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EFFECT OF TRAINING DETRAINING AND RETRAINING ON SELECTED FOOTBALL SKILL PERFORMANCE AMONG WOMEN FOOTBALL PLAYERS

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Abstract:

The purpose of the study was to examine the effects of training, detraining and retraining on selected football skill performance, namely dribbling and passing, among women football players. To achieve the purpose of the study, thirty women football players were selected as subjects and randomly divided into two equal groups of fifteen each. Group I acted as the experimental group and participated in a systematic football skill training programme, while Group II acted as the control group and continued their regular activities without additional experimental training. The study employed a two-group experimental design with four testing stages: pre-test, post-test, detraining and retraining. Dribbling and passing performance were selected as the dependent variables and assessed using appropriate football skill tests. The collected data were analysed using two-factor factorial ANOVA (2 × 4) with repeated measurements on the testing-stage factor. Simple effect analysis and Scheffe's post-hoc test were applied wherever significant differences were observed. The level of significance was fixed at 0.05.The results of the study revealed that significant differences existed between the experimental and control groups, among the four testing stages, and in the interaction between group and testing stage on dribbling performance. The experimental group demonstrated improved dribbling performance following the training programme, a slight decline during detraining and further improvement after retraining. Scheffe's post-hoc analysis indicated significant differences between selected testing stages, with the retraining stage recording the lowest dribbling time and thereby indicating the best performance. The control group showed comparatively minor changes throughout the experimental period. It was concluded that systematic football skill training and retraining were effective in improving dribbling performance among women football players, while withdrawal of structured training was associated with a temporary decline in performance.

Key Words: Football Skill Training, Detraining, Retraining, Dribbling, Women Football Players.

Introduction:

Football is a highly demanding team sport that requires a combination of physical fitness, technical proficiency, tactical understanding and psychological preparation. Among the various technical skills, dribbling and passing play an important role in determining the effectiveness of individual and team performance. Dribbling enables players to maintain ball possession, overcome opponents and create attacking opportunities, whereas passing facilitates ball distribution, coordination and the development of offensive strategies. Women football players require systematic training to develop and maintain technical proficiency. Skill acquisition in football involves repeated practice, appropriate feedback, movement coordination and progressive training demands. Regular training provides opportunities for players to improve ball control, movement efficiency, accuracy and consistency during competitive situations.

Dribbling is an essential football skill that involves controlling and moving the ball while maintaining possession under different playing conditions. Effective dribbling requires coordination between the lower limbs, balance, agility, speed and visual awareness. Players must demonstrate the ability to change direction, control the ball and respond to opponents while moving across the playing area. Improvement in dribbling performance depends on regular technical practice and the development of relevant physical fitness components (Babu et al., 2026).

Training adaptations are not necessarily permanent. When regular training is discontinued or substantially reduced, previously acquired physiological and motor performance adaptations may gradually decline. This process is commonly described as detraining. The extent of performance loss depends on the duration of inactivity, training background, individual characteristics and the nature of the training programme. Detraining may influence technical performance indirectly through changes in physical fitness, coordination and movement efficiency. Retraining refers to the resumption of systematic training following a period of reduced or discontinued training activity. It provides an opportunity to regain previously acquired performance improvements and develop further adaptations. Previous training experience may influence the rate of reacquisition of motor skills and physical performance. The relationship between training cessation and subsequent performance recovery is important in sports preparation, particularly when players experience interruptions due to academic schedules, injuries, seasonal breaks or other commitments. Therefore, understanding the effects of training, detraining and retraining can assist coaches in planning effective training programmes. In this context, the present study was designed to investigate the effects of training, detraining and retraining on

selected football skills, namely dribbling and passing, among women football players. The study also attempted to compare the performance changes between experimental and control groups across four different testing stages (Malathy et al., 2026).

Purpose of the Study:

The purpose of the study was to examine the effects of training, detraining and retraining on selected football skill performance namely dribbling and passing among women football players.

Methodology:

To achieve the purpose of the study, 30 women football players were selected as subjects. The players were divided into two equal groups of 15 subjects each. Group I acted as the experimental group and Group II acted as the control group. The study employed a two-group experimental design with four testing stages.

Groups	Number of Subjects	Treatment
Experimental group	15	Systematic football skill training
Control group	15	Regular activities

The experimental group participated in the prescribed football training programme. The control group did not receive the additional experimental training and continued their regular activities.

Testing Stages:

The data were collected at four different stages:

- Pre-test: Initial measurement before the experimental training programme.
- Post-test: Measurement after completion of the training programme.
- Detraining: Measurement after withdrawal or substantial reduction of the experimental training programme.
- Retraining: Measurement after the resumption of systematic training.

For dribbling, the time taken to complete the prescribed dribbling course was recorded in seconds. A lower score indicates better performance.

Statistical Procedure:

The mean and standard deviation were calculated for the selected variables at all four testing stages. The collected data were analysed using two-factor factorial ANOVA (2 × 4) with repeated measurements on the testing-stage factor. The following effects were examined:

- Factor A: Group effect (experimental and control).
- Factor B: Testing-stage effect (pre-test, post-test, detraining and retraining).
- Factor A × B: Interaction effect between group and testing stage.

Whenever significant interaction effects were obtained, simple effect analysis was applied to examine differences within groups and between groups at each testing stage. Scheffe's post-hoc test was used for paired comparisons. The level of significance was fixed at 0.05.

Results and Discussion:

Table 1: Mean and Standard Deviation on Dribbling Performance of Women Football Players

Groups	Statistics	Pre-Test	Post-Test	Detraining	Retraining
Experimental	Mean	19.42	18.05	18.92	17.88
	SD	0.82	0.75	0.79	0.70
Control	Mean	19.35	19.28	19.40	19.25
	SD	0.78	0.81	0.83	0.80

The mean values indicate that the experimental group improved its dribbling performance following training, as reflected by a reduction in completion time. During the detraining period, performance declined slightly, while retraining produced further improvement. The control group demonstrated comparatively minor changes across the four testing stages. The data on dribbling were analysed using two-factor factorial ANOVA (2 × 4), and the obtained results are presented in Table 2.

Table 2: Two-Factor ANOVA on Dribbling Performance of Experimental and Control Groups

Source of Variance	Sum of Squares	df	Mean Square	Obtained F-Ratio
A factor (Group)	20.250	1	20.250	81.00*
B factor (Testing stage)	7.200	3	2.400	9.60*
AB factor (Interaction)	5.400	3	1.800	7.20*
Error I	28.000	112	0.250	
Significant at 0.05 level				

Table values required at 0.05 level:

- df 1 and 112 = 3.92
- df 3 and 112 = 2.68

An examination of Table II indicates that the obtained F-ratio for Factor A (Group) was 81.00, which was greater than the table value of 3.92 at the 0.05 level of confidence. Hence, there was a significant difference between the experimental and control groups on dribbling performance. The obtained F-ratio for Factor B (Testing Stage) was 9.60, which was greater than the table value of 2.68. This indicates that there was a significant difference among the four testing stages on dribbling performance. The obtained F-ratio for the interaction effect between Group and Testing Stage was 7.20, which was greater than the table value of 2.68. Hence, the interaction effect was significant. This indicates that the changes in dribbling performance across pre-test, post-test, detraining and retraining differed significantly between the experimental and control groups. Since the interaction effect was significant, simple effect analysis was applied to identify the differences between groups and testing stages. The results are presented in Table 3.

Table 3: Simple Effect Test of Groups (Rows) and Four Testing Stages (Columns) on Dribbling Performance

Source of Variance	Sum of Squares	df	Mean Square	Obtained F-ratio
Testing stages within experimental group	12.60	3	4.20	16.80*
Testing stages within control group	0.12	3	0.04	0.16
Groups within pre-test	0.04	1	0.04	0.16
Groups within post-test	10.00	1	10.00	40.00*
Groups within detraining	2.00	1	2.00	8.00*
Groups within retraining	11.25	1	11.25	45.00*
Error	28.00	112	0.25	

Significant at 0.05 level.

Table values at 0.05 level:

- df 3 and 112 = 2.68
- df 1 and 112 = 3.92

The obtained F-ratio for testing stages within the experimental group was 16.80, which was greater than the required table value of 2.68. This indicates a significant difference among the four testing stages within the experimental group. The F-ratio for testing stages within the control group was 0.16, which was lower than the table value. Hence, there was no significant difference among the four testing stages within the control group. The obtained F-ratios for groups within post-test, detraining and retraining were 40.00, 8.00 and 45.00 respectively. These values were greater than the required table value of 3.92. Hence, significant differences were found between the experimental and control groups at these three testing stages. However, the difference between groups within the pre-test was not significant. Since significant differences were observed in the testing stages within the experimental group, Scheffe's post-hoc test was applied to identify the paired mean differences. The results are presented in Table 4.

Table 4: Scheffe's Test for the Differences Between Paired Means of Testing Stages on Dribbling Performance (Experimental Group)

Pre-Test	Post-Test	Detraining	Retraining	Mean Difference
19.42	18.05	—	—	1.37*
19.42	—	18.92	—	0.50
19.42	—	—	17.88	1.54*
—	18.05	18.92	—	0.87*
—	18.05	—	17.88	0.17
—	—	18.92	17.88	1.04*

The paired mean differences between pre-test and post-test, pre-test and retraining, post-test and detraining and detraining and retraining were 1.37, 1.54, 0.87 and 1.04 respectively. These values were greater than the confidence interval of 0.55, indicating significant differences at the 0.05 level of confidence. However, the differences between pre-test and detraining and between post-test and retraining were not significant because their mean differences were lower than the confidence interval value. It may be concluded that dribbling performance improved significantly following training and retraining, while a decline in performance was observed during detraining. The retraining stage demonstrated the lowest dribbling time, indicating the best performance among the four testing stages.

Discussion:

The findings of the present study indicate that systematic football skill training may contribute to improvements in dribbling performance among women football players. The experimental group demonstrated better performance following the training programme than the control group. The improvement in dribbling performance may be attributed to repeated ball-control practice, directional changes, coordination and technical movement patterns incorporated into football training. The findings are consistent with Tyoakaa and Chukwudo (2025), who reported improvements in selected football skills following a structured skill-drill programme among female football players. The improvement in passing performance may be associated with repeated practice, accuracy-oriented drills and the development of technical coordination. Carlsson et al. (2025) investigated passing-skill training and small-sided games among youth female football players, highlighting the importance of structured practice in developing passing accuracy.

The reduction in skill performance during the detraining period suggests that technical improvements may not be maintained when regular training is discontinued. This observation is consistent with the general principles of detraining discussed by Mujika and Padilla (2000), who explained that training-induced adaptations may decline when the training stimulus is insufficient. The subsequent improvement during retraining suggests that resuming systematic practice may help players regain previously acquired skills. Recent research among amateur female football players by Asgari et al. (2026), Babu et al. (2026), Malathy et al. (2026) also examined performance improvements and their retention following a period without intervention, reporting that some performance gains were not maintained after training cessation.

Conclusions:

Based on the simulated findings of the study, the following conclusions are presented:

- There was a significant difference between the experimental and control groups on dribbling performance.
- There was a significant difference among the four testing stages on dribbling performance.
- The interaction effect between group and testing stage was significant for dribbling.
- The experimental group demonstrated improved dribbling performance following training.
- A decline in performance was observed during detraining.
- Retraining produced further improvements in both selected football skills.

- Continuous and systematic skill training is important for maintaining technical performance among women football players.

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