# NUMERICAL SUPERIORITY DEFENSIVE ZONE: AN APPROACH TO AN ACTIVE DIMENSION (4:1:1)

Juan Francisco OLIVER CORONADO, Patricia Irene SOSA GONZÁLEZ Faculty of Educational Sciences, University of Seville, Seville, Spain

# **Summary**

In this paper we present the use of a new zonal defensive system, the 4:1:1, an useful proposal of playing being in numerical superiority in defensive situations. We describe their functioning bases and their objectives. These include, from individual point of view, the application of the interception line as an individual tactical principle, and collectively, the use of tactical active means, mainly 2 against 1 (2x1). It specifies the defensive solutions to possible collective responses of the attacking team, with special attention to situations where it plays with pivot. The Olympic Women National Team of Brazil successfully tested this proposal in official competitions.

#### Keywords

Team handball, zonal defensive systems, numerical superiority in defence, active tactical means

"The one who doesn't invent, not live" (Ana María Matute)
"Every new idea inevitably involves three phases: first, it is ridiculous, later, it is dangerous,
and finally, everyone knew it!" (Henry George)

#### Introduction

On 1st and 2nd July 2007, against Czech Republic, and later, on 7th and 8th July, at Betim (Minas Gerais, Brazil), against Ukraine, both preparation games for Pan American Games to be held in Rio 2007, the Olympic Women National Team of Brazil, put into practice this defence with excellent results. Since then, has always been used, both in official competition (Pan American Games, World Championships and Olympic Games) as in preparation matches, with very positive results. Therefore we want to thank Rita de Cássia Orsi for her inspiration and all handball players of Brazilian Olympic Team for their input and confidence in this 4:1:1 zonal defence model in numerical superiority. Thanks to all.

#### **Functioning bases**

The proposal defence 4:1:1, is a zonal defence, where there are two outside players, two center players and two advanced players. **Figure 1** reflects the name of the specific positions and their spatial distribution.

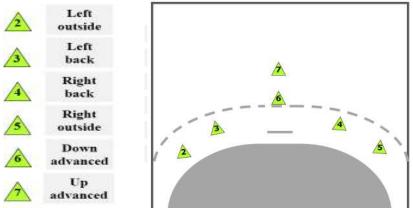


Figure 1: Identification of the specific positions of zonal defence system 4:1:1 and their location in the space.

Apart from the names of the different specific positions and their spatial distribution is necessary to determine the functions to be performed by each player, and even their characteristics. Authors like Jiménez Salas (1995, 2005) and Oliver (2004) studied differences between individually defence and zonal defence. Along this work we will use terminological classification proposed by Antón (2002) about the collective defensive tactical means.

The **outside players** do not differ in characteristics and functions with those of the 5:1 zonal defence system. They should dominate, especially, the individually marking, and the collective tactical medium called "attack to odd".

With reference to **left-back defender and right-back defender**, they must mastery, especially, displacements, orientation and control of the opponent, and referring to the active defensive tactical means, the called 2 against 1 (2x1) and the "flotation".

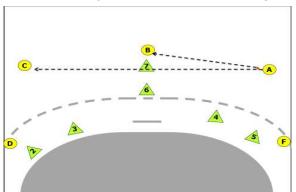
The **upper advanced** is governed by the same rules as the advanced traditional of the 5:1 performing his actions with more or less profundity, but never is an individually defence over somebody. At the individual level must master, especially, variety of displacements and the control of the opponent, besides a continuous dissuasion. Regarding collective tactic, should dominate the defensive tactical means called "active", and also the "preventive" and "reactive" tactical means, called "coverage" and "help", respectively.

Finally, the **lower advanced** player must dominate, lateral displacements, and the concept of "harass" without making technique fault. Regarding to active defensive tactical media must perfectly dominate the 2x1, since he is the responsible to provoke it.

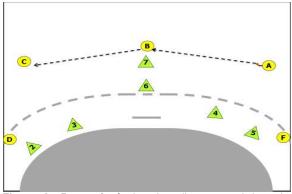
#### **Objectives**

Prevent and hinder the game with the opposite area of the ball. This will be the main objective of the upper advanced player. He must place in various ways to hinder the passline between both sides, as proposed in **Figure 2.** 

Hinder the circulation of the ball. The upper advanced must vary the distance and defensive intensity, with respect to the central player with a dual purpose. For one hand, losing profundity in relation to the goal, and for the other hand, shorten his time of perception and making decision, as shown in **Figure 3.** 



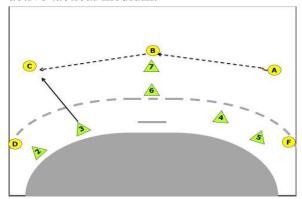
**Figure 2.** Position and situation of up advanced player for hinder or impede the passes between the attacking backplayers.



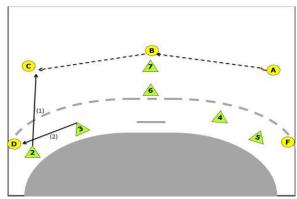
**Figure 3.** Proposal of changing distance and intensity between the upper advanced player and center-back, to hinder the movements of the ball.

The above individual objectives become collective objectives, when to those tactical intentions of impeding the game with the opposite area of the ball and avoid the circulation of the ball, joins the use of active defensive tactical means, applied by the other defenders.

**Figure 4** shows the use of the "flotation", an active tactical medium, applied by left back defender. **Figure 5** shows the use of "attack to the odd" applied by the left outside, as an active tactical medium.



**Figure 4.** The use of "flotation" applied by left back defender, as an example of active defensive tactical means.



**Figure 5.**The use of "attack to odd" applied by the outside left defender, as an example of the active tactical means.

Getting numerical superiority 3 against 2, in zone of the ball

Thanks to the lateral movement of "basculation" made by lower advanced towards the area where is the ball, it will always be three players defenders (outside, back and down advanced) against 2 attacking players, (back and wing), as presented in **Figure 6**.

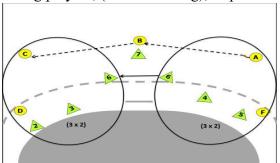


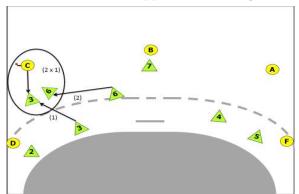
Figure 6. Search of numerical superiority in defence (3x2), thanks to the "basculation" made by down advanced.

Forcing the attackers (left and right back) to attack towards the sideline area

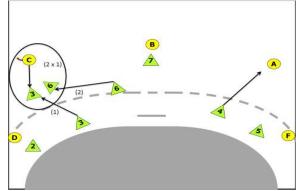
The main aim is to get 2 against 1 (2x1), formed by down-advanced and back, using a properly orientation, as we can observe in **Figure 7.** 

Same as previous, adding more defensive activity through the use of "flotation" in the opposite zone

It is used the "flotation" in the opposite zone, applied by back defender, to avoid passing the ball to the opposite zone. **Figure 8** shows this situation.



**Figure 7.** Getting defensive numerical superiority (2x1) by back defender and down advanced, against right back attacker.



**Figure 8.** Use of the active tactical medium called "flotation" by the back of the opposite side of ball.

Same as above, but now applying the "attack to odd" by the outside defender to avoid passing the ball to the opposite zone. **Figure 9** shows this situation.

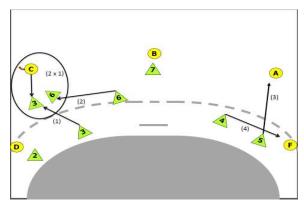


Figure 9. Use of the active tactical medium called "attack to the odd" by the right outside defender in the opposite side of the ball.

#### Situations when playing with pivot

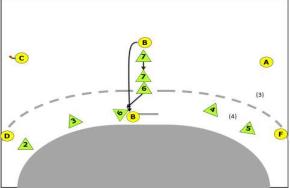
If the opposing team decides to play his numerical inferiority with pivot, our 4:1:1 zonal defence will have to adjust to it, and applying the appropriate solutions.

The most important are:

#### Center- attacking player goes towards pivot position

If playing with a pivot by circulation of the center-back, our defence system 4:1:1 will become a 4:2 defence system, where one of the two advanced will occupy one of two advanced areas, and the left or the right-back defender will become the other advanced player, right or left, depending on what did his teammate.

- **First option.** The up advanced becomes down advanced, and down advanced accompanies center-attacking becoming defensive center. It is the most difficult to execute but is the most recommended because the up advanced continues performing advanced functions, and down advanced occupies the position of central defence. **Figure 10** represents this first option.
- **Second option.** The up advanced accompanies center. It is the most easy to implement in the absence of change of opponent but losing the primitive functions of each player, because the down advanced, usually in a lower position, is paired with center and the up advanced performs another function related to control of opponent and less coverage and help. In **Figure 11** we see the implementation of this proposal.



**Figure 10.** Defensive response to the circulation of center player to the pivot area: 1<sup>st</sup> Option.

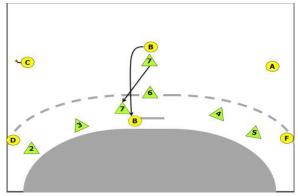


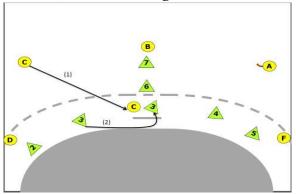
Figure 11. Defensive response to the circulation of center player to the pivot area:  $2^{nd}$  Option.

### Back- attacking player goes towards pivot position

The simplest way to resolve this situation is that the direct opponent of back attacking player accompany him and become his defender in 6-m zone. This option is recommended for being the easiest to coordinate, as there is no change of opponent, but may still find difficulty in pairing the players, in proximity of 6-m, which are very different in anthropometrics, being the attacking player higher or stronger than the defender. This situation can be compensated later by a change of opponent between down advanced and back defender. **Figure 12** reflects this situation.

## Wing-attacking player goes towards pivot position

In this situation his direct opponent, the outside, should go with him, keeping the rest of the structure, as shown in **Figure 13**.



**Figure 12.** Defensive response to the circulation of right-back attacking player towards pivot position.

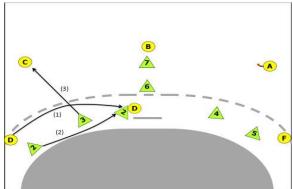


Figure 13. Defensive response to the circulation of rightwing attacking player towards pivot position.

#### Pivot game situations

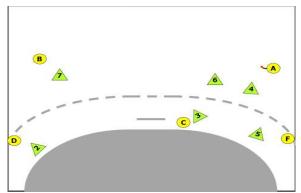
If the opposing team played with a defensive system 2:3, with pivot, or 3:2 with pivot (by circulation of wing), in principle, the team will play in 3:1:2, where there will be three advanced (one low advanced, and two upper advanced, left and right).

The main idea is still the same, get 2 against 1 in side areas, but we can increase the use of active defensive tactical means (flotation and "attack to odd") in the opposite side of the ball. It is important the use of dissuasion as an individual tactic intention, as well as closing pass line. Undoubtedly, the presence or absence of pivot in ball area will condition the defence system.

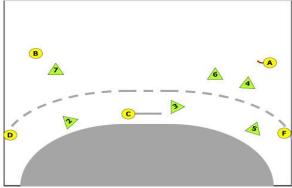
# • **Pivot in the zone of the ball**The distribution of responsibilities will be as explained in **Figure 14.**

# • Pivot in opposite zone of the ball

As there is no danger of pass to the pivot, we will try to intensify the 2 against 1 in zone of the ball, to avoid the ball reaches the opposite zone. **Figure 15** reflects this situation.



**Figure 14.** Distribution of responsibilities with pivot in the same zone of the ball.



**Figure 15.** Distribution of responsibilities with pivot in the opposite zone of the ball.



Visual marking to the right wing. Coverage in central zone.



Marking closely the pivot. He can't receive the ball



Control left back, and searching 2x1.



Marking wing and be in coverage in central zone.



Search options of 2x1 in left side



Marking opponent, dissuasion, flotation, intercepting lines.



Visual marking to the right wing Coverage in central zone.



Visual marking to the pivot. Coverage in central zone.



Control left back and searching 2x1.



Marking wing and the central and coverage in central zone.



Search options 2x1 in left side



Marking opponent, dissuasion, flotation, intercepting lines.

#### **Final considerations**

From functioning bases exposed, other tactical situations that could occur will be always resolved following the methodology presented, which can be summarized as:

- Hinder the movement of the ball between the first line to avoid ball movements from one zone to the opposite zone, fluently.
- Get defensive numerical superiority (3x2) in the zone of the ball.
- Forcing back players to attack towards the less dangerous zones.
- Get defensive numerical superiority using 2x1 in sideline areas.
- Strengthen situations 2x1 with the use of active defensive tactical means of "flotation" and "attack to odd".
- Resolve situations with fixed pivot or as result of the circulation of the first line or the wings.

joliver@us.es