



## Pre-competitive anxiety in padel: the role of sex and competitive level

*La ansiedad pre-competitiva en pádel: implicaciones del sexo y el nivel competitivo*

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### Abstract

**Introduction:** Padel is an intermittent racket sport characterised by physical, technical-tactical, and psychological demands. Competitive anxiety may affect performance and well-being.

**Objective:** This study aimed to analyse pre-competitive anxiety in padel players according to sex and competitive level.

**Methodology:** The sample comprised 136 players, including 68 men and 68 women, classified as professionals (n = 20) or amateurs (n = 116). The Sport Anxiety Scale-2 was used to assess somatic anxiety, worry, and concentration disruption. Descriptive statistics and two-way analyses of variance examining sex, competitive level, and their interaction were conducted, with significance set at  $p < .05$ .

**Results:** No significant sex-by-level interaction was observed for any anxiety dimension. Somatic anxiety did not differ significantly according to sex or competitive level. Worry was significantly higher in women than in men (mean difference = 3.21 points;  $p < .001$ ) and in amateurs than in professionals (mean difference = 2.17 points;  $p = .015$ ). Concentration disruption was also higher in women (mean difference = 1.93 points;  $p = .005$ ) and amateurs (mean difference = 1.85 points;  $p = .007$ ). Amateur women recorded the highest concentration disruption score ( $10.6 \pm 3.3$  points), whereas professional women also showed elevated worry ( $13.9 \pm 3.4$  points). Items concerning poor performance received the highest ratings, while somatic symptoms received the lowest.

**Conclusion:** These findings are consistent with greater cognitive and attentional involvement than somatic expression in pre-competitive anxiety. Psychological preparation should be tailored to players' needs, particularly women and amateurs.

### Keywords

Athletic performance; competitive level; pre-competitive anxiety; SAS-2; sport psychology.

### Resumen

**Introducción:** El pádel es un deporte de raqueta intermitente con demandas físicas, técnico-tácticas y psicológicas específicas.

**Objetivo:** El objetivo fue analizar la ansiedad precompetitiva de jugadores de pádel según el sexo y el nivel competitivo.

**Metodología:** Participaron 136 jugadores, 68 hombres y 68 mujeres, clasificados como profesionales (n = 20) o amateurs (n = 116). Se utilizó la Sport Anxiety Scale-2 para evaluar la ansiedad somática, la preocupación y la desconcentración. Se realizaron análisis descriptivos y análisis de varianza de dos factores para examinar el sexo, el nivel competitivo y su interacción, con significación establecida en  $p < .05$ .

**Resultados:** No se observó ninguna interacción significativa entre sexo y nivel. La ansiedad somática no presentó diferencias significativas según el sexo ni el nivel competitivo. La preocupación fue mayor en las mujeres que en los hombres (diferencia media = 3.21 puntos;  $p < .001$ ) y en los amateurs que en los profesionales (diferencia media = 2.17 puntos;  $p = .015$ ). La desconcentración también fue mayor en las mujeres (diferencia media = 1.93 puntos;  $p = .005$ ) y en los amateurs (diferencia media = 1.85 puntos;  $p = .007$ ). Las mujeres amateurs presentaron la mayor desconcentración ( $10.6 \pm 3.3$  puntos), mientras que las profesionales también mostraron una preocupación elevada ( $13.9 \pm 3.4$  puntos).

**Conclusión:** Estos hallazgos muestran una mayor implicación cognitiva y atencional que somática en la ansiedad precompetitiva. La preparación psicológica debe adaptarse a las necesidades de los jugadores, especialmente de las mujeres y los jugadores amateurs.

### Palabras clave

Ansiedad precompetitiva; nivel competitivo; psicología del deporte; rendimiento deportivo; SAS-2.



## Introduction

Padel is a racket sport that has experienced rapid international growth and increasing participation in recent years. Its popularity has been associated with its accessibility, social character, intrinsic satisfaction, and distinctive playing features (Rodríguez-Cayetano et al., 2020). In particular, the use of enclosing walls, frequent transitions between attack and defence, and intermittent high-intensity actions create specific technical-tactical and physiological demands (Courel-Ibáñez, 2021; Martín-Miguel et al., 2023).

In competitive settings, athletes are exposed not only to physical and technical demands but also to psychological challenges that may condition their performance (Marín-González et al., 2022). Competitive anxiety refers to emotional, cognitive, and physiological responses elicited when athletes anticipate or confront a competition that they perceive as demanding or threatening (Smith et al., 2006; Souza et al., 2019). State anxiety is a transient response that fluctuates according to the immediate situation, whereas trait anxiety is a relatively stable disposition to perceive a broad range of situations as threatening (Dominguez et al., 2024). Although the SAS-2 assesses sport-performance anxiety as a multidimensional construct comprising somatic anxiety, worry, and concentration disruption (Smith et al., 2006), distinguishing between state and trait anxiety is important because situational competitive demands may amplify or attenuate the expression of these responses (Tomczak et al., 2022).

Competitive anxiety has a complex relationship with performance. In padel, anxiety and self-confidence may vary according to ranking, court position, and whether players are assessed in competition or pressure training (Conde-Ripoll et al., 2024a). Pre- and post-competitive anxiety have also been associated with technical-tactical performance in high-level players (Conde-Ripoll et al., 2024b). Research involving high-level padel players has also highlighted the relevance of pre-competitive anxiety and self-confidence, while a recent systematic review identified anxiety as one of the psychological variables most frequently examined in this sport (Castillo-Rodriguez et al., 2022; Yáñez-Sepúlveda et al., 2025). Competitive level, tournament round, match phase, score, and point importance may influence perceived pressure and the conditions under which performance is assessed. In this regard, score context and golden-point rules can modify match demands and playing patterns, which constitute relevant performance indicators in padel (Almonacid et al., 2023; García-Giménez et al., 2022; Muñoz et al., 2022). These contextual factors should be considered when interpreting questionnaire scores collected around competition.

Previous research in padel has identified sex- and level-related variation in competitive anxiety. Amateur players may present different physical and anxiety profiles from higher-level players (Marcos-Rivero et al., 2025), while pre-competitive anxiety and post-competitive mood may also differ between women and men (Rodríguez-Cayetano et al., 2025). At high level, ranking and playing side have been related to somatic anxiety and self-confidence (Conde-Ripoll et al., 2024b). However, competitive experience should not automatically be interpreted as the cause of lower anxiety because individual disposition and immediate match context may also contribute. Therefore, the aim of the present study was to analyse pre-competitive anxiety levels in padel players according to sex and competitive level (professional vs. amateur).

## Method

### Participants

A total of 136 padel players (68 men and 68 women) took part in the study, with their descriptive characteristics presented in Table 1. The amateur group comprised 116 players (55 women and 61 men) who practised outside working or academic hours and competed mainly in local and regional tournaments. The professional group consisted of 20 players (13 women and 7 men) who received financial remuneration and trained at least 12 hours per week, in accordance with the professional-athlete criteria proposed by McKinney et al. (2019) (Table 1). These professional participants competed either in the main draw or in qualifying/preceding phases of the Premier Padel circuit; therefore, they represented an international professional competitive context rather than a single world-ranking stratum.



Table 1. Descriptive characteristics of the sample.

|                       | Professionals (n=20) |             | Amateurs (n=116) |              |
|-----------------------|----------------------|-------------|------------------|--------------|
|                       | Women (n = 13)       | Men (n = 7) | Women (n = 55)   | Men (n = 61) |
| Age (years)           | 25.1 ± 11.1          | 24.6 ± 4.0  | 34.5 ± 11.6      | 32.6 ± 12.4  |
| Training (hours/week) | 14.9 ± 8.4           | 18.3 ± 3.2  | 3.2 ± 1.5        | 4.4 ± 3.6    |

\*Values are expressed as mean ± standard deviation.

Prior to completing the questionnaires, all participants provided written informed consent. They were fully informed about the aims and procedures of the study and the confidentiality and anonymity of data handling and all aspects related to the research process. The study protocol was reviewed and approved by the Social Sciences Ethics Committee of the University of Castilla-La Mancha (Reference: CEIS-2026-170625) and was conducted in accordance with the ethical standards of the Declaration of Helsinki and its later amendments.

### Instrument

The Sport Anxiety Scale-2 (SAS-2; Smith et al., 2006) was used to assess the anxiety experienced by athletes when facing competitive situations. This questionnaire comprises 15 items divided into three subscales: somatic anxiety, worry, and concentration disruption (Table 2). Players were asked to respond to statements beginning with “before or while I compete...” (e.g., “...I feel a knot in my stomach,” “...I lose concentration during the match or competition,” “...I worry about competing or performing poorly”). Each item was rated on a 4-point Likert scale ranging from 1 (not at all) to 4 (very much). Subscale scores were calculated by summing the scores of the respective items, yielding possible ranges from 5 to 20. Lower scores indicate a low likelihood of experiencing that type of anxiety, while higher scores reflect a greater tendency to experience that anxious response in competitive situations. In addition, the questionnaire included items collecting descriptive variables such as sex, age, and weekly training hours. The SAS-2 demonstrated adequate internal consistency in the present sample. Cronbach’s alpha coefficients were .80 for somatic anxiety, .85 for worry, and .80 for concentration disruption. In addition, the overall 15-item scale showed good internal consistency ( $\alpha = .86$ ).

Table 2. Items comprising each of the subscales of the Sport Anxiety Scale-2 (SAS-2)

|                          | Item | Statement: Before or while I play/compete...                              |
|--------------------------|------|---------------------------------------------------------------------------|
| Somatic Anxiety          | 2.   | ...I feel that my body is tense                                           |
|                          | 6.   | ...I feel a knot in my stomach                                            |
|                          | 10.  | ...I feel my muscles trembling                                            |
|                          | 12.  | ...I have an upset stomach                                                |
|                          | 14.  | ...I feel my muscles tense because I am nervous                           |
| Worry                    | 3.   | ...I worry about not playing or competing well                            |
|                          | 5.   | ...I worry about disappointing others (teammates, coaches, parents, etc.) |
|                          | 8.   | ...I worry about not competing or playing as well as I can                |
|                          | 9.   | ...I worry about competing or performing poorly                           |
|                          | 11.  | ...I worry about “messing up” during the match or competition             |
| Concentration Disruption | 1.   | ...I find it hard to concentrate during the match or competition          |
|                          | 4.   | ...I find it difficult to focus on what I am supposed to do               |
|                          | 7.   | ...I lose concentration during the match or competition                   |
|                          | 13.  | ...I cannot think clearly during the match or competition                 |
|                          | 15.  | ...I find it hard to concentrate on what my coach has asked me to do      |

### Procedure

Initially, players were contacted through their clubs, via email, and through social media. Coaches from the participating clubs were also approached to encourage their players to take part in the study and were informed about its objectives and procedures. All participants provided written informed consent, and the study was conducted in accordance with the ethical principles for research with human subjects established by the Declaration of Helsinki.

For the amateur sample, multiple clubs and schools were contacted, and the study was disseminated through social media to reach the maximum number of participants. For the professional sample, both players and high-level coaches were contacted, leveraging the network of one of the researchers (A.G.),



whose experience in padel facilitated access to top players from the “Premier Padel” circuit as well as competitors from preceding phases or tournaments.

All participants were informed about the aims of the study and provided written informed consent. They completed the SAS-2 questionnaire via an anonymous Google Forms link, which also provided detailed information about the study. Participants were encouraged to respond as honestly as possible, emphasising that there were no “right” or “wrong” answers. The researcher remained available by phone to address any questions during questionnaire completion. No time limit was imposed, but completion did not exceed 15 minutes for any participant.

### **Variables**

For a more detailed analysis of competitive anxiety, two grouping variables were established: sex (men and women) and competitive level (professional and amateur).

The dependent variables examined in relation to sex and competitive level were the subscales of the Sport Anxiety Scale-2 (SAS-2):

- Somatic anxiety: This dimension reflects physiological and bodily responses to competitive pressure, such as muscle tension, sweating, stomach discomfort, and increased heart rate.
- Worry: This represents the cognitive component of sport-related anxiety. It captures negative, anticipatory, and ruminative thoughts about athletic performance and potential consequences of failure.
- Concentration disruption: This refers to difficulties in maintaining attention and focus during the competitive task as a consequence of anxiety. It represents the inability to concentrate adequately due to intrusive thoughts, internal or external distractions, and performance-related worries.

### **Data analysis**

Data were stored and managed using Microsoft Excel (Microsoft Spain), and statistical analyses were conducted with SPSS v. 29.0 (SPSS Inc., USA). Descriptive statistics, normality tests, and inferential analyses were performed. Means and standard deviations were calculated. The Kolmogorov-Smirnov test was used to assess normality, indicating that somatic anxiety, worry, and concentration disruption variables followed a parametric distribution ( $p > .05$ ).

Two-way analyses of variance ( $2 \times 2$  ANOVA) were conducted, with competitive level (professional vs. amateur) and sex (men vs. women) as fixed factors. Main effects and the sex  $\times$  competitive-level interaction were tested. When significant main effects were identified, Bonferroni-adjusted pairwise comparisons were performed. Partial eta squared ( $\eta^2p$ ) was reported for ANOVA effects and interpreted as small ( $\sim .01$ ), medium ( $\sim .06$ ), or large ( $\sim .14$ ). Pairwise comparisons were accompanied by effect size calculations using Cohen’s  $d$ . Effect sizes were interpreted according to Cohen (1988) guidelines: approximately 0.2 was considered small, 0.5 medium, and above 0.8 large. Statistical significance was set at  $p < .05$ .

## **Results**

For age, neither the sex  $\times$  competitive-level interaction ( $F(1, 132) = 0.05$ ,  $p = .815$ ,  $\eta^2p < .001$ ) nor the main effect of sex was significant ( $F(1, 132) = 0.16$ ,  $p = .686$ ,  $\eta^2p = .001$ ). Amateur athletes were 27.3% older (approximately 8 years) than professional athletes ( $F(1, 132) = 8.82$ ,  $p = .004$ ,  $\eta^2p = .063$ ). For weekly training hours, the sex  $\times$  competitive-level interaction was not significant ( $F(1, 132) = 1.36$ ,  $p = .245$ ,  $\eta^2p = .010$ ). Men trained 2.3 hours per week more than women ( $F(1, 132) = 6.01$ ,  $p = .016$ ,  $\eta^2p = .044$ ), and professional players trained 12.8 hours per week more than amateur players ( $F(1, 132) = 189.80$ ,  $p < .001$ ,  $\eta^2p = .590$ ).

Regarding the psychological variables assessed, no sex  $\times$  competitive-level interaction was significant for somatic anxiety ( $F(1, 132) = 2.62$ ,  $p = .108$ ,  $\eta^2p = .019$ ), worry ( $F(1, 132) = 1.68$ ,  $p = .197$ ,  $\eta^2p = .013$ ) or concentration disruption ( $F(1, 132) = 0.01$ ,  $p = .928$ ,  $\eta^2p < .001$ ) (Table 3). Somatic anxiety showed



no main effect of sex ( $F(1, 132) = 0.07, p = .789, \eta^2p = .001$ ), or level ( $F(1, 132) = 0.34, p = .558, \eta^2p = .003$ ). Worry showed a main effect of sex, with women reporting higher scores (mean difference (diff) = 3.21 points,  $F(1, 132) = 13.16, p < .001, \eta^2p = .091$ ), and level, with amateur players scoring higher than professionals (diff = 2.17 points,  $F(1, 132) = 6.02, p = .015, \eta^2p = .044$ ). Amateur men reported greater worry than professional men (diff = 3.31 points,  $p = .019, d = 0.9$ ), and women reported greater worry than men among amateurs (diff = 2.06 points,  $p = .002, d = 0.6$ ) and professionals (diff = 4.35 points,  $p = .009, d = 1.2$ ). Concentration disruption showed a main effect of sex, with women scoring higher (diff = 1.93 points,  $F(1, 132) = 8.02, p = .005, \eta^2p = .057$ ), and level, with amateur players scoring higher than professionals (diff = 1.85 points,  $F(1, 132) = 7.40, p = .007, \eta^2p = .053$ ). Amateur women scored higher than professional women (diff = 1.79 points,  $p = .033, d = 0.7$ ), and amateur women scored higher than amateur men (diff = 1.87 points,  $p < .001, d = 0.7$ ) (Table 3).

Table 3. Differences in somatic anxiety, worry, and concentration disruption according to sex (men vs. women) and competitive level (professional vs. amateur)

|                          |  | Professionals (n=20) | Amateurs (n=116) | Sex × Level | Sex    | Level |
|--------------------------|--|----------------------|------------------|-------------|--------|-------|
| Somatic Anxiety          |  |                      |                  |             |        |       |
| Men                      |  | 9.3 ± 3.3            | 7.7 ± 2.3        | .108        | .789   | .558  |
| Women                    |  | 8.3 ± 3.6            | 9.1 ± 3.2        |             |        |       |
| Worry                    |  |                      |                  |             |        |       |
| Men                      |  | 9.6 ± 2.6            | 12.9 ± 3.5 #     | .197        | < .001 | .015  |
| Women                    |  | 13.9 ± 3.4 *         | 14.9 ± 3.6 *     |             |        |       |
| Concentration Disruption |  |                      |                  |             |        |       |
| Men                      |  | 6.9 ± 1.6            | 8.8 ± 2.2        | .928        | .005   | .007  |
| Women                    |  | 8.8 ± 2.3            | 10.6 ± 3.3*#     |             |        |       |

Values are expressed as mean ± standard deviation; \*  $p < .05$  indicates significant differences compared to the men group within the same level; #  $p < .05$  indicates significant differences compared to the professional group of the same sex.

SAS-2 items were ranked according to their mean response scores (range: 1–4), calculated separately for the overall sample and each sex-by-competitive-level subgroup (Table 4). Rank 1 represents the highest mean score, and items with identical means were assigned the same rank. Overall, the highest-ranked items were those related to concerns about sport performance. “I worry about competing or performing poorly” showed the highest mean score (2.85), followed by “I worry about not playing or competing well” and “I worry about not competing or playing as well as I can” (both 2.84). Items reflecting attentional difficulties generally occupied intermediate positions, whereas most somatic symptoms were located at the lower end of the ranking. In particular, “I have an upset stomach” (1.38) and “I feel my muscles trembling” (1.43) showed the lowest overall mean scores. The main differences between subgroups were observed among professional men, who ranked “I worry about messing up during the match or competition” and “I find it hard to concentrate during the match or competition” lower than the other groups, while ranking “I feel a knot in my stomach” and “I have an upset stomach” higher. Table 4 presents the mean score and corresponding rank for each item to facilitate comparison across subgroups.

Table 4. Ranking of SAS-2 questionnaire items based on scores (items ordered from highest to lowest score)

| Item                                                                       | Overall     | W-PRO       | W-AMA     | Mean M-PRO | Mean M-AMA  |
|----------------------------------------------------------------------------|-------------|-------------|-----------|------------|-------------|
|                                                                            | Mean (rank) | Mean (rank) | (rank)    | (rank)     | Mean (rank) |
| ...I worry about competing or performing poorly.                           | 2.85 (1)    | 2.77 (3)    | 3.02 (3)  | 2.14 (3)   | 2.79 (1)    |
| ...I worry about not playing or competing well.                            | 2.84 (2)    | 3.00 (2)    | 3.07 (1)  | 2.29 (1)   | 2.66 (3)    |
| ...I worry about not competing or playing as well as I can.                | 2.84 (2)    | 3.08 (1)    | 2.96 (4)  | 2.14 (3)   | 2.75 (2)    |
| ...I worry about “messing up” during the match or competition.             | 2.62 (4)    | 2.38 (5)    | 3.04 (2)  | 1.43 (10)  | 2.44 (4)    |
| ...I worry about disappointing others.                                     | 2.50 (5)    | 2.69 (4)    | 2.85 (5)  | 1.57 (9)   | 2.25 (5)    |
| ...I feel that my body is tense.                                           | 2.18 (6)    | 1.92 (7)    | 2.38 (6)  | 2.29 (1)   | 2.05 (7)    |
| ...I lose concentration during the match or competition.                   | 2.15 (7)    | 2.15 (6)    | 2.25 (7)  | 1.86 (6)   | 2.08 (6)    |
| ...I find it hard to concentrate during the match or competition.          | 1.96 (8)    | 1.92 (7)    | 2.24 (8)  | 1.14 (14)  | 1.82 (8)    |
| ...I find it difficult to focus on what I am supposed to do.               | 1.94 (9)    | 1.69 (10)   | 2.24 (8)  | 1.43 (10)  | 1.79 (9)    |
| ...I feel my muscles tense because I am nervous.                           | 1.73 (10)   | 1.92 (7)    | 1.85 (11) | 1.86 (6)   | 1.56 (11)   |
| ...I find it hard to concentrate on what my coach has instructed me to do. | 1.72 (11)   | 1.61 (11)   | 2.13 (10) | 1.00 (15)  | 1.46 (13)   |
| ...I cannot think clearly during the match or competition.                 | 1.66 (12)   | 1.46 (13)   | 1.78 (13) | 1.43 (10)  | 1.62 (10)   |
| ...I feel a knot in my stomach.                                            | 1.65 (13)   | 1.61 (11)   | 1.80 (12) | 2.14 (3)   | 1.48 (12)   |
| ...I feel my muscles trembling.                                            | 1.43 (14)   | 1.39 (15)   | 1.56 (14) | 1.29 (13)  | 1.34 (14)   |
| ...I have an upset stomach.                                                | 1.38 (15)   | 1.46 (13)   | 1.46 (15) | 1.71 (8)   | 1.26 (15)   |

W-PRO = Professional Women; W-AMA = Amateur Women; M-PRO = Professional Men; M-AMA = Amateur Men.



## Discussion

The objectives of the present study were to assess pre-competitive somatic anxiety, worry, and concentration disruption in padel players according to sex and competitive level. The main findings indicate that pre-competitive anxiety is present in both professional and amateur players. However, professional players exhibited lower levels of concentration disruption, suggesting that competitive experience may play a key role in regulating attention under pressure. In contrast, amateur players displayed higher levels of worry, a trend that was particularly pronounced in women, which may reflect greater cognitive vulnerability to competitive demands. Notably, within the worry component, even professional women players reported elevated scores, indicating that exposure to high-level competition does not necessarily eliminate cognitive anxiety, and may in some cases maintain or even exacerbate it. Conversely, somatic anxiety did not emerge as a differentiating variable in padel, as similar scores were observed across both competitive levels and sexes.

Somatic anxiety did not differ significantly by sex or competitive level. This is broadly consistent with high-level padel research showing that anxiety responses depend on context and player characteristics, including ranking and playing side (Conde-Ripoll et al., 2024a). Accordingly, the present null effects should not be interpreted as evidence that somatic anxiety is invariant: tournament round, match phase, outcome, and the importance of a point may create within-player fluctuations that a single cross-sectional assessment cannot capture (Conde-Ripoll et al., 2025; Muñoz et al., 2022).

In contrast, the results related to worry reveal differences according to sex, with significantly higher scores observed in women at both competitive levels. Similar sex-related variation has been described in padel research examining pre-competitive anxiety and post-competitive mood (Rodríguez-Cayetano et al., 2025). The elevated scores among professional women should be interpreted cautiously: they may reflect outcome pressure, external evaluation, stable individual differences, or the specific competitive situations sampled, rather than an effect of professional experience itself. Qualitative evidence from world-class padel also indicates that mental toughness develops through a dynamic interaction of personal and contextual experiences (Barreiros et al., 2026).

Regarding concentration disruption, significant differences were observed according to both sex and competitive level, with amateur women reporting the highest scores and, therefore, greater difficulty maintaining attentional control in competitive situations. This finding is consistent with evidence indicating that anxiety, stress, and mental fatigue can interfere with concentration and padel-specific psychomotor performance (Díaz-García et al., 2024; Yáñez-Sepúlveda et al., 2025). Although the lower scores observed among professional players may suggest that repeated exposure to demanding competitive situations is associated with more effective attentional control, this interpretation should be approached cautiously because the cross-sectional design does not permit causal conclusions. Moreover, amateur players were approximately eight years older than professional players, and age was not included as a covariate; consequently, the independent contribution of competitive level cannot be isolated. Future studies should employ larger and more balanced samples, together with longitudinal or repeated-measures designs that account for potentially relevant variables such as age, ranking, tournament round, score, and point importance.

From an applied perspective, the results of the present study highlight the importance of designing and implementing psychological skills training programs tailored to the specific needs of padel players. In particular, amateur women players may benefit from interventions focused on cognitive restructuring, the enhancement of self-confidence, and the incorporation of mindfulness-based techniques, with the aim of improving attentional control and reducing the interference of negative thoughts during competition. This approach is consistent with evidence indicating that psychological interventions lead to significant reductions in competitive anxiety and improvements in performance and emotional self-regulation across athletes of different levels (Craft et al., 2003; Ong and Chua, 2021). Furthermore, structured psychological training programs have been shown to be effective in enhancing concentration and competitive coping in individual and racket sports (Mamassis and Doganis, 2004; Martinent et al., 2018). For professional women players, the development of specific strategies to manage persistent worry is particularly relevant, as the literature suggests that in high-performance contexts, cognitive anxiety may remain a stable factor associated with outcome pressure and external evaluation (Gardner and Moore,



2004; Si et al., 2024). Taken together, these findings reinforce the need to systematically integrate psychological preparation into athletic training to optimise both performance and well-being in padel players.

Several limitations should be considered when interpreting the present findings. First, the cross-sectional design precludes establishing causal relationships between competitive experience and the anxiety dimensions assessed. Furthermore, the use of self-report measures may introduce biases related to social desirability and players' subjective perception of the competitive situation; future studies should therefore complement these measures with objective or psychophysiological indicators. The professional group was relatively small ( $n = 20$ ), particularly after stratification by sex (13 women and 7 men), which may reduce the precision and stability of subgroup estimates. Nevertheless, recruitment was constrained by the strict inclusion criteria used to define professional status—financial remuneration and a minimum of 12 hours of training per week—which resulted in a clearly delimited group with specific and relatively homogeneous competitive characteristics. Professionals and amateurs also differed in age, which may have influenced comparisons between competitive levels. Moreover, potentially relevant variables such as individual world ranking, tournament round, match phase, score, point importance, trait anxiety, personality characteristics, injury history, and perceived social support were not recorded. Finally, the sample was recruited within a specific geographical and competitive context, which may limit the generalisability of the findings. Future research should use longitudinal or repeated-measures designs, recruit larger and more balanced samples, and consider these contextual and individual variables to obtain a more comprehensive understanding of pre-competitive anxiety in padel.

## Conclusions

The results of the present study indicate that pre-competitive anxiety in padel is predominantly manifested in its cognitive dimension, whereas somatic anxiety does not emerge as a relevant differentiating factor. This finding suggests that, in this sport, the primary psychological challenges are related to processes such as worry, negative thinking, and attentional control, rather than physiological arousal. Moreover, differences were identified according to sex, with higher levels of cognitive anxiety and concentration disruption observed in women, particularly at the amateur level, highlighting greater cognitive vulnerability to competitive demands.

Overall, these findings underscore the need to focus psychological preparation in padel on the management of cognitive anxiety, taking into account both sex and competitive level. The implementation of targeted and tailored interventions according to the player's profile appears to be a key strategy for optimising sport performance and promoting more effective psychological adaptation to the competitive context.

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