

## Competitive Anxiety: Multidimensional and Multifactorial Analysis

Milán Ochoa Chang<sup>1\*</sup>, Elsa Sivila Jiménez<sup>2</sup>, Ana Celia Mataran Torres<sup>3</sup>

<sup>1\*</sup>BA in Psychology, Associate Researcher, Assistant Professor, MSc, Provincial Center of Sports Medicine, Santiago de Cuba, <https://orcid.org/0000-0001-7781-3673>

<sup>2</sup>BA in Spanish Literature and Psychology-Pedagogy, Full Professor, PhD in Science, University of Holguín, Cuba, <https://orcid.org/0000-0002-7001-2336>

<sup>3</sup>BA in Spanish Literature and Psychology-Pedagogy, Full Professor, PhD in Science, University of Oriente, Cuba, <https://orcid.org/0000-0003-3888-9389>

**Received date:** 21 November 2025; **Accepted date:** 05 December 2025; **Published date:** 10 December 2025

**Corresponding Author:** Milán Ochoa Chang, BA in Psychology, Associate Researcher, Assistant Professor, MSc, Provincial Center of Sports Medicine, Santiago de Cuba, ORCID ID: <https://orcid.org/0000-0001-7781-3673>

**Citation:** Milán Ochoa Chang, Elsa Sivila Jiménez, Ana Celia Mataran Torres, Competitive Anxiety: Multidimensional and Multifactorial Analysis. Journal of Medicine Care and Health Review 2(4). <https://doi.org/10.61615/JMCHR/2025/DEC027141210>

**Copyright:** © 2025 Milán Ochoa Chang. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Abstract

Competitive anxiety in sport has been a subject of interest for various researchers and studies. Sport Psychology is one of the sciences tasked with providing more accurate explanations for this phenomenon, aiming to achieve control and regulation of this emotional state in athletes and, consequently, contribute to better competitive results. The primary objective of this work was to provide an overview of how this topic has been addressed in the last five years, to understand its multidimensional, multifactorial, and complex nature. As a distinctive element, emphasis was placed on the responsibility of coaches and family members in managing anxiety states in adolescent athletes, intending to design and implement comprehensive intervention programs for psychological preparation during the training and competition cycle. For this purpose, 29 papers from databases including Google Scholar, SciELO, Dialnet, among others, were reviewed. Finally, it was concluded that competitive anxiety must be assessed and intervened upon from a comprehensive perspective, necessarily including the cognitive, behavioral, and physiological manifestations present in each athlete, as well as the implicated social factors (coaches and family).

### Introduction

Throughout the history of psychology, the study of anxiety has been the most extensively researched emotional response, due in part to the impact of negative emotional states on performance, and because many athletic failures are explained by problems derived from poor anxiety management [2].

Studying emotions in the sports domain is a primary task in sport psychology, and its relevance lies in its inclusion in the athlete's psychological preparation, aimed at achieving adequate emotional control during sports activity, both in training and competitive periods [12]. It is essential to deepen theoretical and practical knowledge to acquire better tools for modifying patterns and coping styles for competitive anxiety.

According to [2], anxiety is a threat to well-being that is difficult to detect, negatively impacting the individual when perceived as real. They further emphasize that it is characterized by sensations of nervousness, worry, and apprehension, related to organismal activation.

Sports activity entails competitive demands; therefore, it also requires high-quality athlete preparation aimed at self-regulating behavior, which in turn enables the athlete to handle the sensation of success or failure generated by the competitive outcome [2].

[4] states that anxiety in sport is an expected response before and after an athlete participates in a sporting event, manifesting as fear, worry, and despair; these are generally accompanied by increased physiological activity

and occur in situations requiring high physical and emotional demands. Based on conducted reviews, this author adds that competitive anxiety negatively influences sports performance, and this analysis must consider the connotation each situation holds for the athlete.

For [23], it is essential to consider that the athlete interprets the faced situation as threatening and dangerous and, consequently, responds in a disorganized and unpleasant manner; these responses constitute adaptive activating functions.

Along the same lines, [16] assign a positive nuance to this emotional state, highlighting that the body perceives an optimal level of alertness and that it can enhance cognitive and behavioral activity. In this sense, the author reduces anxiety to positive consequences, overlooking the counterproductive and detrimental effects caused by high levels of this emotional response.

Numerous studies address anxiety in sport specifically, its causes, influences, and consequences for athletic performance. The most recent research trends towards developing broader theoretical definitions of anxiety and identifying determinant factors in its development. Similarly, a large group of researchers has developed sport-specific anxiety questionnaires or scales, considering them better predictors of behavior and anxiety manifestations in this context. Concurrently, there is relentless work to establish more effective strategies for managing anxiety in sport.

In Cuba, published studies on this matter remain insufficient. In most of these, the approach to the adolescent athletic population is scarce, making it imperative to delve into the particularities of this developmental stage due to its specific conditions and the importance of preparing athletes from early ages towards a stage of excellence and maturity [18].

It is vital to expand the spectrum of studies on emotional competencies that enable athletes to confront competitive anxiety in high-performance sports initiation schools. The need to develop and strengthen more comprehensive models and strategies will allow for more effective control of anxiety levels during competitions, and better yet, prepare the athlete to face more complex competitive challenges at higher levels.

The involvement of coaches and family members in regulating anxiety states in adolescent athletes is fundamental for their emotional development and sports performance. During adolescence, young people undergo physical, emotional, and social changes that can generate high levels of stress and anxiety, especially in the sports arena, where performance and competitive pressure are intense.

This work aims to systematize some studies conducted in the last five years addressing this topic. It considers that the theoretical and practical treatment of competitive anxiety has reinforced the premise of a multidimensional and multifactorial approach, where family and coaches assume an essential role in this relational system. For this purpose, bibliographic searches were conducted primarily on Google Scholar, Dialnet, and SciELO platforms, employing theoretical methods such as analytical-synthetic and inductive-deductive.

## Results and Discussion

Currently, anxiety and its adequate regulation constitute one of the most contentious issues in sport psychology, hence its multifactorial analysis points towards a more precise intervention [9].

Authors like [18] acknowledge that anxiety manifests with sensations of nervousness, apprehension, and tension, linked to the activation or deactivation of the organism, particularly in circumstances or situations of alert. The individual suffering from anxiety often acts in a manner perceived as strange by others, as the manifested sensations are uncontrolled and can potentially escalate into more significant pathologies requiring greater care for the affected person.

Generally, this author continues, this emotion is linked to anguish, as the subjective experience of anxiety, and can be part of it. His perspective is also interesting when relating anxiety to stress and its connection to reactive behavior towards potentially stressful situations. Certainly, although these manifestations or emotional categories are closely related, the terms should not be confused under any circumstances; [4] also states this.

Although this work is situated within the sports domain, it is pertinent to note that, from a clinical standpoint, anxiety can manifest in various ways. For instance, anxiety exists as a feeling, a symptom, a syndrome, and also as a disease. As a feeling, it is a normal state of tension provoked by significant stimuli; as a symptom, it is expressed through nervousness and fear; as a syndrome, it comprises a constellation of psychic, physical, and behavioral

symptoms mediated by neurobiological mechanisms. Conversely, anxiety as a disease is typically diagnosed when the anxious condition is well-defined, possessing its own etiopathogenesis, course, prognosis, and treatment [31].

[4] posits that in any human activity, and particularly in sport, variables exist that significantly influence the performance of the competing individual. These internal and external variables affect the player or athlete physically and emotionally before and after a competition. One such variable is anxiety. In the sports context, this anxiety relates to aspects preceding, during, or following sports practice, especially in competition.

Each individual and their organism responds differently to received stimuli; similarly, anxious symptoms vary from person to person. They can be differentiated into cognitive, affective, behavioral, and physiological domains—four functional systems coordinated to produce adaptive responses to dangerous situations [4].

According to [9], feelings of apprehension and tension associated with organismal activation occurring in competitive situations generate a circular feedback dynamic that affects bodily performance and, consequently, diminishes motivation and impairs the level of physical response during adverse competitive moments.

The observation by [18] is apt when stating that prolonged or relatively brief tension elicited during competitions will significantly reduce temporal acuity, as well as the volume of attention, memory, and cause thought distortion. The internal process will affect not only cognitive schemas but also aspects related to the athlete's sensorimotor perceptual system.

For numerous authors [23,15,31,8,7,18,4,6,26,5,20,30,9,27,12] competitive anxiety has a directly proportional relationship with sports performance. This tenet, stated tacitly, may appear absolute and deterministic, an element deemed insufficient within sport psychology interpretations in this field.

According to [11], a comprehensive analysis of various elements influencing the athlete must be considered, including both psychological constructs and sociodemographic characteristics. Each individual's emotional response is complex; therefore, competitive anxiety must be analyzed and evaluated as such.

Determining the optimal level for anxiety expression is controversial; for [11] it is advisable to maintain it at an optimal level, neither too high nor too low, as either extreme could negatively impact performance. Thus, during sports competition, elevated anxiety levels can cause distress and impair both physiological and cognitive processes, potentially hindering performance. This author also supports the notion that cognitive anxiety is the most affected in this context, but this assertion does not always hold true precisely due to the multifactorial nature of this emotion. Moderate anxiety, he further notes, can yield beneficial effects by increasing the physiological and psychological activation necessary to meet competitive demands.

Regarding anxiety-moderating factors impacting performance, [11] identifies competitive experience and coping strategies. Certainly, these elements help modulate anxiety's negative effects, but they are acquired through psychological training and not autonomously.

Regarding the multifactorial nature of competitive anxiety, it is vitally important to highlight the position of Martens' multidimensional anxiety theory, a stance defended in this work. Anxiety is divided into components: somatic anxiety, cognitive anxiety, and physiological anxiety.

According to [15], results derived from the multidimensional theory are inconsistent within the scientific community; this assertion is considered incorrect in the present study. This theory provides a comprehensive understanding of the phenomenon and encompasses all possible symptomatology involved in the anxiety states experienced by athletes in competitive situations; authors like [28,25] concur with this position.

Following this approach, [4] adds a social component to those previously described. Primarily, he reinforces the explanation of the physiological component directly related to the limbic system (hippocampus, prefrontal cortex, brainstem, and amygdala); he highlights the psychological component, albeit reducing it to the athlete's inability to control threatening or tense events and situations involving incorrect perception. Meanwhile, the social element links it to social pressure, family conflicts, and interpersonal relationship difficulties.

[4] adds that, beyond the mentioned components, self-confidence is one of the most relevant elements, particularly due to the potential for specialists in this field to work on developing this psychological skill. If an individual lacks self-confidence and believes they will not achieve their objective or goal, their chances of failure increase.

The presence of physical discomfort and disproportionate thoughts can trigger elevated anxiety levels. The physiological component of anxiety reflects perceptions of the psychological and affective elements of the anxiety reaction directly involving the automatic arousal process; this manifests in the subject through increased heart and respiratory rates, stomach butterflies, hand sweating, dry mouth, and muscle tension. Also included are shortness of breath, chest pressure, rapid breathing, shallow breathing, throat tightness, feeling of suffocation, bronchial spasm, panting; neuromuscular symptoms (increased reflexes, startle reaction, blinking, insomnia, spasms, tremors, stiffness, restlessness, pacing, contorted expression, hesitancy, generalized weakness, clumsy movements); gastrointestinal symptoms (abdominal pain, loss of appetite, food aversion, nausea, heartburn, intestinal discomfort, vomiting); urinary tract symptoms (urinary urgency, frequent urination); and epidermal symptoms (flushing, pale face, localized sweating, generalized sweating, hot and cold flashes, itching) [4].

In compiling characteristic elements of the cognitive component of anxiety, [4] summarizes that it comprises expectations and cognitions of success and failure regarding competition, incorporating thoughts and worries, concentration problems, and maintaining attentional focus; it also encompasses the subject's negative and inappropriate sensations about their performance and competitive outcome. The athlete holds low expectations and negative self-evaluations regarding their chances of success; these are, ultimately, the negative perceptions, ideas, and thoughts athletes maintain during the athletic event. [26] concurs in this regard.

For [3], one way to define anxiety is as an emotional response characterized by three components (cognitive, physiological, and motor) due to the potential influence of stimuli, both internal and external, on the individual; the type of stimulus provoking the anxiety response is largely determined by the individual's characteristics. This author also supports the multidimensional model.

The manifestation of competitive anxiety components is also detrimental as it generates athlete dissatisfaction, diminished sports performance, restricted ability to achieve set results, emotional problems, physical issues, and, additionally, injury occurrence [4].

In conclusion, all characteristics and manifestations of competitive anxiety negatively influence athletes' physical and emotional development; these physical and psychological states are compromised because the likelihood of winning a competition decreases.

From another perspective, it is important to consider that through repeated sports experiences and interactions with different teammates, opponents, coaches, and teams over time, improvement occurs not only in sport-specific elements like technique or tactics but also in the psychological skills that complete the player [3]. Furthermore, this author notes that higher levels of skill and sports mastery correlate with lower anxiety levels. However, these relationships do not occur uniformly across all sports or individuals.

[28] compares athletes in individual disciplines with those in team sports, assessing that the former tend to exhibit higher anxiety levels. This relationship, the author asserts, is justified because errors in team sports carry less individual implication and shared responsibility in defeats. While the competitive outcome in team sports is collectively constructed, this factor does not determine a lower tendency for anxiety manifestations; multiple factors can exert pressure within a collective game, leading to anxiety, such as intra-group relationships, discrepancies between individual goals, and different team roles, among others.

Regulating competitive anxiety requires coaches and technical staff of competition groups to possess strategies for reducing cognitive, somatic, and emotional anxiety levels [4]. The family also exerts a fundamental influence on the development of these emotions; therefore, it can act as either a stressor or a catalyst, making it crucial to analyze this relationship in adolescent athletes who are still forming their personality.

### **Role of the Family and Coaches**

The athlete, like any human being in their biopsychosocial condition, requires attention to familial influences on their holistic development; this refines intervention pathways to transform that influence into a factor for athletic enhancement and personal growth [31].

[21] emphasize the predominant role of social influences on athlete development and performance. They identify three essential social sources: family, coaches, and teammates. These agents form a complex, multifaceted social network that can have null, positive, and/or negative effects on athletes' experiences.

Consequently, positive athlete development through sport depends on their relationships with social agents, the type of support, and how the athlete perceives it.

The family is considered a primary socializing agent through which children develop their identities and learn societal norms and values. The family provides the child's first opportunity to practice sport and significantly impacts the child's decision to continue or abandon it. Thus, from the inception of sport participation through initial achievements, parents exert substantial influence on the athletic career [22].

Furthermore, this author notes that the sports coach holds a position of power and leadership central to shaping athlete experiences. As youth become more systematically involved in sport, coaches become a substantial influence source, while parents gradually recede to a secondary role, adopting a less directive function in their children's sports practice. Thus, support and the quality of the coach-athlete relationship are considered central to athletic career development and, consequently, key to achieving sports success.

Although significant research exists on social influences, there is a scarcity of systematic review studies offering an integrative view of existing empirical knowledge, focusing on support from the three main social agents (family, coaches, teammates) and the type (emotional, informational, tangible) and level (positive, indifferent, negative) of support provided to athletes.

From another perspective, [12] highlights sport as a socializing agent that fosters learning and internalization of social group roles and enables the assimilation of learning strategies for athlete emotion education, aiming for better results and facilitating personality formation and development for effective functioning in other life spheres.

Since sport learning emerges from an educational context, a coach-athlete relationship is established, involving information exchange and knowledge feedback. Influence on athlete personality subsystems directly related to sports practice is also acknowledged, as is the contribution to comprehensive athlete training aligned with social principles [12].

[17] state that coaches, beyond transmitting knowledge, can facilitate emotional self-control under competitive stress conditions. Coach perception of these processes is crucial for psychologists planning psychological preparation for adolescent athletes, training personalization, and support network control, especially familial influence.

In any case, sport psychologists recommend that coaches, when facing marked and intense stress and anxiety, engage in calm dialogue with the athlete, select an appropriate time and place, practice active listening, and demonstrate empathy to foster a trusting environment where the athlete's importance is acknowledged, their self-esteem reinforced, and open communication encouraged [20].

This author colloquially asserts the importance of the coach's own example: it is very difficult for athletes to improve their response to stressful situations if those around them handle them poorly—a restless and anxious coach cannot transmit calm to their pupils.

A study by González (2023) identified an association between family climate and anxiety in athletes; while this correlation cannot be viewed as an absolute analogy, it is a valuable element for the present research; indeed, it constitutes a primary motivation for expanding the scope of competitive anxiety regulation in young baseball players from Santiago de Cuba.

[12] emphasize that parents play a crucial role in developing adolescent social skills, as they are the primary group with whom adolescents continuously interact. As social role importance grows during adolescence through peer identification, it reinforces healthy personality development and self-esteem, enabling self-knowledge and social environment understanding through shared activities, fostering reciprocal behaviors, exchange, and relationship control where leadership positions are strengthened, reinforcing collaboration, emotional support, negotiation, and self-control, thereby also strengthening values.

It is essential for parents to adopt a positive attitude, crucial for the child's equilibrium, avoiding over-involvement, providing serenity, and using common sense. For younger children, sport should not be framed as an obligation; rather, it should maintain a pleasant, playful atmosphere that provides enjoyment, shapes behavior, and consolidates an active personality. Transforming a potentially rewarding activity into an imposed, coercive one is inadmissible.

Therefore, it must be recognized that competition should be another stimulus in athlete training and personal development, and during adolescence, it should never be detached from its educational role [13].

## Conclusions

Based on the sources consulted for this review, it was evident that recent studies on competitive anxiety are attributing a multidimensional (primarily cognitive, behavioral, and physiological) and multifactorial character, due to the numerous factors involved in its regulation. It is undeniable that high levels of anxiety in athletes can negatively impact competitive outcomes.

Collaboration between coaches and family members is essential to create a healthy sports environment promoting adolescent emotional well-being, helping them manage anxiety and enjoy their sports experience positively.

## References

1. Acebes, J, Granado, M, Marchena, C. (2021). Relación entre inteligencia emocional y ansiedad en un club de fútbol sala de Madrid. *Retos*. 39: 643-648.
2. Aguilera, K, Hidalgo, P, Espinosa, M, Álvarez. (2023). Técnicas y ejercicios para el autocontrol de conductas ansiosas en atletas de tiro deportivo de la categoría 11-12 años. *Educación Física, Deporte y Salud*. 6(11): 70-81.
3. Albesa, M. O. (2024). Ansiedad, depresión y estrés cómo afecta en los nadadores. Universidad Miguel Hernández de Elche. Tesis de grado en Ciencias de la Actividad Física y el Deporte.
4. Arias, A. P. (2023). Relación entre ansiedad precompetitiva y motivación deportiva en nadadores del club deportivo carril 4 Riobamba. Pontificia Universidad de Ecuador.

5. Assis, A, Bastos, I. L, Mendes, L. A, Magalhães, B, Fonseca, C. C. (2023). Avaliação da ansiedade-estado em jovens basquetebolistas em competições escolares. *Retos*. 50: 971-975.
6. Casafus, C. B. (2023). Niveles de ansiedad pre-competitiva y estrategias de afrontamiento en nadadores adultos de la provincia de Buenos Aires. Universidad abierta interamericana.
7. Córdova, R, Brandão, R, Tutte, V, Reyes, M. (2023). Relación entre la ansiedad competitiva y resiliencia en practicantes de deportes acuáticos de alto rendimiento durante la COVID-19. *Revista de Psicología Aplicada al Deporte y el Ejercicio Físico*. 8(2).
8. Freire, K. L, Lara, M. (2022). Estrategias de afrontamiento y su relación con la ansiedad en deportistas. *Ciencia Latina Revista Científica Multidisciplinar*. 6(6).
9. Espinosa, Y, Espinosa, Y, García, F. (2022). La Ansiedad competitiva en atletas de Gimnasia Artística. *Educación Física, Deporte y Salud*. 5(9).
10. Heredia, M. I. (2024). Relación entre los estilos de vida y estados de ansiedad de los jóvenes deportistas universitarios. *Retos*. 54: 867-872.
11. Hurtado, E. C. Riascos, Murillo, J. A. (2024). Ansiedad y desempeño deportivo de los futbolistas de una universidad privada de la ciudad de Cali. Universidad Cooperativa de Colombia.
12. Jorge, A, Guerra, N, Lissabet, J. L. (2024). Fundamentos psicológicos y sociológicos de la preparación psicológica y el desarrollo de las competencias emocionales en atletas escolares de bádminton. *Olimpia*. 21(2).
13. Juca, G. J. (2024). La ansiedad pre competencia en deportistas de jiu-jitsu de cinturones blancos de las academias fight house, la gloria y el dojo del sur de la ciudad de cuenca. Universidad Politécnica Salesiana, Ecuador.
14. Lara, A, Carnero, A, Alcaraz, V, Muñoz, A. (2023). How to control competitive anxiety in physical education? *Education, Sport, Health and Physical Activity*. 7(3): 240-255.
15. Melguizo, E. (2022). Estudio sobre la motivación, imagen corporal y ansiedad en función del perfil físico-saludable en futuros docentes de educación física. Tesis Doctoral. Editor: Universidad de Granada. Tesis Doctorales.
16. Menéndez, D. E, Becerra, A. (2020). Ansiedad en deportistas jóvenes: un estudio comparativo entre hombres y mujeres. *Horizonte sanitario*. 19(1).
17. Morales, S, Cañizares, M. (2024). Factores psicosociales que se manifiestan en los ajedrecistas escolares de la Habana. *Olimpia*. 21(1).
18. Ochoa, M, y Matarán, A. C. (2021). Evaluación de la ansiedad competitiva en beisbolistas juveniles santiagueros. *Lecturas: Educación Física y Deportes*. 25(273): 71-85.
19. Ortiz, J. F. (2023). La presencia de ansiedad precompetitiva frente a un partido de fútbol en Ppeadolescentes de 12, 13 y 14 años en el club deportivo Lebrija F.C. Universidad cooperativa de Colombia. Facultad de ciencias sociales y humanas. Bucaramanga.
20. Pérez, F. (2022). Cuál debe ser el rol del entrenador ante el estrés deportivo. *Psicólogos del deporte online*.
21. Pinedo, O. J, Rivera La Rosa, R. E. (2023). Relación entre fortaleza mental y ansiedad precompetitiva en deportistas calificados de Lima. Universidad de Lima.
22. Porto, L. F, Krapp do Nascimento, R, Milistetd, M, Vieira do Nascimento, J, Folle, A. (2021). Revisión sistemática de las influencias sociales en el deporte: apoyo de la familia, entrenadores y compañeros de equipo. *Apunts Educación Física y Deportes*. 37 (145): 39-52.
23. Riveros, F, Murillo-Jiménez, A.N, Navarro, L, Ovalle, J.M, Ruiz-Castiblanco, D, Ardila, A. y Rodríguez, C. (2024). Adaptación de la Escala de ansiedad precompetitiva (SAS-2), para población colombiana. *Cuadernos de Psicología del Deporte*. 24(2): 134-145.
24. Sámano, E. (2020). Prevalencia y direccionalidad de la ansiedad estado precompetitiva en atletas universitarios y su relación con el rendimiento deportivo. Universidad Autónoma de Nuevo León.
25. Sridana, R, Rini, E, Adi, T, Bintang, R. (2024). The effect of coaching style on performance of athletes through anxiety as mediating variable in adolescent swimmers. *Retos*. 55: 241-248.
26. Tenisaca, F. (2023). Niveles de ansiedad en la condición física de los árbitros profesionales de fútbol de Tungurahua. Universidad Técnica de Ambato.
27. Teran, D. A. (2023). Ansiedad en el juego e influencia en el rendimiento deportivo en futbolistas sub 11 de las academias de Trujillo- Perú. Universidad César Vallejo, Perú.
28. Tisera, M. V. (2024). Ansiedad en el fútbol juvenil de alto rendimiento y su relación con el rendimiento deportivo. Tesis de grado. Universidad Abierta Interamericana Facultad de Psicología y Relaciones Humanas. Argentina.
29. Tonato, D. L, Flores, V. F. (2024). La autoestima y su relación con la ansiedad precompetitiva en futbolistas. *Revista Religación*. 9(39).
30. Villalva, J. J. (2023). La ansiedad y su influencia en el rendimiento de los jóvenes de 15 a 17 años. Universidad César Vallejo, Perú.
31. Zaldívar, M. (2022). El impacto de la ansiedad en deportistas profesionales. *Dilemas contemporáneos, educación, política y valores*. 9(1).