UDC 796.011.3:796.332-053.6

Abdussalam Kanniyan

Physical Education Department, King Fahd University of Petroleum & Minerals (Dhahran, Saudi Arabia)

COMPETITIVE STATE ANXIETY: IMPACT OF POSITIVE SELF TALK TRAINING ON JUNIOR LEVEL FOOTBALL PLAYERS

INTRODUCTION

During the last few decades, coaches and athletes from a wide variety of sports have begun to realize the importance of the mental side of athletic performance. Sport specialists agree that athletic performance is influenced not only by physical skills but also by psychological ones. In order to achieve peak performance athletes need a "total package" including physical skills, psychological skills, fitness and injury prevention (Theodorakis et al 2012). An inherent aspect of competitive athletics is the need for players to meet the demands of competition and to perform well under pressure (Craft, L. L 2003). "The perception of a substantial imbalance between environmental demand and response capabilities under conditions which a failure to meet demands is perceived as having important consequences will respond to increase levels of cognitive and somatic state anxiety" (Martens, R., Vealey, R. S., & Burton, D. 1990). Competition can cause athletes to react both physically (somatic) and mentally (cognitive) in a manner which can negatively affect their performance abilities. Stress, arousal and anxiety are terms used to describe this condition.

The anxiety and performance relationship has been studied extensively in the past many years. Previous researches revealed that somatic and cognitive anxiety have different relationships with athletic performance. Athletic performance has been proven to be facilitated by moderate levels of arousal while high and low levels of arousal are associated with lower levels of performance (Martens & Landers, 1970; Sonstroem & Bemardo, 1982, Wrisberg 2010). Concerning the relationship between cognitive anxiety and performance, research has found a negative relationship involving these variables. Higher levels of cognitive anxiety are associated with lower levels of performance (Burton, 1988, Motowildo, Packard, & Manning, 1986). Klein& Taylor 2012) by using the technique of meta-analysis concluded that the negative relationship of anxiety and performance is: a) stronger in female athletes than in male athletes, b) stronger in young athletes than in older athletes, c) stronger in low-level athletes and d) stronger in team than in individual sports. On the other hand self-confidence shows a positive linear relationship, while the relationship between somatic anxiety and performance has the shape of an inverted U.

Theodorakis, Zourbanos (2013), Bandura A. (1977) stipulates that self- confidence is directly related to athletic performance. Increases in self-confidence are mirrored by improvements in performance. Prior experiences affect efficacy expectations; the probability performing to a high standard is much greater if you believe in your

abilities, therefore confidence has tremendous explanatory power when comparing fluctuations in performance (Zeng 2008; Silva & Stevens, 2002).

Many different psychological skills training programs have been developed to teach athletes skills and techniques such as anxiety management, imagery, goal setting, concentration, self-talk, thought stopping and muscle relaxation technique (Weinberg & Williams, 1998). The implementation of a psychological program in the athlete's daily routine may result in the successful handling of pressure and anxiety which in turn enhance athletic performance. By establishing a psychological skills training (PST) program early, it may be possible for athletes to reach their potential more quickly by learning how to perform consistently through increased behavioral control (Balague, 2000). Psychological skills training programs have been shown to be effective for improving elite athletes' performances in golf putting (Cohen, Tenenbaum, & English, 2006; Thomas & Fogarty, 1997), tennis (Mamassis & Doganis, 2004) and football (Holm, Beckwith, Ehde, & Tinius, 1996).

Collectively, these findings suggest athletes may be utilizing more psychological skills in order to enhance self-confidence and protect against the potential debilitating effects of stress.

Positive self-talk

Self-talk is said to be, "dialogue in which the individual interprets feelings and perceptions, regulates and changes evaluations and convictions, and gives him/herself instructions and reinforcement" (Hardy et al.2001). Basically, self-talk allows for an individual to take the perspective of another in their own mind and converse with themselves. When experiencing somatic and specific cognitive anxiety related symptoms, including doubts about performance and physical shaking, participants found that self-talk actually helped to control the anxiety responses. Self-talk helps to increase concentration on the task at hand. Increased levels of effort and motivation may be found by using constructive and adaptive statements regarding personal accomplishments and positive verbalizations about the training leading up to the competition (Hatzigeorgiadis, 2008).

Based on their findings, many researchers have thoroughly supported that self-talk can be an effective cognitive strategy for skill acquisition and performance enhancement," (Goltsois, Hatzigeorgiadis, Theodorakis & Zourbanos, 2008. Therefore, the purpose of the present study was to examine the effects of Positive Self-talk training program on the Competitive Anxiety and Self-Confidence of Junior Level Football Players.

METHODS

Participants

All the participants in this investigation were junior level football players who have participated in inter school level competitions. The total number of subjects in the experimental group who underwent the Psychological Intervention Program (PIP) was

18, aged between 15 and 18 years (mean age = 16.4, SD = 1.8). Their competition experience ranged from 1 to 3 years. The control group was comprised of 18 players aged between 15 and 19 years (mean age =17.1, SD = 1.40) with competition experience ranged from 1 to 4 years.

Instruments

Competitive State Anxiety Inventory-2 (Martens, Vealey, & Burton, 1990) was administered for the assessment of competitive anxiety of the players. They were advised to complete the CSAI-2 questionnaire twice, before and after Positive Self-Talk training program. The CSAI-2 is a 27-item self-reports having three subscales designed to measure cognitive and somatic anxiety, as well as self-confidence. Examples of somatic anxiety items include "I feel jittery" and "My heart is racing"; Cognitive items include "I am concerned about losing" and "I am concerned about performing poorly"; Self-confidence items include "I feel self-confident" and "I am confident I can meet the challenge". Subjects responded on a 4-point Likert scale where categories vary from not at all (1), somewhat (2), moderately so (3) to very much so (4). The use of recall was used to ensure participants were cognisant of the thoughts and feelings they experience when excited or anxious, thereby facilitating accurate completion of the CSAI-2 in the appropriate scenario. This was the preferred methodology given the practical difficulties associated with the assessment of emotions at the time they actually occur (Ntoumanis & Biddle, 2000).

Procedure and intervention program

Considering the fact that any psychological or mental training needs extensive practice before it starts blossoming (Theodorakis, I., Goudas, M., & Papaioannou, A. 2002), the Positive Self-talk training was administered for a period of eight weeks. Moreover, the training was carried out just before the competition period especially before a major tournament when they started the completion training to facilitate adequate time for the subjects to practice self-talk training program and to utilize it well before the competition. The daily mental practice lasted from 10 to 15 minutes before, during the training and also after practice, 3 to 5 days a week. The Pre-test data collection was done exactly before eight weeks of the actual competition and the post test data was collected just before 4 hours of the actual competition. Before the actual commencement of the intervention program participants in the experimental group were oriented about the use of Positive self- talk training and were informed that they were going to use this strategy for their training. The instructor explained and showed them how to use the technique during the training.

Results

To test the effects of Positive Self-Talk Training on competitive anxiety, the initial and final test mean scores were tested treatment wise by applying the paired sample t-test using SPSS statistical package. Descriptive statistical values of the cognitive and somatic anxiety and self-confidence of the subjects in the experimental

group in table 2 and control group in table 3. The graphical representation of the mean values of cognitive anxiety, somatic anxiety and self-confidence were shown in diagrams 1, diagram 2 and diagram 3 respectively,

Table 2. Mean, standard deviation and t- ratio of the three subscales and total score of the Competitive State Anxiety Inventory of experimental group

	Cognitive	anxiety	t-ratio	Somatic anxiety		t-ratio	Self-confidence		t-ratio
	Mean	(±SD)		Mean	(±SD)		Mean	(±SD)	
Pre test	22.6	2.4	6.79	23.8	2.8	9.51	20.4	3.1	11.2
Post tes	t 18.1	2.1		17.6	1.9		24.8	2.3	

The pre-test and post-test scores of the players in the experimental group shown in the Table – 1 indicates that the obtained 't' ratios were: 6.79 for cognitive anxiety, 9.51 for somatic anxiety and 11.2 for self-confidence. While comparing these values with the critical value of 2.201 for degrees of freedom of 17 at 0.05 level of significance, it was found that the mean gains and mean losses are statistically significant. This indicates that eight week practice of positive self-talk training produced a significant improvement; that is decrease in cognitive anxiety and somatic anxiety and increase in self-confidence of the junior level football players in the experimental group under this study.

Table 3. Mean, standard deviation and t- ratio of the three subscales and total score of the Competitive State Anxiety Inventory of control group

	Cognitive anxiety		t-ratio	Somatic anxiety		t-ratio	Self confidence		t-atio
	Mean	(±SD)		Mean	(±SD)		Mean	(±SD)	
Pre test	22.3	2.1	7.63	23.4	2.9	8.62	20.5	1.9	10.9
Post tes	t 21.8	1.9		22.6	2.1		21.2	1.9	

Table 3 represents the pre-test and post- test mean values and t-ratios for the participants in the control group. It can be observed that the obtained t- ratios were 1.33 for cognitive anxiety, 1.62 for somatic anxiety and 1.90 for self-confidence. Since these obtained t-values were lower than the critical value of 2.201 for degrees of freedom of 17 at 0.05 level of significance, it was concluded that no significant difference existed between pre-test and post-test scores of cognitive and somatic anxiety and self-confidence of the players in the control group.

DISCUSSION

The aim of the present investigation was to examine the effect of Positive Selftalk training on the competitive anxiety in junior level football players. The results revealed that the cognitive and somatic anxiety of the players in the experimental group decreased significantly while self-confidence increased as an effect of a 8 week PST training programme.

Previous research has generally supported the beneficial effects of relaxation training on competitive anxiety and sports performance in various events. Fletcher and Hanton (2001) examined the intensity and direction of competitive state anxiety in swimmers who differed in their use of psychological skills. Findings showed that performers who reported a greater usage of relaxation strategies experienced lower levels of anxiety and interpreted symptoms as more beneficial to performance than their comparison groups. This is conversant with the findings of the present study. Maynard and colleagues found similar results when they employed an intervention approach with elite soccer players (Maynard et al., 1995a; 1995b). There are other studies revealing positive results of psychological training in non-sportspersons as well.

Regarding psychological skill usage, other studies predicted that elite athletes would use greater amounts of psychological skills, including goal setting, imagery, and self-talk while non-elite performers would report greater relaxation skill usage (Hanton and Jones, 1999; Richard Neil, Stephen D. Mellalieu and Sheldon Hanton, 2006). Anshel Porter (1996) and Bethany and Forrest (1998) demonstrated further collective evidence that application of psychological skill training programs can decrease competitive a-state anxiety as well as improve athletic performance.

CONCLUSIONS

The present study provides preliminary evidence that Positive self-talk training for a period of eight weeks can be used as an effective tool to reduce cognitive and somatic anxiety and enhance self-confidence in junior level football players. It may be concluded that the psychological preparation of junior level players must be taken into serious consideration during the coaching procedure. The findings of the present study, hopefully, could help soccer coaches and sport psychologists to design more effective training plans, incorporating psychological skills. Professional help and programming of the psychological preparation of the athletes and observation of their emotional condition before and during a game is necessary to reduce competitive anxiety and contribute to better performance in volleyball players.

DECLARATION/ ACKNOWLEDGEMENT

The author acknowledging sincere gratitude to King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia for funding this project study with Project Number IN131042 under Deanship of Scientific Research, KFUPM.

Refferences:

1. Anshel, M, & Porter, A. (1996). Self-regulatory characteristics of competitive swimmers as a function of skill level and gender. *Journal of Sport Behavior*, 1(2), 91.

- 2. Balague, G. (2000). Periodization of psychological skills training. Journal of psychological skills training. *Journal of Science and Medicine in Sports*, 3(3),230-237.
- 3. Bandura, A. (1977). Toward a unifying theory of behavioral change. *Psychological Review*, 84,191-215.
- 4. Bethany, L., & Forrest, S. (1998). Effects of self-administered visual-motor behavioral rehearsal on sport performance of collegiate athletes. *Journal of Sport Behavior*, 21(2), 206.
- 5. Burton, D. (1988). Do anxious swimmers swim slower? Re-examining the elusive anxiety-performance relationship. *Journal of Sports & Exercise Psychology*, 10.45-61.
- 6. Cohen, A.B., Tenenbaum, G., & English, R.W. (2006). An IZOF-based applied sport psychology case study. *Behavior Modification*, 30,259-280.
- 7. Craft, L. L., Magyar, T. M., Becker, B. J., & Feltz, D. L. (2003). The relationship between the competitive state anxiety inventory-2 and sport performance: A meta-analysis. *Journal of Sport & Exercise Psychology*, 25(1), 44-66.
- 8. Fletcher, D. and Hanton, S. (2001). The relationship between psychological skills usage and competitive anxiety responses. *Psychology of Sport and Exercise*, 2, 89-101
- 9. Gould D, Eklund R C (1991). The application of sport psychology for performance optimizations. *Journal of Sport Sciences*, 1: 10-21.
- 10. Finch, L., Gould, D., Smethurst, C., & Steffen, B. (1996). Mental toughness in collegiate athletes. *Journal of Applied Sport Psychology*, 8, S21.
- 11. Hanton, S. and Jones, G. (1999). The acquisition and development of cognitive skills and strategies. I: Making the butterflies fly in formation. *The Sport Psychologist*, 13, 1-21.
- 12. Hanton, S., Mellalieu, S.D. and Hall, R. (2004). Self-confidence and anxiety interpretation: A qualitative investigation. *Psychology of Sport and Exercise*, 5, 477-495
- 13. Hardy, L., Jones, G. and Gould, D. (1996). *Understanding psychological preparation for sport: Theory and practice of elite performers*. Chichester, UK: Wiley.
- 14. Hatzigeorgiadis, Antonis, & Biddle, Stuart J H (2008) "Negative Self-Talk During Sport Performance: Relationships with Pre-Competition Anxiety and Goal-Performance Discrepancies." Journal of Sport Behavior, 31, 237-253.
- 15. Holm, J.E., Beckwith, B.E., Ehde, D.M., & Tinius, T.P. (1996). Cognitive-behavioral interventions for improving performance in competitive athletes: A controlled treatment outcome study. *International Journal of Sport Psychology*, 27, 463-475.
- 16. Jacobson, E. (1938). *Progressive relaxation*. 2d ed. Chicago: University of Chicago Press.
- 17. Klein, D. (1990). Anxiety and sport performance: A meta-analysis. Anxiety Research, 2, 113-131.
- 18. 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*, 118-137.

- 19. Martens, R. & Landers, D. M. (1970). Motor performance under stress: A test of the inverted-U hypothesis. *Journal of Personality and Social Psychology*, 16, 29-37.
- 20. Martens, R., Vealey, R. S., & Burton, D. (1990) *Competitive anxiety in sport*. Champaign, IL: Human Kinetics.
- 21. Maynard, I. W., & Cotton, P. C. J. (1993). An investigation of two stress-management techniques in a field setting. *The Sport Psychologist*, 7, 375-387.
- 22. Maynard, I.W., Hemmings, B. and Warwick-Evans, L. (1995a) The effects of a somatic intervention strategy on competitive state anxiety and performance in semi-professional soccer players. *The Sport Psychologist*, **9**, 51-64.
- 23. Maynard, I.W., Smith, M.J. and Warwick-Evans, L. (1995b) The effects of a cognitive intervention strategy on competitive state anxiety and performance in semi-professional soccer players. *Journal of Sport and Exercise Psychology*, **17**, 428-446.
- 24. Mellalieu, S.D., Neil, R. and Hanton, S. (2006) An investigation of the mediating effects of self-confidence between anxiety intensity and direction. *Research Quarterly for Exercise & sports*, 77, 263-270.
- 25. Motowildo, S. J., Packard, J. S., & Manning, M. R. (1986). Occupational stress: Its causes and con- sequences for job performance. Journal of Applied Psychology, 71, 618-629.
- 26. Nideffer, R.M. Ethics and Practice of Applied Sport Psychology (1981). *Movement Publications*. Ithaca, NY.
- 27. Ntoumanis, N., & Biddle, S. J. H. (2000). Relationship of intensity and direction of competitive state anxiety with coping strategies. *The Sport Psychologist*, 14, 360–371.
- 28. Onestak, D. M. (1991). The effects of progressive relaxation, mental practice, and hypnosis on athletic performance: A review. Journal of Sport Behavior, 14, 247-274
- 29. Rasid, Z. M., & Parish, T. S. (1998). The effects of two types of relaxation on student's levels of anxiety. *Adolescence*, 33 (129), 99-101
- 30. Richard Neil, Stephen D. Mellalieu and Sheldon Hanton (2006) psychological skills usage and the competitive anxiety response as a function of skill level in rugby union, *Journal of Sports Science and Medicine*, 5, 415-423.
- 31. Ryska, Todd A. (1998). Cognitive-behavioral strategies and precompetitive anxiety among recreational athletes. *Psychlogical Records*, 48, 679-708.
- 32. Silva, J.M. & Stevens, D.E. (2002) *Psychological Foundations of Sport*. Allyn & Bacon, Boston; USA.
- 33. **Singh A,** Gaurav V(2011) "A study of pre competitive and post competitive anxiety level of inter-collegiate volleyball players" International Journal of Sports science & Engineering Vol-5, No 4 pp 237-241
- 34. Theodorakis, I., Goudas, M., & Papaioannou, A. (2002) *The Psychological Excellence*.

- 35. **Theodorakis**, Zourbanis (2013)" The effect of a self-talk intervention on elementary students motor task performance" Early child development & care; Routledge June 2013
- 36. Wadey R, & Hanton S. (2008) Basic psychological skills usage and competitive anxiety responses: perceived underlying mechanisms, Research Quaterly for Exercise & Sport, 79(3):363-73.
- 37. Weinberg, R. S., & Williams, J. M. (1998) *Integrating and implementing a psychological skills training program*. In Williams, J. M. (Ed.), Applied sport psychology: Personal growth to peak performance (pp. 329-358). Mountain View, CA: Mayfield Publishing Company.
- 38. **Wrisberg AC**, Loberg A, Reed A (2010)" An exploratory investigation of NCAA division 1 coaches support of sport psychology consultant and willingness to seek mutual training services" Sports Psychology 24, 489-503
- 39. Woodman, T., & Hardy, L. (2003) The relative impact of cognitive anxiety and self-confidence upon sport performance: a meta-analysis. *Journal of Sports Sciences*, 3;21:443-457.
- 40. Zeng, Z. H., & Leung, R. W. (2008). An Examination of Instructional Behaviors of Collegiate Athletic Coaches in Athletic Practice and Physical Skill Class Settings. Proceedings of AIESEP 2008 World Congress, E- Journal of International Association for Physical Education in Higher Education (AIESEP), Vol. 5, 1-8. R

COMPETITIVE STATE ANXIETY: IMPCT OF POSITIVE SELF TALK TRAINING ON JUNIOR LEVEL FOOTBALL PLAYERS

During the last few decades, coaches and athletes from a wide variety of sports have begun to realize the importance of the mental side of athletic performance. Sport specialists agree that athletic performance is influenced not only by physical skills but also by psychological ones. In order to achieve peak performance athletes need a "total package" including physical skills, psychological skills, fitness and injury prevention (Singh 2011). Study was aimed to examine the effect of Positive Self-Talk training on the Competition anxiety and self-confidence of junior level football players. 36 junior level football players, aged 18.7 ± 2.8 years, were randomly assigned into experimental group and control group. Competitive State Anxiety Inventory-2 (CSAI-2) was used to assess cognitive and somatic anxiety and self-confidence. Positive Self-Talk training was given to the experimental group for 8 weeks. Results of ANOVA revealed significant difference between the pre- test and post test scores of cognitive and somatic anxiety and self-confidence in the experimental group while no significant difference in the control group.

Key words: Competitive anxiety, self-confidence, Positive Self-Talk