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مجلة علمية محكمة تصدرها كلية التربية البدنية وعلوم الرياضة



*An Analytical Study of Fear Levels after Returning from Sports Injury in Gymnastics for Female Students of the Faculty of Physical Education and Sport Sciences, Thi Qar University*

Mohammad Jabbar munadi

[mohammed.jabbar@utq.edu.iq](mailto:mohammed.jabbar@utq.edu.iq)

College of Physical Education and Sport Science, University of Thi-Qar, Thi-Qar, 64001, Iraq

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**ABSTRACT**

This research aims to analyze the levels of fear after returning from sports injury among female students of the Faculty of Physical Education and Sport Sciences at Dhi Qar University, who practice gymnastics, which is a sport characterized by complex movements and requires high balance and precise skills, which makes them more susceptible to injuries. The study focused on the psychological aspects associated with the injury, especially feelings of fear that may hinder a full return to normal functioning. The researcher used the descriptive method in his survey method, and the sample included (75) female students who had suffered previous injuries. A special scale for fear was built after returning from injury, and it went through several stages of scientific judging, honesty and consistency tests. The results showed that there were varying levels of fear in the affected female students, indicating the need for psychological support programs during the rehabilitation stages. The study recommends the importance of integrating psychological rehabilitation into training programs to reduce the effects of fear and improve the quality of sports return.

Keywords:

after Returning  
Skill,  
Sports,  
Gymnastics I.

## **1– Introducing the research**

### **1.1 Introduction and Importance of Research**

Sports injuries are one of the most prominent challenges facing practitioners of physical activities, due to the physical and psychological effects they cause that may extend for long periods, and directly affect the continuity of practice and the quality of performance. Sports injury is defined as any damage to the body caused by physical activity, which leads to a temporary or permanent disruption in an individual's ability to perform exercises or participate in competitions. These injuries are usually caused by factors such as overload, poor physical preparation, poor technical performance, or lack of adequate warm-up, as well as psychological factors such as stress and poor concentration

The risk of injury increases in practitioners of sports that rely on complex movements and high balance, as in the case of gymnastics, as it is considered a sport of a high technical nature that requires precise skills, a high degree of flexibility, strength, and motor coordination. In this sport, female students are often exposed to various injuries to the joints, ligaments, and muscles, which leads to the temporary suspension of training and competition, and pushes the injured woman into a cycle of psychological stress and fear of returning.

Although there is a great emphasis on physical therapy in rehabilitation programs, the psychological aspect is often neglected, despite its profound impact on the healing process and return to practice. Fear of repeated injury, loss of skill, or the gaze of others is a major psychological barrier for female athletes. Hence the importance of this research, which aims to study the levels of fear after returning from sports injury in female students Faculty of Physical Education and Sport Sciences, University of Dhi Qar in Sport , in order to reveal the nature of psychological responses associated with injury, and to provide scientific recommendations that contribute to the design of supportive psychological rehabilitation programs that enhance students' ability to adapt and overcome the

psychological effects of the injury, which reflects positively on both athletic performance and mental health

## 1.2 Research Problem

Sports injuries are a common problem in gymnastics, due to their nature, which requires high physical effort and precise motor skills. These injuries directly affect not only physical performance, but also the psychological state of the injured women, as many students suffer from feelings of fear when they return to activity after treatment and rehabilitation.

This is the reason why the problem of the current research stems from the attempt to answer the following main question:

What are the levels of fear and psychological anxiety after returning from a sports injury among female gymnastics students at the Faculty of Physical Education and Sport Sciences – Dhi Qar University?

Psychological emotions are an influential factor that may hinder a complete return to the previous level, or delay the restoration of skill performance and self-confidence, which makes it necessary to study these phenomena and pay attention to their effects.

Despite efforts in the physical aspect of rehabilitation, the psychological aspect is often not given enough attention in training programs within educational institutions, which increases the likelihood of relapse or withdrawal from sports.

## 1.3 Research Objectives

The research aims to identify the following:

- 1– Building a Scale of Fear after Returning from Injury among Female Students of the Faculty of Physical Education and Sport Sciences – Dhi Qar University Returns from Sports Injury in Gymnastics.
- 2– Identifying the Level of Fear among Female Students of the Faculty of Physical Education and Sport Sciences – Dhi Qar University Returns from Sports Injury in Gymnastics.

3– Determining the Normative Levels of Fear Levels among Female Students of the Faculty of Physical Education and Sport Sciences – Dhi Qar University Returns from Sports Injury in Gymnastics.

#### 1.4 Research Areas

- Human Field: Female Students of the Faculty of Physical Education and Sport Sciences, Dhi Qar University for the Academic Year 2024/2025.
- Temporal Domain: From 22/1/2025 – 20/4/2025
- Spatial Field: Gymnastics Hall at the Faculty of Physical Education and Sport Sciences, Dhi Qar University

### 3 – Research Procedures

#### 3.1 Research Methodology

The researcher used the descriptive method in the survey method to suit the nature of the research.

#### 3.2 The research population and its sample

The research population included female students of the Faculty of Physical Education and Sport Sciences, Dhi Qar University for the academic year 2024/2025, and the number of (180) students representing the first and second stages because gymnastics is given to these two stages, their ages ranged between (19–23) years, while the research sample was selected by the deliberate method, which are the students returning from injury in this sport after therapeutic rehabilitation, which are (75) students and for the two academic stages, and the division of the sample was as follows

The sample of the initial application (exploratory experiment): It consisted of (5) students from the first level.

2 - The construction sample: It consisted of (40) female students.

3 - Application sample: It consisted of (30) female students.

Table (1) shows that

Table (1)

Total	Second Level Students	First Level Students
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75	30	45
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### **3.3 Aids, tools and assistive devices**

#### **3.3.1 Wasa'il al-Jama'u'l-Mu'l-'Ulamaat:**

- 1– Arab and foreign sources.**
- 2– Networked information web.**
- 3– Previous studies and researches.**

#### **4. Questionnaires.**

#### **3.3.2 Wasa'il al-Jama al-Bayanaat:**

- 1– Personal interviews.**
- 2– Scale.**
- 3– Petition of Registration.**

#### **3.3.3 Data Analysis Methods:**

- 1– Al-Wasa'il al-Ahsa'iyah.**
- 2– Baramjiyat al-Hasba'i al-Iktroniyyah wa'l-Bidwiyyah.**
- 3–4 Ijra'a'bina wa'tasmimu muqayasi al-khoof after al-Isaba**

#### **3.4.1 Determination of the validity of the scale:**

The researcher presented the scale to a group of (15) experts specialized in the field of sports psychology and sports injuries to reveal the validity of the scale used to measure the levels of fear of female students. After reviewing it, they expressed their opinion on its validity and conformity with the sample members and their levels. The researcher got a good percentage of agreement with their opinions. Table (1) shows that:

**Table No. (1)**

**Yubin al-Darja'a'i al-Mu'izzabat al-Khubra'i al-Muqayasi**

Significance	Itself	K2	Non-Agreeing	Approvers	Number al-Khubra	t
Moral	0,000	15.000	0	15	15	1

### 3-4-1-1 E.Adad al-Sigah al-Awliyyah

The process of preparing the paragraphs of the scale is one of the most important steps, as it requires the meeting of certain conditions of the designer of the scale and the test.

**\*After this , i.e., tahadid a'daw al-faqaraat al-basighatha al-'awliyyah al-maqiyasi**

The researcher formulated (25) the Fear Scale with the Recovery from Sport Injury

### 3-4-1-2 Aarad-e-Faqaraat al-Muqayasi Basightahi al-'Awliyyah al-

## 3.7 Standard Levels of the Scale:

The data distribution curve depends on the nature of the sample, its number, and the suitability of the tests for this sample, so the larger the sample size and the more appropriate the tests, the closer we are to the shape of the moderate curve () when distributing the data<sup>1</sup>. The researcher used the natural distribution curve (Kauss) and selected five levels to measure the levels of fear. The standard scores were divided into (5) levels, as shown in Table (2):

**Table (2)**

**Shows the standard and adjusted scores, raw grades, and levels of the scale**

Number	Standard Grade	Levels
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<sup>1</sup>Wadih Yassin Muhammad and Hassan Muhammad Abed: Statistical Applications and Uses of Computers in Physical Education Research, Mosul, Dar Al-Kutub for Printing and Publishing, 1999, p .165

13	91-110	Very good
17	74-90	Good
5	73-57	medium
3	40-56	Acceptable
2	22-39	Weak

### 3-8 Al-Ta'tabiqu al-Naha'i l-Muqayyaas:

After that, the people of The World are in the middle of the day. Who is it (22) is a paragraph distributed over Khumsi Majalat. Wa'tabaq al-ba'ahith al-muqayyas Al-Naha'iyyah al-'Ali Sample The number of (30) Student. Wa'da'ad ta'lil-e-istajabat'i'ain'i al-baha'a'i al-bayanaat fi astimarat al-khasa'aa', And became For each Student Degree XStick to.

### 3-9:

The researcher used the statistical portfolio (SPSS) and Excel software to obtain statistical information.

## 4.1 The results of the study are asalibi al-tufkir wa fiqh al-mu'ta'l-mu'ta'i'l-ni'itha'laj wa'ta'aha'l-li'aha wa'munaaqishta:

Table (3)

Yubin al-Musharaat al-lhsa'i'ah al-ta'i'i'ta'eeq fi 'Asalib al-tafqeer wa'l-fiqh al-mu'ta'l-mu'ta'i'l-mu'ta'i'l-ta'ilaj

Level	Torsion coefficient	Standard Error	Standard Deviation	Hypothetical Medium	Arithmetic mean	Application Sample	Scale
high	0,986	0,734	7,45	66	88.9	30	

Table (4)

Shows the standard and raw scores, levels, frequency, and percentage of the sample application of the Fear Scale

Number	Standard Grade	Levels
13	91-110	Very good
17	74-90	Good
5	73-57	medium
3	40-56	Acceptable
2	22-39	Weak

The results of the scale showed that female students of the College of Physical Education and Sport Sciences who practice gymnastics experience a high level of fear after returning from injury, which indicates the presence of overlapping problems that include motor, psychological, social, and preventive aspects. On the motor level, this fear is manifested by avoiding performing complex or dangerous skills, such as back somersaults, movements on the balance beam or air jumps, which directly affects the quality and efficiency of performance. <sup>2</sup> The Kvist study

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. Professional coaches' perspectives on the return to sport 2007Podlog, L. and Eklund, R.C., <sup>2</sup> 225–207), pp.2(19following serious injury. Journal of Applied Sport Psychology,

confirmed et al. (2005) show that fear of re-injury leads to hesitant and incomplete performance, which hinders a return to the previous level. On the psychological level, the loss of self-confidence and constant anxiety about evaluation or error are a fundamental factor in the persistence of the state of hesitation, which is consistent with Podlog and Eklund (2007) <sup>3</sup>that the lack of psychological rehabilitation leads to internal disorders that reduce motivation, increase fear, and impede psychological stability in the affected women. These effects are worsened in the Competitive environments, where the social dimension plays an important role, as the student is influenced by the view of the professor and colleagues, which generates a feeling of social pressure and shame about poor performance, as explained by Weinberg and Gould (2014). As for the preventive aspect, studies have shown that most rehabilitation programs focus only on the physical aspects, without providing structured psychological support, which makes fear a persistent factor even after muscular recovery. The "fear and avoidance" model <sup>3</sup> (Vlaeyen and Linton, 2000) confirms that an injured athlete who does not receive appropriate psychological support may gradually avoid physical activity, which prolongs the recovery time and increases the likelihood of recurrence. These data are supported by Arab studies such as Abdel Hamid (2017), <sup>4</sup>which indicated that the absence of psychological support programs leads to a significant decrease in motor

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. Fear of re-injury: a hindrance for returning 2005 Kvist, J., Ek, A., Sporrstedt, K. and Good, L., <sup>3</sup> to sports after anterior cruciate ligament reconstruction. *Knee Surgery, Sports Traumatology*, .397–393), pp.5(13 *Arthroscopy*,

<sup>3</sup> Vlaeyen, J.W.S. and Linton, S.J., 2000. Fear-avoidance and its consequences in chronic musculoskeletal pain: a state of the art. *Pain*, 85(3), pp.317–332. cognitive-behavioral, and it goes through social and educational support from coaches and <sup>4</sup> colleagues, and ends with gradual physical rehabilitation programs that take into account the psychological state of the player, to ensure her safe and complete return to competition.

confidence, while Hussein (2020) observed <sup>5</sup>that many of the affected female students show withdrawal behavior and continuous hesitation even after returning. Therefore, the high level of fear after returning from injury in gymnastics is a multidimensional problem, which requires comprehensive treatment starting from psychocognitive-behavioral rehabilitation, and passing through social and educational support from female trainers and colleagues. It ends with gradual physical rehabilitation programs that take into account the student's psychological state, to ensure her safe and complete return to competition.

## 5. Conclusions and Recommendations

### 5.1 Conclusions

- 1– The results of the study showed that the high level of fear after returning from injury among female students of the Faculty of Physical Education and Sport Sciences who practice gymnastics negatively affects their motor competence and limits their ability to perform complex motor skills with confidence and stability.
2. Psychological factors have been shown to be a key factor in explaining the manifestations of high fear, as anxiety, low self-confidence, and negative thinking all contribute to promoting motor avoidance behavior and delaying the safe return to training.
3. The results of the analysis revealed the weakness of the integration of the current rehabilitation programs in integrating the psychological and social dimension, and its limitation to the physical aspects, which contributes to the

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Abdel Hamid, S. (2017). Psychological Stress Associated with Sports Injuries and its <sup>5</sup> Relationship with Self-Confidence among Female Physical Education Students. *Journal of Psychological and Educational Sciences*, 23(2), pp. 155–172

continuation of the effects of fear and the incompleteness of the psychomotor healing process.

## 5.2 Recommendations

1. The study recommends the need to adopt psychocognitive–behavioral rehabilitation programs within the recovery stages of injured gymnastics students, with the aim of reducing the level of fear and enhancing psychological readiness for a safe return to sports activity.
2. Training institutions are recommended to create a supportive socio–educational environment within the training halls by involving trainers and colleagues in psychological support programs, in order to enhance a sense of security and belonging and reduce social pressure.
3. The study emphasizes the importance of organizing awareness programs and psycho–sports workshops that shed light on the psychological effects of injuries and how to deal with them educationally and psychologically, in a way that contributes to raising the efficiency of dealing with injuries from a comprehensive perspective.

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- cognitive–behavioral, and it goes through social and educational support from coaches and colleagues, and ends with gradual physical rehabilitation programs that take into account the psychological state of the player, to ensure her safe and complete return to competition.
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- 3 Vlaeyen, J.W.S. and Linton, S.J., 2000. Fear–avoidance and its consequences in chronic musculoskeletal pain: a state of the art. Pain, 85(3), pp.317–33

At all	Rarely	Sometimes	Often	All the time		Fear of Injury Scale	
						I feel scared when performing ground movements that involve .spinning or jumping	1
						I avoid some gymnastics skills for fear of recurring injury	2
						I feel insecure while using the ... ,devices (balance beam, parallel .(.etc	3
						I get very nervous before doing any gymnastics show after an .injury	4
						I'm afraid of falling while .performing aerobic movements	5
						I doubt that I can implement the .skills I was previously mastering	6
						I feel like my body is no longer .what it was before the injury	7
						I overdo it while training for fear . of any sudden movement	8
						I have a constant feeling that the injury could come back at any moment	9
						I'm afraid of jumping high or spinning backwards	10

						I feel nervous when performing skills in front of students or colleagues	11
						I avoid intense workouts that require flexibility or high strength	12
						Fear prevents me from enjoying training as I used to	13
						I feel like I can't fully control my body yet	14
						I am reluctant to participate in tournaments or shows after an injury	15
						I feel afraid that others will see my abilities after an injury	16
						I think I may not reach my previous level in gymnastics	17
						I have recurring thoughts of injury when boarding devices	18
						Fear affects my concentration while performing skills	19
						I avoid delicate balance movements for fear of falling	20
						I feel like I need more psychological time before a full return	21
						I don't trust my ability to perform complex movements such as somersaults or flips	22

						The injury has always made me worried about progressing in gymnastics.	23
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