

THE EFFECT OF COMPETITIVE ANXIETY ON THE PERFORMANCE OF MALE MARTIAL ARTS ATHLETES

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Abstract

The aim of the present research was to study the effect of competitive anxiety on the performance of male martial arts athletes in Ankara. This research is applied in terms of purpose and descriptive-correlation in terms of method, and its statistical population was all male athletes of martial arts in Ankara. 102 martial male athletes were selected based on the available method of 140 athletes. The data collection tool was Martens et al.'s Competitive Anxiety Questionnaire (1990), and the sports performance questionnaire made by the researcher. The validity of the questionnaires was confirmed by 5 experts in the field of sports management. The reliability of the questionnaires was obtained by using Cronbach's alpha coefficient for competitive anxiety, Martens et al. (1990) $\alpha = 0.81$ and the researcher-made sports performance questionnaire $\alpha = 0.8$. For data analysis, SPSS 22 software was used to get the results. Kolmogorov-Smirnov test was used to check the normality of the data distribution. Considering the non-normality of the research data, the non-parametric statistical method of regression test, Crosstal-Wallis was used to investigate the effect of competitive anxiety on the performance of male athletes in martial arts in Ankara. The results showed that there is a significant effect between competitive anxiety (cognitive) and athletes' performance (Sig<0.05).

Keywords: competitive anxiety, performance, martial arts

Introduction

Anxiety is a negative emotional state with feelings of anger, discomfort and worry, which is also associated with physical activity or excitement. Anxiety in sports reflects the athlete's feelings that something may go wrong and the performance may fail. Early studies of anxiety were based on the assumption that anxiety is unidimensional. Behzadi et al concluded that competitive anxiety is higher for young participants in individual sports compared to team sports and in individual collision sports compared to non-collision individual sports (Behzadi, 2011). The anxiety reaction that is produced in certain competitive situations is called competitive state anxiety. In fact, competitive anxiety is a type of anxiety that occurs in competitive sports situations. One of the main causes of competitive anxiety is social factors. The constant pressure caused by the expectations of parents, coaches and teammates from a young athlete can produce a lot of anxiety (Baniyadi, Salehian, 2021).

Ghoreish and Salehian (2022) presents the causes of competitive anxiety in this way: unrealistic beliefs about a certain performance in a person who thinks he will have a poor performance, performance lower than the expected level in the previous competition, the person's mental preoccupation with pressures, Previous troubles and problems and belief in the dependence of people's personality on the performance of sports skills. In general, the relationship between anxiety and the athlete's performance is expressed by inverted theories. Based on (u) drive (motivation) and u hypothesis, based on the drive theory, which was formed from the joint efforts of Hall and Spence, there is a linear relationship between the

level of anxiety and sports performance. This means that as anxiety increases, the level of performance increases accordingly.

One of the main points raised in sports psychology, which affects the performance of athletes, especially at championship levels, is the level of anxiety before the competition and its effect on the mental states and movement skills of athletes. Generally, athletes are anxious for various reasons, including the importance of achieving sports success or the difference between their abilities and the required ability to perform sports, which generally interferes with their performance as a negative factor. The results of a survey show the effect of excitement and arousal on the performance of athletes, which is self-evident about the importance of excitement and especially anxiety. The findings emphasize the relationship between anxiety and performance and indicate the negative impact of anxiety on athletes' performance. Competitive anxiety also affects the performance of athletes and the higher the level of competitive anxiety, the lower the performance of athletes during competition (Esfahani et al., 2014).

Hanin (2000) found a significant negative relationship between competitive anxiety and sports performance. Fletcher and Hunton (2016) showed that there is a significant difference between the mean scores of competitive anxiety in groups with high and low skills of calmness, self-talk and imaging. Also, a significant difference was obtained in competitive anxiety for the relaxation, cognitive and mental imaging groups. Hanton et al. (2017) showed that the intensity of cognitive anxiety and physical anxiety of athletes increases and their self-confidence decreases as they get closer to the competition. Also, a significant negative relationship was obtained between competitive anxiety and sports performance. Nevertheless, nowadays it is agreed that the 3-factor model of competitive anxiety introduced by Martens et al. (1990) can be used to describe more prominent aspects of people's competitive anxiety (same source). The three dimensions of competitive anxiety include cognitive, physical, and self-confidence.

Sports performance includes individual and group performance. Group performance is discussed in team sports and the result is the individual performance of each team player on the sports field. In this way, checking individual performance in sports is a priority (Rob, 2017). Sports performance can be evaluated in different ways. This evaluation can be based on external real results and points such as winning or losing, time or place of reaching the finish line, or based on personal assessment results such as the evaluation of a coach or expert or a person's understanding of his performance (Esfandiari, 2013).

With these interpretations, in this research, the impact of athletes' competitive anxiety (cognitive, physical, self-confidence) as predictor variables on athletes' performance will be investigated as a criterion variable. Considering the importance of competitive anxiety in training and competition conditions and due to the effects that such behaviors of athletes have on their performance, it is necessary to identify the organizational measures that cause such behaviors in the organization. The research conducted on competitive anxiety also indicates that athletes' feeling of "competitive anxiety" is effective in all methods and processes of training and competition. At the same time, the most attention and interest in the issue of "emotional intelligence and competitive anxiety" has occurred in the past fifteen years, and the question that may be raised in this regard is whether this affects the sports continuity of athletes and also the improvement of their performance in sports combat is effective.

And because martial athletes train and compete individually more than athletes in other disciplines, and because of this, these athletes experience more anxiety during and after the competition. And one of the reasons for the importance of working on this issue is the poor performance of some combat athletes due to their stress and competitive anxiety. This research seeks an answer to the question of whether competitive anxiety has an effect on the performance of martial arts athletes.

Research method

The current research is applied in terms of purpose and descriptive-correlational in terms of research method.

Statistical Society

The statistical population of this research includes all male athletes of martial arts in Ankara.

The statistical sample

The size of the statistical population of the current research is only the male athletes of martial arts in Van province, and the statistical sample of 102 athletes was randomly selected from the available male athletes based on Morgan's table.

Research measurement tools

The tool for collecting information is competitive anxiety questionnaire of Martens et al. (1990) (15 questions) and a researcher-made sports performance questionnaire (15 questions).

For Martens et al.'s (1990) competitive anxiety questionnaire, a 5-point Likert response scale (1 = very rarely to 5 = very often) was used to answer the questions, and for the researcher-made sports performance questionnaire (1 = very bad to 5 = Very good) is used to answer questions.

Reliability and Validity

After studying the existing sources and questionnaires, the final questionnaire was compiled and distributed among motor behavior specialists to determine the formal and content validity, and was finalized with the supervisor's opinion.

Cronbach's alpha method was used to determine the reliability of the questionnaire. The obtained coefficients were obtained for the competitive anxiety questionnaire of Martens et al. (1990) ($\alpha = 0.83$) and the researcher-made sports performance questionnaire ($\alpha = 0.80$).

Questionnaire data collection method

To collect theoretical information and research background from internal and external theses and articles and the Internet, and in the field part, a questionnaire was used, which was used with the permission of the university from martial sports clubs and the provincial martial sports board for field data collection. Action was taken. After attending martial arts clubs and committees, while fully explaining the questionnaire and variables, the questionnaires were completed. After collecting the questionnaires and coding them, he analyzed and interpreted the data.

Statistical analysis methods

Descriptive statistics and inferential statistics methods were used. In the descriptive statistics section (frequencies and percentages, mean and standard deviation) were used. And in the inferential statistics section, statistical methods of regression and Crossgal-Wallis were used using SPSS version 22 software at a confidence level of 0.95.

Results

Table 1. Investigating the effect of competitive anxiety (cognitive, physical, self-confidence) on the performance of martial arts athletes

Model	SS	df	MS	F	Sig.
Regression	16.989	4	4.456	10.986	0.000
Remaining	143.456	369	0.378		
Total	159.657	373			

According to the table and by emphasizing the obtained F level, it can be stated that the effect of competitive anxiety (cognitive, physical, self-confidence) on the performance of martial arts athletes can be seen at $\alpha=0.05$ level. In other words, there is the ability to predict the perspective of martial athletes regarding competitive anxiety (cognitive, physical, self-confidence) on the performance of martial athletes. Therefore, in order to identify and explain the regression coefficients, it is necessary to refer to the table of regression coefficients.

Table 2. Investigating the effect of competitive anxiety (cognitive, physical, self-confidence) on the performance of martial arts athletes

Criterion variable	Predictor variables	B	Standard error	B Coefficient	T	Sig.
Performance	Competitive anxiety	3.121	0.221		11.845	0.000
	Cognitive	-0.186	0.347	-0.144	-0.567	0.701
	Physical	0.365	0.152	0.457	2.766	0.010
	self-confidence	0.087	0.127	0.122	0.723	0.398

According to the table, the variable coefficient of competitive anxiety (physical, self-confidence) is not significant because it is more than 0.05 and this hypothesis is rejected. But knowledge is meaningful. According to the regression coefficient with the simultaneous entry method and also the regression coefficient obtained, it can be stated that the effect of competitive anxiety (physical, self-confidence) on the performance of martial arts athletes is not observed. Thus, with the increase of competitive anxiety (cognitive, physical, self-confidence) the performance of martial arts athletes decreases. But the effect of competitive (cognitive) anxiety on the performance of martial arts athletes is observed. Thus, with the increase of competitive (cognitive) anxiety, the performance of martial arts athletes increases.

Discussion

The results showed that competitive (cognitive) anxiety has a significant effect on athletes' performance, which is in line with the findings of Shafai et al. (2014), Gazmeh et al. (2004), Behzadi et al. (2011). Because, athletes with components such as "competing against others is generally enjoyable, I have anxiety before competition, I worry about not doing well before competition, when I compete, I am a good athlete, When I compete, I worry that I will make a mistake" are concerned with sports performance and their field of work, and these relationships are vital and important for athletes to be involved in sports and perform better, so the importance of their position In terms of competitive (cognitive) anxiety, it determines the sports performance of athletes.

The results of various researches show that there is a significant difference between the competitive anxiety (physical, mental and self-confidence symptoms) of university and club futsal players. Also, a direct relationship between competitive anxiety and performance was observed in female futsal players (Esfahani, Qezel Saflou, 2013).

Torkfar et al. (2013) conducted a research titled investigating the relationship between emotional intelligence and competitive anxiety in the performance of male and female athletes and concluded that there was no significant difference between anxiety, self-confidence and cognitive anxiety with the performance of male and female athletes. Emotional intelligence and competitive anxiety are related to athletes' performance in most cases.

Shafaei et al. (2009) during a research titled investigating the effect of hypnosis on reducing competitive anxiety and increasing sports performance of martial artists concluded

that all participants who had experienced hypnotic intervention, their competitive anxiety score in the competitive anxiety questionnaire and in the intervention phase (post-test stage) compared to their competitive anxiety score in their baseline competitive anxiety questionnaire (pre-test stage), so that the level of competitive anxiety of the subjects was such that they considered this program very effective for reducing their competitive anxiety level and They were satisfied with participating in these treatment sessions. Also, in these athletes, complaints such as anxiety and fear of facing opponents were significantly reduced according to the athletes' own reports. Also, all the participants who experienced the hypnosis intervention, their sports performance score in the sports performance checklist increased in the intervention phase compared to their baseline sports performance score, so that the subjects' sports performance was such that they completed this program. They considered it very effective for improving their performance level and expressed their satisfaction with participating in these treatment sessions. According to the findings of this research, hypnosis intervention has effectively and continuously improved the sports performance of taekwondo and karate athletes, so that the comparison of the average pre-test and post-test scores of taekwondo and karate athletes in the sports performance checklist indicates that hypnosis intervention increases performance scores. Taekwondo and karate athletes have become sports. This study showed that hypnotic intervention, by removing disturbing and intrusive cognitive thoughts that cause competition anxiety, prevents or at least reduces its destructive and harmful role to the lowest possible level during competitions. Thus, by reducing the level of competitive anxiety, the level of sports performance of martial artists was improved to a favorable level.

Gazmeh et al. (2013) during a research entitled the effect of anger and competitive anxiety on the motivation and performance of handball players of the 1st league of the country came to the conclusion that there is a significant difference in the subscale of mental anxiety and physical anxiety between high-low and middle-class teams. There is a bottom. However, no significant difference was observed between high-middle level teams. In the self-confidence subscale, a significant difference was observed between high-low and high-middle teams. And the findings of the research indicated that there is a negative relationship between anger and competitive anxiety with the performance and motivation of handball players. It seems that the negative effects of anger and competitive anxiety are more on amateur players, so the techniques of controlling and reducing competitive anxiety and anger should be included in the training programs of athletes.

Fletcher and Hanton (2004) showed that there is a significant difference between the mean competitive anxiety in groups with high and low skills, self-talk and mental imagery groups. Also, a significant difference was obtained in competitive anxiety for the relaxation, cognitive and mental imagery groups and the intensity of cognitive anxiety and physical anxiety of athletes increase and their self-confidence decreases as the competition approaches. Also, a negative relationship was found between competitive anxiety and sports performance.

In the above explanation, it can be pointed out that by reducing competitive (cognitive) anxiety, sports performance also increases and competitive (physical) anxiety does not have a significant effect on athletes' performance, which is inconsistent with the findings of Gazmeh et al. Because, athletes with components such as "before the race I am calm, it is important to create a goal during the race, before I race, I feel nauseous, I noticed that just before the race, my heart beats faster than usual. "I want to participate in competitions that require a lot of physical energy" are concerned with sports performance and their field of work, and these connections are vital and important for athletes to engage in sports and perform better. Therefore, it determines the importance of their place in terms of competitive (physical) anxiety in sports performance of athletes.

And competitive anxiety (self-confidence) does not have a significant effect on athletes' performance, which is inconsistent with the findings of Gazmeh et al. Because, athletes with components such as "before the competition I feel comfortable, before the competition I am nervous, team sports are more exciting than individual sports, waiting to start the game makes me nervous, I before I get nervous about the competition" are related to sports performance and their field of work, and these relationships are vital and important for athletes to be involved in sports and perform better, so the importance of their position in terms of competitive anxiety (Self-confidence) in sports performance of athletes. In the above explanation, it can be pointed out that by reducing competitive anxiety (self-confidence), sports performance also decreases.

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