



## Effect of Anxiety and Relaxation on Sport Skills

**GHOLAMREZA  
ZOURMAND**

Sama technical and vocational training college, Islamic Azad University, dezfoul branch, dezfoul, Iran.

### ABSTRACT

Although psychological pressure is a common problem among athletes, but results show when increase this pressure, too, has an impact on the quality of exercise and skills. This psychological pressure in sport competitions can provide the athlete's anxiety and excessive anxiety can be effective on their skills and reduce the quality of their skills. Therefore, in this study researcher wants to study the effects of anxiety on performance. This study was done semi-experimental and using questionnaires to assess personality characteristics. Statistics society was all male physical education students who have chosen badminton with age between 18-24. Sample consisted of two groups (control group, experimental group) which are selected randomly (n=15). tool was Sports Personality Questionnaire (SPQ20). One of the factors that measured by the questionnaire of 24 questions is anxiety. Subjects divided two groups experimental (teaching with relaxation) and control (teaching without relaxation). experimental group done pre-designed and regular activities 8 weeks, 2 sessions per week and 40 minute per session. After 8 weeks subjects completed questionnaire again as a post-test was used. Results showed anxiety is significant effect on Fine skills, Serial skills, Continuous skills, open skills and complex skills. Results showed anxiety is not significant effect on simple skills, close skills, discrete skills and Gross skills. Results showed anxiety effect on skills that need to attention, thinking and accuracy. Then teachers and coach when feel athlete have anxiety can change the strategy and use the skills in teams program that anxiety not effect in skills and have most stable.

**KEYWORDS :** anxiety, performance, sport skills.

### Introduction:

Today, in communities that have high expectations of athletes, athletic competition has a special important. In these kinds of societies, sports competition in competitive athletes has created a large demand. Often result of sporting competitions determined by the differences in perception and skill of competitors'. This topic create high stress in participants and this is usually caused by stress competitive anxiety in athletes (Shamlou, 2000).

Physical Education and Sports have several dimensions, one of the most important and perhaps the most important aspect is sports psychology. Therefore coaches and teachers can use all levels of the sport psychology, stress management, relaxation and develop and athletes can enhance their performance improvement psychological skills (Pasha Sharifi, 2002).

One of important aspects and perhaps most important aspect of sport scientific is sports psychology. Exercise studied by scientific methods and sport psychology examine human movements. (mosaddad, A,A,2002). Then sport psychology interprets human movements and predicts them for next movements and events. In other word sport psychology try by observing the general principles, developed theories and understand causes and results of movements (A. W. Garwin, 2007). One of most subjects in sport psychology is anxiety. Anxiety disorders many life functions and effect on Individual and social human performance. High have negative effective on human performance specific in sport (Jones, G, 2007). There are different methods to reduction anxiety in sport. One of these methods is relaxation that researcher done it in this study (McGowan, 2000).

Undoubted today success in athletics, almost need to higher expectations. So to resolve of these expectations and specific needs, then sport profe forced to pay more attention to although aspects of athletes and tries to enhance their abilities (Laura A Pawlow, 2002).

Although psychological pressure is a common problem among athletes, but results show when increase this pressure, too, has an impact on the quality of exercise and skills (Daniel S, 2002). This psychological pressure in sport competitions can provide the athlete's anxiety and excessive anxiety can be effective on their skills and reduce the quality of their skills. Therefore, in this study researcher wants to study the effects of anxiety on performance.

### Methodology:

This study was done semi-experimental and using questionnaires to assess personality characteristics. Statistics society was all male physical education students who have chosen badminton with age between 18-24. Sample consisted of two groups (control group, experimental group) which are selected randomly (n=15). tool was Sports Personality Questionnaire (SPQ20). One of the factors that measured by the questionnaire of 24 questions is anxiety.

Subjects divided two groups experimental (teaching with relaxation) and control (teaching without relaxation). experimental group done pre-designed and regular activities 8 weeks, 2 sessions per week and 40 minute per session. After 8 weeks subjects completed questionnaire again as a post-test was used.

### Methods of research:

Subjects divided two groups experimental (teaching with relaxation) and control (teaching without relaxation). experimental group done pre-designed and regular activities 8 weeks, 2 sessions per week and 40 minute per session. After 8 weeks subjects completed questionnaire again as a post-test was used.

### Results:

Table 1 shows results pre-test and post - test of effect of anxiety on badminton motor skills in male students. As it is clear, there are significant different in post-test of performance motor skills between experimental group (with relaxation) and control group (without relaxation) in  $p < 0.05$ .

**Table1: pre and post-test results of performance motor skills in experimental and control groups.**

group \ results	test	anxiety mean	SD	Skills performance	P
Experimental	Pre	104.1	6.3	18	0.031
	Post	78.3	3.2		
control	Pre	106	5.1	11.2	
	post	99.6	2.8		

Table 2 shows results pre-test and post - test of effect of anxiety on badminton gross and fine motor skills in male students. As it is clear, there are no significant different in gross motor skills and significant different in fine motor skills in post-test between experimental group (with relaxation) and control group (without relaxation) in  $p < 0.05$ .

**Table2: pre and post-test results of performance gross and fine motor skills in experimental and control groups.**

skills	variable group	test	anxiety mean	SD	Skills mean	P
Gross skills	Experimental	Pre	104.1	6.3	16	0.063
		Post	78.3	3.2		
	control	Pre	106	5.1	12.3	
		post	99.6	2.8		
Fine skills	Experimental	Pre	104.1	6.3	13	0.023
		Post	78.3	3.2		
	control	Pre	106	5.1	4.3	
		post	99.6	2.8		

Table 3 shows results of pre-test and post - test effect of anxiety on badminton discrete, serial and Continuous skills in male students. As it is clear, there are no significant different in discrete skills and significant different in serial and continuous skills in post-test between experimental group (with relaxation) and control group (without relaxation) in  $p < 0.05$ .

**Table3: pre and post-test results of performance discrete, serial and continuous skills in experimental and control groups.**

skills	variable group	test	anxiety mean	SD	Skills mean	P
Discrete skills	Experimental	Pre	104.1	6.3	16	0.057
		Post	78.3	3.2		
	control	Pre	106	5.1	11.8	
		post	99.6	2.8		
Serial skills	Experimental	Pre	104.1	6.3	15	0.013
		Post	78.3	3.2		
	control	Pre	106	5.1	6.4	
		post	99.6	2.8		
Continuous skills	Experimental	Pre	104.1	6.3	15.5	0.019
		Post	78.3	3.2		
	control	Pre	106	5.1	7.3	
		post	99.6	2.8		

Table 4 shows results pre-test and post - test of effect of anxiety on badminton close and open skills in male students. As it is clear, there are no significant different in close skills and significant different in open skills in post-test between experimental group (with relaxation) and control group (without relaxation) in  $p < 0.05$ .

**Table4: pre and post-test results of performance close and open skills in experimental and control groups.**

skills	variable group	test	anxiety mean	SD	Skills mean	P
close skills	Experimental	Pre	104.1	6.3	14.3	0.071
		Post	78.3	3.2		
	control	Pre	106	5.1	10.7	
		post	99.6	2.8		
open skills	Experimental	Pre	104.1	6.3	15.2	0.032
		Post	78.3	3.2		
	control	Pre	106	5.1	6.8	
		post	99.6	2.8		

Table 5 shows results pre-test and post - test of effect of anxiety on badminton simple and complex skills in male students. As it is clear,

there are no significant different in simple skills and significant different in complex skills in post-test between experimental group (with relaxation) and control group (without relaxation) in  $p < 0.05$ .

**Table5: pre and post-test results of performance simple and complex skills in experimental and control groups.**

skills	variable group	test	anxiety mean	SD	Skills mean	P
simple skills	Experimental	Pre	104.1	6.3	16	0.063
		Post	78.3	3.2		
	control	Pre	106	5.1	12.3	
		post	99.6	2.8		
complex skills	Experimental	Pre	104.1	6.3	13	0.023
		Post	78.3	3.2		
	control	Pre	106	5.1	4.3	
		post	99.6	2.8		

**Discussion:**

The aim of this study was examination effect of anxiety and relaxation on skills. Anxiety is cause to muscles veins are open (Susana Bloch ,1994, Mullen, Richard2005), muscles are cramping, increases the muscular and nervous energy (Doug,P,2001, Peter C,T,1998), relaxation can reduction muscular and nervous energy, muscles cramping, (Arne Edvardsson,2011) relaxation reduction anxiety and increase performance (ghafari,s,2009). Relaxation can effect on skills (Hairul, A, H, 2011). In many sports have many skills, some of these skills take effect of anxiety and some do not take effect (Charles, F,2008). some skills take effect of anxiety in every Condition (Daniel,S,2002) and some skills take effect of anxiety only in Unstable and Unknown condition (Davy,V,2011). Skills create tactics (Adie, 2010) and tactics create strategies (Stoerber, 2009), strategies can cause of successful and unsuccessful (Wilson, 2007).results showed anxiety is significant effect on Fine skills, Serial skills, Continuous skills, open skills and complex skills. Results showed anxiety is not significant effect on simple skills, close skills, discrete skills and Gross skills. Results showed anxiety effect on skills that need to attention, thinking and accuracy. Then teachers and coach when feel athlete have anxiety can change the strategy and use the skills in teams program that anxiety not effect in skills and have most stable.

## REFERENCES

- Daniel S. Rooks, Caroline B. Silverman, Fred G. Kantrowitz (2002). The effects of progressive strength training and aerobic exercise on muscle strength and cardiovascular fitness in women with fibromyalgia: A pilot study. *Arthritis Care & Research*. Volume pages 22–28, February 2002. | Garwin, A. W. K. F. Koltyn, W. P. Morgan. Influence of Acute Physical Activity and Relaxation on State Anxiety and Blood Lactate in Untrained College Males. *Int J Sports Med* 2007; 18(6): 470-476. | Jones, G. Cale, A. (2007). Goal difficulty, anxiety and performance. *Ergonomics*, 40 (3):319-33. | Laura A Pawlow, Gary E Jones (2002). The impact of abbreviated progressive muscle relaxation on salivary cortisol. *Psychology*, Volume, July 2002, Pages 1–16. | McGowan, MG, Huddleston, S, Duttler, KE, Bian, W (2000). Mood state changes of students enrolled in physical activity classes. *Percept Mot Skills*, 90 (3 pt1):911-4. | Shamlou, S (2000). Schools, personality theories in psychology. Roshd publications, Fourth Edition. | Pasha Sharifi, H (2002). Theory and Application Intelligence and Personality Tests. sokhan publications, Second edition. | Mosaddad, A, A, (2002). Sport Psychology Theory to Practice. Entesharat publications, First Edition. | Daniel S, R, Caroline B, S, Fred G, K. The effects of progressive strength training and aerobic exercise on muscle strength and cardiovascular fitness in women with fibromyalgia: A pilot study. *Arthritis Care & Research*, Volume 47, Issue 1, pages 22–28, February 2002. | Charles F. Emeryac-Christopher R. Franced, Jennifer HARRISA, Greg Normana, Courtney VanArsdalena, Effects of progressive muscle relaxation training on nociceptive flexion reflex threshold in healthy young adults: A randomized trial, *PAIN*, Volume 138, Issue 2, 31 August 2008, Pages 375–379. | Somayeh Ghafari, Fazlolah Ahmadi, Masoud Nabavi, Kazemnejad Anoshirvan, Robabe Memarian, Mohamad Rafatbakhsh. Effectiveness of applying progressive muscle relaxation technique on quality of life of patients with multiple sclerosis. *Journal of Clinical Nursing*, Volume 18, Issue 15, pages 2171–2179, August 2009. | Hairul, A, H. The Effects of Progressive Muscle Relaxation and Autogenic Relaxation on Young Soccer Players' Mood States. *Asian Journal of Sports Medicine*, 2011; 2(2) : 99-105. | Arne, E, Andreas, I, Urban, J. Is a Cognitive-Behavioural Biofeedback Intervention Useful to Reduce Injury Risk in Junior Football Players? *J Sports Sci Med*. 2012 June; 11(2): 331–338. | Peter C. Terry, Jayne L. Mayer, Bruce L. Howe. Effectiveness of a mental training program for novice scuba divers. *Journal of Applied Sport Psychology*, Volume 10, Issue 2, 1998. | Doug Perkins, George V. Wilson, John H. Kerr, The Effects of Elevated Arousal and Mood on Maximal Strength Performance in Athletes. *Journal of Applied Sport Psychology*, Volume 13, Issue 3, 2001. | Mullen, Richard, Hardy, Lew, Tattersall, Andrew. The Effects of Anxiety on Motor Performance: A Test of the Conscious Processing Hypothesis. *Journal of Sport & Exercise Psychology*. Jun 2005, Vol. 27 Issue 2, p212. 14p. | Adie JW, Duda JL, Ntoumanis N. Achievement goals, competition appraisal, and the well- and ill-being of elite youth soccer players over two competitive seasons. *J Sport Exerc Psychol*. 2010 Aug; 32(4):555-79. | Stoeber J, Uphill MA, Hotham S. Predicting race performance in triathlon: the role of perfectionism, achievement goals, and personal goal setting. *J Sport Exerc Psychol*. 2009 Apr; 31(2):211-45. | Wilson M, Smith NC, Holmes PS (2007). The role of effort in influencing the effect of anxiety on performance: testing the conflicting predictions of processing efficiency theory and the conscious processing hypothesis. *Br J Psychol*. 2007 Aug; 98(Pt 3):411–28. |