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Basketball feint and non-verbal communication: empirical framework

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ABSTRACT

Raiola, G. (2015). Basketball feint and non-verbal communication: empirical framework. *J. Hum. Sport Exerc., 9*(Proc1), pp.S360-S368. Bodily communication has its own epistemological framework in which the message follows a process of encoding, transmission and decoding. It establishes contacts and relationships that are developed first by data processing and after by message content evaluating. It has, within it, an ethnic-social substrate that changes in different cultures and contexts. It is a dynamic flow consisting of five basic elements: context, sender, recipient, channel, code and follows a logical and analogical process. The arguments of bodily communication affect the feint, which means manifest intention of achieving a goal through the initial implementation of a plan with specific motor signs, postures, attitudes, which are later implemented in totally different pursuance It refers to the "tactics" decoding of bodily communication. In this way, non verbal communication have to be included both in experimental and human sciences, so it can investigated by observation and data collected and get together the quantitative and qualitative aspects. The game situations in basketball are so many variables, determined from interacting behaviors engines all players, between teammates and against the opponents. The behaviors of the feints are of great importance both that quality execution technique that every player has and to choice the tactical option. In this study, it is request to recognize the main aspects in basketball, such as in volleyball in past study and to give an argumentative and deductive classification. Method is the observation by descriptive research of three experts: coach of team, experts of body communication and performance analyst. Results show some interested aspects. The body feint is always a deliberate attempt to deceive the opponent to gain an advantage in the context of the game, moreover, it is the basis of the game of basketball, along one players against one, on which is built the complex process of acquisition of tactical advantages over opponents. There are some prerequisites to be able to realize the motor actions of fake, definitely a good knowledge of the rules of the game, knowing how to hesitate (take time before changing direction) or anticipate a move (make a cut changing speed) and especially the ability to read situations game tactics. In conclusion, for young athletes, the education of these aspects becomes essential to ensure the development of the imagination and anticipation motor, which imply the ability of invention and adaptation to different situations of the game. The more a player forces the opponent to react to his feint (shooting, passing or departure dribble), instead of acting, the more likely will have to gain the benefits (time and space) in order to carry out his plan motor effectively (to make an easy score). Although, it is to highlight that, in the modern basketball defensive tactics (zone press, help and recovery, doublings, defensive switch, etc.) start to work out the following game situations: the defender must not have more behavior liabilities compared to the attacker, but in turn must perform the behavior of pretending to try to reverse the situation tactic, creating disorientation, or otherwise, creating an unexpected situation for the attacker; in order to create; an advantage for the defense (recovery of the ball on the dribble, on the steps or on the shoot). **Key words**: TRAINING, METHODOLOGY, LEARNING, MOTOR SKILLS, TECHNICAL FUNDAMENTALS.

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INTRODUCTION

Before to introduce body communication theory it is useful to talk about on anticipation skills (Raiola, 2012) and applied to in basketball, where the athletes jump, run (Ammar et al., 2015; Attene et al., 2014) the ball run too fast and does not grasp than the other sports games. The ball is always grasped and rejected and the, despite has not ever parameter and element for making a good decision, have to make plays such as volleyball (Parisi et al., 2014) also if the time to play is much more. So it is very frequent the specific qualitative ability, called anticipation skill that allows making decision in time for action game. Because of the ball is too fast, it is very difficult to perform sport skills, so it has to anticipate the skills. Subsequent the questions are: What about anticipating your opponent? Is it important to anticipate in basketball? As the ability to anticipate improves, the game of becomes a lot more fun and interesting. What does it mean to anticipate? Will improving the ability to anticipate make a better basketball player? There are a few reasons reading plays and anticipating. First of all, the anticipation improves quickness, the earlier anticipates the play, the earlier will be in good position. If it is good at anticipating, then it will be quicker moving before the opponent and to the ball and making the play. Secondly, anticipation skills improve confidence. Improving the ability to anticipate will help to learn fundamental techniques such as grasping, passing and hitting. This is because anticipation tends to help you focus better. The more it stays focused, the more confident it will be in making plays. Thirdly it conserves energy. Players that anticipate do not freak out and tend to move more efficiently around the court. (Raiola, 2013)

When playing, it might feel pressure to make plays which results in energy loss. If it anticipates the movement, it will not feel as much pressure and have more energy because it is not as stressed. This is especially important when playing in tough conditions like hot and humid weather or in deep sand on the beach. The better it is at predicting what is going to happen next, the more likely you will be in good position to make a play. Basically, if it becomes good at anticipating, then playing basketball it will become easier (Jackson, 2011) To know how improving anticipation skills is strictly connection to body communication theory (Argyle, 1988). The actual basketball training is made by theory, tactics of game play, knowledge of biomechanics and motor control, automatism of sport gesture techniques, and the functional mechanisms to recruit energy. The formative itineraries give rise to the acquisition of the psychological bases of competence that regulate the dynamics of a group in the diverse phases of a game, but there was not a thorough study of the function of signs and gesticulation. A more detailed analysis of the diverse actions connected to the phases of a game sport can provide evidence for the strategic role of body language and its conditioning ability on performance and results. The cause of this conditioning probably draws on two interdependent traditions of research: the first on the form of nonverbal communication in sports games, and the second one, on the neurobiological mechanisms that connect action and cognition. Contest description: Basketball is a very fast sports games whose technical characteristics, tactics and logistics constantly favors nonverbal communication between the players on the court. Furthermore, the motor control system theories have got a significant influence to deep the phenomenon. Bodily communication has got its own epistemological framework and into which the message follows a process of coding, transmission and decoding. It establishes relations and contacts that become real thanks to the elaboration of data and to the evaluation of the content of the message. It is also the relationship in sociality (Shannon & Weaver, 1949) where people collaborate in a common target, it exchanges inside of itself the roles to make effective the function, it shares the meaning using facial expressions (Ekman, 2001), signs, symbols (Argyle, 1988) and spaces (Hall, 1966) also with the paradoxes of body as regards to the meaning of word (Watzlawick, 1967). Bodily Communication in social context also allows the building of the phenomenon through the process of subjectivity among people (Husserl, 1935) and perception also contributes to this process (Merleau-Ponty, 1945). It is the spaces and the relations

body and bodies in the spaces according to proxemics theory (Hall, 1966). It is also a dynamic flow formed by five basic elements: context, sender, receiver, channel, code (Jakobson, 1956) and it is enriched by some other elements of ethnic and social knowledge as in the case of relationships among individuals belonging to different cultures (Meharabian, 1972) where coding and decoding are different but the process is the same. The identifying of the source and the destination of the message are fundamental phases to intercept the code in the channel of communication and to proceed to the decoding. By code it means a shared system for the organization and the use of specific signs both linguistic and physical. The relation between mind theories such as Behaviorism (Mackenzie, 1977), Gestalt psychology (Kohler, 1947), Cognitivism and Phenomenology (Raiola, 2014) and bodily communication help to enlarge the horizons around the body to a best understanding of the phenomenon in an educational psychology vision. The neuropsychological aspects contribute to widen the knowledge of the mechanisms of bodily communication according to the laws of movement (Latash, 2004) of motor control (Adams, 1975; Schmidt, 1985) and to the abstract processes of particular nervous structures and they describe the wide complexity of them. There is new scientific evidence on the brain on some nerve cells that are activated when it sees, hears or perceives through touch but does not produce a movement or act. These nerve cells are defined by the properties to reflect movements of the others or imagine it remaining in stop position. They do not contribute to the practical execution of the movement but they will receive only information (Rizzolatti, Fadiga, Fogassi & Gallese, 1996). They can be seen by sophisticated brain-imaging equipment such as trans-cranial magnetic stimulation and functional magnetic resonance imaging. The focus of this study is the application of bodily communication theories and to construct an interactive process to aim a new scientific paradigm on bodily communication by integrative vision. So the aim of the study is to collate the distinct interfaces of the same knowledge and even to study together and with details the qualitative aspect into the environment. Furthermore the objective is to identify the types of bodily communication in basketball. So, to define the first inventory of signs (gestures) most frequently used in volleyball, according to:

a) The scientific principles of corporeal communication based on the theoretical model of Dr. Michael Argyle, Professor of Social Psychology at Oxford University and Fellow of the Wolfson College for his work published in the book Bodily Communication (1988) pp. 5-12,22-25,48-68,118-131.150-153,165-181,199-209. This way study is integrated by other authors on nonverbal language such as Shannon & Weaver (1949), Watzlawick (1967), Ekman (2001), Jakobson (1956), Meharabian (1972), Hall (1966); b) The aspects of perceptive senses according to the research of Berthoz, published in the book Le Sens du Mouvement, (2002) pp. 1-41, 103-122. This way study is integrated by other authors on motor control theories system such as Adams and Schmidth (2008); c) The neurobiological implications based on the findings of the research of mirror neurons by Rizzolatti published in the book So Quel Che Fai (2006, pp. 113-135) and by Iacoboni Mirroring People - The new science of how we connect with others (2008, pp. 134-180)

It has to consider that the development of coordination skills promotes the learning of sport skills where it is included the several feint aspect or body communication skills. Otherwise, have little development of coordination skills results in a slowdown in the development of the ability to yield (Blume, 1986). In short, the coordination skills represent both the assumption that the result of motor activity (Meinel et al., 1977), obviously they do not act and develop in isolation, but interact with the conditional capacities, cognitive, affective, moral , social, ... It should be noted that the training of motor skills helps develop coordination skills and on the contrary, knowing that their continuous operation and combining them develop coordination skills and conditional (Manno, 1984). Basketball is a sport of situation, for sports situation means all those sports in which it is not possible to predetermine the actions that will occur in the

development of the game (Altavilla et al., 2014). Coordination skills are very tied to motor skills, in the sports of situation, just as basketball, motor skills are the technical fundamentals and improving these can only acquire a high level of sports performance. In all sports of situation, the technical fundamentals acquired and stabilized, are executed automatically without paying attention to what you are doing, because at this level the focus is on the purpose of the movement, that is, action tactics. Instead, in sports not of situation occurs, at least in part, that the focus is on implementation of the technical gesture.

Basketball players have high demands on coordination skills, such as the rapid alternation of phases of attack and defense, a shortcut of motor actions appropriate to the situation of the game, a continual alternation between large movements and short, etc. however, for the resolution of a motor task, during a phase of the game, there is always a predominance of one or more capacity than the other, even if all the coordination skills involved in motor actions.

Analyzing the development needs of coordination skills in the game of basketball is essential to acquire a variety of information, which are used to determine the lines of trajectory of the ball, traveling companions and opponents, the tactical experience gained over time, knowledge of the tasks defensive and offensive, the fundamental technical individual (motor skills), etc. for example, the ability of orientation allows to position themselves on the field (spacing) in relation to the position of the ball, teammates and opponents; the ability of differentiation allows a technical gesture with great precision and economically, for example the shot in suspension. The ability to pair or individual movements matching coordinating them into a global movement aimed towards a goal.

MATERIAL AND METHODS

The method used is theoretical and argumentative to deductive the framework to identify the elements of body communication and its element on feint. Empirical investigation to identify the skills and the aspects of the fundamental by observation. Observation is done by descriptive research of three experts: coach of team, experts of body communication and performance analyst. The sample is 3 specific tactics game steps selected by the coach.

RESULTS

Decoding of signs or of body communication, such as the feint, is “functional” when it refers to the same team and when communication act among players is involved or that one between the trainer and the athletes on the tactical intentions, strategies and problems of game. Decoding can be “diagnostic” when it is possible to recognize the different kind of nonverbal communications of the opposing team, through signs and elements that characterize the communication styles of pupils and PE teachers (Gaetano, 2012) of athletes and coaches. The third form of decoding is “tactics” when the gesture or the action simulates a game intention to solicit a reaction of the adversary who helps their own team. In this case, the neurophysiological and psychological basis of the movement, associated with the perception, influence the performance of each technical skill (Gaetano et al., 2014)

The framework must be included theoretical and practical steps that explains how to teach and training the anticipation skills and how to address the players to utilize the anticipation skills to win the confrontation with the opponent. Finally, the framework of the education planning for coaches, trainers and PE teachers must contain specific theoretical, argumentative, technical, tactical and practical aspects to approach and

that integrate motor and sport skills as competences in body communication and the feints (Polidoro et al., 2013; Raiola et al., 2013; Tursi et al., 2013).

Use the tutorial symmetrical, that is to always carry the fundamental technical, sports skills, with the upper / lower and on both sides of the playing field:

- 1 Stop, fake, step and shoot right and left- Hesitation and shoot in the running right and left Variation in the execution of the fundamental technical:
- Pass with two hands from standstill, the head, the chest, side, etc.
- Pass with a hand from a standstill, with both the right and with the left.

Change in external conditions, is a methodology widely used in sports games of situation, as it allows players to adapt to changing environmental conditions normally encountered on the playing fields (lighting, balloons, type of flooring, backboards and baskets, etc ...) changing exercise habits, rules and tactics of the game is useful to refine the processing capacity, the ability of tactical thinking, while the change in the rules of the game can make it easier or more difficult motor task or tactical team .

Combination of motor skills, to use this method is appropriate that the players have a good grasp of the technical movements to be combined:

- Pass revving, after fake
- Pass running without and with dribble
- Pass jumping, penetrates and download (fig. 1)

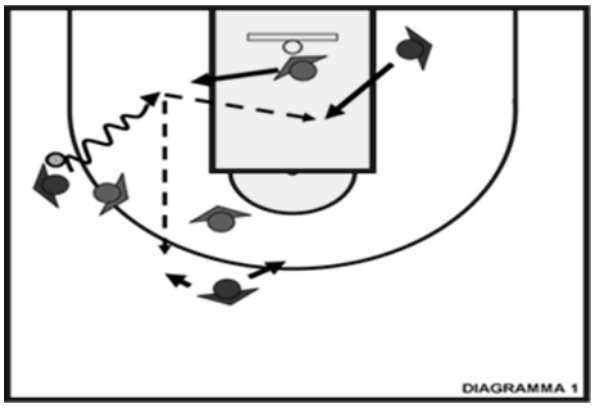

Figure 1. Pass jumping, penetrates and download

Exercise under pressure, this method develops the ability to react, because reducing the time, space or both available for the execution of the actions of the game, significantly increases the level of this mobility, the habit of not reducing the quality of the technical response.

- Reduce the time of execution of a motor task (1vs1 in 5 seconds) fig.2
- Reduce the space to perform a motor task (1vs1 in ¼ of field) fig.3

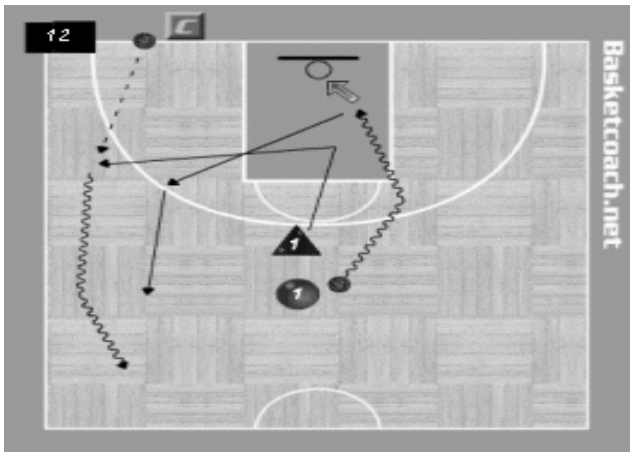

Figure 2. 1 vs 1 in 5 seconds

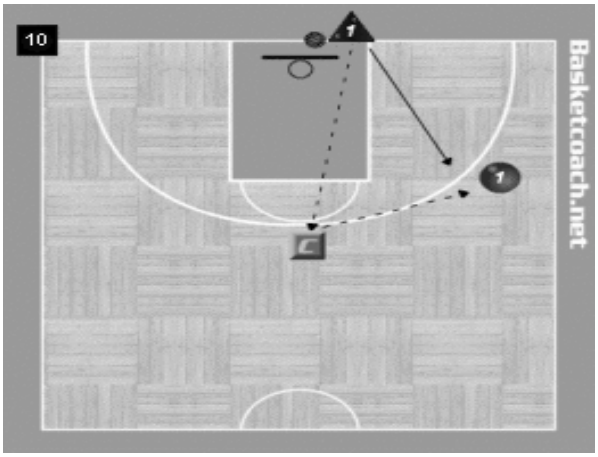

Figure 3. 1 vs 1 in ¼ of field

Exercise under physical and psychological fatigue, state of fatigue reduces the level of motor execution. This method is useful both to train availability is variable and to accustom players to manage stress, especially, the final phase of the match:

- Shooting of 2 or 3 percentage points at the end of training
- Free shoots with environmental disturbance
- Game 5 vs 5 to 3' in the situation of advantage / disadvantage

DISCUSSION AND CONCLUSION

Learn and refine new and always different technical fundamentals also increases the development of coordination skills and the feint, but the fundamental technical sport skills) must be chosen to be finalized in relation to a specific coordinative aspects to be developed, such as the change of direction, the fake shooting, the change of direction, etc. It is good rule to remember that the highest level of coordination is one in which the student, in addition to successfully perform the gesture, keeps the possibility to modify it and adapt it to the "situation" while maintaining the effectiveness (Altavilla et al., 2014). Prove adept also

implies to be sure of their abilities and improving the efficiency in skill is reflected in an increase in security, in the reduction of energy consumption and, at times, in the reduction of time in the execution of a movement. This means reducing or eliminating unintended movements and unnecessary. Ultimately become particularly skilled in any field, and specifically in the execution of motor tasks, implies the baggage train and hone motor skills that you possess. A failure and continuous stress, even in the presence of a strong capability, will never make significantly disabled or able to learn new motor tasks. This objective is accomplished through a long period of work, through numerous exercises performed with conscious control and with a great variety of motor experiences. Each coach will be able to choose and creates new exercises in relation to the level of skills development of its players and propose game situations in which they can experience and increase their technical and tactical skills.

It's obvious to say that during the phases of the process are clear training objectives to be pursued, exact instructions for the conduct of the exercises, feedback is always appropriate and motivating, in order to get an effective workout and with an active and conscious participation by all the players.

Finally, since this work is an example of how you can work overall on coordination skills in body communication as well as the feint, it is only a starting point from which to set research work on special feint skills.

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