International Tennis Federation
www.itfcoachingreview.com
December 2013. 21st Year. Issue 61. 16-19
ISSN 2225-4757
https://doi.org/10.52383/itfcoaching.v21i61.470

Anxiety analysis and treatment techniques for tennis players.

Alberto Gómez-Mármol, Bernardino J. Sánchez-Alcaraz, Juan A. García.

University of Murcia, Spain.

ABSTRACT

This paper intends to discover the level of cognitive and somatic anxiety in a sample of 78 tennis players, by means of the Inventory of Competitive Anxiety. The findings show high somatic anxiety values in tennis players and mid-high values of cognitive anxiety, which are positively related to the number of training hours per week. Finally, a set of psychological training strategies are gathered to help reduce and control the levels of anxiety in tennis players.

Key words: Somatic anxiety, Cognitive anxiety, Tennis, Psychological strategies.
Received: 15 September 2013
Acepted: 29 October 2013
Corresponding author: Alberto Gómez-Mármol, University of Murcia, Spain.
Email: alberto.gomez1@um.es

INTRODUCTION

Anxiety is a psychological variable that has been deeply studied by sport psychologists, with different trends and methodologies, due to its strong relationship with performance (Cecchini et al., 2001). Thus, anxiety can be defined as a multidimensional construct in which the somatic and cognitive aspects must be distinguished, they are independent from one another and impact on behaviour in a different way (Santos-Rosa, García, Jiménez, Moya & Cervelló, 2007). Somatic anxiety reflects on physical changes, due to adrenalin production and its impact on the human body, heart and breathing rate increases, there is greater muscle tension, changes in temperature and over arousal of the nervous system occur (Peden, 2010). Besides, cognitive aspects reflect negative action perceptions raising concern, concentration problems and body control, which players express mainly during tennis matches and competition (Mellalieu, Hanton & O´Brien, 2004).

One of the situations that usually triggers more anxiety is before the match, the player can feel a psychosocial threat, for example, criticism against his/her self image for fear that performance might be poor. However, playing an opponent against whom one is expected to win or lose makes the player feel less anxious since winning expectations will be too high or too low just as Peden (2010) states. Anxiety will more probably occur in matches in which players have similar skill levels.

There is a lot of research indicating the relationship between high anxiety levels and poor performance (Atienza, Balaguer & García- Ermita, 1999; Mamassis & Doganis, 2004; Santos-Rosa et al., 2007). This way, high anxiety may lead to greater muscular tension impacting on coordination and leading to slow reactions and poor footwork. (Peden 2010). Likewise, anxiety can hinder motivation (Cervello, Santos-Rosa, Jimenez, Nerea & García, 2002), self confidence (Weinberg, 2002) or concentration (Balaguer, 1996), both during competition and training.

Therefore, the main objective of this paper is to determine the level of somatic and cognitive anxiety in tennis players and its relationship with gender and number of training hours per week, as well as to present a proposal to apply techniques in order to control and reduce anxiety in tennis players.

METHOD

The research sample consisted of 78 tennis players (45 males and 33 females, aged 13.14 ± 0.83, children and junior who

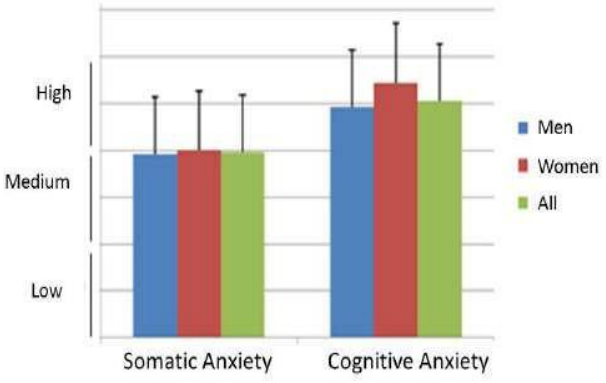

Figure 1. Anxiety media values per gender.

trained an average of 7,90 ± 3,05 hours per week).

The players completed the Inventory of Competitive Anxiety adapted by Andrade, Lois & Arce (2007), It consisted of 12 ítems distributed in two factors: somatic anxiety and cognitive anxiety. Finally, SPSS 21.0 for Windows programme was used for the statistic treatment of data. Figure 1 shows the descriptive results in each of the variables that make up the questionnaire.

FINDINGS AND DISCUSSION

Players show high cognitive anxiety levels, these results coincide with the ones reached by Cevello et al. (2002) who also used a tennis player sample. Likewise, somatic anxiety which has reached the upper limit of average development range, shows similar values to those reached by tennis players studied by Covassin & Pero (2004).

As to women, their values are slightly higher in both dimensions of anxiety as compared to males, these outcomes are consistent with those registered by Covassin y Pero (2004) and Perry & Williams (1998).

Finally, it has also been proved that those players who train more hours are more prone to greater cognitive anxiety ($p = 0.005$; $r = 0.409$), just as Newton & Duda (1993) state. Similarly, greater cognitive anxiety levels follow greater somatic anxiety levels ($p = 0.002$; $r = 0.451$), consistent with the research conducted by Cervello et al. (2002).

TECHNIQUES TO CONTROL ANXIETY IN TENNIS PLAYERS

The high anxiety levels among participants show the need to be treated by a sport psychologist (Heller, 2001) by means of different strategies like the ones below:

- Rituals: According to Peden (2010), routines can help players manage anxiety providing more control over his/her pre-match concerns or during the match and even a certain control over the behaviour of opponents (for example changing the speed of the match).

- Positive thinking: On certain occasions, the so called self fulfilling prophecy -negative thinking during stressful moments- (for example fearing double fault before an important point) may cause greater muscular tension hindering coordination and leading to errors. Thus, the player must be driven towards positive thinking when facing these situations (Peden, 2007; 2010), and also towards redirecting thinking towards the appropriate stroke technique (Weinberg, 2002).

- Focusing on an object: Focusing on an object in moments of anxiety immediately distracts and reduces nervous or stressful feelings. For example, when the ball is in play, the player can concentrate on his/her movement at all times, even try to read the printed letters of the manufacturer´s brand. It seems difficult but if the skill is developed through practice, it benefits the player´s game, improving concentration and coordination and reducing anxiety (Peden, 2007).

- Controlling training loads: Due to the relationship between a great number of training hours and anxiety levels, as this paper also proves, the coach and the trainer must control the intensity of the sessions and the training loads, as well as training in different settings and contexts practising new and player adapted activities (Sánchez-Alcaraz, Gómez-Mármol, 2013).

- Deep breathing: According to Peden (2009), deep breathing is the simplest and most basic relaxation method; among its benefits is the decrease in heart rate, it makes it slower and reduces physical reaction. Deep and slow breathing can be an immediate, affordable and efficient way of reducing stress and anxiety on court during a match, since it is so easy to practice. Some examples are:

a) Exhale deeply, contracting your abdomen.

b) Inhale slowly expanding your abdomen.

c) Continue breathing expanding your chest.

d) Continue inhaling raising your shoulders to your ears.

e) Keep the air to the count of three.

f) Exhale slowly to the count of six.

g) Relax shoulder and chest muscles completely.

h) Repeat 3 or 4 times until you get a feeling of relaxation.

i) It is convenient to concentrate on a positive self talk at the same time.

In a nutshell, this paper highlights the urgent need for all those involved in tennis practice, sport psychologists in particular, to act concretely on anxiety, by means of the above mentioned technique.

REFERENCES

Andrade, E., Lois, G. & Arce, C. (2007). Propiedades psicométricas de la versión española del Inventario de Ansiedad Competitiva CSAI-2R en deportistas. Psicothema, 19(1), 150-155.

Atienza, F., Balaguer, I. & García-Merita, M.L. (1999). Efectos del entrenamiento mental en la mejora de las percepciones de autoconfianza en el servicio del tenis. Revista de Psicología General y Aplicada: Revista de la Federación Española de Asociaciones de Psicología, 52(1), 121-134.

Balaguer, I. (1996). Entrenamiento psicológico en un grupo de competición femenino de tenis. Apunts: Educación Física y Deportes, 44-45, 143- 153.

Braun, J.D. (1999). Evaluación de la activación cognitiva, la activación somática y la autoconfianza en el rendimiento del tenis. En J.M. Buceta, M.C. Pérez-Llantada y A. López (coords.). Investigaciones breves en psicología del deporte. Madrid: Dykinson.

Cecchini, J.A., González, C., Carmona, A., Arruza, J., Escartí, A. & Balagué, G. (2001). The Influence of the Teacher of Physical Education on Intrinsic Motivation, Self-Confidence, Anxiety, and Pre- and Post- Competition Mood Status. European Journal of Sport Science, 1, 4-22. https://doi.org/10.1080/17461390100071407

Cervelló, E., Santos-Rosa, F.J., Jiménez, R., Nerea, A. & García, T. (2002). Motivación y ansiedad en jugadores de tenis. Motricidad. European Journal of Human Movement, 9, 141-161.

Covassin, T. & Pero, S. (2004). The relationship between self-confidence, mood states, and anxiety among collegiate tennis players. Journal of Sport Behavior, 27(3), 230-239.

Heller, R. (2001). Some cautions on the coaches role in managing anxiety related problems in junior tennis players. ITF Coaching and Sport Science Review, 25, 15.

Mamassis, G. & Doganis, G. (2004). The effects of a Mental Training Program on Juniors Pre-Competitive Anxiety, Self-Confidence and Tennis Performance. Journal of Applied Sport Psychology, 16(2), 118- 137. https://doi.org/10.1080/10413200490437903

Mellalieu, S., Hanton, S. & O'Brien, M. (2004). Intensity and direction of competitive anxiety as a function of sport type and experience. Scandinavian Journal of Medicine and Science in Sports, 14, 326-334. https://doi.org/10.1111/j.1600-0838.2004.00389.x

Newton, M. & Duda, J.L. (1993). Elite adolescent athletes' achievement goals and beliefs concerning success in tennis. Journal of Sport and Exercise Psychology, 15, 437-448. https://doi.org/10.1123/jsep.15.4.437

Peden, A. (2007). Técnicas cognitivas para dominar la ansiedad del rendimiento en el tenis. ITF Coaching and Sport Science Review, 15(43), 12-13.

Peden, A. (2009). Respirar para controlar la ansiedad en el tenis. ITF Coaching and Sport Science Review, 16(49), 17-18.

Peden, A. (2010). Cómo incide la ansiedad en el rendimiento tenístico. ITF Coaching and Sport Science Review, 18(52), 9-11.

Perry, J.D. & Williams, J.M. (1998). Relationship of intensity and direction of competitive traid anxiety to skill levels and gender in tennis. The sport psychologist, 12, 169-179. https://doi.org/10.1123/tsp.12.2.169

Sánchez-Alcaraz, B.J. & Gómez-Mármol, A. (2013). Prevención y diagnóstico del burnout en el fútbol. En L. Cantarero (Ed): Psicología aplicada al fútbol. Jugar con cabeza. Zaragoza: Prensas de la Universidad de Zaragoza

Santos-Rosa, F.J., García, T., Jiménez, R., Moya, M. & Cervelló, E.M. (2007). Predicción de la satisfacción con el rendimiento deportivo en jugadores de tenis: Efectos de las claves situacionales. Motricidad. European Journal of Human Movement, 18, 41-60.

Weinberg, R. (2002). Tennis: winning the mental game. Oxford, Ohio: Miami University.