

3.1 Fundamentals of communication

Authors: Ana Merayo and Jesus Portillo

Introduction

In this section, we will look at some of the factors that impact the fluidity and comprehension of communication between different parties. It is important to work on communication, because a message can have multiple interpretations when there are communication interferences.

One of the most important communication methods in sports training, both for trainers and athletes, is body language or non-verbal communication. Communication will generate different types of responses depending on how it is interpreted.

Tools will be shared in this reading that are useful for trainers and sports psychologists looking to improve their verbal and non-verbal communication.

Paul Watzlawick states that "One cannot not communicate". With this statement, the Austrian psychologist affirms that in human interaction all behavior communicates a message. This shows that there is no such thing as non-behavior or anti-behavior, just as it is not possible to not communicate, we are always communicating something.

Theories of human communication state that communication problems between people, on most occasions, are due to speakers not sharing the same point of view. Theories that focus on interaction conceive communication as an open system where messages are exchanged through interaction.

A lack of adherence to certain rules of communication causes mistakes in mutual understanding and patterns of pathological interaction. These axioms are:

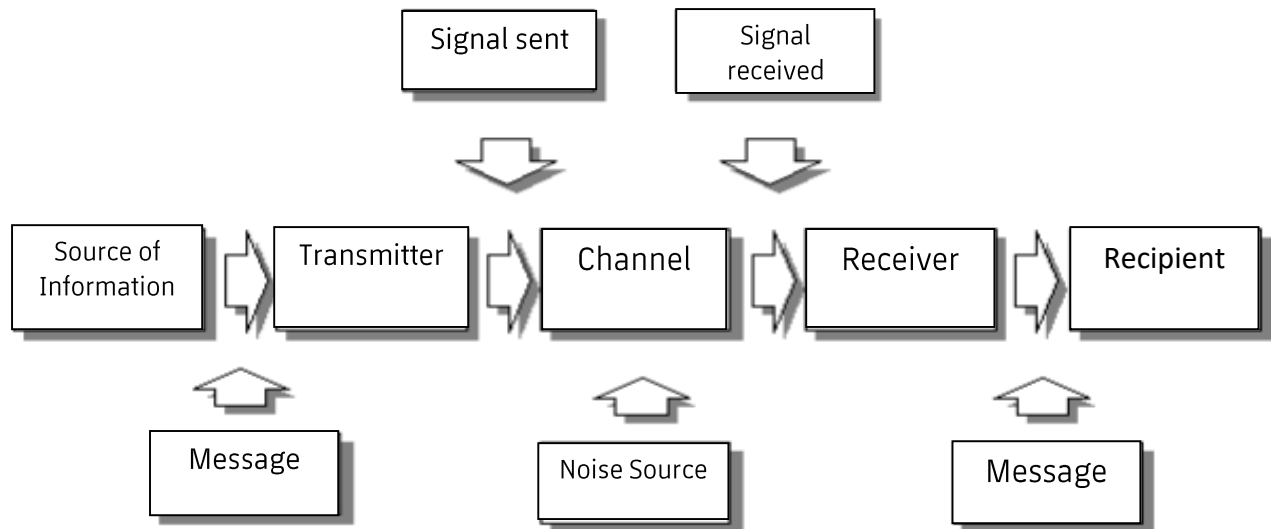
- One cannot not communicate: communication not only occurs through words, but also through facial expressions, gestures, and even through silence.

- Content and relationship: human communication happens on two levels, one is content - what is verbally transmitted and that is subject to non-verbal communication. The relationship aspect, that is to say, the relational aspects of messages change according to how the receiver interprets the content. For example: a message can be said in an ironic tone, which will modify the reception of the message.
- Digital and analog modality: the analog modality generates a quantitative transmission of information (the message is or is not transmitted), whereas in the digital modality, the message is qualitative (the interpretation of the message sent out).
- Punctuation gives meaning: During communication, subjects only concentrate on their own point of view, which on occasion, leads them to think that there is only one correct interpretation of facts, because the point of view of whomever is speaking is ignored.
- Symmetrical and complementary communication: If two subjects possess the same information on the topic they are talking about, it can be said that communication is symmetrical. This refers to the relationship that exists between two speakers. And in the case that the speakers possess different knowledge, we are talking about complementary communication.

Drawing from this premise, there is always communication. Before looking at tips or concrete tools to improve communication in sports, it is important to understand some fundamental concepts in the communication process from a new perspective.

One of the most influential **information theories** was introduced by Claude E. Shannon and Warren Weaver at the end of the 1940s. In this theory, the **factors of communication** acquire a relevant role (transmitter, receiver, source, channel, message, and code).

Figure 1: Communication Theory



Source: Shannon & Weaver, 1949.

Next, we look at what the different factors represent, to better understand the communication process.

Information source: The message selected based on the multiple messages received.

Transmitter: starts the process, produces a certain number of words or gestures that form part of the message to be transmitted. Although initially the transmitter will primarily be the trainer, on numerous occasions, the athletes themselves or members of the coaching staff will be the ones who will initiate communication. A good deal of the success or failure in the communication process will depend on role of the transmitter.

Receiver: this person's function is to decode the message that was transmitted and transferred through the channel, to be transcribed into language that is intelligible for the true receiver or recipient. Aside from the usual receivers present in the actual interaction, in the sports world, we should note that there is usually another group that receives a lot of information and whom we should keep in mind: the fans or supporters of our teams. This can be clearly seen during press conferences given by coaches of high level teams or on an athlete's social media.

Channel: means through which communication is transferred between the transmitter and receiver.

Message: refers to everything that is sent. This can be a word, a signal, etc.

Signal: message codified by the transmitter.

Noise source: refers to possible interferences that may affect the information source.

Once the different factors that intervene in a communication process are known, we can make this process more effective.

An important aspect to highlight is that, in a communication process, not only does the agent who sends the message (transmitter) intervene, but the person who receives the message (receiver) also plays an active role. In this back-and-forth between the transmitter and receiver, there are a number of important points to consider, for example: most of the responsibility for an effective communication is taken by who sends the message; when the transmitter does not consider who will receive the message, instead of communicating, they are just informing.

An example of this is coaches who see their way of communicating as unchanging, and thus, if an athlete does not understand a message, it is the athlete's responsibility. The opposite scenario would be a coach who understands that their predominant communication style reaches some athletes but not all; and thus, they develop new strategies to adjust their message in order to reach everyone. This is a fundamental and frequently observed practice, and demonstrates the coach's interest in evolving and adapting to the complexities of communication.

3.1.1. Communication styles

It is important to note that when the transmitter sends a message, not only is verbal communication produced, non-verbal communication also takes place at the same time. There are two types of communication. Even though verbal communication is given more relevance, if non-verbal communication is not used and suitably attended to, serious issues can arise with whomever we are trying to interact.

The differences between verbal and non-verbal communication extend beyond action versus speech. Looking for congruence and coherence

between these two types of communication will be essential for maintaining credibility amongst players and the coaching staff.

Verbal communication

Based on verbal communication, reference can be made to two components, linguistics (vocabulary, syntax) and paralinguistics (rhythm, tone, and volume).

In the context of training, there may be a physical trainer who talks too fast (a problem with rhythm) or a trainer who speaks too loud (a problem with volume) - two of the most common examples that tend to be observed in verbal communication. In this case, the person responsible for sending the message must work on at least one of these variables, whether a linguistic or paralinguistic variable, based on the needs of the receivers.

Regarding verbal communication, as communicators, what is said needs to be congruent with what is intended to be said. The question to be asked here is: What does the person want to communicate and how they communicate it? In this sense, the following must be taken into account:

- Defining what you want to communicate and structuring the message in such a way that the receiver will be able to understand it. The elements for a clear message are: set communication objectives, determining a common ground between what is said and the receiver's knowledge, use visual resources, don't provide excessive information, summarize the main ideas in a few words.
- Select a set of signs that support the transmission of the message. In this case, linguistic methods are most typical.
- Choose the means through which the message will be sent and use the appropriate mean, depending on the context, content, and objective of the message. The predominant channel is auditory; however in sports, the visual channel often dominates during competition. Gestural language is a heavily used communication strategy in this context.

The message not only has a stated intention but also an implied one. For example, when a messenger inadvertently exposes a lack of experience in the subject matter, which conflicts with their verbal message.

The transmitter is responsible for communicating the message in an environment where the receiver can exchange information and where the transmitter can observe if the message is erroneously interpreted.

Non-Verbal Communication

Both verbal and non-verbal communication supplement and overlap each other. It is argued that non-verbal communication, depending on the situation, can reinforce what is verbally said, contradict it or override it, as well as regulating communication between parties.

Additionally, body language has intercultural interpretations that characterize specific regional customs. Non-verbal language includes movements of the face, body, hands, the space where a person is located, attitude, demeanor, and physical appearance. Some of the characteristics of non-verbal communication are:

- It has multiple interpretations.
- It transmits a large amount of information to others.
- It is part of verbal content.
- Each culture has particular characteristics.

Five categories of non-verbal communication can be mentioned, namely: emblems, illustrators, regulators, adapters, and affective displays. We will review each one in detail:

- Emblems: gestures capable of substituting a word. They are specific to each culture and they transmit a communicative objective.
- Illustrators: movements executed with the arms and hands, which are related to or accompany speech.
- Regulators: gestures that regulate speech or reflect listening and establish a conversational rhythm. Head and eyebrow movements are frequent when a certain topic is being listened to or talked about.
- Adapters: movements developed during childhood with the intention of satisfying needs, controlling emotions, and instigating social contact.
- Affective displays: body or facial expressions which show emotion; happiness, sadness, fear, etc.

3.1.2 Non-verbal communication and sports

Next, we will introduce a communication style used in sports, called the non-verbal communication (NVC) code. This code refers to the communication used between team members with the objective of not being interpreted by their rivals, so as to conquer a series of strategically designed situations that will positively influence the results of the match.

Praxemes:

Understood as a sign inserted in a code, where the signifier is a set of praxiomotor conditions and the meaning is a set of praxiomotor objectives that are associated with it. An example of a praxeme is a check away in football.

Gestemes:

A set of attitudes, mimics, gestures, and motor patterns used to transmit a question, indication, or a tactical or relational order as a simple substitution for a word.

It is important that coaches manage communication with players assertively and that they insist that the players use that same communication style between each other. Not just assertive in terms of spoken word, but assertive in motor expressions, too. Players must keep in mind that their movements are non-verbal ways of communicating, therefore the aim should be for their movements to be understood by their teammates, who can then come to their aid.

Paraverbal Communication

Not only do we have to use words carefully, but also all other phenomena that accompany the voice in language must be managed well to ensure that the message is clear. This includes sounds and noises made with the voice and the coordination between breathing and talking.

The voice corresponds to 40% of the impact of a transmitted message. Trainers must master communication in terms of quality, fluidity, and domain. These variables that will make the message clear. Some guidelines follow:

- Enunciate clearly.
- Use different tones of voice. Just as in everyday use, for example, to reflect different moods. Master raising or lowering tone depending on the message that is intended to be transmitted.
- Emphasize messages using energetic or intense tones of voice, as relevant.
- Use pauses and silences to control sounds as a communication strategy. Be careful with pauses which may create doubt for the other person, since the message could be misinterpreted. During speech, the right words need to be found in order to not create doubt.
- Control emotions for better speech. Intonation is an emotional state indicator and often, it may not be the words that are interpreted as hurtful, but the tone in which they are said.

- Don't use circumlocutions and avoid raising your voice uncontrollably to whatever extent is possible.
- Control breathing, which is an indicator of voice control.

Body and facial movements are a form of communication. Depending on what is trying to be communicated, words can be paired with gestures or facial expressions that confirm or deny what is being said. In training, coaches and players share a universe of gestures and non-verbal communication. There are training methodologies to develop non-verbal communication codes which are used during competition so that rivals cannot interpret communication.

Sports psychologists can observe all the gestures used by athletes and coaches during their conversations and, based on this, are able to perform the relevant analyses. Then, during individual or group sessions, they will be able to work on them.

How much of what is thought or felt during particular moments is transmitted through body language? In the case of a soccer match, if the coach is not satisfied with the team's performance, it will be shown in his body language; players observe this and their anxiety levels increase, bringing about a corresponding decrease in performance. All of this can be a consequence of body language. In the opposite scenario, when performance is optimal, this is also evident in both the players and the coaches.

3.1.3 Gestural and body language

In the field of kinesthetics, body language is studied to successfully interpret the messages transmitted by the body through its different parts. The body has a vast potential for communication and expression.

In teaching and learning situations, a constant exchange of information occurs between coaches and athletes. These messages are transmitted verbally and also through body language. They can be divided into the following categories:

Gestures and movements: during communication, it is necessary for some of the ideas that are intended to be transmitted be expressed with the body so that they make it to the receiver. The expressive displays of the body don't always correspond to what is intended to be communicated, and, on occasion, this may generate confusion.

Regardless, communication should not be stereotyped and expressionless, instead, emotional impulses should be controlled so as not to distract or confuse the sender. Coaches and sports psychologists, should take advantage of the body's ability to communicate and develop some of the following skills:

- Know how to use facial expressions as communication resources, understanding the appropriate time to use them, like during competitions or training sessions. Each situation calls for a different way of delivering speech that is accompanied by gestures which enhance or neutralize it.
- To strengthen a message, nodding is recommended. Additionally, nodding can be used to show approval for an athlete's actions. Athletes interpret these gestures and experience an increase in confidence and motivation.
- Use eye contact and individualizing it for each athlete when that athlete is speaking directly to us. This produces a sense of visibility and makes them feel part of the team. Not looking at an athlete, on the other hand, generates a sense of indifference, and can be demotivating as well as producing other negative effects. Care should be taken with maintaining eye-contact for too long, since it could increase an athlete's anxiety levels. Body language should be used in a fair, dynamic, concrete, and inclusive way.
- Use gestures that indicate feelings of affection, assurance, support, and openness. Don't let negative emotions overwhelm the moment since this will not help players feel secure.

Body posture: body movements are one of the clearest forms of non-verbal communication. They have a direct relationship with emotional states: open postures indicate happiness and closed postures can indicate sadness.



Muscle tone is a silent and incorruptible witness to everything that happens to us.

During communication, participants receive an implicit message through body posture. Interpretation depends on two factors: **orientation** and **body attitude**. Orientation expresses the level of inclusion given to the audience. Body attitude, on the other hand, generates information in

terms of predisposition (favorable or not) to the other speakers. Based on this, sports coaches must take the following into consideration:

- Position your body in such a way that it includes all athletes. Avoid turning away since this can be interpreted as indifference.
- Prioritize audience-facing orientation more than at an angle. Facing the audience facilitates communication.
- Pay attention to the body posture that athletes exhibit since this can indicate discomfort or disagreement with the coach's message.

Body contact: body contact as communicative reinforcement is not frequently used, only on certain occasions. These gestures are subject to variables such as age, gender, confidence level, personality, etc. For athletes, affective signs such as a slap on the back, generate feelings of trust and confidence.

Cultural characteristics are some of the variables that most condition this body language. Coaches must consider the following criteria:

- Whenever possible, try to make sure that social constraints don't limit contact as an affective display.
- Do not force contact to show approval, aim for it to be natural and spontaneous.
- Observe how the athletes behave with each other and their body contact.

Coaches should keep these suggestions in mind that are targeted at communicating through the body. The objective is to master speech so that the message is correctly interpreted and to accompany this speech with the ability to manage your body.

Communication is how we reach other. Sports psychologists must teach coaches these skills, and they should also plan how they use these skills themselves. The coach and the sports psychologist must understand that their communication style forms part of planning, since, as we have previously seen, speech generates diverse interpretations and reactions in others.

Communication style is related to athletic performance. Coaches who do not control their emotional levels generate high anxiety levels in athletes. Whether it be during competitions, training sessions, or communication with parents; how an idea is transmitted should follow logical criteria and have coherence between verbal and body language.

As previously noted, with soccer or basketball matches, for example, a coach is visible in the coach's box and we can see an endless number of

gestures, arms movements and body movements. In most cases, coaches are not completely aware of how much information they continuously send through gestures. How many times has a coach been seen calming down his players while running on the sidelines. It is a priority to be coherent between the message we send on verbal and non-verbal levels, so that the message is interpreted without ambiguity.

Figure 2: Body Gestures That Accompany Speech



Source: Zeit online, 2017, retrieved from goo.gl/mFePNY.



In the image, we can see how different body language is interpreted both by players and fans. Managing body communication is a useful tool to accompany verbal communication

The psychologist Paul Ekman dedicated much of his research to analyzing facial expressions. He asserted that facial expressions of emotions are not determined by culture but are rather universal, and therefore have biological origins.

The importance of this type of communication is such that we could have an athlete that just joined the team who comes from a different culture sitting on the bench, and even though they might not know the language, they are able to interpret a large quantity of the messages sent through observed gestures.

Visual Language

Makes reference to signals and eye contact. In the next image, we can see how a basketball player signals his teammates to communicate the strategy to be followed. This resource is heavily used in sports and, in most cases, it will be the coach's responsibility to give these signals content and make sure that all the team members understand their meaning.

Figure 3: Visual Language



Source: Barcelona Edition, 2018, retrieved from goo.gl/ckzM5X



Indicating a possible play

Eye Contact

This will allow the person sending the message to complement the information transmitted or elaborate on its content.

3.1.4 Information theory

Information theory or the mathematical theory of information is the first scientific approach to the communication process. It arose from the need to understand the channels through which information is transmitted. It studies how human beings can transmit ideas, or in other words, how one mind can influence another.

During a communication process, there are three different levels that can be distinguished: technical, semantic, and pragmatic. At the technical level, the process of security with which information is transmitted between the sender and the receiver is studied. At the semantic level, whatever is related to interpretation and the meaning of what is being transmitted is studied. And at the pragmatic level, this addresses what causes the message, its influence, or effectiveness.

Types of Communication during Training Sessions

Plested, Vallejo & Londoño (2004) argue that verbal communication is incomplete. Body language correlates more strongly with what is intended by speech than speech.

Effenberg (1995) introduced the concept of *sonification*, which is understood as the transformation of movement into acoustic sounds. This is expressed by understanding that linguistics are not complete at a communicative level since they fragment communication. However, non-verbal speech, due to being packed with semantics, is considered more complete. Sports training is a context that has specific characteristics which must be considered for the communicative interactions between the coach and the athlete.

In a study, soccer coaches were monitored to determine communication styles during training sessions. The following characteristics were considered:

- The coach's position in front of the group.
- The use of body segments during speech: hands, arms, and body posture.
- Ways of delivering paralinguistic instructions.

In sports contexts, such as in soccer, there are visual, body, auditory, and oral communication styles. There are multiple communicative expressions which are developed in the training environment and, furthermore, during competition. Thus, the coach must consider the factors that may distort their message: from how they face the group to their eye contact.

During training, there are back-and-forth communications between the coach and the athlete. Frequently, we can see arm and hand movements

used to motivate, indicate positions, and point out specific places to occupy, accompanied by verbal speech to reinforce the content of the message. Such discourses are considered intentional semiotic processes, which means that they are oriented to particular and specific things. The coach needs to master discursive skills in order to ensure that athletes interpret their messages correctly.

The coach is responsible for managing their communication style so that the athlete clearly understands their messages.