# Examination Effect of Anxiety on Skill Factors

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**Abstract:** The aim of this research was examination effect of anxiety and relaxation on some factors of skills. Statistical population of this study included all male physical education students that selected badminton class. Sample includes 2 groups with age 18-24 that selected randomly (n = 15). Measurement tool of this study is Sports Personality Questionnaire (SPQ 20). Subjects divided into a control and experimental athlete groups for 16 weeks, 2 sessions a week and 120 min per session and regular activities are designed (90 min skill training and 30 min relaxation training). Results showed significant difference between skills of control and experimental groups, accuracy, speed and power. According to results have negative effect on all factors of skill. But have most effective on speed, then suggest to coach and teachers use methods to reduction anxiety to improve speed, accuracy and power of skills.

**Key words:** Anxiety, relaxation, speed, accuracy, power, students

## INTRODUCTION

One of the variables that are closely relationship with athletic performance is sport anxiety which appears in athletic competition positions. Anxiety often has a more significant and more pronounced effects in the spot activity. Findings accent on relationship between anxiety and performance and express anxiety have negative effect on the performance of athletes. Anxiety affect on the sports performance athletes and any more anxiety is higher, the performance of athletes during competition will be lower. Most athletes suffer from negative effects of anxiety (Hatzigeorgiadis et al., 2009). Often seen athletes with high athletic abilities in sports because they have anxiety cannot present his abilities. In exercising anxiety pressure on the muscles and caused severe contraction and reduce their power and accurately done skills (Conroy and Metzler, 2004). Although, many researcher notify mental and body together are most effective but this method can done in professional athletes with regard most of athletes in socially and universities are amateur and in many studies, researchers did not examine body and mental methods to reduction anxiety, if they were examine, it not very wide, therefore, the effects of body and mental methods to reduction anxiety in sports is importance and necessary.

Success or failure in sports fields depends on many factors, athletic goals and their character, their relationships with other athletes, incentives, recognition of the athlete's coach and many other social and psychological factors such as anxiety, sports, all are factors can affect on quality performance and results (Keshavarz and Arianpoor, 2010). There are different ways to reduce anxiety. Given the importance of anxiety and its influence on learning and performance and skills in sports, researcher intends to do this study.

## MATERIALS AND METHODS

**Statistical society:** Statistical population of this study included all male athlete's students in physical education degree that select badminton class.

**Statistical sample:** Sample includes 2 group (experimental group anxiety with relaxation and control group anxiety without relaxation (of student athletes with age 18-22 that selected randomly (n = 15).

**Method of the study:** This study has been done descriptive-field and using questionnaires to investigate factors personality characteristics.

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**Tools for data collection:** Measurement tool of this study is Sports Personality Questionnaire (SPQ20). One of the factors measured by this questionnaire is anxiety. Validity of this questionnaire based on the criterion validity and through the study questionnaire in $p<0/05$ was significant and its reliability by Cronbach alpha $0/800$ and in $p<0/05$ was significant.

**Procedure of the study:** After selecting the study subjects were selected randomly and cluster, questionnaires to complete as pre-test subjects were given after completion were collected. Subjects divided into a control and experimental athlete groups for 16 weeks, 2 sessions per week and 30 min relaxation training per session and regular activities are designed to per-test. After 16 weeks of the regular activities the subjects completed the questionnaire again as post test was considered. At end of all subjects were obtained appreciation.

## RESULTS AND DISCUSSION

Table 1 shows results of per-post test effect of anxiety on speed of badminton skills. According to analysis, results Table 2 shows significant difference between control and experimental groups in per-post test. As it is obvious in Table 2, $p = 0.012$ shows significant difference between control and experimental groups in speed of badminton skills.

Table 2 shows results of per-post test effect of anxiety on accuracy of badminton skills. According to analysis results, Table 2 shows significant difference between control and experimental groups in per-post test. As it is obvious in Table 2, $p = 0.0156$ shows significant difference between control and experimental groups in accuracy of badminton skills.

Table 3 shows results of per-post test effect of anxiety on power of badminton skills. According to

Table 1: Results of per-post test of anxiety and speed of badminton skills

| Group/Test | Mean of anxiety | SD | Performance | P of speed |
|---|---|---|---|---|
| **Experimental** | | | | |
| Per | 104.1 | 7.9 | 16.0 | 0.012 |
| Post | 78.3 | 5.2 | - | |
| **Control** | | | | |
| Per | 106.0 | 6.2 | 8.1 | |
| Post | 99.6 | 4.2 | - | |

Tabe 2: Results of per-post test of anxiety and accuracy of badminton skills

| Group/Test | Mean of anxiety | SD | Performance | P of speed |
|---|---|---|---|---|
| **Experimental** | | | | |
| Per | 104.1 | 7.9 | 14.0 | 0.0156 |
| Post | 78.3 | 5.2 | | |
| **Control** | | | | |
| Per | 106.0 | 6.2 | 4.6 | |
| Post | 99.6 | 4.2 | | |

Tabe 3: Results of per-post test of anxiety and power of badminton skills

| Group/Test | Mean of anxiety | SD | Performance | P of speed |
|---|---|---|---|---|
| **Experimental** | | | | |
| Per | 104.1 | 7.9 | 18 | 0.033 |
| Post | 78.3 | 5.2 | | |
| **Control** | | | | |
| Per | 106.0 | 6.2 | 12 | |
| Post | 99.6 | 4.2 | | |

analysis results, Table 3 shows significant difference between control and experimental groups in per-post test. As it is obvious in Table 3, $p = 0.033$ show significant difference between control and experimental groups in power of badminton skills.

## CONCLUSION

Some of studies results (Bergera, 1994; Edwards *et al.*, 2008; Keshavarzi and Arianpoor, 2010) have implicated relaxation reduction anxiety and improve speed of badminton skills. Some of studies results ( ) have implicated relaxation improve accuracy of badminton skills. Researchers represented muscles contraction effect on speed of skills. Some of studies results ( ) have implicated relaxation improve power of badminton skills. Anxiety is caused to activation of the immune system and is causes the secretion of adrenaline from the adrenal from central of the adrenals, blood pressure rises (heart activity increases, change in breathing heavily and rhythm, muscles veins are open, muscles are cramping, increases the muscular and nervous energy, increases the glucose in blood. There was show most stiff muscles in control group when performing skills and also lower attention and centralization in control group and heartbeat and different in blood pressure and blood glucose. According of coache's observations and athlete's statements, control groups had sweat and stiff in their muscles and also change in body physiological can change in anxiety. According to results suggest to coach and teachers use methods to reduction anxiety to improve speed, accuracy and power of skills.

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