# 2.1 Motivation: models and theories

## Introduction

When we talk about motivation we are referring to what mobilizes a person to stay active and interested, in specific aspects of their life, over a long period of time. This can be understood by thinking of the word "motor" as that which drives behavior towards a specific objective.

Dosil (2004) attempted to examine this concept further and proposed that a person's motivation is going to be unfailingly conditioned by their physical and psychic capabilities in relation to what they have learned so far in terms of their tastes, beliefs, preferences, etc. All of this in turn is mobilized by two stimulating factors: internal and external. These factors generate processes of motivational activation.

When discussing internal stimuli or intrinsic factors, Dosil (2004) refers to everything that comes from within the same subject in terms of three variables: *knowledge*, which refers to the pleasure a subject experiences from exploring something new and different. *Execution*, which refers to the athlete's pleasure when executing a new movement and, lastly, *experimentation,* when sensations are experienced for unusual reasons.

External stimuli or extrinsic factors refers to everything that comes from the environment, including, for example, all of the relationships that the subject has and which can influence her in some way, increasing or decreasing her motivation.

### Motivation and behavior

Over the years different authors have linked human behavior with motivational responses. Psychology identifies in human behavior manifestations generated by internal or external agents, which are produced for different reasons. In this way, it is clear that behavior and actions are not generated in a spontaneous manner and that particular reasons or motivational agents produce said behavior.

Motivation is related to the 'why' of behavior. Two questions related to behavior are 'why' and 'how' behavior manifests. As we have noted, motivation is linked to the 'why', as there must be a particular reason for the manifestation of said behavior, a motive that generates and stimulates it.

One of the objectives of a person's motivation is related to directing behavior towards or activating it to achieve a specific goal.

Madsen (1980) proposed that there were two channels or categories that guide motivation. These are defined as:

- Primary: motives that exist in the human being from birth, considered to be innate. These are related to the survival needs of the species.
- Secondary: central motivations, related to the growth of human beings after going through different learning stages.

In conclusion, the author states that secondary motives are common in all species, but, in particular, in human beings.

**Definitions:**

Motivation is related to directing the forces that generate people's behavior. This behavior can guide the destiny of people's lives, with the intention of achieving objectives over time and thus ensuring survival at the social and biological level.

The impulses that generate motivation in humans are of internal origin and this impulse (which is internal) is triggered by external stimuli.

When discussing motivation, biological and cultural aspects can be identified.

The terms motivation and activation are related in that all motivation, both internal and external, generally activates a certain behavior. Some authors argue that if there is no observable behavior, then there is no motivation or motivation is not very high. However, even if there is not a visible behavior, there may be levels of motivation.

In this sense, we can say that open and visible behavior indicates that motivations produced this behavior, but we cannot know whether or not this behavior achieves the objectives or goals that are being pursued.

Theories postulate that there is a direct correlation between the intensity of a manifested behavior and the person's levels of motivation.

In summary: motivation - activation and behavior, are sequenced in terms of the manifestation that occurs for each person.

## Sources of motivation

When discussing sources of motivation, we refer to all stimuli that generate a specific activation in a subject. We must identify the origin of this source of motivation.

It is argued that there are two axes for sources of motivation, the internal-external axis and the psychological-neurophysiological axis. To picture it more clearly, this refers to internal and external environmental axes.

When a stimulus is generated, in certain circumstances it can provoke involuntary responses in a subject, this response is proportional to the intensity with which the stimulus is generated, especially when said stimulus comes from the environment. Stimuli from the environment are related to involuntary behavior.

Emotional and psychological impulses, manifestations of desires, needs, etc., are more closely related to motivations that come from internal stimuli. When some variables within the organism decrease (psychophysiological - biological), events that lead to alerts are triggered so that equilibrium is regulated.

Thus, it is understood that the sources of motivation and the consequent behavioral conduct can have different origins and causes. It is important to understand and identify whether motivation originates from internal or external sources in order to differentiate what is most relevant in each case.

If we can identify what motivates an athlete, what generates movement, what they want, what they fight to achieve in each training, we will have a lot of information to work with, which we can use to ensure training and competitions are more motivating for our players. Understanding individual and group motivation means we can provide more incentives to motivate our players.

## Motivational process

Motivation is considered to be a process and conditions of dynamism are attributed to it. This dynamism is essential since it generates, whenever it is functional, adaptations in the organism according to the changing conditions of the environment.

In order to understand the process, it is fundamental to identify the path the stimulus takes to manifest itself in motivated behavior with regards to whether or not the objective pursued by said behavior is achieved.

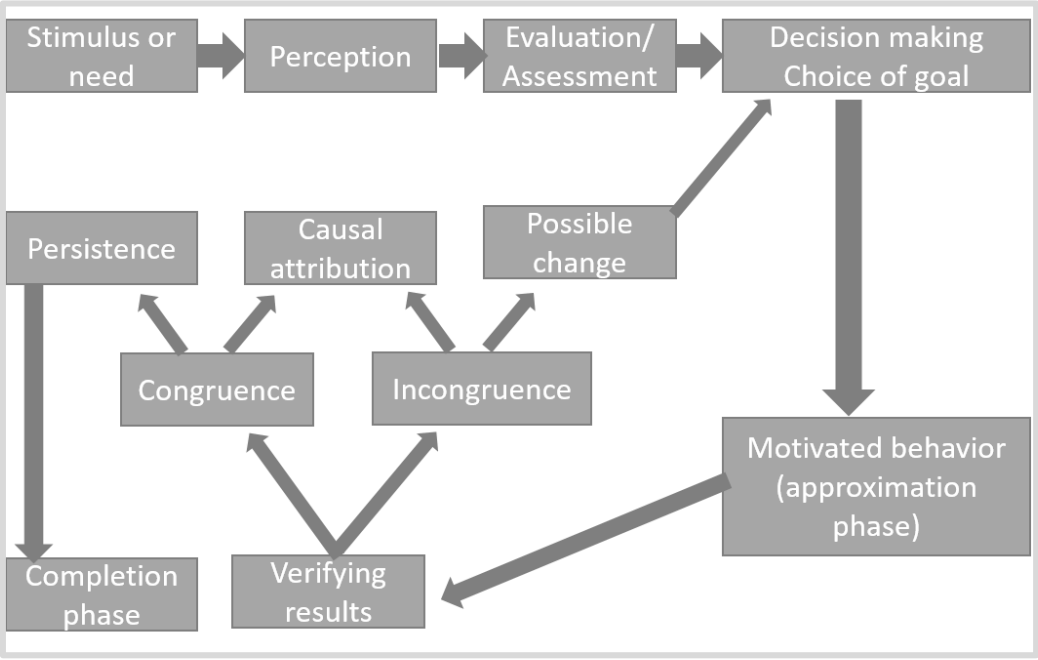
The process can be summarized as follows:

- Objective is chosen.
- Behavioral dynamism.
- Finalization or monitoring of the executed action.

We can extend on this as follows:

Stimulus - perception - assessment - goal chosen - decision taken - activation - management - monitoring of result.

**Figure 1: Motivational process**




Source: Retrieved from Palmero (2000)

## Motivation and how it is related to sports training

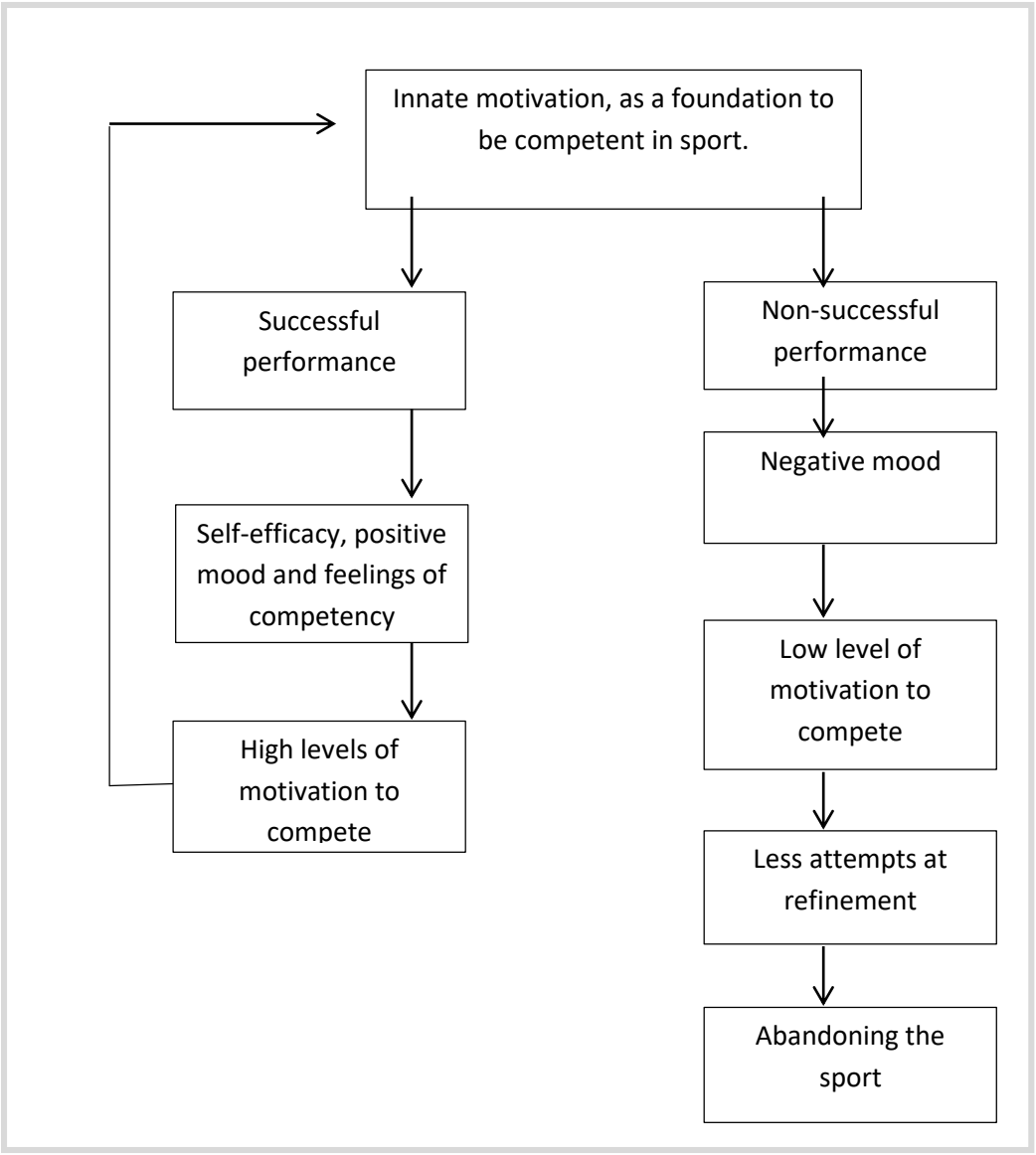
Harter (1978) built on the studies of White (1958) to postulate a theory which is based on how an athlete feels about their personal abilities. According to this author, human beings are innately motivated to be competent in the areas of human development. When one of the areas is mastered successfully, this promotes self-efficacy and feelings of personal ability for the athlete, which generates high motivation to be more competent. As motivation to be more competent increases, the athlete becomes more committed to more attempts at mastery.

On the contrary, if an athlete's attempts to master a given area have negative results, this generates low levels of motivation especially in young athletes. Low motivation is related to possibility of quitting a sport.

Athletes who successfully execute a technique will tend to keep repeating this same technique, they feel competent and they want to continue feeling self-confidence and positive reinforcement that in turn makes them feel secure. It is important to encourage motivation in those skills/abilities in which there is less skill. If a player is less capable at free throwing, it would be motivating to work on it to increase effectiveness, to see how the athlete achieves improvement.

Black and Weiss (1992) outline that the sports coaches that stimulate and encourage positive feedback with their athletes, generate high levels of motivation in the subjects. Sports leaders must understand that their participation as coaches must also be aimed at developing confidence in athletes, without considering it a waste of time. The confidence that the athlete has in herself will be proportionate to her levels of motivation, which can be further developed by her coach.

**Figure 2: Competence Motivation**




Source: Harter (1979)

Motivation and self-efficacy are related to the extent to which if they are both high, this will contribute positively to the achievement of good sports results.

Next we will look at three useful strategies for increasing motivation in competition.

Weigand and Broadhurst (1998) argue that intrinsic motivation is what fuels motivation during competition. This is the product of years of experience in a certain sport and domination in this sport.

Allen and Howe (1998) associate high levels of motivation with the technical direction that coaches give to the players, if and when it is accompanied by

praise. If direction is given without praise, motivation decreases. If the player performs poorly during a match, it is best for the coach to remain silent.

When a performance is poor, a positive response and praise from the coach would also create awkwardness and confusion for the athlete and the rest of the team. Therefore in a situation where there has been an error, words of encouragement may result in the player not looking at the error and focusing on the next action.

Smith (1999) suggests that friendships and the group of people closest to the athlete are fundamental to an athlete's motivation and thus to achieving desired results. As long as the peer group supports them with acceptance. This generates positive motivation, attitude and self-confidence.

Authors such as Amorose (2003) have introduced the concept of **Reflected appraisal process**, which refers to the role played by others in an athlete's assessment or perception. This process leads the athlete to see herself as competent. Loved ones are fundamental to an athlete's self-evaluation. It is important to understand how the subject's emotional stability is linked to variables that are not necessarily within her control, such as with regards to family stability. This may be beyond the scope of what an athlete can manage or deal with, therefore as psychologists or coaches, we must educate the family group regarding how to handle family relations so that, if there are family problems, they can manage said inconveniences so as not to affect the athlete.

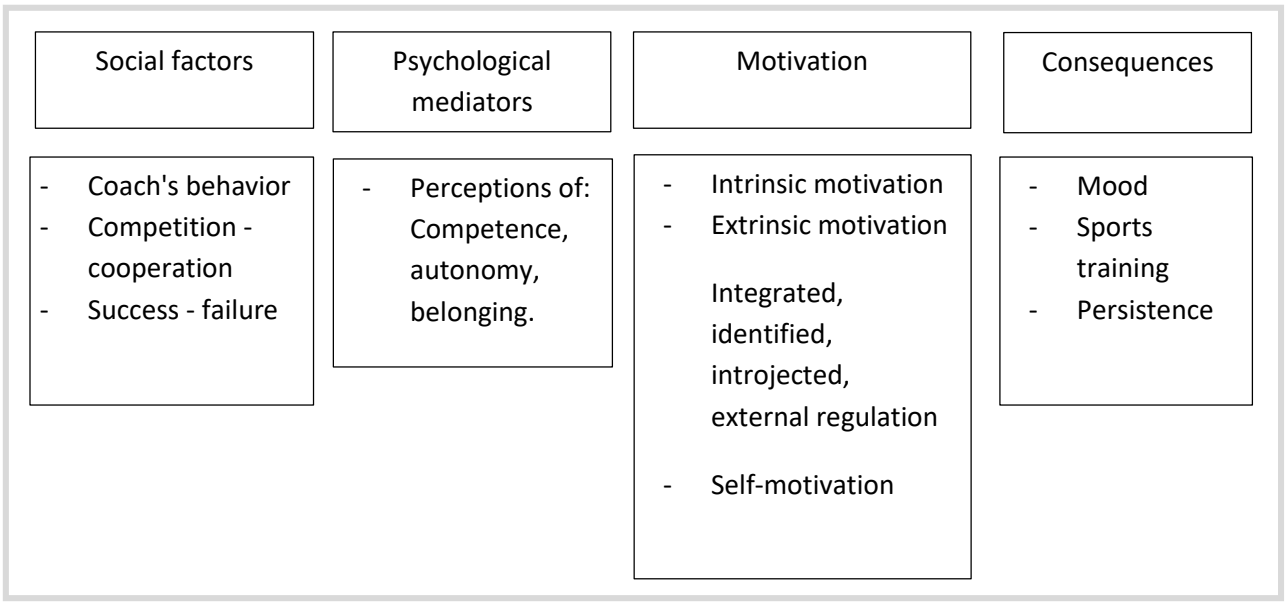
**Integrated theory of motivation**

This theory covers what we know as intrinsic and extrinsic motivation, with the exception that the focus is on the analysis of persistent and long-term motivation.

Most people have a certain idea of what can be motivation and how to maintain it over time. The integrated theory of motivation is based on self-determination; this is the concept that gives meaning to the concept of motivation. Authors such as Vallerand (1997) have created a hierarchical model of motivation which includes the concept of self-determination plus extrinsic and intrinsic motivation. When discussing hierarchical levels, there are three levels: general, contextual and specific.

The following figure provides an overview of the integrated models of extrinsic and intrinsic motivation proposed by Vallerand and Losier (1999) and the elements that make up the models.

**Figure 3: Extrinsic and intrinsic motivation and the integrated theory**




Source: Losier (1999).

There are two factors mentioned above that influence motivation and lead to certain consequences: social and psychological factors.

Social factors:

Social factors are responsible for generating feelings of belonging, autonomy and competence in athletes. We can differentiate, from among social factors, the following:

Success and failure: experiences related to sporting success lead the athlete to feel competent and capable, with a consequent improvement in motivation to face sporting challenges. On the contrary, failure generates feelings of frustration directly related to reduced confidence in themselves. The athlete needs to master her emotions and be able to drive her motivation towards success.

Competition and cooperation: sports achievements are related to cooperation and competition. When competing, the main intention is to defeat the opponent and be superior in terms of social comparison. Generally, when the athlete pays more attention to the social reward, they can lose intrinsic motivation for the sport itself. When cooperation takes center stage and athletes focus their attention on what is best for the team, intrinsic motivation is also lost.

Coach's behavior: when coaches adopt authoritarian behavior, they tend to diminish the intrinsic motivation of the athletes since they are in control and take away the subject's autonomy. This is a characteristic of a particular type

of coach who wants to control everything related to the athletic arena. There are also coaches with more open and democratic approaches, that aim to be open to working with and alongside the athletes.

Psychological mediators

It is argued that this factor is what determines motivation, while the social factor is more related to what the athlete thinks about herself.

The theory of self-determination holds that the athlete must have three skills: competence, autonomy and belonging. They are considered to be innate psychological needs.

Competence: for many coaches, this is understood as the foundation for confidence. In terms of self-determination, it is seen as a pre-requisite for motivation. Competence lays the foundation for the development of intrinsic motivation.

Autonomy: here it is postulated that an athlete must be convinced that she influences the determination of her own behavior, in this way she develops the required maturity to find motivation.

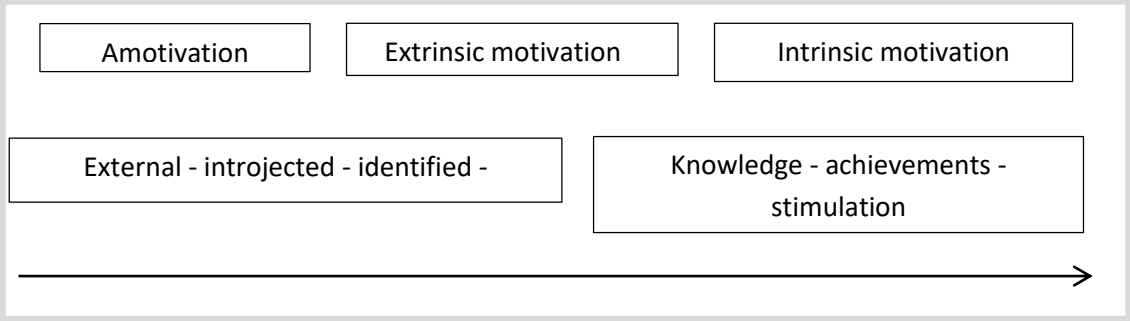
Belonging: refers to the athlete's need to relate to others, feel part of a group which respects her and gives her affection. Harmonious interaction with others is one of the pillars of development. An athlete's satisfaction in terms of feelings of belonging in a particular sport, will be related to the affective integration she has with her teammates, coaches, etc.

As can be seen, social factors and psychological mediators are understood as the building blocks for motivation.

Motivation

Self-determination and motivation are seen as a continuum, along this continuum there are intrinsic motivations (extreme), amotivations (extreme opposite), and extrinsic motivations.

**Figure 4: Self-determination continuum**




Source: Vallerand and Losier (1999).

Amotivation: refers to the complete absence of motivation. In this case, an athlete cannot identify why she engages in a certain sport or what the associated benefits are. The lack of motivation is related to low autonomy, competence and sense of belonging.

Intrinsic motivation: motivation in this case is internal. An athlete that is intrinsically motivated is in a state of satisfaction and complete self-control. They do not find meaning in sources of external motivation. The subjects find satisfaction in experience, knowledge and in stimulation.

Extrinsic motivation: in this case motivation comes from external sources. This may include trophies, money, praise, etc.

- External regulation: related to the need to obtain external rewards.
- Introjected regulation: the athlete still does not assimilate her true internal interest for sport. She partially understands her motivation. For example, she trains to satisfy the coach instead of doing it to improve her performance as a player.
- Identified regulation: in this case the athlete recognizes that carrying out certain sporting objectives can be favorable. She recognizes sports as a means to another end.
- Integrated regulation: this is very similar to intrinsic motivation. The athlete's aspirations are understood as their own and not imposed. The objectives to be achieved do not belong to external factors but rather to internal factors. It is for this reason that on the continuum, integrated regulation is close to intrinsic motivation.

To summarize the above, we can say that when an athlete has high levels of extrinsic and intrinsic motivation, this will result in positive behavior, along with a positive mood and increases in cognition levels.

All athletes involved in sport due to their own determination show higher levels of competence in these sports.

## Theory of self-determination

Over the years the study of motivation has given rise to what is now known as the psychology of motivation and emotion. This branch of psychology studies the origin of behavior and its application in the world of sports and training.

This theory has given the world of training and sports a new way of interpreting the behavioral manifestations of subjects. Thus we move from understanding behavior using mechanistic theories to interpreting them using social theories and cognitive models.

The theory of self-determination is a conceptual framework that clarifies the origin of human motivation in a more coherent way. Specifically, the motivation for physical activity.

This theory basically studies how the person is able to do certain activities in an immensely voluntary way and by their own choice. It is based on four sub-theories, namely:

- Cognitive evaluation theory
- Organic or organismic integration theory
- Causality orientations theory
- Basic needs theory

Cognitive evaluation theory: attempts to understand how factors of variability are produced in relation to intrinsic motivation. It is studied in the laboratory and investigates how internal mechanisms are generated in terms of rewards and factors which are external to the subject.

There are four premises to this theory.

- If a subject participates in a certain activity and manages to master it, this will increase their internal motivation.
- If the subject has the possibility of choice and control within their activity, internal motivation will increase.
- External factors perceived as potential sources of positive information increase internal motivation.

- If an athlete is motivated to do the task and also enjoys the task, internal motivation will increase.

> *When an athlete begins to practice a sport, she masters it, sees that she can improve, can have autonomy in some decisions (within the field of play), sees her social and economic status increase, her family supports her, she likes to train and test that she has the ability to improve with her level of training, this athlete will develop more intrinsic motivation when compared to another athlete that fails at any of these premises.*

Theory of organic integration: this theory investigates the elements that shape extrinsic motivation and environmental stimuli that prevent them from being internalized in the regulation of behavior.

Causality orientations theory: these are aspects that regulate the self-determination of people's behavior. Three types of causal orientations are described.

- Control orientation: behaviors where control of the context or environment and of oneself is manifested. When this manifests, the subject is carrying out her behavior because she considers that she must do so.
- Autonomy orientation: the subject regulates, chooses and initiates her behavior with internal control. Everything is done according to the subject's objectives and interests.
- Impersonal orientation: the behavior is experienced by the subject as beyond their control. In this case, they feel they have little ability to master certain situations.

Basic needs theory: it is understood that every person must have a certain amount of basic psychological resources to be able to cope with life. The human being develops in harmony to the extent that their basic needs are met.

There are several theories and models about motivation. All of them can explain an athlete's level of interest, commitment and/or involvement in their sport, which will depend on the relationship between what is obtained as a benefit and what it costs to get it. This relationship will depend on what stage the athlete is going through (initiation; the athlete is looking to have fun with the physical activity, in comparison with a high performance

athlete, whose time and energy invested is much higher and on occasions does not translate into optimal results).

Occasionally, there are athletes who have achieved very good results in their category, but they are at the age to transition from one category to the next, which will require a higher investment in training hours and more sacrifice and commitment. In this transition, the athlete experiences different emotions as a result of increasing her commitment to training, which is not reflected in her performance, because she is not yet at the same level as her teammates.

Silva, Roberts and Weiner (1984) state that an athlete's level of motivation is determined by the interaction produced between two types of factors:

- Personal factors: personality, needs, interests and/or abilities.
- Situational factors: type of coach, sports facilities, successes and failures.

Last but not least, we will explain the origin, direction and intensity/persistence of behavior in sports:

1 - Needs: Martens (1987) outlines three needs to be met when practicing sport: fun, (need for stimulation and activation), interaction with other people (need to belong): share with the team and thirdly, demonstrate skill (need to feel accomplished).

2 - Objectives: achieving set objectives creates energy that is a motor for athletes and gets them involved.

3 - Expectations: beliefs or thoughts regarding reaching an objective, that is, anticipating what will happen if I get what I want. Athletes generate expectations about results, and also about the cost/benefit ratio (how much effort do I need to put in to be able to achieve what I have set out to do).

4 - Attributions: the reasons or causes that an athlete attributes to a successful performance or failure in sport (Weiner, 1985-86).

Finally, we will look at what for some authors are the key factors or strategies when promoting self-determination.

This psychological variable, motivation, can often explain an athlete's stagnation or abandonment of sport. Importantly, mastering knowledge about player motivation, will mean being able to prevent the previously mentioned situations. Motivation is key when explaining the reasons why a particular sport has been chosen (origin), the choice and commitment to its objectives (selection) and the dedication and effort in training and competition (intensity and persistence).

Strategies:

- Promote positive feedback.
- Develop process-orientated goals.
- Promote less difficult goals in the beginning.
- Leave the possibility of choice open to the subject.
- Establish the objectives for each task.
- Stimulate social connections.
- Stimulate interest in learning.

As we will observe throughout the next unit, when studying motivation, we must interpret multiple variables related to the athlete which will determine motivational levels.

From the internal and external point of view, the athlete will find potential interests that lead her or motivate her towards the achievement of an objective or goal. With this, the subject must identify the motor or motive to her existence in the world in order to achieve in her sport. This transforms into a double workload, since the athlete must not lose her motivation to conquer her sporting goals nor must she lose motivation corresponding to her life as a student, partner, colleague etc.

An athlete's whole environment must revolve around generating a climate according to their interests so that they find in their environment the energy necessary to continue with their sporting purposes.