

Introduction

Sports practice, understood as an organized process of teaching and learning within training or competition institutions, was established as one of the main social phenomena of the twentieth century. Nowadays, this trend does not seem to be stopping in terms of global growth.

Within this context, the dimensions involved in the development of every athlete, regardless of age, gender, and level of performance or competence, have to do with the acquisition of:

- General and specific motor patterns (physical abilities).
- Knowledge of individual technical gestures of the sports discipline (technical skills).
- Models of collective coordination, in the case of sporting disciplines as a whole, as well as modes of execution of technical gestures, in the case of individual disciplines (tactical skills).
- Systems to understand sports situations and responses to the various moments and environments of a contest or competitive situation (strategic skills).

The dimensions mentioned so far have to do with visible aspects of sports practice, as much for the one performing as for their colleagues, rivals and the overall environment.

However, there is a dimension that remains unseen, yet deals with all the aspects described; this dimension has to do with mental abilities. Within these, the set of psychological tools that the athlete can employ before, during and after practice or competition determines the quality of their experience, both cognitive and emotional.

Mental strength, therefore, is a construct referring to the mental abilities that every athlete should develop at ideal levels, in order to optimize, precisely, their experiential quality within the sport. Optimizing levels of performance (main objective of the psychology of sport and physical activity) does not mean winning every match or always being the champion, but rather enabling every individual to experience what they know how to do within a field and enjoy each one of these behaviors. It is fundamental to differentiate the concepts of performance and results, not as mutually exclusive but rather as complementary yet different from each other. While the concept of performance refers to the level of execution of the sports task, the concept of outcome refers to the interaction of that execution with the environment and generates a concrete consequence.



We present the following table in order to make this important distinction more graphic:

Table 1: Performance and Results

Conceptual Characteristics	Performance	Results
Timeline that defines it	Cause	Consequence
Type of variable that defines it	Independent	Dependent
Defining verb	Attempt	Achieve
Defining question	How will I execute it?	What do I want to achieve?
Defining logic	Journey	Destination

Source: Prepared by the author.

If we had to list the main components of the mental strength of the athlete, we could mention the following:

- Self-Confidence
- Motivation
- Attention and Concentration
- Controlling Anxiety Levels
- Attitudinal Development

We will begin precisely with this last one, because it is one of the main fuels that determines not only the continuity or discontinuity of the athletic practice of every athlete, but the already mentioned and transcendent quality of the sport experience.



1.1 Attitudinal Development

Attitude is a determining disposition. It is the way an individual is prepared when facing the diverse situations proposed by the environment. According to De Diego and Sagredo (1992), we may define it as the "disposition of the spirit expressed externally in some form, the states of mind being the manifestation of affectivity, the way we respond to all that affects us from within" (page 143).

In this sense, one of the main axioms of cognitive-behavioral psychology in general, and in particular of the psychology of sport and physical activity, becomes extremely relevant: think-feel-act. "Positive thoughts generate positive emotions and all this leads to positive actions" (De Diego and Sagredo, 1992, p. 144).

Therefore, the interference of thought is fundamental when it comes to talking about the development of attitude in the athlete. Choosing what to think, avoiding contaminating ideas and advocating constructive ones is the central pillar for the construction of another psychological variable that supports attitudinal development: self-confidence. Defining self-confidence is fundamental to mental strength in athletes, since it is "the internal belief that one is capable of doing something, based on the appropriateness of one's own abilities to perform successfully" (De Diego and Sagredo, 1992, p. 146).

The relationship between performance and self-confidence has a lot to do with the athlete's attitudinal development. As self-confidence levels grow, sports performance also grows to an ideal point where, if self-confidence levels continue to increase, the level of performance will start to decline. Therefore, a continuum of self-confidence that ranges from scarce levels to excessive levels can be established, where both extremes are mediated by an optimum level of self-confidence; that means that the athlete should have full confidence in their abilities and perform at their peak level (Dasil 2004, p. 341).

De Diego and Sagredo (1992 pp. 148-149) also mention some cognitive and emotional features of the athlete concerning self-confidence levels. Once these items are made clear, it will be easier to describe the specific components of attitudinal development and to understand their respective states.

Table 2: Psychological Traits of Self-Confidence Levels

Scarce self-confidence	Optimal self-confidence	Excessive self-confidence
They are so afraid of failure that they refuse to participate or act without conviction.	They play based on real possibilities and propose goals based on these.	The level of self-confidence is greater than what their chances actually guarantee.
They see themselves as a loser.	Joint development of self-confidence and physical-technical skills levels.	These inadequate beliefs of the athlete can be reinforced by messages from their environment, such as parents, coaches, etc.
They firmly believe that no matter how much they train, they will continue to do so poorly.	They interpret errors and defeats positively, as part of the sport, and as data to improve in the future.	This inadequate inner belief may also be an external reflection of very little internal confidence. Aggressiveness and cynicism can be a response to internal management of fears and doubts.
High levels of anxiety and low levels of concentration.	They do not limit themselves due to fear of winning or losing.	They confuse what they are now with what they would like to be.
High risk of abandonment of sports practice.		They avoid situations that may damage their image with fictitious injuries, discussions with the referee, etc.

Source: Taken from De Diego and Sagredo, 1992.



These manifestations of the athlete's thoughts and feelings, by virtue of their self-confidence level, must be linked to concrete modes of action. It is at this point that attitudinal development, in particular, has a lot to contribute.

Attitude is a state of mind, that is, it benefits from being transient. An individual can have the optimal attitude to manage a certain situation at a given time and a very different one to face the same situation at another time. Therefore, attitude should be characterized as dynamic and susceptible to changes in its levels and states, as we will see below.

In order to understand the functioning of the psyche in terms of attitudinal development, it is useful to be aware of the main components of this process:

- Amount of psychic energy: abundant or scarce.
- Type of psychic energy: positive or negative.
- Orientation of the objectives: towards performance (execution of the task) or towards result (attainment of achievement).

After describing these components, we can mention the four states that make up the ladder of attitudinal development. Based on their combination, a regular individual and a specific athlete (at a specific time) can be placed into one of the following states:

- Challenging state.
- Blocked and explosive state.
- Apathetic and avoidant state.
- Quitting state.

Table 3: States of Attitudinal Development.

Challenging Attitude	Blocked or Explosive Attitude
Emotional energy intensity: high.	Emotional energy intensity: high.
Type of emotional energy: positive.	Type of emotional energy: negative.
Predominant orientation of the objectives: performance (looking towards the execution of the task).	Predominant orientation of the objectives: outcome (toward achievement).
Avoidant or Apathetic Attitude	Quitting Attitude
Emotional energy intensity: low.	Emotional energy intensity: low.
Type of emotional energy: positive.	Type of emotional energy: negative.
Predominant orientation of the objectives: outcome (looking towards achievement).	Predominant orientation of the objectives: no objectives.

Source: prepared by the author.

Before going deeper into each of the states, we will go over the central concepts presented so far:

- Think-feel-act: depending on how one thinks, feels and acts.
- Performance is the athlete's management focus, that is, their attempts at executing the task. This is the cause of their actions.
- The outcome is the consequence of the management of the athlete with regard to their executions and interaction with their external sports environment. The outcome should not be the central focus when managing the athlete, since there are factors concerning the outcome that the athlete cannot control voluntarily.
- Self-confidence is the athlete's internal belief that they can do something successfully, based on real possibilities.
- Attitude is the determining provision that the athlete should possess in order to respond to various sports situations.
- Attitude is a transient, not a permanent state of mind. Therefore, attitude is dynamic and susceptible to changes in its levels. Hence why it is relevant to understand the attitudinal development of the athlete.

- There are four states in this attitudinal development: challenging; blocked and explosive; avoidant and apathetic; quitting.
- The components of these four steps are: amount of energy, type of energy and target orientation.

1.1.1 The Challenging Attitude and its Cognitive-Emotional Component

The challenging attitude is the ideal state in attitudinal development. It is the highest step on the attitude ladder. In this state, we can observe the perfect fusion of the concepts of attendance (quantitative presence in training and competitions) and adherence (qualitative presence in training and competition).

It corresponds to high levels of positive energy and predominant performance targets.

The athlete's characteristic thinking in this state is: I want to try again and again until I succeed.

It is the ideal combination of objectives oriented towards the execution of the task and clear achievement goals.

Self-confidence levels at the challenging attitude stage are optimal (neither scarce nor excessive, but ideal).

This corresponds to an athlete who, from a cognitive point of view (thought), plans their actions from real possibilities; they set challenging but not utopian objectives; and they manage their mistakes from a constructive perspective (making them into real learning tools, not self-punishing tools). They understand defeats as useful provisions for the next contest or training session and does not present evidence of managing their thoughts from cognitive defects, such as filtered thinking, mind reading, polarized thinking, catastrophizing and emotional reasoning. Each of these cognitive vices will be explained in the next section.

From an emotional point of view (feelings), the challenging attitude creates an athlete who does not fear making decisions or failing, without dramatizing not being able to achieve what they set out to. The most important thing is that the individual experiences high levels of enjoyment for their sport in this state.

The set of these cognitive-emotional components maximizes the likelihood of positive actions by the individual.

All these characteristics allow us to infer that the quality of the athlete's sporting experience will be optimal. Under these conditions, the chances of continuity in the middle and long term practice of the sport, sustainability in the acquisition process, assimilation and automation of the learned sports gestures and behaviors, and achieving maximum use of the teaching-learning process are increased. Within the sports sphere, certain personality traits are fomented in human beings, such as:

- High levels of frustration tolerance.
- Conviction in attempts.
- Perseverance in processes.
- Flexibility in ways of understanding the situations to be managed.
- Solvency in behavior, for themselves and their environment.

1.1.2 The Blocked and/or Explosive Attitude and its Cognitive-Emotional Component

The blocked or explosive attitude is the state that precedes the top step previously described in attitudinal development: challenge. The athlete attends, wants to perform, but is unable to find the proper procedures to succeed.

This stage corresponds to high levels of negative energy and a clear predominance of objectives focused solely on results. The characteristic thinking of the athlete is: I want to, but I do not know how.

Anxiety about attaining achievement does not allow for clarity in terms of strategies on how to succeed. The levels of self-confidence in the blocked or explosive attitude are scarce in many cases and excessive in others, but never ideal or optimal.

So, what differentiates the athlete who becomes blocked from the one who explodes, if the psychological characteristics of this state are the same? The answer lies in understanding the components of the athlete's personality, where it can be observed that an introverted personality would result in low levels of social ability (inhibition-oriented) and where an extroverted personality would result in low levels of social ability (aggressiveness-oriented). The optimal level of social skill is found in the concept of assertiveness. It should be noted that it is neither necessary nor sufficient for an introvert or extrovert to have low levels of social skills.

Thus, athletes with an introverted personality, more likely to externally inhibit what happens to them internally, predominantly produce block-type responses, whereas athletes with an extroverted personality, less likely to inhibit (but quite the opposite), who vent their anger and frustration externally, predominantly produce explosive responses.

However, both personalities have a common denominator in this state: doubt.

Doubt as a psychological variable usually appears when the athlete's psyche:

- Thinks more about the outcome than about performance.
- Thinks predominantly about the consequences of their actions and not the causes.
- Does not have a plan that clearly contemplates achievement strategies.
- Fears mistakes in their performance.
- Believes that the only important thing is to win.
- Only enjoys the destination and not the journey.

This corresponds to an athlete who, from the cognitive (thinking) point of view, plans their actions based on unrealistic prospects (either by shortfall or excess), gives themselves inadequate goals (outcomes only), interprets their errors from a self-punishment perspective, understands defeats as the reaffirmation of what they cannot do, and shows evidence of managing their thoughts based on cognitive vices such as filtered thinking, mind reading, polarized thinking, catastrophizing and emotional reasoning.

Table 4: Main Cognitive Vices

Cognitive Vices	Description
Filtered thinking	Searching for evidence, among all the facts, that confirm the athlete's initial prejudice.
Mind reading	Anticipating other people's intentions, emotions and/or thoughts (Rodríguez Biglieri and Vetere, 2011, p. 36).
Polarized thinking	"Black-and-white" reasoning regarding situations that are full of nuances and deserve an objective assessment.
Catastrophizing	Tendency to imagine the worst possible outcome or consequence of a situation (Rodríguez Biglieri and Vetere, 2011, p. 36).
Emotional reasoning	Believing that the individual is thinking when they are in fact feeling emotions.

Source: Adapted from Weinberg and Gould, 1996.



From an emotional (feeling) point of view, the blocked and explosive attitude creates an athlete who is afraid of making decisions, afraid of failure, and who is distressed when they do not achieve what they set out to do. In this state, the individual experiences low levels of enjoyment while practicing the sport in question.

The combination of these cognitive-emotional components undermines the probability of positive actions by the individual.

All these features allow us to infer that the low levels of tolerance to frustration inherent to this state, among other items mentioned, contribute to the blocked and explosive attitude, a step of great concern for athletes, coaches and the athlete's immediate environment. Evidence shows that it is not so, since it is just a step away from the challenging state.

The high energy levels experienced by an individual in the blocked or explosive state express their desire to improve their situation. The key is in reversing the type of energy (positive instead of negative) and the focus of the objectives (from outcome to performance). This is done through cognitive restructuring, which consists in actively combating negative beliefs. For instance, this may consist in questioning these beliefs and trying to realize that they are possibly not very adequate, or even wrong to some extent (Hernández Mendo, 2005, p. 114). The following table shows other main guidelines.

Table 5: Main Cognitive Vices and Associated Cognitive Restructuring

Cognitive Vices	Cognitive Restructuring
No filtered thinking	Taking into account all behavior with regard to a situation.
No mind reading	Listing concrete arguments to reliably know the position of the environment.
No polarized thinking	Partial and objective performance assessments, highlighting the nuances.
No catastrophizing	De-dramatization and analysis of what happened.
No emotional reasoning	Acknowledging that the idea must predate the feeling.

Source: Taken from Weinberg and Gould, 1996.



1.1.3 The Avoidant and Apathetic Attitude and its Cognitive-Emotional Component

In attitudinal development, the avoidant or apathetic attitude is the state that precedes the least desirable and riskiest step: resignation. The athlete still attends (unintentionally adhering), but cannot give a concrete constructive meaning to their sports experience.

This corresponds to low levels of energy that is still positive and to performance objectives (although unspecified) without concrete strategies for achievement. The characteristic thinking of the athlete in this phase is: *Why should I keep trying? It's all the same to me.*

The anxiety of having to attain objectives has turned into disbelief at the chance of achieving goals and growing as an athlete. The levels of self-confidence in avoidant and apathetic attitudes are limited in all cases.

This is in keeping with an athlete who, from a cognitive (thinking) point of view, does not plan their actions with a proactive character (simply reacts with disbelief to what they are told to do), sets nonspecific performance objectives, and interprets their mistakes as a reaffirmation that it doesn't matter whether they keep trying or not. They interpret defeats as the logical consequence of what has to happen, present evidence of managing their thoughts without involvement in the process in general or the sporting situation in particular, and from an excessive distance.

From the emotional (feeling) point of view, the avoidant and apathetic attitude creates an athlete with high levels of dissatisfaction, distance, loneliness and lack of conviction with regard to their sports experience.

The combination of these cognitive-emotional components is much riskier than with the blocked and explosive attitude, as the fundamental variable that changes at this stage is the amount of energy available in the individual (low amount of emotional energy). This implies states of mind contrary to those required for the effective management of sports situations. Psychological rehabilitation of an athlete in the avoidant and apathetic stage is more complex than in the blocked and explosive state as the level of "psychic fuel" is lower and the athlete does not believe in their chance to grow and improve.

One last characteristic that makes it even more difficult to detect athletes in this state is the lack of concrete and visible demonstration of their true state of mind: the athlete no longer gets angry, or explodes, they do not block themselves; they simply attend without care.

For this reason, the importance of actively cooperating with the rehabilitation of athletes in the blocked and explosive stage is



emphasized since the amount of energy available makes evolution towards the highest step more likely: challenge.

1.1.4 The Quitting Attitude and its Cognitive-Emotional Component

The quitting attitude is the least desired state. The athlete neither assists nor adheres. They show low levels of negative energy without goals. The characteristic thinking of this phase by the athlete is: I do not want anything to do with this anymore.

Levels of self-confidence in the quitting stage are very low.

From the cognitive point of view (thought) this corresponds to an athlete who no longer sees sports as something positive for them. They prepare a set of ideas about their emotional state (described below), in which continuing with the activity causes them anguish, anxiety, and discomfort. They act out all the time, rigorously punish themselves for their mistakes, do not separate thoughts from their actions, do not have achievement strategies and therefore, do not train using these. They propose absolute distance from sports as a method of coping.

From an emotional point of view (feelings), the quitting attitude sets up an athlete with high levels of suffering and displeasure, high levels of anxiety and very low frustration tolerance.

The set of these cognitive-emotional components is the riskiest of all. It should be noted that the quitting state does not start on the day that the athlete actually withdraws from activity. The athlete may still attend, but internally they are already cognitively and emotionally withdrawn from their discipline.

Evidence shows that it is extremely important to prevent reaching this state, since the reversibility to other states of attitudinal development is complex.

Finally, in relation to attitudinal development in general, it is noted that this ladder, like all ladders, can be used to either go up or down. There are athletes that take steps down from ideal states to not so ideal ones and vice versa. The transience of all mental states provides the possibility for the athlete to modify their levels and type of energy, as well as the orientation of their objectives and self-esteem levels, in order to approach and remain within an optimal challenging attitude.

The environment of the athlete, with the help of the concepts provided by sports psychology and physical activity has a lot to offer in terms of their development.

