



## Original Article

# A Methodological Strategy for the Development of Team Tactical Offensive Actions in 3x3 Basketball

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## ABSTRACT

**Introduction:** Sports in general, and basketball, in particular, have undergone constant changes through the years, both in planning theory and practice due to the different technologies and multiple changes of the different rules of the sport, demanding higher technical, tactical, theoretical, psychological, and physical preparedness.

**Aim:** To design a methodological strategy for the development of team tactical offensive actions by 3x3 basketball university athletes in Camaguey.

**Materials and methods:** The sample consisted of twelve coaches, directors, and all the athletes. The methods used were theoretical, empirical, and mathematical-statistical.

**Results:** They permitted the methodological strategy to organize its structure by phases, starting with the rationale, then the diagnostic, general objective, planning, testing, and evaluation to distinguish the development of team tactical actions.





**Conclusions:** The methodological strategy suggested is feasible, viable, and valid for the development of team tactical offensive actions by university athletes

**Keywords:** Methodological strategy, team tactical offensive actions, 3x3 basketball

## INTRODUCTION

Today, sports in general, and basketball, in particular, have undergone constant changes through the years, both in planning theory and practice due to the different technologies and multiple changes of the different rules of the sport, demanding higher technical, tactical, theoretical, psychological, and physical preparedness.

Besides, one of the transformations brought about by these changes, with a lot of followers, is 3x3 basketball, an adaptation of 5x5 basketball. It has been promoted by the FIBA, and it has been played in official tournaments internationally, so it was included in the 2020 Olympic program.

To introduce this modality as an official discipline, it was considered as an excellent opportunity to attract new fans to the sport, 3x3 offers the chance to many more countries to take part in international competitions, which spread out through different areas of the world, and help with this purpose. The constant changes produced in this sport to keep it at the highest competitive level and turn it into a show sport demands a productive-based approach for the sport to develop the proper skills depending on the actions of the game, in which the tactical actions are critical for the outcome, having the players and their interactions as the major actors.

According to Valero Inerarity and Hernández Garay (2019), today's basketball is one of the most commonly played disciplines, with one of the largest number of participants. Its actions rely on quick movements and reactions, along with great creativity and dynamism; collective and group- actions are the base of performance. To achieve that collective and group unity, it is necessary to coordinate the individual actions of players in time and space, consciously, around a common goal.

Recent studies done by Águila, Piedra, Hernández (2019); Hernández Buides, Piedra Cárdenas, and Ramírez González (2021), showed that 3x3 in Cuba was very popular in the 1970s, during the emergence of sport schools, usually associated with recreational purposes, and the pre-sports games to develop physical capacities in other disciplines, improve sport motor skills, and the tactical thinking. In the present century, a national strategy was designed by the National Basketball Commission (CNB), that started out with the updating workshops about the rules





for 3X3, in all the provinces, and the inclusion of 3x3 in the University Games and The Higher Basketball League, both included in the FIBA platform to be in the ranking of international events.

In the university, the sport showed up officially in 2013, in the Sports Games, which led to extracurricular practice of the sport. Then it was broadened to the 3x3 open category, along with summer courses and festivals in 2019 and 2020, the insertion in the degrees' integrating subjects, sports and recreational programs in the communities, and research activities that contributed to the professional training and national and international meetings, besides promoting studies for theoretical and practical optimization, depending on the significant differences between the two disciplines, from start in schools. Hernández Buides, Piedra Cárdenas, Ramírez González (2021).

Recent research studies on the offensive tactics in 3x3 basketball were pioneered by Ortega *et al.* (2021), Pion *et al.* (2018), and Cañadas, Gómez, García-Rubio, Ibáñez (2018), showed that the utilization of variables such as the origin of ball possession, action start, types of attack, passes, dribbling, shooting, and number of players involved were analyzed in two groups: quantitative studies (study of the game using statistics with performance indicators), and qualitative (game and action analysis during the game, and team effectiveness), through observation. The tactical dimension was noted as a key aspect of performance in team sports.

Studies done in Cuba by Valero Inerarity *et al.* (2018 and 2019) showed the following flaws in basketball: A marked interest of coaches in tactical preparedness, with the lack of tools for the control and evaluation of the tactical preparedness, and the literature about this topic. Regarding the tactical aspect, there is an unpredictable number of responses from the opponent before a tactical action. Besides, a diagnostic of 3x3 university basketball revealed the absence and dispersion related to this sport. Hernández Buides, Piedra Cárdenas, Ramírez González (2021)

Accordingly, a factual study conducted in 3x3 basketball revealed the existence of shortcomings in planning and execution of tactical offensive actions in 3X3 basketball, and the need of updating the knowledge, planning, and implementation of all team actions in 3x3 basketball in the university athletes in Camaguey.

Hence, the aim of this paper was to design a methodological strategy for the development of team tactical offensive actions by 3x3 basketball university athletes in Camaguey.

## **MATERIALS AND METHODS**





This research relied on a non-probabilistic intentional sampling to all the athletes in the 3x3 basketball pre-selection of the University of Camaguey. It includes athletes from different faculties, particularly the Physical Culture Faculty, their ages vary between 19 and 26, averaging 23.5 years of age. Besides, a non-probabilistic intentional sampling was performed to twelve (12) professionals associated with the sport, four (4) directors, four (4), from the Physical Culture Faculty, and other four (4) coaches.

Stemming from the importance of team tactical offensive actions by 3x3 university basketball athletes, and upon the detection of the problematic, a factual study was conducted, which unveiled several shortcomings.

Then a painstaking bibliographic review was conducted following the theoretical methods (analytical-synthetic) to assess the qualities of the object of study based on the different opinions about the tactical actions of the team, permitting better understanding of this topic, expressed concisely and precisely; a critical review of the literature was done (induction-deduction), as it is the theoretical and methodological base of this work and the processing of results achieved after a diagnostic, and possible implementation of the strategy to reach to partial and final conclusions; the other method (systemic-structural-functional) was used to design the logical structure of the strategy suggested, with actions, objectives, and procedures at every stage and phase.

Empirical methods were used to collect the information required (survey), to provide a rationale for the problematic and integrate more elements into the methodological strategy. Other group of methods (mathematical-statistical) was used to represent the outcome, and to interpret and quantitative assessment of the results.

### **A methodological strategy for the development of team tactical offensive actions by 3x3 basketball university athletes in Camaguey.**

The methodological strategy requires a rationale for presentation, which can be obtained from a diagnostic, and then set a general objective that derives into strategic planning, instrumentation, and evaluation. The design of this strategy is based on the development of team tactical offensive actions by 3x3 basketball university athletes in Camaguey, considering the shortcomings of planning and execution of these actions.

## **RESULTS AND DISCUSSION**

The outcome of this research consists of two aspects (a methodological strategy), which define certain space within the sports training process *per se*, or education, in general.





## **Phases of the methodological strategy for the development of team tactical offensive actions**

The strategy relies on three main stages, which will be described below, including their features and practical implementation.

### **Phase I. Diagnostic of the tactical offensive preparedness in 3X3 basketball**

#### **Description of the documentary review**

Upon a review of the training plans and some of its units, none of the components of training and didactics foster development or optimization of the team tactical offensive actions particularly. Reference is only made to individual actions and very little is said about two players, as opposed to the findings of Oliveira, Vagetti and Paes (2021), who claimed that the greatest effectiveness was given by the actions of two players and the team.

A look into the training units showed that there are a few cases in which reference is made to the individual tactical offensive actions as one of the components to be trained in the training session, but no reference is made to the dosage in terms of time and repetitions. It was corroborated by Reina, González, Cañadas and Ibáñez (2018), who suggested the treatment of offensive contents with the utilization of exercises and with game situations with no opponents, starting with (1x0), which is different from the findings of Valero Inerarity *et al.* (2018), who argued the need of addressing several changing situations during the training and the game, which include some tactical actions.

#### **Results of the survey to athletes**

These results show that the team offensive tactics in the 3x3 male basketball pre-selection of the University of Camaguey is a weakness. Considering that the offensive tactics of the team is a strong pillar that helps win games, naturally the purpose of any sport, that situation must improve. Moreover, Reina, González, Cañadas, and Ibáñez (2018), argued that the individual performance permit understanding the players; however, they do not permit understanding the game's internal logic completely, through collective sport performances do provide this information, facilitating the coaches' perspectives in every game.

#### **Results of the survey to coaches**

On individual actions with or without the ball which are most commonly used in 3X3 basketball there is a predominance of 100% acceptance to go to a free space to go unmarked (catch a pass), with the screen created by another player, move toward the player with the ball, toward the hoop, feints, and cuts. The frequent moves with the possession of the ball are shooting, dribbling, passing, shooting and dribbling feints, shooting and pass feint, and pass and shooting feint, all chosen by 100% of the coaches in the survey.





The essential individual actions with or without the ball in 3X3 basketball: Without the ball, the most frequent actions are moving to a free spot to catch a pass (go unmarked), with speed and direction changes, another player creating a screen and cuts, whereas the ball skills were shooting, shooting feints and shooting, and dribbling feint and shooting.

The results of the individual tactical offensive actions coincided with studies done by Oliveira, Vagetti, and Paes (2021), with Brazilian coaches, in which 27.3 % of the subjects claimed that the plays against an opponent must be individual, illustrating with 1x1 in the pivot position, though they are mainly used to go unmarked.

The most frequently used actions used in the game, which are indispensable in 3X3 basketball, are passing the ball and break into a lateral or backward with an inner screen (to the front or the side), whereas the not so indispensable were the outer screen (on the side or the back), and the screen on the move (without the ball or while dribbling).

The most commonly used team actions, and indispensable for the 3X3 game were the screen to the player with the ball or direct screen (screen of the player with the ball), who can pass the ball to either player accompanying him on the attack, or attack the basket. The central player (with the ball) defines a strong lateral passing the ball to one of the players located on the laterals and the player who makes the screen. Upon personal contact, the player spins facing the ball and continues moving to the basket to ensure a numerical advantage. The indispensable consisted of two: passing and cutting to a free space, and the screening player. Upon personal contact, the player spins facing the ball and continues moving toward the basket to ensure a numerical advantage.

These results coincide somehow with the tactical concepts of Ortega *et al* (2021), Pion *et al.* (2018), and Cañadas, Gomez, Garcia-Rubio, Ibanez (2018). There may also be individual and collective tactics to be observed occasionally, in terms of winner and loser's behaviors. Moreover, Vagetti and Paes (2021) stated that, according to the elite Brazilian coaches, 27.3% are in favor of free game, whereas the majority (63.6 %), argued that the games must be by groups, while paired work and groups are highly praised. Furthermore, Tricoli and De Rose (2017), said that the offensive tactics is a way of facilitating the purpose of the game and its contents, namely, single or double, depending on the pivot number and initial position of the attackers.

## **Phase II. Setting and implementation of the methodological strategy**

Objective-based work focuses on what must be done with athletes and the time needed, as university sport is trained to pursue that end. Besides, gradual derivation is necessary to offer a systematic response to the requirements of



offensive actions and their relation to the other activities, keeping in mind that the objective has a projection into the future, since a single training session is not enough to accomplish them.

Then, the structured strategy's *general objective* is to reach optimum development levels of the team offensive tactics, considering the efficient and harmonious evolution of the players involved during the training sessions.

### Content selection

The practical application of the content must encourage the integration of theoretical and practical foundations of the implementation of offensive tactical actions. It must also involve the determination of the structure, the declaration of problematic situations that promote the athlete's interest, activating previous knowledge as a way of broadening the scope.

The content must include what should be improved in the athletes, what aspects will require the most time, and the demands to be considered for stimulating the completion of offensive tactical actions by the team. The task will necessarily be more complex, having an adequate relation between its components.

The contents needed for the optimization of the methodological strategy for the development of team tactical offensive actions would be arranged as follows:

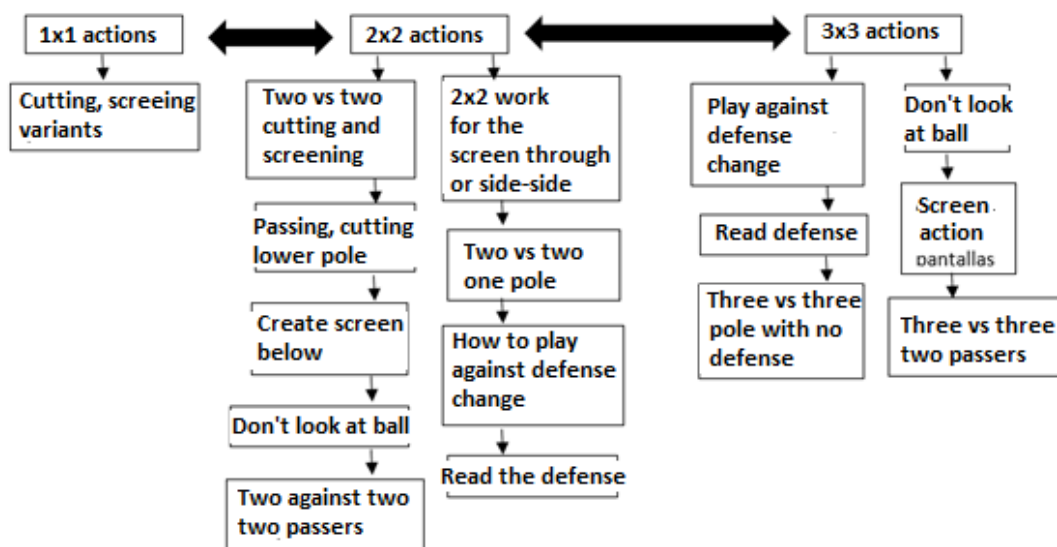


Fig. 1. Structure of the general contents

Below is an example of the contents of 2x2 and 3x3 actions.





Every exercise should be divided into 5-10 minute-segments, then start another exercise with the same duration to develop the capacity of performing quick changes in the players.

*An example of 2x2 action: two against two, cutting and creating screens:*

The next step is to work on exercises that involve 4 players (2 attackers and 2 defense players).

The 2 vs 2 alignment for the low screen and the blind screen, respectively. The position on the court is changed, working on both sides of it.

The important thing is that the player creating the screen can use the angles to create a good screen. The cutter, in either case, must read the intentions of the player on the offensive to choose the appropriate route out of the screen. In the initial action does not lead to shooting, the ball is returned to the coach, and another new movement must be initiated by the screen creator. These two exercises show that the player position after the first screen will be so that they will have to try to figure out if the next screen is a low one or a blind one. The exercise will always be started using one of the screens, though eventually the two will be used throughout the exercise. Once more, it is important for the cutter and the screen creator to work together to set up the proper angles for the cutting and the screen.

### **An example of 3x3 action Three vs three and a pole without defense:**

Each of the four basic cuts may be used in this 3x3 exercise in the perimeter. The two screen types can be used as well. The only part of the offensive not included in the perimeter game is the screen across or from side to side, as the outer players are not supposed to align around the pole area.

This exercise has the same 3 vs 3 previously described alignment, but the pole is without defense, helping the attackers and increasing the cutting and screening opportunities, and raising the mental capacity of reading the defensive movements. Method selection The system of methods used must place the practitioner as the constructor of their knowledge, reflexive, participatory, and with the capacity to question the activity performed positively. The utilization of ideo-motor, sensor-perceptual, methods, the repetition and partial search.

*Teaching aids* The coach uses aids to enhance the team tactical offensive actions, articulating them to form a system along with the other didactic components, which could be used to ensure conscious acquisition of the skill, and include them as the guiding base of the activity, not only to enhance instructive process but also educational process depending on their contents.







*Organizational forms* The organizational forms of training, particularly in the training of team tactical offensive actions must enable encourage the active participation of athletes, offering them reasoning and query.

These forms must be combined to perform a teaching-learning process that integrates the problematic, which also projects solutions to the everyday problems.

This study relied on the individual and group forms, but especially the latter.

The evaluation should be integral, and become a system to contribute to the development of the team tactical offensive actions by university athletes. The integration of assessment, co-assessment, and self-assessment, and the results of systematic assessment contribute to pedagogic improvements. The main ways of daily assessment must be observation and verification at different implementation levels. In this case, the final assessment of the process will use the tests to assess the team tactical offensive actions described in the Program of Athlete Training most similar to the characteristics of university athletes. However, the coach may make decisions as to athlete assessment based on the objectives set at every training stage.

An assessment of the methodological strategy that distinguishes the development of team tactical offensive actions by 3x3 basketball university athletes in Camaguey through critical opinion workshops and collective construction.

Considering its recognition of the collective vision by science in relation to a given topic, and based on open discussions that mobilize individual engagement that enable collective intelligence and the contrasting of opinions from different groups, but associated with the workshop topic.

During the previous stage, the three groups linked to the pedagogic-methodological training were defined. It was analyzed through collective criticism and construction by 12 teachers, 4 in each of the following areas: The Physical Culture and Sports University, Provincial INDER. (Members and officials of the sports provincial commission), and INDER (coaches). Three workshops were planned, as the number of groups permitted determining the quantity of workshops (one by every group).

Then, each of the stages suggested were conducted, which permitted the assessment of its theoretical validity, in which the experts' opinions coincided.

The methodological strategy relies on previous experiences and it is methodologically structured at the theoretical-practical level and the pedagogic-methodological and didactic reflections in sports. It derived from practice to construct a system of diverse reflections and be completed in practice to enhance 3x3 basketball.

Besides, it promotes the development of the offensive tactics by university athletes, from the introduction of their actions (simple to complex), closely related to the





moments consisting of a diagnostic, characterization, needs, causes, proposal, and the control form suggested, with a system perspective, which also allows the coaches to train themselves constantly.

## CONCLUSIONS

The analysis of the scientific literature helped determine the main regularities associated with the object of study, corroborating the existence of pedagogic criteria to develop team offensive tactic actions in 3X3 basketball athletes.

A series of indicators that could offer a comprehensive characterization were selected, demonstrating the current shortcomings of the team offensive techniques by university athletes in 3X3 basketball in Camaguey.

The methodological strategy requires a rationale for presentation, which can be obtained from a diagnostic, and then set a general objective that derives into strategic planning, instrumentation, and assessment to distinguish the evolution of the team offensive tactical actions by 3X3 basketball university athletes in Camaguey.

The specialists argued that the strategy is a feasible, viable, and valid way of developing the offensive tactics by university athletes, from the introduction of their actions individually (simple to complex), 2x2 and team, closely related to the moments consisting of a diagnostic, characterization, needs, causes, proposal, and the control form suggested, with a system perspective.

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**Conflict of interest statement:**

The authors declare the are no conflicts of interests whatsoever.

**Author contribution statement:**

The authors have taken part in the redaction of the manuscripts and the analysis of documents.

BSc. Reinaldo Márquez Perez (70%), in charge of research and strategy design.

Dr. Luis Alfonso Rangel Mayor PhD (15%), article review.

MSc. Carlos Alberto Govea Macías (15%), analysis of the results.

