

THEORETICAL, ARGUMENTATIVE AND EMPIRICAL VOLLEYBALL STUDY ON BODY COMMUNICATION AND ITS RELATION TO ANTICIPATION SKILLS: NEW PERSPECTIVES OF COACHING FORMATION

Gaetano Raiola

University of Salerno, Italian Federation of Volleyball FIPAV, Italy

Review paper

Abstract

The actual coaching formation of volleyball regards training theory, tactics of game play, knowledge of biomechanics, 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 (Teodorescu, 1984), but there was not a thorough study of the function, signs and gesticulations (body communication). Due to the high velocity of the ball during the sport game, the qualitative aspects of nonverbal language are involved by the performance. Anticipation skills, that mean ability to predict the game action and to play immediately, are fundamental in volleyball and it could be defined one of the practical expression of body communication. The aim is to define the first inventory of signs (gestures) most frequently used in volleyball and the classification of decoding of body communication. Furthermore, to search argumentative conclusions on application body communication at anticipation skills in volleyball. The study method is complex and integrated. Complex because it includes the basic research methodology of Philosophy, Pedagogy and Psychology and the testing of descriptive research by empirical approach. Integrated because it combines several theoretical aspects of pure study, deductive arguments related to different theoretical knowledge in relation to the technical and tactical aspects of volleyball. Therefore, it is necessary to provide an educated course for technicians and coaches that teaches and speaks about the anticipation skills in theory of body communication. Education in the field of corporeal and body language requires interactive methodologies like cooperative learning, role playing, focus group and the experimentation of multiple types of simulations in relation to anticipation skills, that is one of the most qualitative aspects of tactic and technique of game sport. It needs to make an appropriate framework inside university studies in collaboration to Italian Federation of Volleyball FIPAV that includes the basis of the functions of gestures, signs and mimicking in order to construct the competence of gestures required to become expert coach of volleyball.

Key words: *sign, gesticulation, decoding tactical-functional-diagnostic, learning*

Introduction

Before to introduce body communication theory it is useful to speak about on anticipation skills in volleyball, where the ball run too fast and does not grasp than the other sports games such as basketball, handball, and rugby. The ball is always rejected and, often, the volleyball players has not time to exactly understand everything on the action game (Reynaud 2011) and he, despite has not ever parameter and element for making a good decision, have to make plays (Raiola, 2003). 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 and it is forbidden to grasp, it is very difficult to give a game act with a good technique (Waite, 2011), so must be to follow the way to improve the anticipation skills. Subsequent the questions are: What about anticipating your opponent? Is it important to anticipate in volleyball? 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 volleyball player? There are a few reasons reading plays and anticipating. First of all the anticipation improves quickness. The early it anticipates the play, the earlier it will be in position.

If it is good at anticipating, then it will be quicker moving 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 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. When playing, it might feel pressure to make plays which results in energy loss. If it anticipates the act, 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 become good at anticipating, then playing volleyball it will become easier (Jackson 2011) To know how improving anticipation skills is strictly connection to body communication theory (Raiola, 2007). The actual coaching formation of volleyball training theory, tactics of game play, knowledge of biomechanics, 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: Volleyball is a very fast sports games in a very narrow and little court (81 square meters per team) 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 frame 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 and 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 (Skinner, 1969; Mackenzie, 1977), Gestalt psychology (Kohler, 1947), Cognitivism and Phenomenology 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 volleyball. So, the research wants 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), Mehrabian (1972), Hall (1966); b) The aspects of perceptive senses according to the research of Berthoz, published in the book *Le Sens du Mouvement*, (1997) pp. 1-41, 103-122. This way study is integrated by other authors on motor control theories system such as Adams (1975) and Schmidt (1985); 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 Iacononi *Mirroring People - The new science of how we connect with others* (2008, pp. 134-180).

Methods

The study method is complex and integrated. Complex because it consists of the basic research methodology of the humanities, its Philosophy, Pedagogy and Psychology and the testing of descriptive research. Integrated because it combines several theoretical aspects of pure study, deductive arguments related to different knowledge: epistemology, education, psychology, physiology. Thus it explains and justifies the phenomenon with the results of descriptive research in the field to evaluate the body communication performance relating to anticipation skills.

Integrated because it utilizes empirical approach, both related to the field approach for the human science by ecological vision. An observers group analyzes three fast volleyball skills to evaluate the type of phenomenon by the following four steps: 1) study of specialized literature; 2) observation, 3) investigation, and 4) focus group. The subjects, that made the specialized group, are three coaches of major level of the observed team. The group is integrated by six athletes of the observed volleyball team that participate to focus group. Furthermore, the results are interpreted by argumentative approach and to relate to the tactical and technical aspects to deep the educating and training characteristics with the method of action research (Lewin, 1946). For this study, action research has been used to improve learning of ability and skills, as well as suggested resources for those seeking to incorporate action research method into their own practice of training and education. In generally, action research can be utilized in three domains of science education: teacher education and training professional development; research on science learning; and curriculum development and implementation (Feldman & Capobianco, 2003). Teachers are always in the role of researcher, either studying their own methods of instruction and assessment in this case the coach is in the same situation plus he helps the athletes to replay and learn the anticipation skills

Theoretical Results

Bodily communication, according to the authors Argyle, Mehrabian, Watzlawick, Ekman and Hall has its own epistemological framework where the non-verbal message is empirically investigated in the process of decoding and encoding. Communicating means to establish a relationship, a contact among people and implies the transfer of a message from one individual to another, communication is not just transmission of information through a channel where the beginning is the source of the body signs or issuer and the arrival or receiving the same in the form of Shannon and Weaver which addresses to logical-mathematical aspects. In the relational approach, communication is the foundation of sociability and socialization where it planned cooperation, exchanges of roles (issuer / receiver), sharing among multiple actors in a same context surrounding the provision for the existence of common symbols that replace or accompany the use of language. Communication is social because it is composed of behaviors that help the socialization through the construction of subjectivity meanings among people. The individual, through the natural development and evolution in the interaction with the socio and cultural context, acquires a set of norms, values and behavior characteristic patterns of that particular cultural reality. They are learned and, therefore, are evaluated and varied from context to context and only from the context, because the decoding of messages from outside the body is difficult due to the lack of specific knowledge elements of the signs, symbols, signals,

movements and spaces of that context. Another context has other items, for example the sport is different from the other context for dynamics, rules, and elements. The communication process takes into account these variables, a dynamic flow where there are several elements: the context, sender, recipient, channel and code (Jakobson, 1956). Knowledge of the factors of communication does not guarantee the success of the communication. In the case of relations among individuals belonging to different contexts is necessary to remove the obstacles against which the communication would not be effective. If you are able to identify immediately the issuer the message, the one who produces it, and the recipient, who must decode the message or the recipient to whom the message is directed, the context, the channel and the code may be incomprehensible. Code means a shared system for the organization of signs that refers to a linguistic code, due to a different language the message is decoded by the absence or difference in code where code is the same as spoken language; if channel means the physical medium through which the communicative act takes place, a non-verbal channel for example can cause misunderstandings in relation to cultural beliefs and customs, the environment, understood as physical or psychological scenario in which communication events occur, may interfere with the communication process when the code of an issuer is understood by the recipient but the meaning is distorted for ideological reasons. It is quite obvious that, for those who do not speak a language code, physical contact or rather non-verbal language represents the first real form of communication between the two subjects. It is not often given appropriate emphasis to this approach that can generate some real misunderstandings if you do not know the habits of the interlocutor. Some aspects of nonverbal communication are universal, others are adopted by different cultures and contexts and these differences in the area of non verbal communication represents the cause of "a major source of antagonism, misunderstanding and conflict between cultural and ethnic groups" (Argyle, 1988). The smile, facial expression and a symbol according to different contexts, cultures and places, is widely interpreted as a sign of contentment considered the studies of eleven different cultures. In Japan, the smile is used as a mask that can hide embarrassment or reserve. The face, facial expression, is the first element to be analyzed in a first approach followed by the postures, movements and body attitudes. The facial expressions that communicate emotions are very similar in different cultures and in different contexts. If Ekman and Friesen's studies reveal that the facial expressions reveal emotions, feelings and moods, no less importance must be given to gesture, "is the aspect that seems to change more in the context of different cultures" (Argyle, 1988). He defines nonverbal emblems acts that have a direct verbal translation, as do the nod, the beckon and the pointing at. The origin of these movements is derived from basic human experiences or

symbols that describe actions or natural persons. If this final gesture is considered universal and then the same in all cultures, it is not the gesture of the head that in many cultures as in northern Europe is shaken to indicate "no", while in Greece the rapid movement of the head is a sign of denial. The same sign with thumb and forefinger to form a closed ring is a sign of approval in the United States and northern Europe to mean "ok" but in southern France indicates something worthless recalling zero. It should not be neglected the contribution of sign language in its purest form were developed by groups of people who cannot make use of words such as deaf. The visual interaction varies considerably within different cultures. The Arabs, South Americans and southern Europeans in a survey conducted by Watson (1970) on a sample of 110 foreign students of the University of Colorado, looking more than students from other cultures where physical contact is limited. Just as American blacks look less white, giving the impression of a lack of attention or understanding, if combined with slight head movements during listening. While African-Americans would look directly at a higher index of equal status, so they are reluctant to do so because their action would be interpreted as a lack of respect. The spatial behavior must be duly considered in the relationship between individuals and groups. The proxemics theory (Hall, 1966) gives the answer on the relation among object and people and between persons within the past relation. It defines the current definition of distance space and its effect of verbal language. Anthropologists often distinguish between cultures with frequent physical contacts and cultures with no or very limited physical contacts. Individuals from cultures with frequent physical contact (Arabs, Latin Americans, southern Europeans) are closest, are often opposite each other, touch each other and they look more at each other, they also speak louder than people from cultures of non-contact as Asians, Indians, Pakistanis and northern Europeans. The Arabs, for example, when greeting you take your hands for a certain period of time or they can embrace and kiss the hands, face or beard in formal occasions; Arab men, in conversation, touch each other on the upper arm with their right hand and playfully slapped their right hand, against the Arab females are not touched at all in public. Most likely the differences in spatial behavior may result from differences in the structure of the physical environment, such as the size of the houses and the degree of crowding. Instead, we are likely to interpret the spatial behavior in a very simplistic way: who gets too close is considered invasive in contrast to those who approach too little that are considered cold and aloof. There are significant cultural differences concerning the number and type of contact. The Arabs also have a forward leaning posture, an angle of the body most directly aimed at the contact, while the Japanese bow (even up to 45°) are only a sign of respect. Another characterization of ethnic groups is the use of voice tone and vocal intensity as not to associate with the verbal communication that is the absolute transmission through the contents of the word.

The inhabitants of the West Indies do not mark the end of sentences with a rising tone of voice appearing rude to the English culture, in addition they utilize high tones to emphasize what they say, wrongly interpreted as sudden outbursts of anger. The Arabs use a very high tone of voice compared to most cultures that could be seen as assertive and speak up is synonymous with sincerity. The Japanese instead change their vocal style to sex gender and social status of their partner, Morsbach has distinguished eight separate tones of voice. This analysis opens the scene of bodily communication in physical education and sport and its specific aspects related to the individual situation of sports both individual and group, with common roots and different endings, with general characterizations and specific details. The confrontation between adversaries is also with the help of body communication and the effects in the context at that particular time and place. Particular arguments revolve around the feint, manifest intention of achieving a goal through the initial implementation of a plan with specific motor signs, postures, attitudes, etc., which then are carried out in completely different versions of those originally deduced. In this case, the psychological foundations of the movement related to the perception and motor control on the theoretical framework, according to the authors Adams (1975) and Schmidt (1985), affect the performance. In addition, the motor system according to the theory of mirror neurons (Rizzolatti et al, 1996) is a new ecological vision more and more associated with the current Phenomenology of Perception, Merleau-Ponty (1945), with the current ecological visual perception of the mind (Gibson, 1978) and with the current movement sense (Berthoz, 1998). So, explaining how the brain works only from the biological point of view may be limited, the same may apply if it deals with the matter only from the philosophical point of view. The new scientific findings bring into the question of body communication and the theories of motor control are the principal field of research. It distinguishes the temporal phase of the afferent perception and efferent movement enforces the reflection according to two scientific paradigms. The first scientific evidence that the perception occurs first and then occurs the movement and so constantly in a continuous pathway, where the feedback helps continuously the movement by adjustments and corrections of motor execution. The adjustments and corrections are compared by the scheme already in motor memory. It is called in motor system theory closed-loop (Adams, 1975). The second one is when the movements are in the motor memory in a wide repertory of motor scheme and they are executed without the help of feedback for the adjustments and the corrections of errors. It cannot be adjustment and corrected because the feedback comes up to the 200 milliseconds and the brain do not process the data. It is called in motor system theory (Schmidt, 1985). 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 move 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 phenomenon of activation occurs continuously, in processes of the mind related to the movement of its own or that of others, thus opening a new scenario on learning related to the movement by imitation and teaching based on simulation. New discoveries about the brain suggests that some sort of order mixing action perception in a single process where perception and execution are together without sequential order. It is described in motor imagery. Which means that action and perception carries out in a single moment without the phases of afferent sensory or perception, motor development of the idea, motion planning and execution of actions? In conclusion it would open a new way to concern the body and its movement in accordance to a complex approach by ecological vision and the theory of mind and multiple intelligences, one of the most is body kinesthetic intelligence (Gardner, 2002). The partial study nowadays does not help the total phenomena of the body language. There are no studies in physical education and sport literature on body language, although there is an interest in the field of investigation and the consequences that the appropriate use of the findings and mechanisms of encoding and decoding of the message body may have some proficiency in fundamental gestures of the sport in variable contexts. It might be useful for the analysis and evaluation of performance of the athlete. It checks the inference on the behavior, to observe the associations among the observed variables and possibly identify pathways that help to regulate the educational training to enhance the performance. To identify the components of body communication relating the epistemological, psycho-pedagogical and technical evaluation could be useful to collect the all aspects around the question.

Empirical Results

They are three types: Tactical, Functional and Diagnostics. The decoding of the signs or of the gesticulation may be: Tactical when the gesture or the action simulates a game intention to solicit a reaction of the adversary who helps their own team. Bodily and nonverbal communication of the athletes is expressed through 4 different typology: 1) dominate when an athlete dominates the area of game thanks to his high athletic and/or technical ability works; 2) hostile or adverse when in the adverse phases, the technical-athletic ability works in conjunction with the facial signs and the body pantomime which communicate aggressiveness; 3) friendly during training when the actions of the game are finalized to improve on the plans of attack and defense. In this case, the players of the same team split into 2 separate (rival) teams), 4)

subjected or mastered when the offensive abilities of a team are obviously higher. The decoding of the signs or of the gesticulation may be: Functional when it refers to the same team and it is involved the communication between the game companions or that between trainer and athletes on the tactical intentions, the strategies and the problems of game. In volleyball, for example, the setter uses conventional prearranged signs to communicate to the other players the plans of the game (hand gesture): 1) index finger meaning the ball will be set (tossed) in front of the player (setter) for a very rapid spike centered on the net by the attacker; 2) middle and index finger meaning the ball will be set (tossed) behind the player (setter) for a very rapid spike on the right side of the net by the attacker; 3) thumb and index finger meaning the ball will be set (tossed) away and in front of the player (setter) between the left side and the centre of the net for a very rapid spike by the attacker; 4) thumb and little finger meaning the ball will be set away and behind the player (setter) between the right side and the centre of the net for a very rapid spike by the attacker.

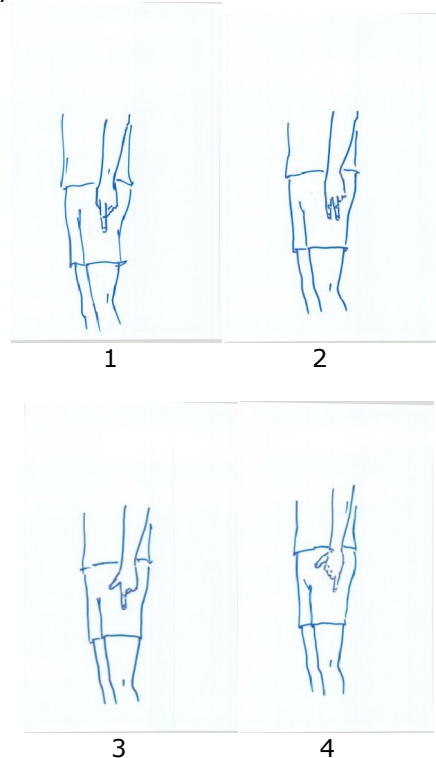


Figure 1. The setter uses conventional prearranged signs to communicate to the other players the plans of the game (hand gesture).

The decoding of the signs or of the gesticulation may be: Diagnostic when it is possible to analyze the diverse forms of nonverbal communication of the opposing team, the signs of the athletes and of the trainer, who anticipate or solicit actions of the game. This sign language between players is based on (Hall, 1966; Argyle, 1986): 1) close contact and a glance when distance between the players of two teams, visual contact through the net; 2) expressive ability when facial expressions and corporeal (body) gestures that precede, continue,

and follow the actions of play; 3) significant difference between signs when difference between corporeal signals, conventionally coded, prearranged, or personal; 4) rituals when gestures, facial expressions, or attitudes that mark the behavior of the athlete; 5) symbolic presentation of oneself when utilize the body and of gestures to express one's own needs or demands.

Discussion

To speak about technical aspects on body communication and anticipation skills applied to volleyball it means to argument the theoretical results and to justify the empirical results at training. To empathize the application of them at the game contexts of volleyball is the way to follow. It needs to recruit and collect the significant knowledge of this field and to teach very well for the formation of technicians and coaches, because they have to educate and train own pupils and athletes on the anticipation skills and to address them to make decision. Education for coaches and trainers means to speak about on reality of sports games, through specific steps on theoretical and argumentative method in a path formation where the game aspects must be organically systematized to results of body communication. Thus, as following it speaks about the practice in relation to the theories that has just augmented. Making volleyball easier by learning communication skills means to train how to read and anticipate the game actions such as position and to use good technique to get in position. In volleyball, if it has the ability to anticipate effectively, it has the ability to predict what is going to happen earlier than most players, i.e. a player called "libero" (specific role takes position sole in second line and does not attack and set, but he can defense and receive), that always seems to be in the right place to dig is a player that reads the hitter very well. This highly skilled defensive player will know where the ball is going to be hit much earlier than most other players. This aspect is related at diagnostic decoding of body communication and must be trained because watching how the hitter (attacker) approaches and contacts the ball helps. A defender will know where the ball is likely to go even before the hitter contacts the ball thanks body communication type diagnostic. Defender could also know what area of the court to give up and what area the ball will likely be sent to thanks at same type of body communication decoding. Apparently, it may appear the defensive player is all over the court but in reality the player is just giving up what is unlikely to happen, because he plays by help of anticipation skills and decodes by diagnostic type of body communication. Defender will seemingly cover the entire court, anticipating the play. Anticipation skills can be developed at all positions and diagnostic decoding of body communication could help usually during the game actions. The defense fundamental have to train with these specifications and characteristics relate body communication and communication skills. Again, it is important to realize anticipation skills are not just for playing

defense and passing. A setter needs to anticipate the ball coming from a passer and this it is possible through a good decoding of body communication by diagnostic and tactical type. Not all passes are going to be good, so the better a setter is at anticipating the pass; the better the setter will be at getting in position. Furthermore, a hitter needs to anticipate the ball coming from the setter. This is probably the most underused anticipation skill in youth volleyball because many coaches over emphasize where the ball needs to be set and blame the setter for poorly set balls. Instead to improve anticipation skills also in youth volleyball players is good to make decision in time and functional type of body communication gives a strong contribution to improve technical skills of the hitter needs to realize it is possible to read the setter (Raiola, 2010a). Another role interested at anticipation skills by decoding body communication is the hitter; it is practice reading the setter, predicting where the ball is going to be spiked. Hitters will seem to possess the ability to hit any set, this is not the true. Because of constant practice of reading the setter and having the mindset to get in position no matter what and not whining about the set. So belong again a new case, passers need to anticipate the server and it is realizable for the mechanism of the decoding of trajectory of the ball and the decoding diagnostic and functional type of nonverbal language of the server. Most servers have few favorite serves or like to serve to certain spot. Watch for these tendencies and use decoding of opponent body is advantageous and, through anticipation skills, it is possible call the scheme as well as attack or block (Raiola, 2010a). It can also watch the arm swing to help predict where the serve is going and decoding of body message before the serve shot and subsequent the diagnostic of velocity and trajectory of the ball helps the performance. If the ball is contacted back behind the head, the serve will likely go up and short over the net. Only decoding body language of the arm by functional type, the opponent team can make the better game action. If the ball contacted in the serve is more out in front, the ball will likely travel lower and more straight across the net. Most players are fairly predictable by diagnostic decoding of body communication. Not only is it a good idea to watch for opponent tendencies, but also learn the tendencies of its teammates can be useful to win the match. Watch for what its teammates tend to do in certain situations and be ready to help out, if you have a teammate that gets blocked every time the ball is set tight to the net, be down and ready to cover thanks body communication. Or if a teammate is struggling passing, be ready to help out the setter to play the second ball (Raiola, 2010b). Many rallies would last longer if players would just do a better job of anticipating teammates. Every game actions are just illustrated must be taught in with good practice of training, but this is other aspect that will be spoken about in didactics. Is it even possible to teach anticipation? Not only does it think it is possible to teach anticipation, but it also believes it is possible to create players to not anticipate.

Obviously it does not want to train its players to not anticipate on purpose. But it believes if it run drills a certain way, it will actually help train the mind to focus on the opposite of anticipating. Momentum is in everything, so if your team has been performing drills without emphasis on anticipation, do not be surprised that they cannot just "turn it on" when it is time to play (Wrisberg, 2009). The formation of technicians and coaches does not include the methodology of teaching anticipation skills and the relation with a field of knowledge apparently unrelated at theory, technique and didactics of volleyball. It suggests 3 ways of expertise to run volleyball drills that keep players from learning to anticipate. It is absolutely forbidden performing a skill off a toss. If the setter does not anticipate very well, then a set off a toss is a wasted repetition. The problem with setting off a toss is that most often the setter will be thinking they do not need to get in position to set because the setter is tossing the ball right to them. It should always be ready to move and anticipate where the ball is going and this can happen if the training includes body communication it's decoding and relation to communication skills. Expecting the ball to come directly to setter is the opposite of anticipating and it is a mistake, in reality it must always anticipate. Performing drills where players do not have to anticipate where the ball is going. If it has plays work on passing short serves and the coach tells the plays that the ball is going to be served short, then the coach is not working on anticipation. To work on anticipation for serve receive, it has the server serve the ball either short or deep without the passers knowing what is coming. It will find that this type of volleyball passing drill will actually create much better passers because it forces passers to anticipate the serve earlier. Passers will start moving before the contact for serve instead of waiting and reacting to the flight of the ball. It is possible if it is properly training anticipation skills with body communication. Convince the hitters that the ball must be set perfectly in order to get a kill (volleyball language). It does not want to make the mistake of having the hitters believe it is hard or near impossible to adjust to a bad set. The fact is that the best hitters can hit just about anything. Do not be a hitter that constantly complains about the set, the trainer must be teaching the decoding in every type of body communication. Learn to anticipate the setter and adjust the approach when necessary, so it must adjust to every set because the ball never goes exactly where he expects it to. It is not so much that running drills that do not involve anticipation is all bad. It can help to perform drills that do not involve much movement so the player can focus on positioning, technique, accuracy, and consistency and less on having to anticipate. Thus, improving anticipation is not easy and is something you can always improve no matter how skilled it is, so the sooner it starts the better is for teammates. Teaching skill versus playing games and how anticipation factors in athletes likely have seen coaches run practices where it just seems like all they do is play games

and do the same random fluff drills. It is useful to utilize the method of random practice instead of blocked practice (Wrisberg & Schimdt, 2008). It knows how important teaching skill is and it does not understand why coaches do not spend more time focusing on techniques. It thinks the reason teams can get away with not specifically training to improve skill is because there is a large anticipation component to playing games and subsequent it is duty to know theories and arguments on bodily communication, included the neurobiological aspects. The fact is, if it just plays in tournaments, scrimmage, or performs ball control drills in practice; it is going to improve because it is going to improve the anticipation skills. This is not to say that the way to go is to just focus on improving anticipation. When thinking long term, it is the level of individual playing techniques (passing, setting, hitting, etc) that is going to be the biggest factor when it comes to meeting your potential, while the skill of anticipation is an important attribute to technique execution and tactical choice. At the end, the anticipation skills are important in volleyball because has several applied directions in order to role, scheme, technique, tactics and game strategy. The theoretical fundamental helps to understand the whole of anticipation skills phenomenon and it is easy to learn it in every contexts.

Conclusions

During the last years at the professional level, many trainers have dedicated time to these aspects of nonverbal communication, to their codes, and to their technical-tactical uses of gesture, but often undervaluing the scientific aspects that subtend body language and its relation on anticipation skills. Therefore, it is necessary to provide an educated course for technicians and coaches that teaches and speaks about the following subjects: a) Neurobiological knowledge on the mechanisms of regulation of the various types and ways of imitation, learning, and gestural communication according to the research on mirror neurons; b) Knowledge of the mechanisms of perception and on the sense of movement or kinesthesia which studies the types of simulations and anticipations of motor actions; c) Knowledge of the mechanisms of imitation in the different phases of training; i.e., the phenomenon called covert or implicit imitation or the chameleon effect; d) Knowledge of the rule of the emotion in the sports effect described as an emotional contact; e) Acquaintance and meaning of non-verbal communication, of the interpersonal motor attitudes, of spaces and body in the spaces, of posture, of facial expressions, of contact, of proceeding, and of the glance. Education in the field of corporeal and body language requires interactive methodologies like cooperative learning, role playing, and the experimentation of multiple types of simulations (Raiola, 2011). It needs to make an appropriate framework inside university studies with contribution of Italian Federation of Volleyball that includes the basis of the functions of gestures, signs and mimicking in order to construct the competence of gestures required to become

expert coach of volleyball or specialist performance analyst. In the same time, into the framework must be included theoretical and practical steps that explain 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 have to educate teachers, coaches and technicians on specific theoretical, argumentative, technical, tactical and practical knowledge with ecological approach that integrates also motor and sport activities as expertise.

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TEORIJSKA, ARGUMENTIRANA I EMPIRIJSKA ODOJKAŠKA STUDIJA O TJELESNOJ KOMUNIKACIJI I RELACIJAMA PREMA ANTICIPACIJSKIM VJEŠTINAMA: NOVE PERSPEKTIVE OBUČAVANJA TRENERA

Sažetak

Aktualno sportsko treniranje odbojke zahtijeva poznavanje teorije treninga, taktike igre, biomehanike, automatizacije sportske tehnike i funkcionalne mehanizme za angažman energije. Formacijski raspored daje izvor prikupljanja informacija o psihološkom temelju natjecanja koji regulira grupnu dinamiku u različitim fazama igre (Teodorescu, 1984), ali tu nema studiranja funkcija, znakova i gestikulacija (tjelesne komunikacije). Zbog velike brzine lopte za vrijeme igre, kvalitativni aspekt neverbalnog jezika je uključen u izvođenje. Vještine anticipacije, odnosno sposobnosti predviđanja akcija u igri radi momentalne akcije je fundamentalan u odbojci i može biti definiran kao praktični izraz tjelesne komunikacije. Cilj je definiranje prvog inventara znakova (gestura) koje se najčešće koriste u odbojci kao i klasifikacija dekodiranja tjelesne komunikacije. Nadalje, i radi traženja argumentiranih zaključaka u primjeni tjelesne komunikacije u vještini anticipacije u odbojci. Metoda istraživanja je kompleksna i integrirana. Kompleksna jer uključuje temeljno istraživanje metodologije u Filozofiji, Pedagogiji i Psihologiji kao i testiranje opisnih istraživanja pri empirijskom pristupu. Integrirana je jer kombinira više teorijskih aspekata čistih studija, deduktivne argument u odnosu na različita teorijska znanja u relacijama s tehničkim i taktičkim aspektima odbojke. Dakle, neophodno je osigurati edukacijske tečajeve za tehničko osoblje i trenere koje će govoriti o anticipacijskim vještinama u teoriji tjelesne komunikacije. Edukacija u prostoru tjelesnog jezika zahtijeva interaktivnu metodologiju poput kooperativnog učenja, planiranje uloga, fokusnu grupu i eksperimentiranje višestrukih tipova simulacija u odnosu na anticipacijske vještine, što je jedan od najkvalitetnijih aspekata taktike i tehnike u sportskim igrama. Treba pripemiti odgovarajući okvir unutar sveučilišnih studija u suradnji s Talijenskom Odbojkaškom Federacijom što uključuje temelje funkcija gestura, znakova i mimike u skladu s konstrukcijom kompetentnih gestura zahtijevanih u cilju dostizanja ekspertnih odbojkaških znanja.

Ključne riječi: znak, gestikulacija, dekodiranje taktičko-funkcionalno-dijagnostičko, učenje

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Correspondence to:

Gaetano Raiola, PhD.

Faculty of Social Sciences

University of Salerno

Via Ponte don Melillo, 84084, Italy

Phone: 089 964417

E-mail: raiolagaetano@libero.it