

PSYCHOLOGICAL POLLUTION AND ITS RELATIONSHIP TO THE ACCURACY OF SCORING IN FUTSAL AMONG FEMALE STUDENTS AT THE UNIVERSITY OF BABYLON

Rouda Falih Hassan¹, Mahmoud Adnan Mahmoud Kaid²

^{1,2}*University of Babylon / College of Physical Education and Sports Sciences/Iraq.*

Corresponding Author:

mahmoud.kaid@uobabylon.edu.iq

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ABSTRACT

The research addressed psychological pollution, which is one of the important factors influencing scoring accuracy. The research problem included identifying the level of its impact on female students at the University of Babylon, as it is a game that many people love.

Research objective:

- *To determine the relationship between psychological pollution and scoring accuracy in soccer.*

Research hypothesis:

- *There is a correlation between psychological pollution and scoring accuracy in soccer.*

The researchers used the descriptive approach using the survey method, as it is the appropriate method for formulating the problem. The research sample included (44) female students from the University of Babylon's futsal team for the academic year 2024-2025. It also included the research tools and tests used, the questionnaire, the pilot experiment, the main experiment, and statistical treatments.

The researchers reached the following conclusions and recommendations:

In light of the results and statistical treatments of the data obtained, the researchers reached the following conclusions:

- *There are levels of both psychological pollution and scoring accuracy.*
- *The discrepancy between the stress level and the accuracy of their scoring is greater in women than in men.*

The researchers also reached the following recommendations:

In light of the conclusions drawn from the research results, the researchers recommend the following:

1. *Emphasize psychological preparation during the implementation of the training curriculum.*
2. *Pay attention to and study the psychological state of the player before and after playing matches.*

Keywords: *Psychological, pollution, accuracy and futsal.*

INTRODUCTION

The ongoing development is an inevitable result of all aspects of life. Football is one of the sports that has been subject to scientific principles and foundations. This is the secret behind this rapid and successive development in performance, which includes playing methods and defensive and offensive techniques. There is no doubt that the development taking place in sports in general, and football in particular, is significant.

Football is represented by the elements of physical fitness, skill performance, planning, and psychological preparation for female students.¹ The basic offensive skills are considered one of the correct and solid foundations for female football students, which focuses on overcoming the opponent's defenses. Shooting is part of the offensive skills, which is considered the basic means of estimating the final result. Shooting accuracy is affected by several factors that may be negative or positive for female students, including the psychological factor, which is considered one of the important factors influencing the accuracy of scoring.² In view of this importance, many specialists in the sports field have conducted a future and accurate study of psychological factors and their relationship to the athletic level and the extent of benefit from employing these factors to raise the athletic level.³ Therefore, the researchers decided to study psychological pollution in the sports field and evaluate it among female students of indoor soccer as a psychological state that has a direct impact on the athlete's performance, which makes studying and knowing his level, which gives the coach direct psychological preparation in a way that makes the level of psychological pollution less severe and has less impact on the athlete's level, as football is a team game in which psychological emotions play a prominent role that cannot be ignored. From this standpoint, the importance of this study came.⁴ The need for this is to understand the level of psychological pollution among female futsal students and the psychological readiness of sports teams through studying this important psychological trait.

RESEARCH PROBLEM

It has been confirmed that the psychological preparation of an athlete has a significant impact on the level of achievement and athletic performance. Through this, the athlete's maximum potential can be unleashed (psychological pollution is one of the psychological traits that has a profound impact on achieving athletic achievement. It is also one of the most difficult and dynamic psychological traits due to its complexity, overlap, and multiplicity of causes). Therefore, controlling this trait by the athlete will ensure the highest level of achievement. Otherwise, achievement will be weak. Therefore, the researchers decided to investigate this trait and identify its level of impact on futsal athletes, as it is one of the sports that many people love. Through the researchers' experience, their exposure to numerous studies and research, and their presence in the educational process, they noticed that a large number of female students face difficulties in performing the motor skill of scoring in soccer, as this is a difficult skill. However, they do not perform this skill correctly. Accordingly, the researchers were interested in studying this topic, given the important role psychological stress plays in improving the accuracy of scoring in futsal for the female students of the University of Babylon national team.

RESEARCH OBJECTIVES

- To understand the relationship between psychological stress and scoring accuracy in soccer.

RESEARCH HYPOTHESES

- There is a correlation between psychological stress and scoring accuracy in soccer.

RESEARCH AREAS

- Human Area: Female students of the College of Physical Education and Sports Sciences national team at the University of Babylon for the academic year 2024-2025.
- Time Area: From December 22, 2024, to April 13, 2025.
- Spatial area: The indoor sports hall of the College of Physical Education and Sports Sciences - University of Babylon.

RESEARCH METHODOLOGY

The nature of the problem determines the methodology chosen by the researchers to arrive at the results. Many phenomena can only be studied through a methodology that is appropriate to the problem under investigation. Therefore, the researchers used the descriptive method using a correlational approach, as it is one of the methods that achieves the objectives of this research. It is a method that relies on studying reality or phenomena as they exist in reality and is concerned with accurately describing them⁵.

RESEARCH COMMUNITY AND SAMPLE

The sample is the primary focus of the research and one of its means of achieving the objective. Therefore, the research was conducted. The research community was defined as female students from the University of Babylon for the academic

year 2024-2025, numbering (44) students. The sample was intentionally tested using a random method. The researchers excluded (3) female goalkeepers from the research sample, as well as (2) injured female students. Thus, the primary research sample became (20), representing a percentage of (88%), As shown in Table (1).

Table 1. Shows the sample size

Research community	Primary sample	The excluded	Percentage
44	35	4	88%

METHODS, TOOLS, AND DEVICES USED IN THE RESEARCH

1. Arabic and Foreign Sources and References
2. Personal Interviews.
3. Questionnaire.
4. Score Recording Form.
5. Soccer Ball (5).
6. Whistle (2).
7. Electronic Calculator.

FIELD RESEARCH PROCEDURES

One of the most important aspects of scientific research is that it requires testing. Tests are a vital tool for assessment in Life in general, and physical education in particular, as a result of the recent increase in this field's development.

DESCRIPTION OF THE TESTS USED IN THE RESEARCH⁶

- Purpose of the test: To measure scoring accuracy.
- Equipment:
 1. (10) indoor soccer balls
 2. A smooth wall with three overlapping rectangles drawn on it, the dimensions of which are: (the large rectangle 3m x 2m - the middle rectangle 2.20m x 1.50m - the small rectangle 1.40m x 1m). The ground represents the lower edge of the rectangles, and a line is drawn in front of the wall at a distance of (10m).
 3. Performance Description: The subject stands behind the starting line (10m) and then shoots the three balls at the wall in succession, attempting to hit the large rectangle. This is done for five repetitions.
 4. Performance Conditions: The test begins with ball sequence (1) and ends with ball sequence (3).
- Scoring Method:
 - The subject is awarded (one mark) if the ball hits the small rectangle.
 - The subject is awarded (two marks) if the ball hits the middle rectangle.
 - The subject is awarded (three marks) if the ball hits the large rectangle.
 - The subject is awarded (zero marks) if the ball hits the rectangle. Three.
 - 15 points are awarded for all attempts.

QUESTIONNAIRE

The researchers used the Psychological Pollution Scale, University of Diyala, 2010. The Psychological Pollution Scale consisted of (46) items and was corrected using a five-point scale (fully applies to me, applies to me, sometimes applies to me, does not apply to me, does not apply to me at all). The alternatives were given a graded weight (5-1). The maximum total score obtained by the examinee on the scale was (230), while the minimum score was (46).⁷ The researchers distributed the Psychological Pollution Scale to the female students of the University of Babylon's futsal team on Monday, December 28, 2024. The scale contained (46) items measuring the state of psychological pollution among the students of the College of Physical Education and Sports Sciences at the University of Babylon are called females.

A TEST TO MEASURE PSYCHOLOGICAL POLLUTION

The psychological pollution scale prepared by (Yasmine Al-Bayati, 2009) consists of (42) items, distributed over five domains, and is answered with five-point answer alternatives. The highest score obtained by the test-taker is (210), the lowest score is (42), and the hypothetical mean of the scale is (126). Table (1) shows the domains of the scale and the sequence of their positive and negative items.

Table 2. Shows the answer alternatives and the correction key

Domain name	Positive paragraphs	Negative paragraphs	Total
Identity denial and abuse	8-7-2-1	6-5-3	8
Attachment to foreign antiquities	18-17-16-15-14-11-10-9	13-12	10

Effeminacy	25-23-22-21-20-19	24	7
Chaos	31-30-29-27-26	33-32-28	6
Weak commitment and social cohesion	41-40-39-38-37-36-35-34	42-41	9

EXPLORATORY EXPERIMENT

The researchers conducted the exploratory experiment on the sample on January 28, 2025, at the stadium of the Department of Physical Education and Sports Sciences at the University of Babylon. This was intended to identify and locate errors that occurred during the execution of the test.

MAIN EXPERIMENT

The researchers conducted the primary experiment from February 7th, 2025, to February 14th, 2025. The accuracy of the scoring system was evaluated in the research sample, which included (35) female students from the University of Babylon's women's football team for the academic year 2024-2025.

The tests were conducted in the confined hall of the College of Physical Education and Sports Sciences at the University of Babylon.

STATISTICAL METHODS

Approved statistical methods were used for the research, and the results were presented using the SPSS program to extract statistical values.

RESULTS

- **Presentation and discussion of the results between the level of psychological pollution and scoring accuracy in futsal.**

After collecting data through the application of shooting accuracy tests for scoring skills, and to achieve the goal and hypothesis of the research, the researcher had to use the calculated value (r) as shown in Table (3).

Table 3. Shows the calculated value of (r) between psychological pollution and scoring accuracy

Variables	(r) calculated	(r) tabular
Level of psychological pollution	-0.209	0.468

From Table (3), it is evident that the calculated value of (r) is (-0.209), which is less than the previously calculated value of (r) which is (0.468). This implies that the difference in psychology is not significant pollution and scoring accuracy at the level of (0.05) with a degree of freedom of (18). The researchers attribute the lack of a significant difference between psychological pollution and scoring accuracy in futsal to the lack of attention to the psychological aspect (psychological preparation) among the students of the University of Babylon futsal team, which was reflected in the students' performance during the test. This indicates that psychological pollution is one of the important psychological characteristics that coaches must consider in training sessions, as it raises the students' level during the training session or competition, and thus is reflected in the outcome of the match in terms of victory or loss. Psychological pollution plays an important role in athletic performance, as it is a psychological state that has a direct impact on students' performance.

Table 4. Shows the average of the numerical values, their standard deviation, the calculated t-value, and the level of significance associated with the various components of the psychological pollution scale in regards to sports

Variables	Units	Pre-test		Post-test		(t) Value*	Sig.	significance
		Mean	Std	Mean	Std			
Psychological pollution	Degree	22.87	1.701	14.22	1.002	16.8	0.001	Sig.
Physical pollution		24.33	3.002	12.34	2.887	17.30	0.003	Sig.
Self-confidence		25.9	1.02	16.01	0.3	11.1	0.002	Sig.

DISCUSSION

Table (4) indicates that there are significant differences across all of the sports scale's psychological pollution dimensions. This suggests the presence of psychological pollution that is evident in the research sample. The cause of this is the specific nature of the research sample selected in the current study, which was comprised of futsal players between the ages of 21 and 22. The researchers believe these discrepancies are the result of the lack of psychological preparation,⁸ which did not receive the proper amount of physical, mental, and practical preparation during the training process. "Various competitions have a significant impact on all players, and particularly young players. A team that lacks successes weakens their spirits, and questions about their own capabilities take hold of them, especially when the opposition is more advanced and more prepared."⁹

This also implies that the sports-related pollution observed in the sample's pre-tests was primarily caused by the misconceptions the player had regarding the tournament, derived from their environmental surroundings, which is primarily based on the adoption of Distorted ideas and unrealistic images of sports competitions.¹⁰ The current research agenda involved addressing fear, replacing negative thoughts with positive ones, teaching players to stop negative thinking, develop rational thinking, and practice relaxation and self-talk techniques.¹¹ These findings are in line with Borders (1992) regarding the efficacy of the counseling method in small groups. counseling small, formal groups, especially during a particular timeframe, is a dedicated and accurate practice that relies on the principles and ideas of group behavior,¹² the improvement of the collective, and the potential for development. This procedure will result in a strong, stable association with the training that will enable them to learn and develop skills and abilities pertaining to planning and organization.¹³ The researchers also attributed the current result to multiple causes of anxiety in young players (fear of injury, fear of failure, fear of others, and fear of psychological discord). Because of the variety of these concerns and the inclusion of a significant portion of the player's thoughts, who is expected to have some psychological, physical, and mental issues due to their participation in competitions, these reasons, as a whole, may have increased the player's pollution levels. When they observe the atmosphere of a formal game, their pollution levels increase,¹⁴ From aiding relaxation during the break and during the night, they transitioned into an inhibitor of anxiety under the pressure of competition, this led to a loss of focus on the intended goal. Here the role of the coach is to discuss all of the possible scenarios that occur during competitions, such as the stadium, the type of ground, the audience, and the opposing team.¹⁵ The coach's insight or reading of the competition's picture before entering is apparent in the behavior of the players themselves and leads to superior performance, which, as a result, leads to the greatest success.¹⁶ As a result, the coach is now responsible for ensuring that the player is familiar with these effects during training, and that there is no difference between the performance of training and the match's performance.¹⁷ In advance of competitions, psychological preparation is of great importance, this increases the positive component of confidence, which is offset by the negative component of cognitive and physical pollution. The opposite is primarily true: the higher the cognitive and physical pollution level, the lower the self-confidence level. This outcome is largely in line with modern environmental theories regarding pollution and self-esteem, these theories have been addressed by everyone.¹⁸

CONCLUSIONS

In light of the results and statistical processing of the data obtained, the researchers reached the following conclusions:

1. There was no significant difference between psychological pollution and scoring accuracy among the research sample.
2. Psychological pollution has an inverse relationship with scoring accuracy among the research sample.

RECOMMENDATIONS

1. Psychological preparation is emphasized during the implementation of the training curriculum.
2. Pay attention to and study the player's psychological state before and after playing matches.

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