

# THE SYSTEM OF DEFENSIVE TEACHING OF HANDBALL: METHODOLOGICAL CONSIDERATIONS ON CADET CATEGORY

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## **Abstract**

In cadet category, teaching defensive system must prioritize the resolution of either motor or cognitive tasks, considering the development of the players, the teaching methods adopted by coaches and previous experiences of players within the modality. Identifying these features allows pointing out the need of a formation of offensive defenders, disturbing constantly the opponents, limiting their action areas and complicating the offensive collective game, for a quick recovery of possession of the ball. The coach's job must be based on formation of players with plural performance and flexible behaviour in the game, and not expert technical and tactically players.

**Keywords:** Handball – Pedagogy of Sport – Defensive Tactics

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## **Introduction**

Handball, like other collective modalities, consists in several aspects: the coach, the tactical, fitness, psychological preparation, among others. Such components are related directly to the phases of the game: offensive, defensive and transitions, which are interrelated (BAYER, 1994), have aims and, therefore, require different systems of tasks resolution. We may characterize it as a modality of opposition, where two teams play to win according to the rules; of invasion, in which a team can take the ownership of the opponents' area, in an attempt to write down their scores; and of cooperation, related to the need of mutual collaboration among the players of a team, subsequently forming collective and group tactics.

According to its features, handball can be classified as a Sport Collective Game (REIS, 1994), with simultaneous actions by attackers and defenders, in close or distant areas in which the ball is. This is

ruled by strategies and tactics, either individual or collective, offensive, defensive and of transition, which depends, especially, on the perception of the players on the situation that the game requires and the decision of the players that respect the rules of the modality and that aims the tasks resolution.

The tasks resolution systems, specifically to the attackers, involve the control on the ball, the movements with or without the ball, fundamentals execution – handle, passing, receiving, shooting, dribbling, pace and dual-phase three-phase rhythm – inserted in the tactical context of the game, as in situations of superiority (3x2, 2x1...), equality (1x1, 2x2...) or outnumbered (1x2, 2x3...). In case of defenders, the first difference is the fact of not having the ball, which implies the priority of defending the goal, not allowing the opponents to get close to the ball, also having techniques and collective and individual tactics.

In this research, the tactic will be considered as a dimension of time shorter than strategy (related to the coordination and organization of a set of offensive, defensive and transition tactics), as a set of individual actions to be taken, intelligently, by the team members to achieve their collective goals proposed to such situation, either attack, defense or transition. The tactic also includes the implementation of offensive and defensive tactics means to generate favorable conditions for such systems. According to Moreira and Tavares (2004), the system of the game is the way players are distributed on the court during the game being an essential structure of collective tactic.

According to Herrero (2003), defending, in handball, implies not only in the resolution of motor tasks, but also in cognitive tasks. It means that, from sport initiation to the high level of efficiency, defenders must undergo to classes and training to task resolution, either complex or simple of individual, group or collective character (GRECO, 1998).

The insertion of defenders in a tactical context is characterized by some of the levels of relationship pointed out by Garganta (1995), within them are described interactions among players – partners and opponents – ball and target. Within the defensive context, often with certain space restriction that is limited to the areas closest to the ball, all defenders' actions must be led individually, as ways of thinking and analyzing the situations of the game (SIMÕES, 2002), and collectively, to intervene intelligently to get the ball back. Such interventions must emphasize the attempts of ball stealing (by moving closer to the

attacker), the passing interception (when the defender intervenes in the pass line), or even the prioritization of shots from the closest side areas of the court (from where the goalkeepers can easily intervene, due to the difficulty level for attackers).

Defending, in handball and in other collective modalities, suggest implications not only tactics when we refer to the context of the game, but also related to psychological issues. When a team goes through the defensive phase successfully, the result is perceived in an easier behaviour during the subsequent offensive. This condition can be checked more frequently in the final period of matches that tie.

One of the greatest difficulties the coaches face is the fact that players look for handball late, which results in heterogeneous group. According to Ré et al. (2005), it is common, in one competitive team or in the same training group, finding youngsters in different maturational stages. Such situation “may favor the most advanced in biological development, and may discourage the others belated” (RÉ et al. 2005, p. 153).

This difficulty may be due to factors as: a) non-inclusion of handball in some schools as a possibility of content, as mini-handball for children or even for teenagers; b) rarely open channels broadcasting on television of the National Team matches or competitions; and c) even the lack of knowledge by some teachers, about the rules and how the modality dynamics works. It is common to find clubs and cities that start their teams in cadet category (15-16 years old) or juvenile (17-18 years old).

The aim of this research is to identify the features of the players when they are in cadet category and provide indicative that there is a possible marking of defensive behaviors during this phase of education. For this, the main issue to be discussed in this research is the way the teaching of defensive systems is led to and in the cadet category.

## **The teaching of defensive system**

One great difficulty in the defensive teaching systems is to communicate the meaning and importance of “defending” to children and teenagers. Clearly, when most people look for handball playing, as well as in soccer playing, the main motivation is in the possibility to scoring; however, when we find out that in handball is much easier

because we have more control over our hands than over our feet.

The defensive systems aim to provide a collective organization for defensive actions, sometimes either limiting the acting area of the players or pointing out the opponents to be marked. For this, the understanding of system dynamic and the reason of positioning and decision to be taken are necessary.

By deepening in the literature about pedagogical aspects in the defensive teaching systems in handball, we notice that there is a converging thought about the first system to be taught. For Antón (1990) and Ehret et al. (2002), the first defensive system to be taught in the infant category (11-12 years old) and children (13-14 anos) is the individual, first in their variations on the full court and half-court, and later, zonal systems.

In Brazil, as result of literary productions as above and of training provided by Handball Brazilian Confederation (CBHb), in children categories is consensual, and even is a part of the rules in some competitions, to adopt individual markings– in full court, in half-court or by approaching– or in two defensive lines. In cadet category, the restrictions in defesive systems include, in some cases, the use of mixed defensive or settled systems (zonal + individual).

The implications in applying individual and open defense in infant and cadet categories are based on the technique-tactic premises and fitness. From the point of view of fitness, the game becomes faster and, therefore, more intense, mainly for the need of direct attacker accompaniment during the match. Regarding technical-tactical aspects, some goals of the younger categories remain present, as the constant pressure of the attackers, that provides them the development of individual tactics as feint and clear, the direct marking attempting to recover the possession of the ball back, either the dribble of the attacker or the attempting of interception of the pass, which assist in the construction and structuring, mental e practical, of zonal defensive systems.

The individual system must develop in players some features which will be very relevant in zonal defensive systems. Here are some considerations:

- Each defender has his own responsibility, that is, each defender is responsible for his oponent, with or without the ball;
- The defender must be positioned between the attacker and the goal, so close to hinder the actions of attacker and also the ofensive pass

and reception;

- The development of the concept of space in the defender, given by displacement of the attackers, and its Constant accompaniment by the defenders in game court, stopping the approaching of attackers to the goal. That is, the defender moves from one place to another as a way to respond the situation of the attacker (MEDINA; ORTÍN, 2002);
- The development of the strategy toward the opponent that hinders his actions, from the contextualization of his actions.

The open defensive systems, due to the learning provided by individual defense teaching in minor categories, must be the pillars of the game in cadet category. Open defensive systems are the ones in which the players are arranged in two or more lines, as the 1:5, the 3:3, the 3:2:1, the 4:2 and the 5:1. Due to these previous teaching phases, in which the main concept is keeping the defensive systems as more offensive as possible, the initial impetus for defensive offensiveness in cadet category should not be discouraged. The premise of disturbing constantly the attackers leads to an interesting defensive point of view, as the limitation of offensive areas and quick combativeness, result of the difficulty of the offensive collective game.

The behavior of the defender must be understood as a long-term process, and this process must provide knowledge and ways of flexible performances to it, based on the need of adaptation to constant changes imposed by the attackers and their interactions. In this perspective, the defender must be able to understand the information of the oponents so it can anticipate probable decisions to be taken not only by his direct marker as well as of other attackers to get mutual help and covers.

So the need to provoke the biggest numbers of possible variation also in offensive situations during trains and classes, aiming to expand the set of response to defensive tactics, either in numerical superiority, equality or inferiority. Nevertheless, it is very important that all players experience all specific defensive positions, not only to know how to perform the tactic functions but also to share the difficulty and possibility to intervene in every position.

Based on the concepts by Ehret et al. (2002) and by Antón (1990), that suggest that defenses, in the formation phase of the player, must present a defensive posture, we understand, however, defenders must know how to play in different ways, as adopting more defensive or even anticipated positions. This variability in defensive tactic behavior

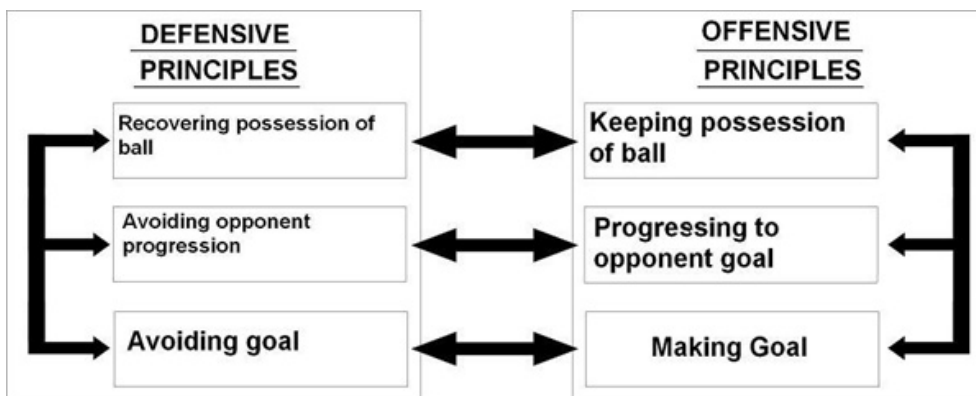
suggest a great variation of motivation to defenders, firstly to learn how to play in different ways and also for the defender, by watching his direct marker during the game, be able to select or change his way of marking, aiming mainly the exchange of reference that his marker has in relation to the direct opposition (1x1).

One of the greatest contents that must have a special emphasis, since the beginning in handball to the high level, refers to the capacity of player locomotion. Especially in defensive situations, players must domain all types of displacements: forwards, backwards, diagonal and lateral; these displacements are both in high, medium or low speed, and in a way to keep the position of defensive “alert.” The importance of the capacity of player locomotion can be seen in actions as:

- Perform defensive blocks, individually or in groups, to avoid that the ball reaches the goal;
- Change the marking in front of offensive blocks (to perform counter-blocks), to avoid the ball be given to the pivot or not to have the infiltration of one of the point guard;
- Advance quickly towards the attackers direction who bounces the ball (dribbles), or even accompanying him during the continuous dribble, to steal the ball or difficult the player progression;
- Perform weighbridge movements (or sliding) towards where the ball is, aiming to generate defensive numerical superiority close to the ball;
- Cloak spaces apparently existing (or “defensive emptiness”) in which attackers have the possibility of infiltration and throw;
- Quickly retrieve the ball rebounds from the goalkeeper or of the beams to fast initiation of the counter-attack phase.

The defensive systems operation also depends on the good development of the offensive game by the relation of direct opposition and, at the same time, it is connected to offensive processes described by Bayer (1994) that are: keeping the ball possession, the progression towards the opponent goal and the goal marking. The development of the capacity of locomotion of defenders, as previously described, is to achieve three defensive principles proposed by the author above from actions that meet the offensive principles, as indicated in picture 1.





**Figure 1 - Defensive and offensive operational principles (adapted from Bayer, 1994)**

## Discussions

Some aspects must be considered when we refer to the teaching of defensive systems of handball in cadet category. The first is to develop physical abilities of teenagers. Machado and Barbanti (2007) claim that in adolescence there is a fast increase in body size, in weight or even in lengths of upper and lower limbs.

For Gallahue and Ozmun (2003), girls stop the skeleton growing at the age of 16 years old, while the boys, at the same age, still present growing in their skeletal structure, which indicates that the control of the movements can be damaged, both boys and girls. This statement reminds us about the need of constant exercises, in this development and growing phase, which aims a plurality of movements, as the variations of shapes, directions and displacement speeds and the different positions of the defender in relation to space that he is in the court or in relation to his direct opponent.

The authors above present, yet, that in adolescence the gains of resistance and muscular strength occur abruptly in boys, while in girls, it occurs in the beginning of puberty, regressing slightly in late adolescence (at nearly 16 years-old). As speed, muscular power of the upper and lower torso of boys has more progress in adolescence; however, girls present, in the same period, stabilization or decrease of the same variables (GALLAHUE; OZMUN, 2003). All these features meet the study by Antón (1990), that suggest an increase in volumes and intensities of physical training in this category

Bee (2003) claims that in adolescence, each part of the body grows in a different Rhythm, printing an asymmetrical aspect, which many

times, conveys the idea that teenagers are uncoordinated and, according to the author, they are not. Other aspect emphasized by the author is that, during the period of formal operations (described in the Cognitive-Developmental Theory, by Piaget, according to Dolle, 1978), the individual tries to solve a problem in a systematic and methodical way. When we transcend this concept to the handball teaching, specifically of defensive systems, we see that a certain situation may present one or more possible solutions, which must be presented as alternatives by the coach to the set of players to see a greater number of possibilities and embody them to their actions.

The second aspect is the teaching methods of JCE's. Overall, the coach might choose to focus on the defensive techniques by repeating movements and, after the learning of this set of techniques, try to bring them game's guidance. This model, according to Costa e Nascimento (2004), presents the technique as a step of preparation, which could make the understanding of situations of the game difficult and even discourage some students due to the exhaustive quantity of repetitions in the same exercises (it justifies the technique domain of movements), as one of the possible consequences of adoption of technician model.

The education focusing on tactics whose main purpose is to manage the structure of the game and the intervention ways of players within the transient process of this game, once the collective sports "own features that are not totally predictable" (COSTA; NASCIMENTO, 2004, p. 51), that opposes the technician proposal. An important observation is about the effectiveness of this teaching model, in which the player can have a good capacity to make decision, but the movement performed is not effective for the proposed objective. However, there is a motivational high level of students, due to the game and to playful activities be in a centered space during trainings and classes.

The concern about finding a teaching model of JCE's that fulfills the technical and tactical aspects is presented by Greco (1998). The author suggests a methodology focused on game situations, or in its operational structures, that start from simple situations, as one attacker and no defender – 1x0; the situation of an attacker and a joker against no defender– 1+1 x 0; an attacker and a joker against a defender– 1+1 x 1 and so on, going through several levels of variations, that go from the number of players and other fixed structures to achieving the



phase of formal game (6x6).

Thus, it is necessary that the coach knows some of the JCE's teaching methods because in different moments in the same season, he may change emphasis either on technique or on tactic, using tools of either methods.

By assuming that adolescence is a phase of permanent changes in physical abilities and anthropometric characteristics, and it is full of challenge for individuals, as social life and the motivation to take part in a sports team, a factor to be emphasized during the trainings or classes is the resolution of problem-situations in an encouraging way. This resolution based on schemes of encouragement-response must cover the important triple "time-space-situation", cited by Greco (2001), and not only the pressure of time and space. In this case, the priority is to take the right decision to solve tasks inherent to the presented situation, either individual, collective or simultaneous, that is, "when" and "why" to do and not only "how" to do, result of motor tasks decontextualized from the game.

The third concept is about the individual and collective defensive tactics concepts. The understanding of some concepts becomes necessary from the methodological point of view, including the description of defensive systems operation, such as:

- Deterrent: action of a defender to move towards the attacker without the ball, aiming to stop him to have the ball;
- Tipping or scale: movements of the players towards the ball, aiming to cover great spaces left in a defensive system;
- Fluctuation: displacement forward that aims the approaching of the defender in relation to his direct marker, in case he is with the ball. It aims to reduce the radius of action of the attacker with the ball possession, delay or accelerate his actions;
- Cover: movement of a defender towards the space created by the fluctuation of the partner;
- Marking: movements that aim to stop the attackers to get closer in relation to the goal to be defended; depends on quick displacements and physical contacts with the opponent;
- Defensive block: movement to put arms and hands towards the throw to attempt to stop passing the ball to the goal.

Understanding that the learning of a modality involves a process of transmission and apprenticeship knowledge, preferably of tasks the players can solve those more complex, we hope that, achieving the cadet category, these players must be experienced earlier, or at least have

the basic knowledge of displacement and positions adopted in handball, mainly if they come from children category, which seldom occurs. In all cases, the main task of the coach, besides acting as mediating the process of teaching-learning-training that prioritizes the creation of problem-situations, will be to increase the possibility of intervention of these players and provide a deeper knowledge of defensive tactics means, either in the form they are executed as in the right moments of their performances, even that previously the players have not experienced handball and its situations. For Antón (2002), the variation of offensive game allows the defender to have at hand a variability of means which allows an effective opposition.

The simultaneous participation in technical-tactical activities during classes or training sessions, that involves beginners and experienced players, may provide a propitious environment to learn both. For the beginners, such experience can be positive when we assume that the partner more experienced is a “support” to learning, or a “model” to be followed technically and tactically. For the more experienced, the attempt to help the beginners to find the resolution of tasks turns to be An “auxiliary” way to question the content of the domain, mainly due to the observations performed by the beginners and, why not, by teachers.

Therefore, because there is learning by the experience experimented by the player, the importance of holding-friendly games and training with more experienced teams, preferably the next higher category (juvenile), or even sporadic trainings sessions performed with players of adult category. Reinforcing the previous idea, Antón (1990, p. 194) claims that this step there must be an attempt “to consolidate the technical-tactical habits acquired starting a process of specialization in a simultaneous way,” and yet suggests that it is convenient the player develops alternately in two specific points. Nevertheless, the start of the specialization process refers to the event in question and not just to specific posts, there is a need of plurality of teaching connected to a specialization process that can be facilitated by both experiences acquired in practices cited previously (games-training and training with more experienced teams).

Nevertheless, there has to be an exception regarding the specialization of players in cadet category, in which those players who own previous experience in the modality and good development in capacities of game will go through this specialization process. This is not the

case. Most players always know the modality and its practice only in this category.

## **Final Consideration**

The work in cadet category must aim the plurality of situations of the game and, as a result, the formation of players with good actions, ability to make decisions based on the perception of offensive actions.

The main difference between defensive systems of beginners and professional athletes lies in the features of attackers, as the difference among speed intensities, variability of intervention techniques, tactical interactions and automation of different mechanisms. It is about the same systems at all ages, but with different issues to be solved, as difference of speeds and best view, domain and combination of all availabilities of triggers from offensive and defensive actions, which requires different ways of interaction.

Simple tasks, as games with numerical equality in reduced spaces or defensive numerical superiority (2x3, 5x6...), and complex tasks, as defensive numerical inferiority (2x1, 3x2...) or even defensive momentary imbalances, as a defender being introduced after the beginning of an offensive situation, they must be inserted constantly in classes and training sessions. Such tasks own, in many cases, multiple solutions that must be searched by players.

However, to fulfill its main objective as a defensive system, two premises must be respected: the individual tactic behavior and mutual help among defenders. It is necessary that during the teaching-learning-training process (TLT) individual and collective activities must be encouraged, since the start in handball until the training in high level productivity teams.

In handball, we find unchangeable structures (or fixed structures) and also structures that vary during the game (or variable structures), that are: a) fixed structures: the court, duration, the goal and the ball; and b) variable structures: the number of players, the defensive and offensive systems, the ways to use these elements, the interaction between the players and the arbitration sanctions. All these “structural components” of modality must be considered and used as tools to stimulus variation in training sessions.

Thus, the coach may choose, for instance, to reduce or expand the space of the game; to vary the numbers of players in relation to attack

X defense; to change between types of defensive systems or individual conduct of defenders; to major pressure in relation to game duration; or even settling some of these variables. These variations may occur in different moments in training, as in playful activities, in reduced situations of game or even during the formal game.

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### **Bibliographic references**

ANTÓN, J. L. **Balonmano**: fundamentos y etapas de aprendizaje. Madrid: Gymnos Editorial, 1990.

\_\_\_\_\_. **Balonmano**. Tática grupal defensiva: concepto, estructura y metodología. Granada: Grupo Editorial Universitario, 2002.

BAYER, C. **O ensino dos desportos colectivos**. Lisboa: Dinalivros, 1994.

BEE, H. **A criança em desenvolvimento**. 9.ed. Porto Alegre: Artmed, 2003.

COSTA, L. C. A. da; NASCIMENTO, J. V. do. O ensino da técnica e da tática: novas abordagens metodológicas. **Revista da Educação Física/Universidade Estadual de Maringá**, v. 15, n. 2, p. 49-56, 2004.

DOLLE, J. M. **Para compreender Jean Piaget**. Rio de Janeiro: Zahar Editores, 1978.

EHRET, A. et al. **Manual de handebol**: treinamento de base para crianças e adolescentes. 1. ed. São Paulo: Phorte Editora, 2002.

GALLAHUE, D.; OZMUN, J. **Compreendendo o desenvolvimento motor**: bebês, crianças, adolescentes e adultos. 2. ed. São Paulo: Phorte Editora, 2003.

GARGANTA, J. **O ensino dos jogos desportivos**. 2. ed. Centro de Estudos dos Jogos Desportivos, Universidade do Porto, 1995.

GRECO, P. J. **Iniciação esportiva universal**: metodologia da iniciação esportiva na escola e no clube. Belo Horizonte: UFMG, 1998.

\_\_\_\_\_. Métodos de ensino-aprendizagem-treinamento nos jogos esportivos coletivos. In: GARCIA, E. S.; LEMOS, K. L. M. (org.), **Temas atuais VI em Educação Física e esportes**, Belo Horizonte:

Health Editora, 2001. p. 48-72.

HERRERO, J. A. G. **Entrenamiento en balonmano**: bases para la construcción de un proyecto de formación defensiva. Barcelona: Editorial Paidotribo, 2003.

MACHADO, D. R. L.; BARBANTI, V. J. Maturação esquelética e crescimento em crianças e adolescentes. **Revista Brasileira de Cineantropometria e Desempenho Humano**, v. 9, n. 1, p. 12-20, 2007.

MEDINA, A. A.; ORTÍN, N. U. **Guía didáctica de balonmano**. 1. ed. Murcia: Librero-Editor, 2002.

MOREIRA, I.; TAVARES, F. Configuração do processo ofensivo no jogo de andebol pela relação cooperação/oposição relativa à zona da bola. Estudo em equipas portuguesas de diferentes níveis competitivos. **Revista Portuguesa de Ciências do Desporto**, v. 4, n. 1, p. 29-38, 2004.

RÉ, A. H. N. et al. Relações entre crescimento, desempenho motor, maturação biológica e idade cronológica em jovens do sexo masculino. **Revista Brasileira de Educação Física e Esportes**, São Paulo, v. 19, n. 2, p. 153-62, 2005.

REIS, H. H. B. dos. **O ensino dos jogos coletivos esportivizados na escola**. 1994. 75f. Dissertação (Mestrado em Educação Física) - Centro de Educação Física e Desporto, Universidade Federal de Santa Maria, Santa Maria, 1994.

SIMÕES, A. C. **Handebol defensivo**: conceitos técnicos e táticos. 2. ed. São Paulo: Phorte Editora, 2002.

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