



## Effect of Special Exercises on Psychological Endurance and Learning Basic Football Skills among Female Students

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### Abstract

**Objectives:** This study aimed to prepare special exercises designed to improve psychological endurance and support the learning of basic football skills among female students. It also examined the effect of these exercises on psychological endurance and selected football skills.

**Materials and Methods:** The study used an experimental method with a pre-test and post-test design involving equivalent experimental and control groups. The sample consisted of 50 first-year female students from the College of Physical Education and Sports Sciences, University of Baghdad, selected from a population of 110 students. The participants were divided into an experimental group and a control group, with 25 students in each group. The experimental group received special exercises for eight weeks, with two educational units per week, while the control group followed the traditional teaching program. Psychological endurance and football skill tests, including passing, ball control, and dribbling, were administered before and after the intervention. Data were analyzed using means, standard deviations, and t-tests.

**Results:** The results showed significant improvements in psychological endurance and basic football skills in both groups. However, the experimental group achieved greater improvement than the control group in all post-test variables. These findings indicate that the use of special exercises was more effective than traditional exercises in developing psychological endurance and improving football skill performance.

**Conclusions:** Scientifically designed special exercises contributed positively to improving psychological endurance and learning basic football skills among female students. Integrating psychological preparation into football learning activities can increase confidence, motivation, active participation, and skill mastery.

**Keywords:** psychological endurance, football skills, female students, special exercises, physical education.

## **Introduction**

Football is one of the most widely practiced team sports and requires an integrated combination of physical, technical, tactical, and psychological abilities. The mastery of basic skills such as passing, ball control, and dribbling represents an essential foundation for effective football performance, particularly among students in physical education programs.

In contemporary physical education, skill learning is no longer viewed only as a matter of physical repetition or technical instruction. Psychological factors also play an important role in determining students' ability to learn, perform, and maintain stable performance under pressure. Psychological endurance refers to the ability of individuals to cope with pressure, control emotional responses, and continue performing effectively despite challenging situations.

Female students who learn football skills may experience hesitation, fear of making mistakes, low confidence, and anxiety when performing in front of peers or during evaluation. These psychological barriers can reduce concentration and limit active participation. Therefore, teaching programs need to include exercises that not only develop technical skills but also strengthen psychological endurance.

Special exercises that simulate real game situations may help students adapt to pressure, increase confidence, and improve their readiness to perform football skills in competitive contexts. Based on this background, the present study examined the effect of special exercises on psychological endurance and learning selected basic football skills among female students.

## **Materials and Methods**

### **Study Design**

This study employed an experimental method using a pre-test and post-test design with equivalent experimental and control groups. This design was considered appropriate because the study aimed to determine the effect of special exercises on psychological endurance and football skill learning.

### **Participants**

The research population consisted of 110 first-year female students from the College of Physical Education and Sports Sciences, University of Baghdad, during the 2025–2026 academic year. The sample consisted of 50 students selected by lottery and divided into two groups: an experimental group of 25 students and a control group of 25 students.

### **Research Instruments**

The study used several tests to measure psychological endurance and basic football skills. These included a psychological endurance test, a passing test, a ball control test, and a straight zigzag dribbling test.

### **Procedures**

A pilot study was conducted with six students to ensure the suitability of the tests, determine the time required, and identify possible obstacles. The pre-tests were then conducted under standardized conditions. After that, the experimental group followed special exercises for eight weeks, with two sessions per week. These exercises were implemented in the main part of the educational unit and included football skill activities combined with psychological pressure, challenge, competition, and motivation. The control group followed the traditional program prepared by the teacher. Post-tests were conducted after the intervention using the same procedures and conditions as the pre-tests.

### **Statistical Analysis**

The data were analyzed using SPSS. Means, standard deviations, and t-tests were used to determine differences between pre-test and post-test results and between the experimental and control groups.

## **Results**

The pre-test results showed that the experimental and control groups were equivalent in psychological endurance, passing, ball control, and dribbling before the intervention. This indicates that both groups started from a similar level.

The post-test results showed significant improvement in the experimental group across all variables. Psychological endurance increased from 80.57 to 89.57. Passing performance, ball control, and dribbling also improved after the implementation of the special exercises.

The control group also showed significant improvement between the pre-test and post-test. However, the improvement was lower than that achieved by the experimental group. The comparison of post-test results between the two groups showed significant differences in favor of the experimental group in psychological endurance, passing, ball control, and dribbling. These results indicate that the special exercises had a stronger effect than the traditional teaching program.

## **Discussion**

The findings showed that special exercises had a positive effect on psychological endurance and learning basic football skills among female students. The improvement in the experimental group can be attributed to the nature of the exercises, which combined skill practice with psychological stimulation, pressure, competition, and gradual challenge. This type of learning situation encouraged students to perform with greater confidence and emotional control.

The results are consistent with the view that enjoyable and challenging educational activities can increase motivation, reduce fear, and improve skill efficiency. Adel Fadel Ali (2000) emphasized that exercises that create enjoyment, excitement, and mental readiness can support the development of skill performance. In this study, the special exercises provided students with opportunities to practice football skills in situations similar to real play, which helped them adapt to pressure and improve their psychological endurance.

The improvement in the control group may be explained by the effect of regular practice and repetition. Repetition is an important factor in motor learning because it helps learners stabilize movement patterns and reduce performance errors. Schmidt and Wrisberg (2000) also stated that repeated practice contributes to improving movement control and making performance more predictable. However, the greater improvement in the experimental group suggests that repetition becomes more effective when combined with psychological preparation and varied learning situations.

The superiority of the experimental group also indicates that psychological endurance plays an important role in learning football skills. Students who are able to control fear, anxiety, and hesitation are more likely to participate actively and perform skills with better concentration. This supports the view of Abdul Khaliq (1984), who described psychological endurance as part of an individual's ability to adapt to internal and external demands. Similarly, Kamil Taha Lewis (1981) explained that psychological endurance is closely related to motivation and achievement readiness.

The improvement in passing, ball control, and dribbling may also be related to the structure of the special exercises. The exercises used purposeful repetition, immediate feedback, gradual difficulty, and game-like situations. These elements helped students connect technical performance with decision-making and emotional control. Therefore, integrating psychological and skill-based training appears to be an effective approach in football learning for female students.

## **Conclusions**

The use of scientifically designed special exercises contributed to improving psychological endurance among female students. These exercises also improved the learning of basic football skills, including passing, ball control, and dribbling. The experimental group achieved better results than the control group, indicating that exercises combining skill learning and psychological preparation are more effective than traditional teaching alone.

The study concludes that psychological preparation should be integrated into physical education lessons, especially when teaching football skills. Special exercises that include challenge, competition, pressure, and positive reinforcement can increase students' confidence, motivation, participation, and skill performance.

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