

# USING SPECIFIC MENTAL IMAGERY EXERCISES TO REDUCE COMPETITIVE STRESS FOR FOOTBALL PLAYERS

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## ABSTRACT

*This research aimed to identify the levels of mental imagery and competitive stress among the players of the University of Babylon football team for the 2024/2025 academic year. It also aimed to determine the effectiveness of specific mental imagery exercises in reducing competitive stress, as identified in the current research. The researcher hypothesized that specific mental imagery exercises are effective in reducing competitive stress. The experimental method was used, employing pre- and post-tests. The researcher utilized the research population and its members to conduct the pilot study and establish the scientific basis for the study using the University of Babylon football team players. The researcher concluded that there was a clear use of mental visualization and a reduction in competitive tension among the research sample, indicating that the exercises played a significant role in these results. The researcher recommended that it is essential to include exercises related to higher-order mental processes in the preparation stages for football players, as they affect psychological and mental levels, performance, and results.*

**Keywords:** Mental, Imagery, Exercises, Competitive Stress.

## INTRODUCTION

Football is an activity that requires a high level of effort to fulfill all the duties assigned to the player, due to the game's inherent requirements of speed, constant competition, and a relatively small playing field. All of this necessitates that the player possesses the necessary skills to maintain a good performance, whether in terms of physical fitness, technical ability, tactical awareness, or, often, psychological readiness, to achieve the best results.

It is self-evident that mental aspects and processes play a significant role in performance levels, influencing them positively or negatively. Among these processes is mental visualization, which guides the necessary stimulation for the programs that determine performance. This reinforces the relationship between stimuli and response in the player, acting as a faster form of visualization than the actual skill performance itself. This occurs when a player feels weak, insecure, or unable to achieve goals or perform at their best. This feeling arises from the player's belief that the demands of the performance or the situation exceeds their capabilities. This is what happens to players during competitive periods, in both official and friendly matches.<sup>1</sup> It leaves clear effects on player behavior, skill level, and even relationships with others (teammates, coaching staff, management, referees). The consequences of this behavior are evident in performance due to its strong connection to psychological factors. All this impacts performance and results. Hence the importance of our research in using specific mental visualization exercises to address stressful situations and reduce competitive tension during competition periods.

## RESEARCH PROBLEM

From our observations of training curricula, we found that some curricula lack psychological preparation, especially training related to higher-order mental processes, which are considered the most significant and decisive factor in determining the outcome of some matches. This stems from a lack of awareness of their importance and impact on skill performance, in addition to the scarcity of studies in these areas. This issue was present in the minds of researchers and prompted this research. Based on the above, the researcher decided to conduct this study to develop specific exercises and determine effectiveness in mental imagery and competitive tension, emphasizing the importance of these aspects during preparation processes and maintaining performance levels and achievements.

## RESEARCH OBJECTIVES

1. To identify the current state of mental imagery and competitive tension levels among football research sample.
2. To develop specific exercises and determine their effectiveness in improving mental imagery among the players of the University of Babylon football team.

## RESEARCH HYPOTHESES

1. There is a use of exercises related to mental imagery and competitive tension among the experimental research sample.
2. There is a preference for post-test results over pre-test results, favoring the experimental group over the control group.

## RESEARCH AREAS

- Human Area – Players of the University of Babylon football team.
- Spatial Area – The indoor sports hall at the University of Babylon – College of Physical Education and Sports Sciences.
- Temporal Area – From 2/10/2024 to 4/5/2025.

## RESEARCH METHODOLOGY AND FIELD PROCEDURES

1. **Research Methodology:** The researcher used the experimental method, as it is suitable for the nature of the current research, employing a single-group approach and using pre- and post-tests.
2. **Research Population and Sample:** The research population consisted of the players of the University of Babylon football team in Babylon Governorate. The researcher divided the population into two samples: a control group and an experimental group, as shown in Table(1) .

**Table (1).** shows the two research samples

Research Population	Pre-Test	Post-Test	Total
Experimental Sample	16	16	16
Pilot Sample	4	/	/
Percentage	100%	100%	100%

3. **Research Tools:** (Arabic and foreign sources, (20) futsal balls, (15) goalposts, ropes, measuring tape, small (1x1) m goals, futsal field goals, whistle, pens, questionnaire form, electronic stopwatch, HP computer, camera, electronic calculator).

#### 4. Field Procedures of the Research:

##### • Measures Used in the Research:

1. Selection of the Mental Imagery and Competitive Tension Scales:  
After reviewing sources and previous studies in sports psychology, the researcher selected the Mental Imagery and Competitive Tension scales, as detailed in the appendices.  
Preparation of Specific Exercises:<sup>2</sup> The researcher prepared specific exercises for this process. It is important to emphasize that the exercises should resemble different game situations that might occur during matches, allowing for recall when needed. Emphasis should be placed on utilizing the senses of sight and hearing, as well as kinesthetic imagery, in relation to the nature of the player's skill performance.  
It should be noted that the exercises included both defensive and offensive drills. Video clips related to specific game situations were also shown for analysis, opening the floor for discussion and dialogue to optimize player positioning and drill execution.
2. Pilot Test: The researcher conducted a pilot test on October 2, 2024, at 10:00 AM in the indoor hall of the College of Physical Education and Sports Sciences, University of Babylon. A group of players participated in the tests, which measured competitive tension and motor perception.
3. Pre-Tests: The researcher conducted pre-tests on October 5, 2024, at 1:00 AM with the research sample of 16 players. The purpose of these pre-tests was to determine the current level of motor perception and competitive tension using the tests specific to this research, and to prepare the necessary testing materials.  
The researchers relied on the evaluators to record the data for the approved tests.
4. Applying Mental Visualization Exercises:<sup>3</sup> The researcher applied the exercises on Wednesday, October 7, 2024, at 10:30 AM to the experimental research sample. The exercises took place in the main part of the training session, with all necessary conditions in place. The session concluded on October 30, 2024. The exercise was repeated three times, totaling nine training sessions (three sessions per week).  
The visualization exercises were given after the players had entered a competitive atmosphere, i.e., in the middle of the training session, to create an environment like a match and to simulate the same level of exertion. This was achieved through a simulated match between the players.  
The team coach was responsible for conducting mental visualization exercises for the players. However, in the last three sessions, the focus was on internal or individual visualization. The coach's role was limited to presenting the situation, while the players were responsible for visualizing the scenario and developing the appropriate solution. The duration of the mental visualization exercise was fifteen minutes. There are some points emphasized during the application of mental relaxation exercises:<sup>4</sup>
  1. Before beginning mental visualization exercises, the player should perform some breathing and relaxation exercises to help the nervous system function effectively.
  2. During mental visualization exercises, the player should assume the best position on the field, alternating between defensive and offensive roles.
  3. Should the player advance with the ball or wait for it to reach them? What is the expected location of the ball?
  4. What is the speed of the competing player to reach the same location as the ball, and what is the speed of the ball?
  5. Which player is the most dangerous and could disrupt our team, requiring individual marking to prevent them from moving freely?
  6. Which player is responsible for covering gaps during movement in the game to defend the goal?
  7. The player should use all their senses, both auditory and visual, to move as required by the performance and the situation.
  8. Should the player take risks or be cautious when rushing forward or moving from their position?
  8. What is the best position to penetrate the opponent's defense, and is my teammate's movement correct during the attack and support phase?
  9. What force does the player need to prepare to kick the ball in order to score a goal? Should the player kick the ball from the side of the goal or facing the goal? Is the opposing goalkeeper positioned correctly? All these observations should be made before starting the training exercises.

##### 5. Post-Tests:

The post-tests were conducted on November 1, 2024, during a friendly match with the Future University team.

##### 6. Statistical Methods:

- Percentage, Mean, Standard Deviation, Coefficient of Variation, Chi-square test, t-test for paired samples.

## RESULTS

### • Presentation, Discussion, and Analysis of Results:

1. Presentation, Discussion, and Analysis of the Mental Imagery Results of the Pre- and Post-Tests for the Research Sample: The mental imagery results in the pre- and post-tests for the research sample are shown in Table .

**Table (2).** shows the players' level in the pre- and post-tests of mental imagery for both groups

Performance Category	Pre-Test (Excellent)	Post-Test (Excellent)	Pre-Test (Good)	Post-Test (Good)	Pre-Test (Average)	Post-Test (Average)	Pre-Test (Poor)	Post-Test (Poor)	Pre-Test (Very Poor)	Post-Test (Very Poor)
Excellent	18	20	1	4	0	0	0	0	0	0
Good	15	17	3	5	0	0	0	0	0	0
Average	12	14	4	6	0	0	0	0	0	0
Poor	8	11	6	1	0	0	0	0	0	0
Very Poor	4	7	0	0	0	0	0	0	0	0

Based on Table and the data obtained, and according to the scoring key for the mental imagery scale, the following results were obtained:

1. All scores obtained in item (1) in all situations represent the post-test imagery.
2. All scores obtained in item (2) in all situations represent the auditory imagery.
3. All scores obtained in item (3) in all situations represent the kinesthetic imagery.
4. All scores obtained in item (4) in all situations represent the accompanying emotional state. Returning to the same table, the results for the experimental group were as shown in Table (2) itself, as follows: In the first level, the excellent level, the number of players in the pre-test changed from 1 to 4. In the second level, the number of players increased from 3 to 5, and in the weak level, it rose from 4 to 6. The weak level, which had 6 players in the pre-test, decreased to 1 in the post-test. The final level had no players in the post-test, just as it hadn't in the pre-test.<sup>5</sup>

Here we find that the exercises used, along with the video presentation of mental visualization and all the scenarios, contributed to raising the players' mental visualization skills, recalling their best performance or scenario, and improving their application of it. This also increased their focus, minimized other external variables, and allowed them to remain in a competitive environment.<sup>6</sup>

This indicates that the training sessions were designed to meet the players' needs in coping with performance-related pressures and challenges, especially since they were conducted using scientific methods. Each situation has a specific dimension and requires a specific action, addressing a particular phenomenon. While mental visualization is not directly observable, it can be inferred from performance and its results, specifically the speed and accuracy of performance during post-tests of mental visualization. This allows us to confirm, in short, that no player exhibited weak performance levels.<sup>7</sup>

### 2. Presentation, Analysis, and Discussion of the Pre- and Post-Test Results for the Competition Stress Test in the Research Group:

**Table 3.** Comparison of Experimental Group Pre-Test and Post-Test Results

Test	Experimental Group	Calculated	Tabulated	Significance
Pre-Test	Competition Stress	-X + Y	121.07	Significant
Post-Test	Competition Stress	-X + Y	8.83	Significant

After applying the procedures related to the pre- and post-tests of competition stress for the experimental group, Referring to the same results in Table (6) and the data for the experimental group, we find a clear and significant improvement among the players in the experimental group. This can be attributed to the exercises the experimental group underwent over (9) training units related to motor visualization and its implementation. The use of psychological relaxation strategies also contributed significantly to reducing the level of competition stress. This indicates the significance, as the calculated value (5.04) appears when compared to the tabulated value<sup>8</sup>.

The positive decrease in stress levels can be attributed to mental visualization exercises, which have contributed to improving the athlete's ability to cope with pressure, choose solutions to manage stress, and dispel the fear of not performing well, not delivering their best, or lacking the necessary experience to adapt to competitive conditions.<sup>9</sup> If

these fears persist, they will create psychological conflict within the athlete, increasing tension and stress, and leading to unwanted negative arousal, thus hindering achievement. This highlights the role of mental visualization exercises in preventing scattered thoughts, maintaining focus, and concentrating on the demands of the situation without negative psychological effects. On the contrary, mental visualization increases self-confidence, helps control emotions and their intensity, and improves the generation of positive and applicable ideas.<sup>10</sup> Therefore, we can confirm that increased awareness of emotional control, effective adaptation to changing situations, improved mental visualization, and the ability to find successful solutions in every situation are all results of mental visualization training and practice, which regulates the body's systems.<sup>11</sup>

The positive impact of mental visualization exercises on the athlete's ability to cope with stress can be attributed to these exercises.<sup>12</sup>

## CONCLUSIONS

1. Specialized training exercises improved the mental visualization of the University of Babylon football team players.
2. Specialized training exercises reduced competitive tension among the University of Babylon futsal team players.
3. Competitive tension can be used as an indicator of the training and psychological state of football players.
4. There is a significant correlation and influence between psychological and physiological aspects, affecting performance levels and results.

## RECOMMENDATIONS

1. Emphasize the importance of focusing on higher-order mental processes during the preparation periods for football players.
2. Enroll coaches in training courses covering psychological and physiological aspects to maintain the players' health and functional level for their well-being.
3. Conduct similar research and studies on other categories and sports.

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