tudor, 2019). In addition, excellent physical abilities can also be influenced by mental aspects and the players' confidence level. According to Saidi et al. (2020), negative emotional conditions affect players' acute fatigue and negatively impact performance.

Another supporting factor in soccer achievement is tactics. Every team needs amateur and professional tactics training (Bulqini et al., 2016). Each team certainly has different tactics to win. In tactical training, the emphasis will usually be on the players' strategy, position, and movement in attack, transition, and defense. An effective tactic can enhance the team's ability to score goals and increase their chances of securing victory.

For this reason, tactics are a very important part of the training program. To be able to carry out tactics, good physical abilities are needed. In previous research, soccer players performed high-speed running (19.8–25.1 km/h) as far as  $461.83 \pm 160.15$  and fast running (>25.2 km/h) as far as  $155.89 \pm 97.13$  (Modric et al., 2019). The frequency of running during a match ranges from 31-33 times per player (Chmura et al., 2017; Miñano-Espin et al., 2017). In addition, players' speed requirements will vary depending on their position and playing characteristics (Velásquez-González et al., 2023). The highest physical demands typically occur when defenders are in the defensive phase, while midfielders and attackers experience increased demands during the attacking phase of the match. Additionally, research indicates differences in physical and technical performance distribution across various phases of play, with

variations observed in metrics such as distance traveled, speed, tackling frequency, handball occurrences, and kicking rates (Rennie et al., 2020). The results of this study provide a further understanding of the game's physical, technical, and tactical demands and can be used as a guide for coaching teams. According to Díez et al. (2021), variations in physical demands and technical-tactical actions in matches are important to train to achieve optimal team performance to win matches. The running of good tactics is strongly influenced by strong physical, technical, and mental abilities, so that technical, physical, tactical, and mental factors are components that are intertwined and cannot be separated (Bulqini et al., 2016).

In its application, training is needed that can cover all of these components, so that training will be more effective and efficient. Holistic physical training is needed by soccer teams who want to achieve maximum performance. Holistic training is an exercise that combines all the elements contained in the game of football. Most amateur and professional teams still separate physical, technical, tactical, and mental training separately. This is possible because there is a need for more information about holistic practices. When viewed from a theoretical point of view, many training models have been researched that are related to improving the performance of soccer teams, such as high-intensity interval training (HIIT), small-sided games (SSG), circuit training, plyometrics, fartlek, resistance training, and moderate-intensity continuous training. The results of this study prove that the exercise has proven effective in improving player performance. However, these studies are still focused on only a few components, and they are still partial. Partial practice is an exercise that focuses on one or two components contained in the game. Another study conducted by Vella et al. (2022) concluded that most studies have much information about physical requirements in matches but still do not fully understand how the results of player techniques and team tactics affect player movements. By understanding how these game elements interact, we can improve our understanding of in-game performance and provide better guidance in planning practice. In addition, if examined from a training planning perspective, according to Kinnerk et al. (2021), it is found that trainers need to be involved in research and theory to improve the quality of training session planning. On the other hand, research by Leduc et al. (2012), shows that the impact of trainer education modules on training practice varies depending on how much trainers engage in reflective learning and how they can transform their experiences cognitively, emotionally, and practically.

To answer the above problems, this study aims to review the literature on holistic physical training, which includes physical, technical, tactical, and mental components, so that it is expected to add to the body of knowledge for practitioners in the field. On the other hand, it can be a recommendation for academics to research and further develop a holistic soccer training model.

#### Methods

This study used a systematic review approach using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method, a practitioner's guide to systematic research with or without meta-analyses (Moher et al., 2015). Keywords and synonyms were entered in various combinations in the title, abstract, or keywords: (soccer OR football) AND ("physical training" OR "physical approach" OR "physical method") AND ("technical training" OR "technical approach" OR "technical method") AND ("tactical training" OR "tactical approach" OR "tactical method") AND ("mental training" OR "mental approach" OR "mental method"). These keywords are used so that the articles captured focus on soccer training that uses physical, technical, tactical, and mental approaches. Searching for articles is carried out comprehensively through a predetermined database. Then the duplicated articles will be deleted manually or through the application. The first and second authors are tasked with reviewing articles by predetermined review topics. Furthermore, the first, second, and third authors analysed the selected articles thoroughly.

## Eligibility Criteria

The inclusion and exclusion criteria can be found in Table 1, according to the PICOS approach (Cohen, 2013)

Table 1.
Inclusion and Exclusion Criteria.

	Inclusion Criteria	Exclusion Criteria		
Population	Male and female participants aged between 14 and 23 years took part in	Male and female participants aged beyond 14 to 23 years were e		
	soccer training	cluded.		
Intervention	Studies that involve physical, technical, tactical, and mental training in the	Studies that do not involve physical, technical, tactical, and mental		
	context of soccer practice	training in the context of soccer practice		
Comparator	No specific comparisons were required in the inclusion criteria	No specific exclusion criteria were applied regarding the comparisons		
Outcome	Studies reporting outcomes related to training goals in technical, physical,	Studies that do not report results relevant to training objectives in		
	tactical, or mental aspects of soccer	technical, physical, tactical, or mental aspects of soccer		
Study design	Utilizing appropriate research methods, such as controlled trials and ran-	Articles other than original research (e.g., reviews, letters to editors,		
	domized trials	trial registrations, proposals for protocols, editorials, book chapter		
	domized triais	and conference abstracts)		
Additional criteria	Anticles written in English	Studies written in any		
	Articles written in English	language other than English		

## Sources of Information

The reviewed articles were searched from 2021 to 2024 using three databases, namely Web of Science (WoS), Scopus, SPORTDiscus, and PubMed. To facilitate the search, this research uses the following keywords: (1) Soccer physical exercise; (2) Soccer technique training; (3) Soccer tactics training; (4) Soccer mental training. Once a search is performed, the results are exported to EndNote Web, and duplicates are removed.

## Study Selection and Data Extraction Process

A data extraction form was created using Microsoft Excel software (Microsoft Corporation, Redmond, WA, USA). The Excel sheet was used to assess inclusion requirements and then tested for all selected studies. After obtaining the manuscript, the first author reviewed the title and abstract to identify studies relevant to the research objectives. Next, the second and third authors extracted data regarding participant characteristics (i.e., number and age), research methods, study objectives (technique, physical, tactic, mental), training methods used, measures assessed, and main outcomes.

#### Data Item

The following data items were extracted: (i) type of study design and age group; (ii) training goals; (iii) characteristics of training method or result (physical, technical, tactical, and mental); (iv) characteristics of the experimental approach to the problem, procedures and settings of each study.

Table 2.
Evaluation of the methodological quality of each included study (Dechechi et al., 2022)

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	Question	Answer	Score
Q1	The objectives of the study are clearly defined	Yes = 2 $Partially = 1$ $No = 0$	0-2
Q2	Characteristics of the participants are presented (level, country, position, age, height, body mass)	Yes = 2 $Partially = 1$ $No = 0$	0-2
Q3	The physical and/or physiological and/or technical/tactical variables are clearly informed	Yes = 2 $Partially = 1$ $No = 0$	0-2
Q4	The reliability of the system/equipment is (i) not mentioned; (ii) mentioned (with a quote from previous study/studies); or (iii) measured under local conditions where data collection occurred	Measured = 2 Mentioned = 1 Not mentioned = 0	0-2
Q5	Detailed results (e.g., mean and standard deviation, confidence interval) are presented	Yes = 2 $Partially = 1$ $No = 0$	0-2
Q6	Insightful conclusions (clear and practical applications and future directions) are presented	Yes = 2 $Partially = 1$ $No = 0$	0-2
	Total		0-12

### Assessment of Methodological Quality

The methodological assessment of each study included in the review was conducted following the procedures outlined in previous studies by Dechechi et al. (2022), using a modified version of the scoring system described in Table 2. Six questions (Q1-Q6) were rated on a 3-point scale ('yes' = 2 points; 'in part' = 1 point; 'no' = 0 points), except Q4. The total score obtained from all the questions (ranging from 0 to 12 points) was used to classify the methodological quality. Additionally, the scores were converted to a percentage scale. A threshold of >75% was considered appropriate for determining satisfactory methodological quality scores (Liberati et al., 2009). The first and second authors independently provide scores for the articles included in this study.

#### Result

# Study identification and selection

Database searches (Web of Science (WOS), Scopus, SPORTDiscus, and PubMed) identified 221 initial articles. The chart below illustrates the process of identifying and selecting articles collected to obtain the relevant ones for the systematic review stage.

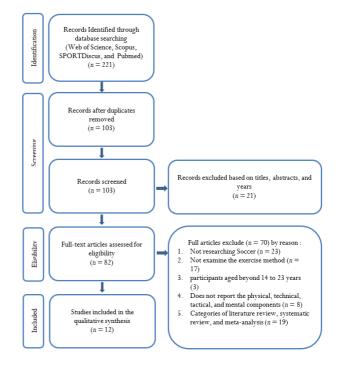


Figure 1. PRISMA flowchart in the current systematic review.

Based on the diagram above, out of 221 articles, 118 duplicate studies were deleted automatically or manually. The remaining 103 articles were then screened. A total of 21 articles were deleted because they did not match the title, abstract, and year. After reading the text in full, 70 articles were excluded for several reasons. These included studies that did not focus on soccer or training methods, studies with participants outside the age range of 14 to 23 years, studies that did not report on physical, technical, tactical, and mental components, as well as studies categorized as literature reviews, systematic reviews, and meta-analyses.

So, that leaves up to 12 articles that meet the requirements to continue a systematic review (Figure 1).

# Methodological Quality

Table 3 below presents the results of an analysis of the methodology quality in the articles included in the systematic review.

## Study Characteristics Included Review

A total of 12 articles that were included in the systematic review stage exhibited several characteristics. Table 3 briefly presents the age data, research objectives, research design, measurements, training approach, training methods, and results.

Table 3. Analysis of the methodological quality of the studies.

Article	Q1	Q2	Q3	Q4	Q5	Q6	Total	%
Article	0-2	0-2	0-2	0-2	0-2	0-2	0-12	100
(Hasan, 2023)	1	1	2	1	2	2	9	75
(D'Isanto et al., 2022)	2	2	1	0	2	2	9	75
(Nayıro <b>ğ</b> lu et al., 2022)	2	2	2	0	1	2	9	75
(Ouertatani et al., 2022)	2	1	2	1	2	2	10	83
(Arslan et al., 2021)	2	1	2	1	1	2	9	75
(Emirzeoğlu & Ülger, 2021)	2	1	2	2	2	2	11	92
(Arslan, Soylu, et al., 2021)	2	1	2	1	1	2	9	75
(Hůlka & Strniště, 2021)	2	2	2	0	1	2	9	75
(Maciejczyk et al., 2021)	2	1	2	1	1	2	9	75
(Pamungkas et al., 2024)	2	2	2	1	1	2	10	83
(Hasan et al., 2021)	2	2	2	1	1	1	9	75
(Fang et al., 2021)	2	2	2	0	1	2	9	75
Mean±SD	1.92±0.29	$1.50\pm0.52$	1.92±0.29	$0.75\pm0.62$	1.33±0.49	1.87±0.35	9.33±0.65	77.75±5.45

Table 4.

Characteristics of studies included in the review.

Characteristics of studies included in the review.						
Study	Age-Group	Research Objective	Research Design	Training Method	Result	
(Hasan, (2023)	Aged 22.95±1.26 years (PT), 22.20±1.84 years (ST), 22.36±1.60 years (CT)	Compared the Effects of Plyometric Training (PT) vs. Strength Training (ST) on Muscle Strength, Sprinting, and Lower Leg Functional Performance in Football Players	Randomized Controlled Trial	PT vs. ST	The greatest increases in muscle strength, sprinting, and lower limb functional performance were observed in ST, followed by PT and the Control group	
(D'Isanto et al., 2022)	Aged 15.81±0.83 years	Improved Qualitative (Strength) and Quantitative (Technique) Aspects of Sports Achievement	One-Group Pretest-Posttest Design	HIIT	Significant for increased Strength, Passing and Finishing	
(Nayıroğlu et al., 2022)	Aged 18.63±2.36 years	Compared the effects of running-based small-sided play (SSG) and high-intensity interval training (HIIT) on the body composition and physical fitness of young female soccer players	Randomized Parallel Study Design	SSG vs. Running- Based HIIT	SSG and HIIT are both effective for improving vertical and horizontal jumping ability, direction changes, and aerobic capacity status as measured in progressive and intermittent multistage tests in young soccer players	
(Ouertatani et al., 2022)	Aged 16.7±0.9 years	Compared the effects of high-intensity interval training (HIIT) and small-sided game (SSG) programs on physiological and psychological responses in youth soccer players	Two-Group Pretest-Posttest Design	HIIT vs. SSG	SSG has a better effect on the physical and psychological component than HIIT	
(Arslan et al., 2021)	sSG+HIIT group (14.67±0.6 5 years old) and HIIT+SSG group (14.58±0.7 9 years old)	Compared the sequence of effects of combined small-sided games (SSG) and high-intensity interval training (HIIT) on young soccer players' physical performance, psychophysiological responses, and technical skills. SSG+HIIT and HIIT+SSG.	A Two-Group, Matched, Experimental Design	SSG+HIIT vs. HIIT+SSG	This study shows that the combination of SSG and HIIT effectively improves young soccer players' physical and technical performance.	
(Emirzeoğlu & Ülger, 2021)	Aged $16.93 \pm 1.1$ 8 years (CBNT), $17.05 \pm 1.3$ 9 years (GBT), $16.75 \pm 1.1$ 2 years (CG)	Compared the acute effects of cognitive and play-based training (GBT) on dy- namic balance (DB) and speed perfor- mance (SP) in healthy young soccer play- ers	Randomized Controlled Trial	Cognitive-Based Neuromuscular Training (CBNT) vs. GBT	CBNT and GBT are promising training that can increase the DB and SP of healthy young soccer players	
(Arslan et al., 2021)	Aged 16.50±0.51 years	Compared the effects of combined core strength training and small-sided play (SSGcore) over 6 weeks vs. small-sided game training (SSG) on the physical performance of young soccer players	A parallel Group-Controlled Design	SSG Core Strength vs. SSG	These results suggest that including core strength training into the SSG periodization is very effective for increasing speed and strength-based conditioning in youth soccer players	
(Hůlka & Strništ <b>ě</b> , 2021)	Aged 16.2±1.3 years	Anaerobic and Aerobic Improvement in Young Football Players after a Six Week Intervention of High-Volume Training (HVT) or Small-Sided Play (SSG)	A Randomized Paral- lel Matched-Group Design	HVT vs. SSG	This study shows that SSG and HVT training interventions are effective for aerobic improvement for the U19 category but not for younger players. SSG was identified as more	

Table 4.
Characteristics of studies included in the review.

Study	Age-Group	Research Objective	Research Design	Training Method	Result
			-	-	suitable for the fitness development of soccer players
(Maciejczyk et al., 2021)	Aged 21 ± 3 years (PLY), 18.2 ± 1.8 years (CG)	Knew the short-term effects (4 weeks, twice a week: 8 sessions) of plyometric (PLY) exercises on agility, jump, and repetitive sprint performance in wom- en's soccer players	Parallel, Randomized, Controlled Trial	PT	Significant improvements in jump performance, countermovement jumps, and agility
(Pamungkas et al., 2024)	Aged 14-17 years	Investigated the effect of the small side games training method on the anaerobic endurance of soccer players aged U-17	Experimental Study	SSG Training	The small-sided games training method has a significant impact on the anaerobic endurance of U-17 soccer players
(Hasan et al., 2021)	Aged 20.39±1.77 years (RST), 20.66±1.84 years (PT), 20.39±1.60 years (CG)	Examined the short-term effects of resisted sprinting (RST) and plyometric training (PT) on sprint performance and lower limb physiological and functional performance in college football players	A Randomised Con- trol Trial	Resisted Sprint vs. PT	During Short-Term Training, The PT Group showed an advantage over the RST group in increasing knee extensor strength
(Fang et al., 2021)	Aged 15.7±0.8 years (HIIT) and 15.8±0.7 years (MICT)	Analyzed the impact of short-term high-intensity interval training (HIIT) and traditional moderate-intensity continuous training (MICT) on youth soccer players	Two-Group Pretest-Posttest De- sign	Cycle-Based HIIT versus Moderate to MICT	Short-term HIIT given to youth soccer players effectively increased cardiorespiratory fitness in the HIIT and MICT groups. While HIIT increases anaerobic threshold and strength, MICT effectively increases muscular endurance. Short-term intensive training can be considered a time-saving training strategy

When viewed from the research results, Table 4 above shows that nine articles examine the impact of training on the physical components Arslan, Soylu, et al. (2021); Emirzeoğlu & Ülger (2021); Fang et al. (2021); Hasan (2023); Hasan et al. (2021); Hůlka & Strniště (2021); Maciejczyk et al. (2021); Nayıroğlu et al. (2022); Pamungkas et al. (2024), two articles analyze the impact of training on the technical and physical components Arslan et al. (2021); D'Isanto et al. (2022), one article studies the impact of exercise on physical and mental components (Ouertatani et al., 2022). In addition, it can be concluded that the entire article focuses on the physical component. However, if viewed from the training approach, seven articles use a partial approach and five articles use a holistic approach.

## Partial Approach

Based on Table 4 above, eight articles use a partial approach in their research. This approach involves analyzing or focusing on one aspect, such as physical strength, technique, or tactics in soccer player training and performance. These articles study the effect of tolerance strength training on sprint speed, passing technique training on accuracy, and other specific aspects of improving soccer performance. This partial approach provides an in-depth understanding of one area in particular but only comprehensively considers some aspects that affect soccer performance. The conclusion from studies using a partial approach is that this approach effectively improves certain aspects of physical and technical performance in soccer players. Focusing on certain aspects offers an advantage in the partial approach. This can help trainers and researchers in addressing particular issues and developing effective training models.

## Holistic Approach

Seven articles take a holistic approach. In practice, this

approach incorporates all aspects of football, such as technique, physicality, tactics, and mentality. These articles found that the interaction of these four components can have a positive effect on player performance. This holistic approach provides unique insight into the factors that influence football performance. Exercise methods such as SSG, HIIT, core strength training, and game experience-based exercises are effective in improving body composition, physical fitness, physiological and psychological responses, technical skills, teamwork, attitude, and physical abilities of soccer players. This holistic approach views soccer players as an integrated whole, requiring comprehensive coaching to achieve optimal performance.

### Discussion

When viewed from the training approach, the partial approach is more widely used and when viewed from the aspect of research objectives, the physical component is still a topic that is often raised as a research goal. This results in a need for more attention to the close relationships among other components leading to fragmented understanding. The review results show that various physical training models in soccer have significant benefits. Almost all of the articles focus on the physical aspect; however, this research does not cover the entire spectrum of essential components in soccer, although it is undeniable that the findings from these studies provide invaluable insights about the effects of training, exceedingly physical. Based on a critical review of previous research, several deficiencies, limitations, or potential biases have been identified that require attention. Most of the research needs to consider the holistic aspect of the practice; the training approach tends to be partial. This results in a limited understanding of the interactions and interrelationships between components in soccer. In addition, another factor that causes much research to focus on

only one aspect is the limitations of the design and the samples chosen to address the field's issues.

Debates about holistic and partial approaches to soccer development will always lead to lengthy discussions. There are differing views among practitioners, academics, and researchers about which approach is more effective in coaching.

One of the arguments that have developed is that if a trainer adheres to a partial approach where the focus is on physical training that tends to be conventional, it will hurt the other components. Soccer is a complex sport, so developing and applying holistic training is very important. The relationship between a soccer match's physical, technical, tactical, and mental elements is interrelated and can be influenced by contextual factors such as tactics, phase of play, and pitch location (Vella et al., 2021; Vella et al., 2022). Excellent physical ability is required to play tirelessly during matches and to dash and move explosively. Good technique will support team performance; players will excel in passing, dribbling, and shooting. In addition, a good understanding of tactics and solid mental abilities, such as focus, endurance, and quick decision-making, are also crucial in achieving success on the pitch (Teoldo et al., 2023). A holistic understanding of training is necessary because the physical, technical, tactical, and mental components are interrelated and influence each other. These components cannot stand alone. The development of a holistic approach to football training based on Tactical Periodization highlights the importance of understanding game models as a basis for creating successful game patterns, with the aim of providing practical guidance for professionals in designing effective training methods (Martín-Barrero & Martínez-Cabrera, 2019). The coach plays a dominant role in determining the approach used (Hardman et al., 2010). The mental component is no less important; this component can affect physical, technical, and tactical abilities (Clemente et al., 2021; Sun et al., 2022; Trecroci et al., 2020). Therefore, a holistic approach to soccer training that focuses on and integrates the physical component with other components is vital for overall player development. Previous research has found that SSG can improve players' technical and aerobic abilities (Yudi et al., 2024). Exciting findings from a study by Selmi et al. (2017), stated that HIIT and SSG produce similar physiological responses, but HIIT causes mood disturbances while SSG help maintain mood balance. Those who support this argument assume that by integrating these four components simultaneously, they will be able to achieve the best performance.

On the other hand, those who argue that the physical component as the primary foundation, which should be trained first, will oppose the holistic approach. The argument assumes that players who lack sufficient physical abilities are unable to develop technical, tactical, and mental components. According to them, the physical component will affect the technical, tactical, and mental components. For example, players who do HIIT or MICT training will have good endurance skills and indirectly have an advantage

in the technical and tactical components. Good endurance skills influence specific techniques and tactics in soccer. In line with the research by Akyildiz et al. (2022), which states that changes in technical ability are closely related to physical abilities. Players who have good endurance will be able to perform actions in matches without experiencing significant fatigue (Kenney et al., 2021). In addition, having excellent physical abilities will affect the players' mentality. Physical readiness will align with mental, emotional, and high self-confidence during a match. By having an excellent physical foundation, players can better carry out technical and tactical tasks while having the confidence and mental resilience needed to succeed in a match.

Exciting findings to mediate the difference of opinion above were contributed by Impellizzeri et al. (2005) in their research. They found that specific and non-specific exercises have the same positive impact, allowing both types of exercises to be applied depending on the needs of players or teams. Conversely, it is directed at the perspective of long-term player development and developmental age. In that case, both points of view have the same advantages but have different priority scales depending on the age of their development. Based on the theory of Long-Term Athlete Development (LTAD), coaching is divided into several phases: Fundamental Stage, Development Stage, Training to Train, Training to Compete, Training to Win, and Active for Life (Balyi et al., 2013). In the fundamental phase, a partial approach focusing on physical aspects is more effectively applied. During this phase, children receive training focused on physical components such as motor skills, coordination, and balance (Balyi & Hamilton, 2004). Furthermore, applying a holistic approach is more effective during the development phase. This phase introduces children to specific physical techniques, tactics, and sports strategies (Balyi & Hamilton, 2004). In this phase, using a game-based approach is highly recommended. While the Train-to-Train phase to train to win, partial and holistic approaches are equally important, depending on the children's and the team's needs. For example, a partial approach is needed if there is a deficiency in one of the physical, technical, tactical, or mental components. LTAD provides positive benefits for long-term player development Lloyd & Oliver (2012); Perreault & Gonzalez (2021) and is enhanced by applying the two approaches mentioned above.

Other debates also arise when the approach is tested for success. How to measure the success of a holistic approach and how to apply it still require further research. Based on the review, the training approach in modern soccer follows a game-based method where training with the ball is focused on the game as a whole (Light, 2004; Robles et al., 2020). This approach aims to teach necessary playing skills and develop an understanding of game tactics and strategy in particular contexts (Fernández-Espínola et al., 2020; Riboli et al., 2022). Recent research has shown that coaches can analyze how teams handle the ball to design strategies matching players' technical skills. This analysis allows coaches to observe tactical situations in matches (Vella et

al., 2021; Vella et al., 2022). This approach gives coaches the advantage of analyzing performance and provides guidelines for preparing training programs.

This research has significant implications for practitioners in soccer training. First, this study emphasizes the importance of a holistic approach in soccer training that integrates physical, technical, tactical, and mental components into one comprehensive training model. The implication is that coaches can apply these findings when designing training programs (Pino-Ortega et al., 2021). Second, this study shows that the physical component plays a significant role in developing other components, such as technique, tactics, and mentality. It can have implications for the training process, where the coach can prioritize physical training according to the needs to support other components. Third, physical exercises that include elements of playing soccer have advantages in increasing motivation, enhancing tactical transfers, and developing practical decision-making skills (Harvey & Jarrett, 2014; Kinnerk et al., 2018). According to Price et al. (2023), coaches must develop problem-solving abilities in match situations, so game-like exercises are needed. The implication is that it can be a recommendation for exercises that resemble actual games (Jones et al., 2023; Martín-Moya, 2022).

## Conclusion

The partial approach focusing on the physical is dominant compared to the holistic approach. Although there is a debate, both approaches have a positive impact on the long-term development of athletes. Further research is needed to apply a holistic approach and provide insight into soccer coaching.

## **Conflict of Interest**

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