

## The relationship between fear and sports injuries among female futsal players

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### Abstract

**Aims:** to identify the relationship between the phenomenon of fear and the occurrence of sports injuries among female futsal players. **Method:** we applied the survey method with a descriptive approach. The population sample consisted of 82 female players representing seven clubs in the club league in the Kurdistan region-Iraq. The study sample was players  $n=48$  chosen from four random clubs. It constitutes a 58.5% population time-domain rate for the period from 5/1/2021 to 1/2/2021 for the data collection. The homogeneity component of the sample members was considered, as they are all women aged 19-24 years, had a futsal training history of 3-6 years, and a Body Mass Index from 19-23. **Results:** researchers recorded that 23 players got injured in 12 matches games, corresponding to 1.9 injuries per game. Moreover, nearly half (48%) of the players experienced injuries during the period, the mean fear score was 5.64 value of computed is 0.98, which is very large and more significant than the tabular ( $r$ ) value at the degree of freedom 46 and the level of significance 0.05, which is 0.288. There was a correlation between fear and sports injuries among women in the Kurdistan futsal top league. **Conclusion:** we reached a significant correlation between fear and sports injuries among females in the Kurdistan futsal team. Elite female players are subjected to a significant risk of injury, particularly repeat injuries.

**Keywords:** futsal, female athletes, sports injuries, fearing.

## Introduction

Sports injuries are one of the main obstacles facing athletes and coaches during preparation for competition. The negative effects of injuries also inhibit the athletes from fielding training, limiting progression. Moreover, injury-induced impairment of functional competencies necessary for participation in-field training and exposure to the fear factor of repetition of the injury further affects skill performance and willingness development (Junge & Dvorak, 2010).

Fear, which represents a double-edged sword, is either achievement or defeat. Most of it is needed if we know that many team games lack linking educational and psychological sciences with the requirements to practice; one game is futsal. Hence the importance of research with positive linkage and the lack of fear of sports injuries and their psychological impact (Miller et al., 2000). Futsal players are exposed to a variety of psychological factors, whether during training or competition, including fear, anxiety, and disturbances, all of which have an effect on their technical performance, whether negatively or positively, in the general form and on players with a particular form, and that practice shapes the player's psychological characteristics, which can be influenced by fear, anxiety, and a variety of other psychological factors from here (Lago et al., 2020).

The player must swipe for these waiting periods to feel the continuation of the competition. The player's psychological and mental readiness, as the player with high excitement, has different injuries from the player who has control of his emotions. The aggressive player - severe - may expose himself to injury more than the non-aggressive player (Lago et al., 2020). Many kinds of research focus on wrong training physical, physiological, and psychological factors that affect the injuries. Nonetheless, less research on specific concerns in dread associated with injuries is critical for the study (Nemčić et al., 2016; Tinto et al., 2015).

The problem of the study in Futsal players is exposed to many psychological factors, whether during training or competition, fear, anxiety, and disturbances that consequently affect the technical performance of the players negatively or positively in general and the injured players in particular, and the practice determines the psychological characteristics of the player, which can be affected by fear, anxiety and some other psychological factors (Decker, 2020). Therefore, the researcher believes fear and interest in studying this problem are essential in determining achievement by studying the female players of clubs of excellent example for futsal (Mottaghi et al., 2013).

The researcher believes identifying the effect of the phenomenon of fear and interest in studying it is one of the most important problems due to its importance in determining achievement by conducting the study on clubs excellent achievements for the excellent achievements of futsal game (Gioldasis, 2016). The study aims to identify the relationship between the phenomenon of fear and the occurrence of sports injuries among players of the excellent degree in futsal.

## Method

*Participants:* the population consisted of 82 female players representing seven clubs in the Kurdistan supper deviation clubs league in Kurdistan region-Iraq. The study sample is 48 players were chosen in 4 random clubs, it constitutes a rate of 58.5% population Time-domain for the period from 5/1/2020 to 1/2/2020 for the data collection. The researchers are considering the homogeneity component of the sample members, as they are all female players, age  $21.62 \pm 2.18$ , the training time of 3 to 6 years, and Body Mass Index of  $19 \pm 2$ .

*Experimental design procedures:* the researchers used the survey method with a descriptive approach to suit the research. During the survey, there is some question about the players who had an injury last three years and about the situation of fearing to the relationship between fear and injuries. The survey was given to players and the researcher has used the Fear assessments tool from the survey to measure the fear level of women players. The survey was used before by researchers and scientific books (Rateb, 2007).

The scale of the Fear assessment questioner

	Terms	Scarcely	Some time	Agree
		1	2	3
1	I am interested in the competition			
2	I feel nervous during the competition			
3	I feel calm			
4	I doubt my ability			
5	I fear reinjury			
6	Feel comfortable			
7	I am afraid I won't be able to do well to perform			
8	I felt that my body is tense			
9	I feel confident in myself			
10	I am afraid of losing (defeat)			
11	I feel cramping in my stomach			
12	I feel secure			
13	I am afraid of poor performance under the pressure of competition			
14	I feel like my body is relaxing			
15	I can face a challenge			
16	I am afraid of poor-performing			
17	My heart is beating fast			
18	I am confident of my good performance			
19	I care about achieving my goals			
20	I fear that others will not be satisfied with my performance			
21	I am afraid of losing my ability to focus			

The scale has been used by Osama Kamel Rateb (Rateb, 2007). After consulting references to specialist water in Riyadh's educational institutions, the researcher followed the scale's definition without stating the dimensions and measurements of 21 words and included the measure on the balance of the trio's assessment: Scarcely, Some time and Agree. As a result, the following grades have been assigned (1,2,3).

*Reconnaissance experiment:* the researcher conducted the survey experiment on a sample of the ten players of the women Erbil that in 20-1-2020 and after the completion of the answers checked by the researcher to make sure the followers of the 20-24-year-old and make sure the paragraphs of the scale all answered, and two weeks later i.e. the date 30/1/2020 the researchers re-applied the reconnaissance. The same research sample showed through the results that the paragraphs were clear and clear and did not need to be adjusted and that the average time taken to answer the scale 21 minutes is approximate.

#### *Believe the scale*

1. The validity of the content means the extent of representation and the association of the terms of the scale with the aspect that you measure. This was done by relying on scientific references to achieve the logical, constructive honesty of the content phrases of the scale.
2. The arbitrators believed: the scale was presented to a group of specialists in sports psychology, and their number was 5 specialists, and all agreed on the phrases and the measure measures tolerance among athletes
3. The excellence of honesty was applied to 48 female futsal players from different clubs in Kurdistan super division. After collecting forms and correcting them, the grades were entered, and the researcher arranged the data in An upward order from the lowest to the highest degree. Then the adoption of a percentage 27% of the forms with the lowest grades and named the lower group and 27% of the forms with the highest degrees and named the upper group and after analyzing the results And extracting the discriminatory power of paragraphs to accept acceptable sections and keeping out the weak paragraphs and all the paragraphs were accepted as described.

#### *Statistical analysis*

All values were presented as Mean, Standard deviation, Percentage and *Pearson* Correlation Coefficient. In addition, statistical analyses of within-group data for the measuring fearing level and related to (r). sports injuries were achieved through the use of a correlation has been used between fear and sports injuries among female futsal players. All statistical analyses were performed using the 22.0 version of SPSS.

## Results

The result of table 1 showed that the number of sampling which are 48 players and 23 players got injuries from 12 matches, which is a significant number if we compare between the sample and every single game 1.9 injuries occurs, near to half of the players experienced injuries, and the results show that the ratio of the number of injured to the number of 12 matches was 47.9%.

**Table 1.** Percentage of injuries for the number of players and the number of matches.

Number of players	Injuries	Matches	% injuries on players	Injuries on matches
48	23	12	47.9	1.9

Table 2 shows the results of the mean and the standard deviation of the variables studied for the study, that the value of the arithmetic mean is fear 36.25, and a standard deviation of 2.98, while in sports injuries in the value of the arithmetic mean is 4.75, and a standard deviation of 0.95.

**Table 2.** Mean and standard deviation in fear and injuries.

Variables	Mean	Standard Deviation
Fear	36.25	2.98
Injuries	4.75	0.95

In table 3, it is observed that the probability value of the fear-link factor for the study sample was obtained *Pearson* Correlation Coefficient-(r) and probability significance is 0.032.

**Table 3.** Values of the correlation factor between fear and injuries.

Variable	Correlation Coefficient- (r)	Fear	
		Probability Significance	Significance
Sports Injuries	0.62	0.032 *	Significant *

A probability value of the fear-link factor for the study sample was obtained (0.62). This is a smaller value than the level of significance (0.05). This is evidence of the moral correlation between them.

## Discussion

The discussion aims to connect with some other studies related to our article. For example, maybe some study is in methodology, variables, fields, or, aim be related to our research so that we have been connected and explained to our discussion.

However, according to separate research, the total injury rate was 90 injuries, meaning that 54 of 89 players (60.6%) were injured, there are five injuries for every 1000 hours of futsal play. The most common kind of injury was mild: 1.7 injuries per 1000 h of futsal play exposure (Lago et al., 2020). Incidents were calculated at one incident per 1000 hours of exposure, A total of 23 injuries were recorded throughout the three seasons while accounting for 480 minutes. There were 6.7,

6.4, and 6.8 injuries per 1000 hours of exposure, respectively. Of the 93% of injuries that did not involve a collision, the lower extremities were the most commonly affected area (Ruiz et al., 2019). Interestingly, only three concussions were identified out of a total of seven head injuries. Concussions occurred at a lower rate (3.2 per 1000 player hours) than in previous Futsal World Cups from 2000 to 2008 (8.3 per 1000 player hours). All concussions in this research were caused by contact trauma. Notably, concussions were detected only among female futsal players (Hamid et al., 2014).

Additionally, only negative state anxiety was linked with global anxiety in healthy players. In contrast, all types of fear were associated with international dimensions in injured players (Zurita et al., 2018). Researchers discussed two models of injured football players: resilience was closely linked with the anxiety questionnaire scores. Indicates that wounded athletes feel worried and concerned about incurring an injury (Fernández et al., 2014; Liberal et al., 2014). This shows that this is a strong possibility. There is also some evidence that when a player is motivated to participate but is stopped by injury, emotions of worry may extend the length of the injury (Cezarino et al., 2020). Thus, in the first stages of the competition season, state anxiety levels may have been lower than anticipated, indicating the link strength found for resilience (Liberal et al., 2014; Olmedilla et al., 2011) could be different. Stability and anxiety in athletics were positively correlated, exhibiting more significant correlations among non-injured athletes, the loadings of the indicators relating to global resilience ( $p < 0.001$ ), ARM ( $r = 0.87$ ) and OASE ( $r = 0.84$ ) were significant. In addition, there was a positive correlation between resilience and Stai-Trait ( $r = 0.61$ ), which was significant at the level of  $p < 0.001$ . Because it has not been reduced by the frustration of wounded athletes, who cannot participate, their potential for resilience may be more significant (Morgan et al., 2015; Sarkar & Fletcher, 2014). The athlete's resistance to action-oriented behaviour also had no significant relationships with non-injured athletes, confirming that prior hypothesis. In the same way, global levels of anxiety in wounded athletes were shown to be heavily influenced by their psychological states and environmental variables (Zurita et al., 2014).

Resilience, a psychological trait that may help adjust to difficult times, like sustaining an accident, is also crucial to consider. The study of Connor and Davidson (2003) asserts that increasing resilience leads to higher anxiety levels and faster recovery. Stability is also very desired in sports considering the players' stressful and challenging environments (Fletcher & Sarkar, 2012; Galli & Gonzalez, 2015). Locus of control may serve as a great indication of resilience in wounded athletes. It shows their capacity to overcome the injuries and sustain long-term progressions. To conclude, Olmedilla et al. (2011) showed that stress levels for sportspeople influence all aspects of their activities, including their athletic performance. A person who has no injuries may avoid this inner struggle that reduces their ability to recover. Additionally, Galli and Gonzalez (2015) suggested that the perceived accomplishment in sports practice is not affected by anxiety caused by the injury (Olmedilla et al., 2011). Based on the effect on both the sportsperson and the sport, it would be reasonable and prudent to implement personal injury prevention strategies for each (Zurita et al.,

2014). Psychological treatments have been used to help individuals overcome their injuries and avoid future ones (Hsu et al., 2017).

Additionally, a program should be implemented to improve recovery capacity to minimize stress during injury. Locus of control and commitment, optimism, and the ability to adjust to difficult circumstances should be emphasized. This can decrease the recuperation time, as well as increase motivation during difficult situations (Drew & Matthews, 2019; González et al., 2017)

Finally, it is important to highlight some of the limitations of the present study, which could influence the interpretation of the findings. Firstly, the sample size was relatively small. So, a greater number of sportspersons need to be recruited to confirm these preliminary findings. The research should also be extended to various sports, including classification sports, to enable meaningful comparison of results. Another limitation is the timing of measurements taken during a low-performance burden period. It would be interesting to take measures at various times of the season to observe fluctuations of state anxiety and its relationship with resilience. Finally, the present study included only females. It would be interesting to conduct subsequent studies on males to enable further exciting comparisons.

### *Conclusion*

In summary, we reached a significant correlation between fear and sports injuries among females in the Kurdistan futsal super deviation during the results. Those players have been injury fearing level has been high, and many reasons behind that like reputation injuries and the way to recovery are not easy; elite female futsal players are subjected to a significant risk of injury, particularly some injuries which repeated, which may be moderate in severity and occurs towards the conclusion of sessions, as well as during matches. These findings emphasize the need for novel injury prevention measures to help decrease the high risk of injury among female futsal players.

### *Perspectives*

Future research may focus on developing self-confidence and avoiding fear and anxiety among female players by specialists and coaches for injured players and others. Furthermore, similar research deals with other psychological phenomena and features in the futsal game.

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