

Pre-competitive anxiety in U12, U14 and U16 paddle tennis players

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ANSIEDAD PRE-COMPETITIVA EN JUGADORES DE PÁDEL U12, U14 Y U16

KEYWORDS: Cognitive anxiety, somatic anxiety, self-confidence, paddle tennis.

ABSTRACT: The main aim of this research is to analyze the level of precompetitive anxiety in female paddle players and male paddle players of Castilla y León in the categories U12, U14 and 16 before the beginning of the competition. Thus, 221 players participated in the study: 100 female athletes and 121 male athletes. The results showed that the level of self-confidence of athletes is higher than the levels obtained in the cognitive anxiety and somatic anxiety, respectively. In relation with the sex of the athletes, male players showed higher levels in self-confidence and somatic anxiety, while the female players counted higher on cognitive anxiety. Finally, depending on the category in which they compete, U12 players are those who have more confidence in themselves, whereas U16 players are those who counted higher in the variables of cognitive anxiety and somatic anxiety.

Anxiety is one of the most frequently observed states of mind in competitive sport understanding it as “an inadequate adaptation of an individual to a specific situation which increases the activation level and modifies the emotional functioning” (Urta, 2014, p. 67).

Smith (1989) explains that while for some athletes the competition is an entertaining and challenging practice, for others it may be potentially anxiogenic. Competition is a situation in which an athlete must face some facts in which the results and consequences of his performance can determine his future as an athlete (López, Pineda and Tomás, 2015).

In general, it is assumed that in the moments before a competition, athletes should be in a psychological condition that helps them to confront the competition in the best physical and psychological conditions in order to be able to perform to their maximum potential (Buceta, 1998). Dosil (2004) warns that the most propitious moment in order that anxiety or stress should take place in the sports area is the one that precedes a competitive activity. The anxiety that occurs before a competition or in anticipation of it is what is known as precompetitive anxiety (Cox, 2009).

The study and the evaluation of the competitive anxiety continues being a topic of interest and many authors in Psychology of Sport and Physical Activity have done some researches on this, highlighting Abenza, Alarcón, Leite, Ureña and Piñar, (2009); Abrahamsen, Roberts and Pensgaard, (2006); Eubank and Collins, (2000); Hanson and Gould, (1988); Martens, Vealey and Burton (1990); Partridge and Wiggins, (2008); Patel, Omar and Terry, (2010); Ramis, Torregrosa, Viladrich and Cruz, (2010); Smith, Smoll, Cumming and Grossbard (2006); Thomas, Picknell and Hanton, (2011).

The main aim of this research is to analyze the level of precompetitive anxiety in female paddle players and male paddle players of Castilla y León in the categories U12, U14 and U16 before the beginning of the competition.

Method

Participants

The sample for the present study consists of 221 paddle tennis players from Castilla y León, 100 of them belonging to

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the feminine sex and 121 to the masculine sex. By categories, there are 93 U12 players, 73 U14 and 55 U16.

Instruments

For the execution of this investigation, the Revised Competitive State Anxiety Inventory-2 (CSAI-2R) (Cox, Martens & Russell, 2003) has been chosen in its Spanish version from Andrade, Lois and Arce (2007).

The CSAI-2R of Andrade et. al.,(2007) is composed by 16 items, distributed in three subscales: cognitive anxiety, somatic anxiety and self-confidence. Each of these statements is evaluated by means of a format of response type Likert, with four different alternatives, numbered from 1 (nothing) to 4 (much).

Procedure

The data was collected from players fifteen minutes before the beginning of the competition in the same place where they competed.

Results

The average in the obtained answers is 1.51 ($\pm .622$) for the features 'somatic anxiety', 1.96 ($\pm .716$) for the 'cognitive anxiety' and 3.24 ($\pm .642$) for the features 'self-confidence'. By categories, the elements 'cognitive anxiety' and 'somatic anxiety' are higher in the U16 category ($M = 2.20$ y $M = 1.62$, respectively), while the element self-confidence is higher in the U12 category ($M = 3.44$) (Table 1).

A Univariate Analysis (ANOVA) was performed to analyze if there were significant differences in the three variables that shape the precompetitive anxiety factor according to the sex of the players and the category in which they compete. When significant differences ($p < .05$) were observed through ANOVA, the test of Scheffé's Multiple Comparisons was used to detect the specific groups among those differences.

According to the sex of the players, there are no significant differences between the paddle tennis players in the three variables that shape the precompetitive factor (Table 2). However, with respect to the category in which they compete, there are significant differences in the U12 category and the U16 category with respect to the cognitive anxiety factor and between

the U12 and U14 categories and U12 and U16 with respect to the self-confidence factor (Tables 3 and 4)

The analysis of bivariate correlations was performed to determine the relationships among the dependent variables object of study. Table 5 shows the coefficients of correlation among the variables cognitive anxiety, somatic anxiety and self-confidence. The obtained results show that there is a significant positive correlation between the elements cognitive anxiety and somatic anxiety. Regarding to the self-confidence elements, there is a significant negative correlation between this feature and the somatic anxiety and the cognitive anxiety. Finally, when there is a maximum of cognitive anxiety, there is a decrease of the self-confidence factor very similar to the increase of somatic anxiety.

Discussion

The results previously exposed reveal the existence of a higher level of self-confidence than of cognitive anxiety and somatic anxiety, being the latter the one that the lowest punctuation obtains of the three variables. These results follow the line of the studies realized by Cervelló, Santos-Rosa, Jiménez, Nerea and García (2002) with tennis players and Buceta, López, Pérez-Llantada Vallejo and Del Pinto (2003) with popular marathon runners. On the other hand, in the investigation realized by Arroyo (2015) with young football players, the variable that presents a higher level is the somatic anxiety, followed by the self-confidence and, in last place, the cognitive anxiety.

As for the sex of the athletes, there are no statistically differences between the factors cognitive anxiety, somatic anxiety and self-confidence. This study is related to the realized one by Guillén and Álvarez-Malé (2010) with young swimmers, in which the results did not show statistically significant differences, although men presented higher scores in the factors self-confidence and somatic anxiety and minors in the factor cognitive anxiety.

In reference to the results obtained in the precompetitive anxiety for each of the categories, there are statistically significant differences in the variables cognitive anxiety and self-confidence. With regard to the cognitive anxiety, there are statistically significant differences between the U12 and U16 players, showing higher values as they compete in a higher category. For the self-confidence variable, there are significant

differences between U12 and U14 and between U12 and U16, while there are no significant differences between U14 and U16 players. The highest level of this factor occurs in U12 players followed by U16 players and, the last ones, U14 athletes. Finally, with respect to somatic anxiety, there are no significant differences between the different categories, showing higher levels as the category increases.

These results are opposite to the obtained in other investigations such as the one realized for Hernández, Olmedilla and Ortega (2008) with young judo athletes, in which U14 athletes showed higher levels of cognitive anxiety and somatic anxiety and a level of self-confidence lower than the U16 athletes.

In conclusion, the level of self-confidence in the paddle tennis players of Castilla y Leon is higher than the level of

cognitive anxiety and this, in turn, higher than somatic anxiety. Youngest are the ones who present better results of self-confidence opposite to those who are older. These results can be useful to improve skills associated with the competitive challenges, and useful for the athlete to have a better predisposition at the moment of confronting the competition, improving the self-confidence level and valuing precompetitive anxiety from a beneficial perspective to his performance. From here, it would be advisable to develop a program of psychological training for the improvement of the self-confidence and to analyze its efficiency to improve the results obtained in the precompetitive anxiety and, later, to be able to relate it to the sports performance.

		Sex		Category		
		Female	Male	U12	U14	16
Cognitive Anxiety	1.96 (± .716)	1.97 (± .758)	1.95 (± .681)	1.74 (± .736)	2.05 (± .621)	2.20 (± .704)
Somatic Anxiety	1.51 (± .622)	1.44 (± .608)	1.56 (± .631)	1.45 (± .651)	1.49 (± .580)	1.62 (± .623)
Self-Confidence	3.24 (± .642)	3.18 (± .642)	3.30 (± .641)	3.44 (± .616)	3.07 (± .608)	3.15 (± .650)

Table 1. Descriptive statistics by sexes and by categories of the variables cognitive anxiety, somatic anxiety and self-confidence

		Sum of Squares	df	Mean Square	F	Sig.
Cognitive Anxiety	Between Groups	.021	1	.021	.041	.840
	Within Groups	112.612	219	.514		
	Total	112.633	220			
Self-Confidence	Between Groups	.756	1	.756	1.839	.176
	Within Groups	90.049	219	.411		
	Total	90.805	220			
Somatic Anxiety	Between Groups	.815	1	.815	2.113	.147
	Within Groups	84.425	219	.386		
	Total	85.240	220			

$p < .05^*$

Table 2. ANOVA of the factor "sex of the players" in function of the precompetitive anxiety

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		Sum of Squares	df	Mean Square	F	Sig.
Cognitive Anxiety	Between Groups	8.246	2	4.123	8.611	.000
	Within Groups	104.387	218	.479		
	Total	112.633	220			
Self-Confidence	Between Groups	6.387	2	3.193	8.247	.000
	Within Groups	84.419	218	.387		
	Total	90.805	220			
Somatic Anxiety	Between Groups	.979	2	.490	1.267	.284
	Within Groups	84.261	218	.387		
	Total	85.240	220			

$p < .05^*$

Table 3. ANOVA of the factor "category in which they compete" in function of the precompetitive anxiety

Dependent Variable	(I) Category	(J) Category	Mean Difference (I-J)	Std. Error	Sig.
Cognitive Anxiety	U12	U14	-.313*	.108	.017
		U16	-.458*	.118	.001
	U14	U12	.313*	.108	.017
		U16	-.145	.124	.502
	U16	U12	.458*	.118	.001
		U14	.145	.124	.502
Self-confidence	U12	U14	.372*	.097	.001
		U16	.295*	.106	.022
	U14	U12	-.372*	.097	.001
		U16	-.077	.111	.787
	Cadete	Alevín	-.295*	.106	.022
		Infantil	.077	.111	.787

$p < .05^*$

Table 4. Multiple Comparisons Scheffé of ANOVA of the factor "category in which they compete" depending on the precompetitive anxiety

		Cognitive Anxiety	Self-Confidence	Somatic Anxiety
Cognitive Anxiety	Pearson Correlation	1	-.364**	.373**
	Sig. (2-tailed)		.000	.000
	N	221	221	221
Self-Confidence	Pearson Correlation	-.364**	1	-.266**
	Sig. (2-tailed)	.000		.000
	N	221	221	221
Somatic Anxiety	Pearson Correlation	.373**	-.266**	1
	Sig. (2-tailed)	.000	.000	
	N	221	221	221

** Correlation is significant at the 0.01 level (2-tailed).

Table 5. Correlations between dependent variables: cognitive anxiety, somatic anxiety and self-confidence

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PALABRAS CLAVE: Ansiedad cognitiva, ansiedad somática, autoconfianza, jugadaores de pádel.

RESUMEN: El objetivo principal que se propone con este trabajo de investigación es analizar el nivel de ansiedad precompetitiva en los jugadores y las jugadoras de pádel de Castilla y León en las categorías alevín, infantil y cadete, en los minutos previos al comienzo de la competición. Para ello, participaron 221 jugadores: 100 deportistas de sexo femenino y 121 del sexo masculino. Los resultados demostraron que el nivel de autoconfianza de los deportistas es mayor que los niveles obtenidos en las variables ansiedad cognitiva y ansiedad somática, respectivamente. En relación con el sexo, los jugadores mostraron niveles superiores en autoconfianza y ansiedad somática, mientras las jugadoras puntuaron más alto en ansiedad cognitiva. Por último, en función de la categoría en la que compiten, los alevines son los que más confianza tienen en ellos mismos, mientras que los cadetes son los que puntuaron más alto en las variables de ansiedad cognitiva y ansiedad somática.

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