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# Ciencia y Deporte



## *Offensive tactical actions in football, category 13-14 years, of the Torremar Bilingual Educational Unit*

*[Acciones tácticas ofensivas en el fútbol categoría 13 - 14 años de la Unidad Educativa Bilingüe Torremar]*

*[Ações táticas ofensivas no futebol da categoria 13-14 anos na Unidade Educacional Bilíngue de Torremar]*

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### **ABSTRACT**

**Introduction:** This work starts from the treatment in the literature of the tactical direction of preparation in football and the insertion of actions based on established tactical principles.

**Objective:** To determine the effectiveness of offensive tactical actions on the performance of footballers (n=15) in the 13-14-year-old category of the Torremar Bilingual Educational Unit in Guayaquil, Ecuador.

**Materials and methods:** the measurement was used with the FUT-SAT test (P+3X3+P) and the official match observation protocol during the 2023 and 2024 seasons.

**Results:** A set of tactical actions is offered for penetration, mobility, coverage, space assessment and offensive unity during the general, special and competitive stages of the 2024 season.

**Conclusions:** The effectiveness was corroborated through the *McNemar statistical test*, which with significance values of  $p < 0.05$  demonstrated significant differences in the tactical principles assessed before and after the application of the proposal in the studied footballers, and the *Student's t-test* to compare the percentages of balls that went into offensive sequences and the number of balls shot on goal before and after the application of the proposed actions, which showed results of  $p < 0.05$  demonstrating the effectiveness of the same.

**Keywords:** tactical principles; offensive tactical actions; effectiveness.

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## RESUMEN

**Introducción:** el presente trabajo parte del tratamiento en la literatura a la dirección táctica de la preparación en el fútbol y la inserción de acciones basadas en principios tácticos establecidos.

**Objetivo:** determinar la efectividad de acciones tácticas ofensivas en el rendimiento de los futbolistas ( $n=15$ ) de la categoría 13-14 años de la Unidad Educativa Bilingüe Torremar en Guayaquil, Ecuador.

**Materiales y métodos:** se utilizó la medición con el test FUT-SAT (P+3X3+P) y el protocolo de observación de partidos oficiales durante las temporadas 2023 y 2024.

**Resultados:** se ofrece un conjunto de acciones tácticas de penetración, movilidad, cobertura, evaluación de espacios y unidad ofensiva durante las etapas general, especial y competitiva de la temporada 2024.

**Conclusiones:** la efectividad se corroboró a través de la prueba estadística de *McNemar* la que con valores de significación de  $p \text{ valor} < 0.05$  demostraron diferencias significativas en los principios tácticos valorados antes y después de aplicada la propuesta en los futbolistas estudiados y la prueba T de *student* para comparar los porcentajes de balones que pasaron a secuencia ofensiva y la cantidad de balones

rematados a puerta antes y después de aplicada la propuesta de acciones, los que evidenciaron resultados de  $p$  valor  $< 0.05$  demostrando la efectividad de la misma.

**Palabras clave:** principios tácticos; acciones tácticas ofensivas; efectividad.

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## **RESUMO**

**Introdução:** Este artigo explora a literatura sobre gestão tática da preparação para o futebol e a implementação de ações baseadas em princípios táticos estabelecidos.

**Objetivo:** Determinar a eficácia das ações táticas ofensivas no desempenho de jogadores de futebol de 13-14 anos ( $n=15$ ) da Unidade Educacional Bilingue Torremar em Guayaquil, Equador. **Materiais e métodos:** O teste FUT-SAT (P+3X3+P) e o protocolo oficial de observação de jogos foram utilizados durante as temporadas de 2023 e 2024.

**Resultados:** Um conjunto de ações táticas para penetração, mobilidade, cobertura, avaliação de espaço e unidade ofensiva é oferecido durante as etapas geral, especial e competitiva da temporada de 2024.

**Conclusões:** A eficácia foi corroborada pelo teste estatístico de McNemar, que, com valores de significância de  $p < 0,05$ , demonstrou diferenças significativas nos princípios táticos avaliados antes e depois da aplicação da proposta nos jogadores estudados. O teste  $t$  de Student foi utilizado para comparar a porcentagem de bolas que entraram em sequências ofensivas e o número de bolas chutadas a gol antes e depois da aplicação das ações propostas. Esses resultados apresentaram valor de  $p < 0,05$ , demonstrando sua eficácia.

**Palavras-chave:** princípios táticos; ações táticas ofensivas; eficacia.

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## **INTRODUCTION**

Tactical preparation in football is crucial for optimizing team performance. It encompasses everything from overall strategy to in-game adaptations, involving analyzing the opponent, defining roles and positions, developing offensive and

defensive tactics, and practicing specific situations. Among the most important aspects is the team's collective organization, ensuring the interrelation of group and team actions for success. Authors such as (Frade, V.,1990; González-Víllora & Da Costa, 2015; Medina Rojas, 2019; Rivera, García & Goenaga, 2020; León López, 2021; Valencia Sánchez, 2021; Gualoto Andrango, 2021; Vélez Llor, 2022; Martín-Moya, 2022; Burgos Angulo, Jiménez, Cañizares, Perlaza, Coello & Fischer, 2024) address the relevance of tactics in the sporting performance of the preparation of a football team.

Among the aspects studied regarding tactical preparation is the role of tactical training in developing the ability to adapt to the challenges of each situation during matches, and the players' skills in solving problems related to space, time, and decision-making. Key aspects of defensive tactics in achieving this preparation include covering, pressing, and retreating to protect the goal, while offensively, the creation of space, off-the-ball movement, defensive-to-offensive transitions, set pieces, and combinations to generate scoring opportunities (Rivera, García & Goenaga, 2020; Gualoto Andrango, 2021).

A wide variety of studies address exercises and activities for tactical training in different periodization models and competition categories. Authors such as Rivera, García & Goenaga (2020), Sánchez Salgado, Moreno Iglesia, Quetglas González & González Gortes (2024), and Eugênio-Cuco, D., & Castro-Marcelo (2024) advocate the use of the "train by playing" method, where the game contributes to the development of various components of preparation, but above all, it develops a high capacity for decision-making. Among the ways this approach is used are real game situations, simplified game situations, and active methods to facilitate comprehensive teaching, as well as alternative models that focus on tactics through role-playing games.

Offensive tactics in football are an essential component for achieving success, as they focus on creating scoring opportunities and overcoming the opposing defense. They involve the coordinated planning and execution of individual and collective actions, with the aim of moving the ball close to the opponent's goal and achieving the best possible angle to score. Authors such as Rivera, García & Goenaga (2020), Gualoto Andrango (2021), González Ramos, Martín Agüero, Montero Quesada & Rice Nelson

(2022), and Martín-Moya (2022) define them as the set of actions taken while in possession of the ball to create scoring situations and score.

It is common in the consulted literature to observe the existence of several tactical actions related to offense, among which the following stand out: off-the-ball movement, attack, counter-attack, overlapping runs, creating open space, support, constant help, one-twos, timing, offensive pressure, ball retention, game rhythm, changes of direction, speed of play, progression of play, and offensive awareness. However, in this research, the tactical principles to be followed by the players are those proposed by Teoldo et al. (2009), adapted from González-Víllora, S. & Costa, IT (2015) and taken from López, (2021), which establish the following actions as tactical principles: penetration, movement, space, offensive cover, and offensive unity.

Previous studies constitute a valuable premise to complement the tactical limitations presented by the 13–14-year-old footballers of the Torremar Basic Educational Unit in Guayaquil, Ecuador, which allows us to determine as the objective of the research: to determine the effectiveness of offensive tactical actions in the performance of the 13–14-year-old footballers of the Torremar Bilingual Educational Unit in Guayaquil, Ecuador.

## ***MATERIALS AND METHODS***

The study being carried out is of an experimental type in its pre-experimental modality, with an explanatory design and a quantitative-cross-sectional approach.

### *Participants*

The population is assumed to be 22 footballers from the 13–14-year-old category of the Torremar Bilingual Educational Unit in Guayaquil during the 2024 season, with the following characteristics ( $13.54 \pm 0.7$  years;  $166.23 \pm 0.06$  cm of height;  $60.05 \pm 2.05$  kg of body weight).

The non-probabilistic sample, selected by inclusion criteria, consisted of the 15 footballers in the 13–14-year-old category who participated in the previous season (2023) and formed the basis of the team for the 2024 season. The roles of the subjects under study are shown in the following table (Table 1).

*Table 1 - Player distributions by playing positions*

Position	N
Goalie	1
Central defender	2
Right back	2
Left-back	1
Central midfielder	2
Far right	1
Far left	2
Steering wheel link	1
Front	3
Total	15

*Techniques and instruments*

The FUT-SAT offensive tactic execution test (P+3X3+P) was applied according to the criteria of López, (2021), which establishes how to evaluate in the categories (BR: Well, done and MR: Poorly done. To reach the Well-done category each player must have effectiveness above 60% in the tactical actions) the tactical actions according to the principles established by the authors: penetration, mobility, spaces, offensive coverage and offensive unit.

### *Ethical considerations*

The research was conducted in accordance with international normative codes of informed consent and voluntary participation, as outlined in the Declaration of Helsinki. All 15 soccer players and their parents or legal guardians were notified about the study prior to its commencement.

## **RESULTS AND DISCUSSION**

The FUT-SAT offensive tactic execution test (P+3X3+P) was applied according to the criteria of López, (2021) during the competitive stage of the 2023 season. The results of this test in the competitive stage of the 2023 season were as follows (Table 2).

**Table 2.** - *Results of the behavior of the principles by the footballers in each of the tactical actions during the matches of the 2023 season (pre-test)*

Indicator	Tactical action	BR	%	MR	%
<b>Penetration</b>	1.- Incursion of the controlled ball into the opponent's area	3	20.0	12	80.0
	2.- Maintain the build-up from the back in the positions of space for an accurate pass between the lines	4	26.7	11	73.3
	Develop quick counter-attack transitions and vertical movements	2	13.3	13	86.7
<b>Mobility</b>	1. Make the movement, creating space for the timely deep pass.	5	33.3	10	66.7
	2. It expands the movement and effective playing spaces of the defense behind the opposing team.	3	20.0	11	73.3
	3.- To enable the ball carrier to play the ball in various directions	4	26.7	11	73.3
<b>Spaces</b>	1. It expands the effective playing area in length.	2	13.3	13	86.7
	2. It expands the depth, the effective playing space in depth.	3	20.0	12	80.0



	3. Create space for teammates to move around.	4	26.7	11	73.3
<b>Offensive coverage</b>	1.- Guarantee passing lane.	3	20.0	12	80.0
	2.- Reduce pressure on the attacking player with the ball.	5	33.3	10	66.7
	3.- Allow the possibility of auction.	6	40.0	9	60.0
<b>Offensive Unit</b>	1. Move the team closer to the center of play.	5	33.3	10	66.7
	2. Participate in the following actions.	4	26.7	11	73.3
	3. Contribute to and help the team with offensive actions behind the ball line and when arriving in the offensive midfield.	3	20.0	12	80.0

The evaluation of tactical actions for each principle revealed tactical deficiencies in the motivated athletes in the study. It was found that, under the principle of penetration, the most difficult tactical actions were: developing quick counter-attack transitions and vertical runs (only two players were evaluated as BR, representing 13.3%). Under the tactical principle of mobility, the most difficult action was: expanding the movement and effective playing space of the defense behind the opposing team (only three players were evaluated as BR, representing 20.0%). Under the principle of space, the most difficult tactical action was: expanding the effective playing space in length (only two players were evaluated as BR, representing 13.3%). Regarding the tactical principle of offensive coverage, the most difficult tactical action was: guaranteeing a passing lane (only three players were evaluated as BR, representing 20.0%). Finally, the tactical principle of offensive unity showed that the action with the greatest difficulty was: Contributing and helping the team to offensive actions behind the line of the ball and upon arriving in the offensive midfield (only 3 footballers evaluated as BR for 20.0%).

Based on the results obtained in the evaluation of each tactical action, each of the 15 players was assessed on the five principles. For each principle, achieving at least two out of the three actions evaluated as "Well" resulted in a "Well" rating, while fewer than two resulted in a "Poorly" rating. The results for each player on each principle are shown in the following table (Table 3).

**Table 3. - Results of the evaluation of each footballer in each of the tactical principles during the pretest**

Pretest indicators	BR	%	MR	%
Penetration	1	6.7	14	93.3
Mobility	3	20.0	12	80.0
Spaces	3	20.0	12	80.0
Offensive coverage	3	20.0	12	80.0
Offensive Unit	3	20.0	12	80.0
<b>Average</b>	<b>2.6</b>	<b>17.3</b>	<b>12.4</b>	<b>82.7</b>

The results obtained in each of the principles allow us to arrive at some important considerations about the condition of the 15 footballers during the competitive period of the 2023 season. It was found that the tactical principles of penetration, spaces and offensive coverage, which are directly related to the positioning of the footballers and adequate anticipation for a better position in the game, constituted the principles where the footballers had the most difficulties with 93.3% and 80.0% respectively of being evaluated as Poorly executed.

To assess the effectiveness of the team's tactical actions, the proposal of Valencia Sánchez, WG (2021) was used, which proposes the following tactical indicators to observe: Ball recovery (RB), percentage of ball recoveries that became offensive actions (%RBSO), percentage of balls lost in offensive actions (%BPAO) and number of balls shot on goal (CBRP), which can be seen in the following table (Table 4).

*Table 4 - Results of offensive tactical actions in the last four official matches during the 2023 season (pretest)*

Observations of official pre-test matches						
Matches/Tactical Action	RB	SW	(%RBSO)	BPAO	(%BPAO)	(CBRP)
Match 1	286	116	40.5	170	59.5	1
Match 2	275	99	36	176	64	2
Match 3	293	114	38.9	179	61.1	1
Match 4	301	123	40.8	178	59.2	1
Totals	1155	452	39.13	703	60.86	5

The results obtained from observing matches according to López's (2021) criteria indicate a low percentage of tactical offensive actions on average in the last four matches of the season, with only 39.13% of ball recoveries leading to further offensive actions and a decrease in the number of recovered balls resulting in shots on goal. This, along with the evaluations of the players studied regarding the five indicators of offensive tactics (penetration, mobility, offensive coverage, space utilization, and offensive unity), demonstrates the players' tactical limitations in the initial assessment (pretest).

Based on these diagnostic results, a practical intervention was implemented, applying the tactical exercise system within the 2024 campaign macrocycle, based on Frade's (1991) tactical periodization concepts. Team preparation began in May 2024 with a classic or traditional periodization model and a competition organized by FEDEGUAYAS from July to November 2024. During this stage, the intervention was structured with the following phases and actions:

Based on research and findings from the 2023 pre-season test with 13-14-year-old soccer players from the Torremar Bilingual Educational Unit, a comprehensive proposal for an offensive tactical training system was presented, organized by stages of the sports preparation process: General Preparation, Special Preparation, and Competitive Period.

This proposal is structured in four phases, considering the offensive tactical principles of penetration, mobility, space, coverage, and offensive unity.

General objective of the tactical exercise system: To improve offensive tactics in football players of the 13-14-year-old category of the Torremar Bilingual Educational Unit.

Stage 1: Exercises and actions during general preparation

Suggested duration: 4-6 weeks

Tactical objective: To develop the basic fundamentals of individual and group offensive tactics.

Key method: Modified games and simple situational exercises.

Tactical initiation phase – Basic understanding

Tactical test: Based on the basic understanding tactic (Table 5).

**Table 5.** - *Tactical actions and exercises for the tactical initiation phase in the general preparation stage*

Principle	Proposed exercise
Penetration	1v1 + goalkeeper: incursion into the area with ball control from the wing or central zone.
Mobility	3v1 game in square: search for a pass while moving with constant displacement.
Spaces	Rondo 4v2: change of direction + occupation of spaces after pass.
Offensive coverage	4v3 game: maintain passing lane towards the ball carrier.
Offensive unit	Triangle passing circuit with progression towards goal.

Instructions: Work at a moderate intensity, emphasizing correct technique and tactical awareness. Reinforce spatial awareness and orientation.

Stage 2: Exercises and actions during special preparation

Suggested duration: 4–5 weeks

Tactical objective: To consolidate the group functioning of offensive actions through collective tactical situations.

Key method: Simplified game situations (SSG) and role-playing exercises.

Tactical application phase – offensive association

Tactical test: Based on the offensive association tactic (Table 6)

*Table 6. - Tactical actions and exercises for the tactical application phase during the special preparation stage*

Principle	Proposed exercise
Penetration	3v2 in the attacking zone: quick transitions and through ball.
Mobility	5v5 positional play: breaking runs and support.
Spaces	6v4 zonal attack: identification and occupation of free zones.
Offensive coverage	Playing with wide wildcards: maintain constant passing options.
Offensive unit	7v7 with immediate recovery after loss: offensive pressure after loss.

Instructions: Introduce decision-making under competitive conditions, promoting teamwork and tactical cohesion. Begin data recording (BR and MR).

Stage 3: Exercises and actions during the competitive period

Suggested duration: July-November 2024

Tactical objective: To optimize the execution of offensive actions in real game conditions.

Key method: Real games, simulations, and video analysis. Phase 3: Tactical consolidation – controlled real game

Tactical test: Based on controlled real game tactics (Table 7).

**Table 7. - Exercises and actions of the tactical consolidation phase during the competitive period**

Principle	Proposed exercise
Penetration	10v10 game: emphasis on passes between the lines and finishing.
Mobility	Conditioned play: obligation of two touches + mandatory runs.
Spaces	Game with active zones: extra points for advancing through side zones.
Offensive coverage	I play with organized offensive pressing when we lose possession.
Offensive unit	Free play with post-match video analysis based on tactical principles.

Instructions: Evaluate using tools such as FUT-SAT, match observation and tactical statistics (RB, %RBSO, %BPAO, CBRP).

1. Methodological considerations for the implementation of the tactical action system:

Perform cross-sectional analysis after each microcycle of the indicators.

- Ball recovery (RB)
  - Percentage of recovered balls that ended in offense (%RBSO)
  - % of turnovers on offense (%BPAO)
  - Number of shots on target (CBRP)
2. Use varied tools and technologies to establish feedback in the analysis of microcycles, mesocycles and matches held using Video analysis (Scout, Longo Match, Hudl) and direct observation and tactical rubrics.

3. Apply the principles of tactical progression: from simple to complex, from individual to collective, train by playing: use real or representative games, tactical variability: create multiple contexts for the same action, continuous feedback: immediate and specific feedback, meaningful learning with stimulation of the player's tactical autonomy.

This system of offensive tactical exercises offers a structured, progressive, and player-centered approach to improving the offensive effectiveness of young footballers aged 13–14. Based on scientific principles and adapted to the competitive context, it allows for comprehensive preparation at all three stages of the sporting cycle.

The application of the tactical action system in accordance with the principles assessed during the intervention was recorded in the results of the application of each of the instruments in the post-test, which was carried out between the months of October and November 2024. The results appear below (Table 8).

*Table 8. - Results of the behavior of the principles by the footballers in each of the tactical actions during the matches of the 2024 season (post-test)*

Indicator	Tactical action	BR	%	MR	%
Penetration	1.- Incursion of the controlled ball into the opponent's area	10	66.7	5	33.3
	2.- Maintain the build-up from the back in the positions of space for an accurate pass between the lines	11	73.3	4	26.7
	Develop quick counter-attack transitions and vertical movements	12	80.0	3	20.0
Mobility	1. Make the movement, creating space for the timely deep pass.	10	66.7	5	33.3
	2. It expands the movement and effective playing spaces of the defense behind the opposing team.	11	73.3	4	26.7
	3.- To enable the ball carrier to play the ball in various directions	12	80.0	3	20.0

<b>Spaces</b>	1. Expand the effective playing area in length.	10	66.7	5	33.3
	2. Expand the depth of the effective playing space in depth.	13	86.7	2	13.3
	3. Create space for teammates to move around.	12	80.0	3	20.0
<b>Offensive coverage</b>	1.- Guarantee the passing lane.	13	86.7	2	13.3
	2.- Reduce the pressure on the attacking player with the ball.	12	80.0	3	20.0
	3.- Allow the possibility of auction.	11	73.3	4	26.7
<b>Offensive Unit</b>	1. Move the team closer to the center of play.	12	80.0	3	20.0
	2. Participate in the following actions.	12	80.0	3	20.0
	3. Contribute to and help the team with offensive actions behind the ball line and when arriving in the offensive midfield.	13	86.7	2	13.3

These results confirm improvements in the effectiveness of the tactical actions of each of the indicators evaluated.

Regarding the evaluation of each of the footballers in each of the tactical principles after the proposal was applied, the following results were obtained (Table 9).

**Table 9. - Results of the evaluation of each footballer in each of the tactical principles during the post-test**

<b>Posttest / Indicators</b>	<b>BR</b>	<b>%</b>	<b>MR</b>	<b>%</b>
Penetration	12	80.0	3	20
Mobility	13	86.6	2	13.4
Spaces	12	80.0	3	20
Offensive coverage	13	86.6	2	13.4
Offensive Unit	14	93.3	1	6.7
Average	12.8	85.3	2.2	14.7



The results of the evaluation of the 15 players after the application of the tactical action system show significant changes in each of the five indicators with an average of 85.3% of well-executed actions, demonstrating the positive changes achieved in the subjects of the study.

The observation of the last four matches to evaluate the behavior of tactical actions during their development yielded the following results (Table 10).

**Table 10.** - Results of offensive tactical actions in the last four official matches during the 2024 season (post-test)

Post-test observations of official matches						
Tactical Action/Matches	RB	SW	(%RBSO)	BPAO	(%BPAO)	(CBRP)
Match 1	295	140	47.46	155	52.54	5
Match 2	306	134	43.79	172	56.21	6
Match 3	288	132	45.83	156	54.17	5
Match 4	297	149	50.17	148	49.83	6
Totals	1186	555	46.80	631	53.20	21

Regarding the continuity and effectiveness of offensive tactical actions and their completion in terms of shots on goal, it was observed that the percentage of recovered balls that continued into offensive action improved to 46.80% in the team's last four matches, significantly higher than the previous season. As for the number of shots on goal following offensive tactical actions, it increased to 21 in the four matches, averaging more than five per game.

The performance of the 15 footballers in terms of the tactical actions described (penetration, mobility, spaces, coverage and offensive unit) could be compared by applying the Macnemar statistical test for dichotomous variables, which showed P-value results less than 0.05 in the five indicators when comparing the statistical differences between the pre-test vs post-test results (penetration  $p= 0.01$ ; mobility  $p=0.004$ ; space

evaluation  $p=0.02$ ; coverage  $p=0.01$  and offensive unit  $p=0.01$ ), showing in most of them highly significant differences between the values before and after applying the proposal (Table 11).

**Table 11.** - Results of the McNemar statistical test on the indicators of tactical principles before and after the application of the proposal

Test statistics					
	Tactical penetration action pretest & tactical penetration action posttest	Tactical action mobility pretest & tactical action mobility posttest	Evaluation. Pretest spaces & posttest spaces	Pretest coverage & posttest coverage	Offensive unit pretest & offensive unit posttest
N	15	15	15	15	15
Exact meaning (bilateral)	.001	.004	.002	.001	.001

*a. McNemar's Test*

*b. Binomial distribution used.*

To corroborate the effectiveness of the tactical actions implemented, the Shapiro-Wilk normality test was applied to the data obtained for the number of recovered balls that led to offensive action and the number of recovered balls that resulted in shots on goal. The test yielded p-values of 0.085 and 0.076, respectively, indicating that the data have a normal distribution. This result allows the application of the parametric Student's t-test to compare the means of the variables reported during the pre-test and post-test (Table 12).

**Table 12. - Student's t-test on variables percentage of recovered balls that went into offensive action and number of balls shot on goal**

Paired samples test									
		Paired differences					t	gl	Sign (bilateral)
		Average	Dev. Deviation	Average Error Deviation	95% confidence interval of the difference				
					Lower	Superior			
Par 1	Percentage of balls recovered that continued offensive action (Pretest) - Percentage of balls recovered that continued offensive action (Posttest)	-7.76250	1.14337	0.57168	-9.58185	-5.94315	-13.578	3	0.01
Pair 2	Number of shots on target Pretest - Number of shots on target Posttest	-4.250	0.500	0.250	-5.046	-3.454	-17,000	3	0.00

The results obtained in the applied tests allow us to validate the effectiveness of the tactical actions applied.

The application of tactical principles through exercises and activities in the training sessions of the microcycles of the competitive period, although related to those addressed by (Valencia, 2021; Hurtado, 2021), shows differences in the conception of tactical exercises adhering to the principles of (penetration, mobility, spaces, coverage and offensive unity).

The results of using exercises and activities that integrated tactical principles in simplified game situations align with the study by Vera Rivera et al. (2018), although the integrative method used by these authors in their study was not explicitly applied. The proposed approach differs from traditional periodization planning based on accumulation, transformation, and realization mesocycles, taking into account a longer competitive period than traditional models and a single, overarching competition.

### **CONCLUSIONS**

The theoretical frameworks considered allowed for the design of a system of tactical exercises for each stage of general, specific, and competitive preparation, typical of classical periodization. The proposal was based on tactical principles (penetration, mobility, space, offensive cover, and offensive unity), applied in an experimental process during the 2024 season. This process, using Macnemar's statistical test, revealed significant differences in four of the five principles during the post-test compared to the pre-test, with p-values  $< 0.05$  (penetration p-value = 0.01; space p-value = 0.02; cover p-value = 0.01; and offensive unity p-value = 0.01). Another element that corroborates the effectiveness of the tactical exercises was the application of an observation protocol to the offensive tactical actions through the percentages of balls that went into offensive sequence (%PBSO) and the number of balls shot on goal (BRP), which showed results of p value  $< 0.05$  with the student's T test.

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***Conflict of interest:***

The authors declare no conflicts of interest.

***Authors' contribution:***

The authors have participated in the writing of the work and analysis of the documents.



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