



## 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.

Students learning basic football skills face numerous psychological challenges, such as anxiety about failure, fear of judgment, low self-confidence, hesitation during play, all of which negatively impact their learning skill mastery. This underscores importance of introducing scientifically designed, specialized training exercises that simulate real-life game situations place students in environments demanding high concentration emotional control, thus contributing to development of their psychological resilience, use of these exercises not only aims to improve skill performance but also to prepare students psychologically to cope with various pressures, whether during lessons or competitions, thus enhancing their motivation to learn increasing their active participation. Therefore, linking specific exercises with development of psychological resilience is a modern trend in physical education that contributes to improving quality of educational process achieving its goals comprehensively. Importance of study in preparing special exercises to raise psychological endurance learn some basic football skills.

Research problem through observation of female students during physical education classes, particularly while learning basic football skills, a clear disparity in performance levels was observed. Some students struggled to master skills despite repeated practice, exhibiting hesitation, fear, a lack of confidence. Furthermore, many students were significantly affected by psychological pressures associated with educational situations, such as performing skills in front of peers or under evaluation. This led to decreased concentration, errors, or even a reluctance to actively participate in lesson. This is attributed to their low level of psychological resilience their inability to cope with stressful situations. Moreover, teaching methods employed often focus on traditional skill repetition without considering psychological aspects, which reduces effectiveness of learning makes students less able to apply their skills in real-life, competitive, pressured playing situations, study problem weakness of female students in learning some basic football skills, which may be related to their low level of psychological resilience. This necessitates use of specific exercises that contribute to developing this aspect. Therefore, research problem can be formulated as following question: Can using special exercises contribute to raising level of psychological endurance among female students, thus improve learning of some basic football skills?

Research objectives to preparing special exercises to improve psychological endurance teach some basic football skills to female students. To identify effect of special exercises in raising psychological endurance learning some basic football skills for female students.

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

Presentation analysis of results for experimental control groups regarding psychological endurance some basic football skills:

**Table 1.** Means standard deviations t-value for pre-test post-test of experimental group

Test	Pre-test		Post-test		(t) value	Sig. level	Sig. type
	M.	St.d	M.	St.d			
Psychological resilience	80.57	2.14	89.57	4.14	14.432	0.000	Sig.
Passing	2.431	0.528	6.105	3.361	8.182	0.000	Sig.
Ball control	3.034	0.546	5.754	1.517	6.259	0.000	Sig.
Dribbling	20.153	3.178	19.355	3.248	8.669	0.000	Sig.

\* Significant at a significance level of (0.05) degrees of freedom of (48)

**Table 2.** Means standard deviations t-value for pre-test post-test of control group

Test	Pre-test		Post-test		(t) value	Sig. level	Sig. type
	M.	St.d	M.	St.d			
Psychological resilience	80.42	1.13	85.28	4.71	12.301	0.000	Sig.
Passing	2.403	0.456	4.525	3.131	6.532	0.000	Sig.
Ball control	2.8.10	0.345	4.254	1.737	6.720	0.000	Sig.
Dribbling	20.140	2.213	19.655	3.428	8.866	0.000	Sig.

\* Significant at a significance level of (0.05) degrees of freedom of (48)

**Table 3.** Means standard deviations t-value for post-tests of experimental control samples

Test	Experimental		Control		(t) value	Sig. level	Sig. type
	M.	St.d	M.	St.d			

Psychological resilience	89.57	4.14	85.28	4.71	10.838	0.000	Insig.
Passing	6.105	3.361	4.525	3.131	6.704	0.000	Insig.
Ball control	5.754	1.517	4.254	1.737	8,600	0.000	Insig.
Dribbling	19.355	3.248	19.655	3.428	8.264	0.000	Insig.
* Significant at a significance level of (0.05) degrees of freedom of (48)							

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.

Based on what was presented in Tables (1,2, 3) for psychological endurance tests some basic football skills, results in Table (1) showed significant differences between pre-tests post-tests in variables under investigation. researcher attributes these differences in experimental group to introduction of special exercises to raise psychological endurance, which has an effect on developing variables under investigation, as these sessions increase excitement suspense among students, as they “bring a spirit of joy, fun happiness, also contribute to improving level of skill efficiency are considered among best means for mental preparation.” (Adel Fadel Ali, 2000, 95).

Regarding control group, there were significant differences between pre-tests post-tests, favoring post-tests, as shown in Table (3). researcher attributes emergence of these differences to fact that curriculum followed by teacher number of repetitions it contained had an impact on developing students' performance in variables under investigation, as sources confirmed that " numerous repetitions practiced by learner during practical application help in acquiring learning” (Adel Fadel Ali, 2000, 95). Schmidt believes that repeated attempts are key to performance, making unexpected movements predictable timed. ( Schmidt , R.A., Craig, A., Wrisberg , 2000, 63)

In light of results in Table (3), there were statistically significant differences in post-tests between control experimental groups in psychological endurance tests some basic football skills for female students, in favor of experimental group. researcher attributes this to effectiveness of applying special exercises in raising psychological endurance, which is in favor of post-test. This gives an indication of dominance of psychological aspect through raising psychological endurance, which was reflected in skill performance reduced fear, anxiety, pressure on members of experimental group. Here, importance of using guidance methods techniques in alleviating psychological social problems that female students face is evident. (Levin) indicated that method of group activities discussions has a major role in creating an atmosphere of affection harmony, that this atmosphere helps in acquiring positive educational social values (Hamed Abdel Salam Zahran, 1980, 90). (Kamel Taha Louis, 1981, 131) believes that achieving required increase in psychological endurance for achievement leads to highlighting psychological phenomena of endurance. Psychological endurance has a decisive effect on motivation, as it affects stimulation of readiness for achievement indirectly.

Raising level of psychological resilience involves encouragement giving students impression that there is no difficulty in situations that all difficult matters can be performed better. This is what is confirmed by (Abdul Khaliq, 1984, 63) that psychological resilience is a personality trait when it is part of individual's process of adapting to his internal external environment.

Attributes superiority of experimental group over control group to nature of special exercises, which were characterized by a gradual increase in intensity a variety of performance, as well as containing educational situations that simulated real-life play conditions. This contributed to accustoming students to facing psychological pressures dealing with them with flexibility emotional stability. Also, use of encouraging methods positive reinforcement during implementation of exercises led to raising level of self-confidence motivation, which was directly reflected in psychological endurance.

Regarding development of fundamental football skills, this is attributed to reliance of specific training exercises on purposeful directed repetition, coupled with immediate feedback error correction, which helped solidify correct motor performance. Furthermore, variety of exercises use of mini-game scenarios contributed to improving ability to connect different skills apply them in match-like situations.

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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