### Methodology For the Definition and Application of Motivational Strategies in A Basketball Academy

#### Sánchez M1, García B2

#### **Abstract**

Understanding motivation as a means to achieve learning (Martín, 2020), it is important to consider that educational projects must define a series of strategies and actions with the aim of achieving emotional states that favour the acquisition of learning objectives. To this end, a practical experience is presented to define and apply motivational strategies in a basketball school. To evaluate the experience, the Spanish version of (MURCIA, COLL, GARZÓN, & ROJAS, 2008) of the Basic Psychological Needs in Exercise Scale (BPNES) and the Spanish version of Cecchini, González, Prado, and Brustad (2005) of the questionnaire on the perception of the motivational climate in sport-2 are used. In addition to proposing a methodology to define and apply motivational strategies, the evaluation carried out shows that the athletes participating in the experience have a high feeling of competence and sense of belonging to the group and that the motivational climate where the experience has been developed is oriented towards improvement. These data mark a positive trend towards adherence to sport, persistence, the pleasant experience of sport and constitute an ideal framework for learning.

**Keywords:** Motivational strategies, basketball.

#### Justification of the Practical Experience

There are muktiple variables involved in the learning process (Martín, 2020; Pozo, 2016). With the teacher or coach as the most important factor (Hattie, 2012), it is known that it is necessary to create a favorable environment for learning to be optimized (Cox & COX, 2008; Hendry, Ford, Williams, & Hodges, 2015; Martín, 2020). Therefore, it is the responsibility of the coach to establish a series of strategies to ensure that participants are more committed to the tasks, that they feel motivated to continue practicing and devote more effort to achieving the goals they set themselves. The aim would be not only to get them involved in the training sessions, but also to ensure that these strategies make it easier for the athletes to continue practicing on their own outside of the training sessions. As a consequence, for any educational project, it is necessary to consider a series of strategies that act as fuel to mobilize participants towards the achievement of the objectives (Coyle & di Masso, 2009). According to Martín (2020), motivation is a means to achieve learning objectives, not an end in itself. In order to give a theoretical-scientific basis to the strategies that will be suggested in the practical part, firstly, the study will mention what facilitates motivation in the educational field and then, specifically, what works in physical education and sport.

In the field of education, Guillén (2015) establishes a series of stages to achieve motivation in the classroom. Starting from curiosity, from how meaningful learning can be, he indicates that a challenging objective must be set for the student. In the process, he gives special importance to the

autonomy of the student, an autonomy that allows them to act and take responsibility for their actions. In this sense, he suggests that it is interesting for students to intervene in the creation of rules, in the choice of problems or tasks in order to achieve learning. During the process, he stresses the importance of a growth mindset in order to persevere in the face of challenges, and to this end, he considers the emotional climate generated by the teacher to be of vital importance. Likewise, he understands that as social beings, the person must feel useful, valued, recognized by peers, educators and the group, hence the importance of proposing strategies that develop the feeling of belonging to the group. Along these lines, Bueno (2017, p. 120) indicates that the environment that has the greatest influence on learning is the social environment i.e. the relationship established with classmates and teachers, with their parents and with society in general. He emphasizes educating through social pleasure, as this is what the brain interprets as being of maximum utility (Bueno, 2017, p. 124). Therefore, he considers that teamwork is a good strategy to achieve learning in a more integrated and efficient way. He adds that the best way to carry out cooperative work is through play. However, he states that without objectives, motivation is not possible. Hence, the importance of setting objectives that challenge the learner. For Bueno, learning has one enemy, stress, and two powerful allies, pleasure and motivation (Diamond, 2012). Marina and Pellicer (2015) in terms of motivation management, indicate that in order to be attractive, any goal must be linked to a desire that is already being acted upon. To this end, they suggest that we should aim to satisfy three main desires: a) Having a good time; b)

<sup>&</sup>lt;sup>1</sup> Facultad de Ciencias del Deporte de la Universidad de Castilla-La Mancha.

<sup>&</sup>lt;sup>2</sup> Club Baloncesto La Fábrica de Valores.

Corresponding author: Sánchez, M.

Campus Tecnológico Fábrica de Armas. Avda Carlos III, s/n. 45071. Toledo. Tíno: 609245197.Correo electrónico: mauro.sanchez@uclm.es

Maintaining cordial, pleasant social relations, and feeling valued, recognized, loved; c) Desire to feel that my possibilities are expanding, that I am capable of doing valuable things, and of progressing. As a facilitating factor, they propose generating a growth mindset, understood as one in which people are convinced that they can improve in whatever they set out to do as long as they do the right tasks, follow good advice and make an effort (Dweck, 2007).

In the field of sport, Deci and Ryan's self-determination theory is perceived as one of the theories with the most coherent and solid theoretical constructs to explain motivation towards physical activities and sports (Moreno & Martínez, 2006). This theory determines that the basic psychological needs of competency, autonomy and relatedness are the main drivers of behaviors and those that allow their continuity (Hendry et al., 2015). From the point of view of perseverance and effort, it has already been mentioned that the motivational climate in which the individual finds him/herself is very important. An improvement-oriented motivational climate is determined by an educator giving positive reinforcement to students/athletes when they work hard, demonstrate progress, help others learn through cooperation and believe that each player's contribution is important (Cox & COX, 2008). As can be seen, these actions reinforce the satisfaction of psychological needs by improving the feeling of competency and relatedness (Almagro Torres, Sáenz-López Buñuel, González Cutre Coll, & Moreno Murcia, 2011; Alvarez, Balaguer, Castillo, & Duda, 2012). As practical applications of self-determination theory, approaches should be oriented towards improving intrinsic motivation. In this sense, the proposals made for physical and sports education by Moreno and Martínez (2006) and Sánchez Sánchez and Collado Martínez (2016) aimed at satisfying basic psychological needs and generating task-oriented motivational climates as being of particular interest. In general, the former point out that strategies should be aimed at promoting positive feedback, promoting process-oriented goals, setting goals of moderate difficulty, providing choice, explaining the purpose of the activity, fostering social relationships, using rewards, developing flow state and raising awareness of the need to learn.

From a research perspective, highly valid instruments have been generated to measure the satisfaction of basic psychological needs and the motivational climate in physical education and sport. Regarding the former, one of the most widely used is MURCIA et al. (2008). Spanish version of the Basic Psychological Needs in Exercise Scale (BPNES; Vlachopoulos & Michailidou, 2006). To measure motivational climate, Cecchini et al. (2005). Spanish version of the questionnaire of perception of motivational climate in sport-2 (Newton, Duda & Yin, 2000) is usually used.

Using the aforementioned instruments, Almagro Torres et al. (2011) analyze the prediction of perceived motivational

climate, satisfaction of classical psychological needs and intrinsic motivation on adherence to sport practice. With a sample of 580 adolescent athletes, they found that task-involving motivational climate predicts the three basic psychological needs and the intention to remain physically active. They also found that satisfaction of the three basic psychological needs positively predicts intrinsic motivation. Alvarez et al. (2012) also with a sample of 370 adolescent football athletes found similar results.

In summary, the strategies that are shown to be effective for participants to learn better and commit to sport are the establishment of significant objectives that challenge the athletes, having expectations that they can achieve the learning, generating situations in which the satisfaction of basic psychological needs is achieved and the creation of environments that promote the desire to improve. This vision justifies the practical experience that we contextualize and develop below.

# Contextualisation of the Experience, Participants and Objectives

The experience takes place in the field of non-formal education (extra-curricular activities), within the framework of the La Fábrica de Valores-UCLM sports club. This study believes that these educational contexts should be taken into account in terms of personal and social development. According to the Fundación para la investigación nutricional (2016), around 50% of this group are involved in organized sports programs. The number of participants together with the motivation with which they attend offers a context with many possibilities for achieving educational objectives (Moreno & Martínez, 2006; Tejero-González, 2016).

La Fábrica de Valores-UCLM is an educational project that was born as a transfer of knowledge in the Faculty of Sports Sciences of the University of Castilla-La Mancha. With an inclusive character, it aims to collaborate with families in the integral education of their children through basketball. 150 children and young people aged between 5 and 15 from different schools and high schools in the town of Toledo take part in this experience. Depending on the category, they carry out two or three training sessions lasting an hour and a half in the facilities of the University Campus of the Fábrica de Armas from Toledo. In total, there are 11 teams led by 5 educators with pedagogical training in the field of sports science and specifically, in basketball.

Since sport does not educate in itself, this project assumes as a principle that in order to achieve the objectives of holistic education it is necessary, firstly, to select a group of educators who are an example of the identity of the project and, secondly, to develop a program with tasks, activities and strategies that are deliberately oriented towards the proposed goals (developing healthy habits, motor and socio-emotional skills). Regarding the latter, Libros

Bisquerra (2009)'s Emotional Education proposal has been taken as a reference point, aimed at working on emotional awareness, emotional regulation, emotional autonomy, social skills and life skills.

In the project, the means to achieve integral education are the learning of sport and competition, the latter being an excellent means as it brings into play all the socioemotional competences. Also, around sport, volunteer or solidarity actions are used (for example, 3x3 where food, hygiene products and/or school materials are collected), the service-learning methodology and workshops to work on healthy habits and specific socio-emotional education content (knowledge of emotions, emotional literacy, emotional self-control techniques, etc.). The participation and training of parents is another means of achieving integral education through sport. Finally, the project incorporates inclusive sport for the development of socioemotional competences. In the sports facility, training sessions are held simultaneously with associations with intellectual disabilities, which makes it possible to train and play matches together.

From the collaboration with families and being aware of the important, decisive role played by the educator to achieve the objectives, the methodological principles to achieve the goal of comprehensive education are focused on generating optimal learning climates, where playfulness and fun have a special role to play in order to achieve the proposed learning from an initial assessment. In this motivational line, the activities that are programmed should be oriented towards the search for autonomy, so that they can relate to each other and with the intention of making them aware of their learning, of their improvements, so that they have a feeling of being competent, and confident that with dedication and effort they can improve.

With this methodological approach, the need arises to design a program, an approach of activities, strategies and actions that generate a climate for improvement, oriented towards the task and that manages to satisfy basic psychological needs. On the other hand, it is necessary to know whether the LFV-UCLM project is managing to create these learning climates based on the activities that are deliberately being carried out and whether these basic psychological needs are being satisfied. Therefore, the aim of this experience is, firstly, to propose a methodology where a series of activities, methodological strategies and actions that generate a task-motivational climate and satisfy basic psychological needs (autonomy, feeling of competence and relatedness) are collected and their corresponding application. The second aim of the present study is to analyze whether this climate of improvement is being achieved and whether the basic psychological needs are being met.

#### **Methodology of Practical Experience**

The experience includes a series of phases that begin in the

17-18 season with the implementation of the La Fábrica de Valores-UCLM project and continue in the 18-19 season (table 1). Specifically, before training began in the 17-18 season, the first to fourth phases are developed with the general objective of designing the project. The fifth and sixth phases take place in the first months of implementation. The seventh phase is carried out during the 17-18 and 18-19 season. The evaluation (eighth phase) takes place two months before the end of the 18-19 season. **Table1** 

Time distribution of the phases.

SEASON	PHASE
17/18	Before the start of in-season training.
	Phase-1. Definition of the club's identity and
	representative slogan.
	Phase-2. Definition of coaches'
	responsibilities.
	Phase-3. Proposal of strategies, activities,
	resources for the improvement of motivation.
	Phase-4. Workshops to reach a consensus and
	train educators.
	During training.
	Phase-5. Explanation and development of the
	club's identity in the teams.
	Phase-6. Definition of a decalogue of rules and
	responsibilities for athletes and families based
	on the identity of the educational project.
	Phase-7. Development of strategies in training
	sessions.
18/19	Phase-7. Development of strategies in training
	sessions.
	Phase-8. Evaluation

## Phase 1. Definition of the Club's Identity and Representative Slogan

Before the start of the season, the board of directors and educators define the purpose of the educational project and identify which arethe most important elements that should be influenced. In this sense, the importance of the educators in developing the project, the participation of the families and the integral nature of the project are considered. To this end, the objectives focused on learning basketball, the development of healthy habits and socioemotional skills.

In this phase, the study decides to look for slogans that would identify the educational project. One of them arises from the combination of the place where the training sessions takes place, the former apprentice school of La Fábrica de Armas, and the aim of developing values through sport: "We are all learners of values", not only children and young people, but also educators, families and the sporting environment. Furthermore, this phrase reflects the interesting idea proposed by Bueno (2017: p. 150) that behaving as apprentices, with this mentality and attitude, stimulates pupils/athletes unconsciously to learn, towards constant progress.

Another aim of the project is to make better people through sport. This idea is specified in the objectives of R. Bisquerra's model of emotional education referred to above. To try to achieve this, it is proposed to work on

emotional self-control, emotional autonomy (selfmotivation, responsibility and self-esteem), empathy, respect, basic social skills, cooperation, goal setting, decision making and solidarity. By reading the paper A Case Study of Excellence in Elite Sport: Motivational Climate in a World Champion Team by Hodge, Henry, and Smith (2014) the author is inspired to use the slogan "Better people make better All Blacks" and adapt it to our project using the expression "Better people make better teams", this expression closely reflects what we wanted to

Also in this phase, it is established as an identity to consider the satisfaction of basic psychological needs, goal setting, fun, high expectations and the creation of task-oriented climates as key elements to generate what Doyle (2009) calls "ignition" in clear reference to motivation. Industrially speaking, these would be the fuels of La Fábrica, which would make the machinery move (children, youth and family).

#### Phase 2. Definition of the Coaches' Responsibilities

From a first proposal of responsibilities that are related to Table 2

Strategies for the development of BPN.

the identity of the project, the coaches modify, expand, and finally agree on them before the start of the training sessions.

#### PHASE 3. Proposal of strategies, activities, resources for improving motivation

In this case, focusing on the experience of motivational strategies being presented, the coordinator, based on the proposals of Sánchez Sánchez and Collado Martínez (2016) and Moreno and Martínez (2006), selects those that he considers relevant and easy to apply. In this phase, an initial proposal is made in which the actions are grouped according to the basic psychological need developed.

#### Phase 4. Workshops To Reach a Consensus on Actions and Train Educators

Two two-hour sessions are held to agree on the activities and strategies to be developed and to explain how to work on them. In this case, the coordination-training meetings are relatively simple as the educators have pedagogical training and experience. The strategies that it has decided to implement are defined in Table 2.

#### **BPNStrategies-Activities-Actions**

- Establishment of club and team identity.
- Participatory development of LFV-UCLM responsibilities for coaches, players and parents.
- Participation in school competition representing the LFV-UCLM club.
- Reinforcement of the club's identity through the presence of the values on kits, roll-ups and baskets.
  - Reinforcement of the identity of the teams through the display of representative phrases.
- Flexible and heterogeneous groupings.
  - Regular mixed training sessions.
  - Participation in activities aimed at all members of the club and their families: 3x3 solidarity and inclusive, volunteering, inclusive sport, attendance at high-performance matches, training sessions at a retirement home, going to see films, ApS, team meals, healthy snacks, social days with other clubs.
- Give regular positive feedback.
- Avoid punishment as much as possible.
- Make them feel competent by recognising the things they do well.
- Clear and precise objectives, achievable (success).
- Inform learners about the objectives of the sessions.
- Reflect at the end of the session or match on the achievement of the objectives.
- Propose challenging tasks.
- Major use of global tasks (contextualised).
- Progressive tasks in terms of difficulty so that they can be achieved.
- Establish different levels in the exercises to respond to different abilities.
- Adapt tasks to match levels.
- Reinforce progress on an individual level.
- Recognise efforts and progress.
- Corrections that tell them what to do (prescriptive).
- Use private and meaningful assessment.
- Based on the club identity, the players develop rules for training and matches, as well as the consequences of not complying with them.
- Athletes propose exercises and activities.
- AUTONOMY Athletes design sessions.
  - They are given responsibilities.
  - Reinforcement of the identity of the teams by displaying representative phrases of their choice.
  - Participatory elaboration of an instrument for the evaluation of team values.

### Phase 5. Explanation And Development of the Club's Identity in the Teams

In the first weeks, a series of activities are developed with the aim of making the participants aware of the purpose of the project in which they have been immersed. The activities are adapted to the age of the participants. The following are some of the activities and actions that are carried out: in teams, a workshop is held to work on the identity of the club and the team; each participant looks for a phrase representative of the club's values, presents it to the group and reflects on the idea it conveyed; design of the sports kits with the club's slogan and with the most representative values; stickers with the values representative of the educational project are placed on the baskets.

#### Phase 6. Definition of a Decalogue of Rules and Responsibilities for Athletes and Families Based on The Identity of the Educational Project

The rules and responsibilities for athletes and families are drawn up in the first months. A series of dynamics wereare defined which, in an autonomous and participative way, makes it possible to define the decalogue of responsibilities and, in the case of participants the consequences of not assuming them. For all the components, the decalogue is applicable to training and competition.

### Phase 7. Development of the Strategies in the Training Sessions

From the beginning of the season, the strategies are applied in the training sessions and the programmed activities are carried out in which various teams and family members interact.

#### Phase 8. Evaluation

For the assessment of the satisfaction of basic psychological needs (competence, autonomy, relatedness) the version of MURCIA et al. (2008) is used. It has 12 items, four per factor. Responses range from one (strongly disagree) to five (strongly agree). The sample to evaluate this section consists of children from 8 to 15 years of age, as the instrument used is recommended for use from that age onwards. A total of 100 athletes have filled in the questionnaire.

Figure 1 shows that the LFV-UCLM average for "relationship with others" is 4.4, a high value, which is very satisfactory. Regarding the feeling of competence, the average value is 4.1, also high, but with room for improvement. The perception of autonomy is lower than the previous ones (3.6), a variable that needs to be improved. In contrast, the value of autonomy in the mixed group of young children is 4. This may be explained by the fact that in the classes they have more possibilities to propose games, unlike in the older groups where the teachers seem to have a more directive tendency. In general, these results indicate that the athletes are in a motivating context insofar as they feel competent and belonging to a group.

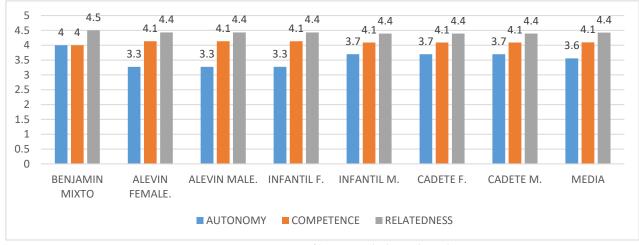


Figure 1. Assessment of basic psychological needs.

In the case of the assessment of the motivational climate. Perceived Motivational Climate in Sport Questionnaire-2 (PMCSQ-2) has been used. This questionnaire consists of a total of 33 items which are grouped and divided into two dimensions i.e., the perception of the task motivational climate (17 items) and the ego motivational climate (16 items). In turn, these dimensions are made up of three factors each. To measure the task climate, the factors: cooperative learning, effort/improvement and important role are used. Likewise, the ego motivational climate is measured using the following factors: punishment for mistakes, unequal

recognition and rivalry among group members. Responses were scored on a Likert-type scale, with a range of scores from 1 (Strongly Disagree) to 5 (Strongly Agree). Due to the complexity of the instrument, only athletes aged 10 to 15 years old filled in the questionnaire, for a total of 80 athletes.

Figure 2 shows the values related to the task motivational climate. The average for LFV-UCLM is 4.1; although it is a very satisfactory value, it allows, as in the case of autonomy, the possibility of improvement. If we look at the values of the teams, the male alevin and male infantile "A" teams standout with values of 4.5 on average. It can be seen

that, although all the dimensions need to be worked on, it seems that strategies centred on cooperative learning should be emphasised in certain groups.



Figure 2. Task motivational climate

The values of ego motivational climate are low (1.9), therefore satisfactory (Figure 3). The perception of rivalry between group members (2.1) stands out, an aspect that may be common in sports groups when it comes to

winning the starting position or more playing time. With regard to punishment for errors, with an average value of 1.8, more work should be done to reduce this perception.

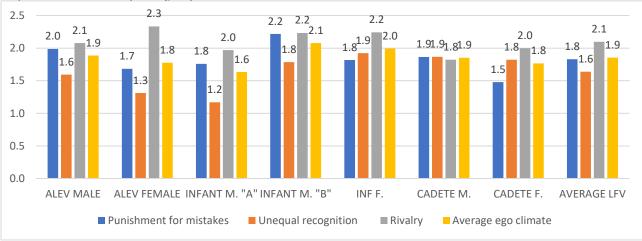


Figure 3. Ego motivational climate

From a general perspective and regardless of the margin for improvement, the results indicate that the athletes are immersed in a motivational climate that is conducive to persistence and improvement. The values obtained coincide with those of research carried out on this subject in the field of sport, in which the relationship between the satisfaction of basic motivations, the task motivational climate and intrinsic motivation is highlighted.

#### **Conclusions**

- In order to facilitate learning, it is necessary to design activities, strategies and actions that improve the motivation of athletes. It is a matter of understanding

- motivation as a means to achieve learning goals.
- According to findings from scientific literature, sports
  projects are invited to include challenges, high
  expectations, fun, the satisfaction of basic psychological
  needs and the creation of environments that promote
  the desire to improve as essential ingredients to
  optimise learning.
- In order to define the strategies, a methodological process structured as follows is recommended: definition of the identity of the club and the teams; proposal of motivational strategies, consensual selection among coaches and how to develop them; development of identity in athletes and families; definition of responsibilities of coaches, athletes and

- families; development of strategies in training sessions; evaluation of the motivational climate and the satisfaction of basic psychological needs.
- The results of the questionnaires show the motivation levels of the participants of the LFV-UCLM. These data show a positive trend towards adherence to sport, persistence, and the pleasurable experience of engaging in sports activities. La Fábrica's fuel seems to be working, although it is possible to use more. The tanks, as the data show, are not yet full. It is necessary to
- continue working on autonomy, cooperation and everything that reinforces a positive attitude towards improvement and effort.
- Although the design of this experience does not establish a causal relationship between these strategies and the motivation of the athletes, we defend that in order to achieve learning objectives it is necessary to make deliberate approaches defining how they have to be achieved (method), without leaving learning to chance. This practical experience that we have developed is an example of this.

#### References

- Almagro Torres, B. J., Sáenz-López Buñuel, P., González Cutre Coll, D., & Moreno Murcia, J. A. (2011). Clima motivacional percibido, necesidades psicológicas y motivación intrínseca como predictores del compromiso deportivo en adolescentes. doi:10.5232/ricvde2011.02501
- Alvarez, M. S., Balaguer, I., Castillo, I., & Duda, J. L. (2012). The coach-created motivational climate, young athletes' well-being, and intentions to continue participation. *Journal of clinical sport psychology*, *6*(2), 166-179. doi:https://doi.org/10.1123/jcsp.6.2.166
- Cecchini, J. A., González, C., Prado, J. L., & Brustad, R. J. (2005). Relación del clima motivacional percibido con la orientación de meta, la motivación intrínseca y las opiniones y conductas de fair play. *Revista Mexicana de Psicología*, 22(2), 469-479.
- Cox, R. H., & COX, R. (2008). Psicología del deporte: conceptos y sus aplicaciones: Ed. Médica Panamericana.
- Coyle, D., & di Masso, G. (2009). Las claves del talento: Planeta Barcelona.
- Diamond, A. (2012). Activities and programs that improve children's executive functions. *Current directions in psychological science*, 21(5), 335-341. doi:https://doi.org/10.1177/0963721412453722
- Dweck, C. S. (2007). La actitud del éxito: VERGARA (SELLO).
- Fundación para la investigación nutricional. (2016). Actividad Física en niños y adolescentes en España.
- Guillén, J. C. (2015). Neuroeducación en el aula: de la teoría a la práctica: ASIRE.
- Hattie, J. (2012). Visible learning for teachers: Maximizing impact on learning. Routledge.
- Hendry, D. T., Ford, P. R., Williams, A. M., & Hodges, N. J. (2015). Five evidence-based principles of effective practice and instruction *Routledge handbook of sport expertise* (pp. 414-429): Routledge.
- Hodge, K., Henry, G., & Smith, W. (2014). A case study of excellence in elite sport: Motivational climate in a world champion team. *The Sport Psychologist*, 28(1), 60-74. doi:https://doi.org/10.1123/tsp.2013-0037
- Libros Bisquerra, R. (2009). Psicopedagogía de las emociones. Madrid: Editorial Sintesis Fernández-Vidal, S.(2011). La puerta de los 3 cerrojos. Barcelona: Narrativa Singular Ginberg, J.(1994). *El Yo como idea*.
- Marina, J. A., & Pellicer, C. (2015). La inteligencia que aprende. Madrid: Santillana.
- Martín, H. R. (2020). ¿ Cómo aprendemos?: una aproximación científica al aprendizaje y la enseñanza (Vol. 1): Graó.
- Moreno, J. A., & Martínez, A. (2006). Importancia de la Teoría de la Autodeterminación en la práctica físico-deportiva: Fundamentos e implicaciones prácticas. *Cuadernos de Psicología del Deporte, 6*(2).
- MURCIA, J. A. M., COLL, D. G.-C., GARZÓN, M. C., & ROJAS, N. P. (2008). Adaptación a la educación física de la escala de las necesidades psicológicas básicas en el ejercicio. *Revista Mexicana de Psicología*, *25*(2), 295-303.
- Pozo, J. I. (2016). Aprender en tiempos revueltos: Alianza Editorial.
- Sánchez Sánchez, M., & Collado Martínez, J. Á. (2016). Factores determinantes en la enseñanza-aprendizaje del deporte desde la perspectiva emocional.
- Tejero-González, C. M. (2016). Sobre la importancia del deporte como acción política: Razones y medidas de gobernanza. *Cultura, Ciencia y deporte, 11*(31), 5-6.