

THE EFFECT OF COMPETITIVE EXERCISES ON DEVELOPING CERTAIN PHYSICAL AND SKILL ABILITIES OF YOUNG GOALKEEPERS IN FOOTBALL

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ABSTRACT

This study aims to investigate the effect of competitive exercises on developing certain physical and skill abilities of young football goalkeepers. The researcher utilized the experimental method with an equivalent groups design. The research population consisted of young goalkeepers from clubs in Al-Diwaniyah province participating in the Iraqi youth football league, organized by the local football federation under the supervision of the Iraqi Central Football Federation. A total sample of 20 youth goalkeepers was randomly selected. The sample was divided into two groups: an experimental group and a control group, with 10 goalkeepers in each group, selected using a simple lottery method. The researcher ensured homogeneity and equivalence across the variables studied. The training program lasted six weeks, with three training sessions per week. Statistical analyses were conducted using the SPSS software package.

KEYWORDS: *Exercises Physical and Skill Abilities.*

INTRODUCTION

The significant advances in sports training are attributed to the optimal application of training theories and methodologies, which rely on scientific and practical principles. This progress is evident in the rapid and impressive development observed globally. Sports training aims to achieve a high level of performance in specialized sports activities by improving athletes' training status based on scientifically planned approaches.

The success of a coach in the training process depends heavily on a thorough understanding of various training components and principles. This necessitates a comprehensive knowledge of the fundamentals of sports training. Selecting appropriate and organized exercises that are controllable in terms of execution speed and understanding the specific duties assigned to football goalkeepers is crucial. Effective control of training loads through planned training programs is essential to enhancing the physical and skill performance of goalkeepers, enabling them to meet the demands of matches.¹

The significance of this research lies in exploring how diverse training methods, particularly competition-style exercises, can be used to improve goalkeepers' physical and skill abilities. The study provides new insights into utilizing dynamic and competitive movement patterns in training, thus contributing to the development of young football goalkeepers' performance.

RESEARCH PROBLEM

The research problem is rooted in the observation that those responsible for football training, particularly goalkeeper coaches, need to adopt modern methods and techniques. The lack of integration of innovative approaches to improve goalkeepers' physical and skill performance highlights a gap in the training process. This research addresses this issue by introducing scientifically based competitive exercises to enhance goalkeepers' agility, speed, and skill performance. It aims to design a training program that addresses common challenges faced by young goalkeepers during matches.

RESEARCH OBJECTIVES

1. Develop competitive exercises tailored for young football goalkeepers.
2. Examine the effect of competitive exercises on specific physical abilities of young goalkeepers.
3. Investigate the impact of competitive exercises on certain skill abilities of young goalkeepers.

RESEARCH HYPOTHESES

1. Competitive exercises have a positive impact on improving specific physical abilities of young goalkeepers.
2. Competitive exercises positively affect the development of specific skill abilities of young goalkeepers.

RESEARCH SCOPE

- **Human Scope:** Young goalkeepers from Al-Diwaniyah province clubs participating in the 2024-2025 youth league.
- **Temporal Scope:** From August 9, 2023, to October 29, 2024.
- **Spatial Scope:** Football fields under the Ministry of Youth and Sports.

RESEARCH METHODOLOGY AND FIELD PROCEDURES

RESEARCH METHOD

The researcher employed the experimental method with an equivalent groups design, as it is suitable for addressing the research problem.

RESEARCH SAMPLE

The sample consisted of young goalkeepers from five clubs participating in the Iraqi youth league in Al-Diwaniyah province. The selected clubs were Al-Diwaniyah, Al-Mahnaweiah, Al-Sunnayah, Al-Ittifaq, and Al-Najma, comprising 20 goalkeepers. These participants were randomly divided into two groups: an experimental group and a control group, with each group containing 10 young goalkeepers.

TOOLS AND EQUIPMENT USED

- **Questionnaire Form:** Including both Arabic and foreign references.
- **Data Collection Form:** Measurements, tests, and personal interviews.
- **Supporting Team:** Stopwatch, Rostameter for measuring height and weight.
- **Training Equipment:** 25 official footballs, 15 flags, ropes to divide the goal into squares.
- **Platforms of Various Heights:** 30 cm, 40 cm, and 50 cm.

FORM FOR SELECTING THE MOST RELEVANT TESTS

After conducting personal interviews with experts and specialists, and documenting their opinions through a questionnaire, the researcher identified the most appropriate and effective tests for young football goalkeepers. These tests demonstrated significant agreement among experts regarding their suitability for assessing goalkeeper skills.

DESCRIPTION OF SKILL TESTS

1. Test for Accuracy in Catching High Balls and Passing Them:²

- **Objective:** To measure the skill of receiving and passing high balls in the target area.

2. Test for Receiving Side Balls Without Jumping:³

- **Objective:** To measure the skill of receiving or deflecting side balls without jumping.

3. Test for the Ability to Clear Balls Returned by Defenders:⁴

- **Objective:** To measure the goalkeeper's ability to clear balls returned by defenders.

2-6 Description of Physical Tests:

1. 30-Meter Sprint from a Standing Start:⁵

- **Objective:** To measure the transitional speed of football goalkeepers.

2. Forward Jump Over a 35 cm Hurdle:⁶

- **Objective:** To measure the explosive power of the goalkeeper's legs using a forward jump from a standing position.

TRAINING PROGRAM

The researcher developed a six-week training program tailored to the specific conditions of the sample (young football goalkeepers). The program includes three training sessions per week during the preparatory phase.

STATISTICAL TOOLS

The SPSS software was used to calculate the statistical parameters.

RESULTS

PRE- AND POST-TEST RESULTS OF THE CONTROL GROUP FOR THE STUDIED VARIABLES

Table 1. Demonstrates the mean, standard deviations, calculated t-values, and the significance of differences in the pre- and post-tests for the control group

Variables	Pre-Test	Post-Test	t-value	SIG	Statistical Significance
High Ball Catching Test	3.77 ± 0.256	4.10 ± 0.424	3.578	0.005	Significant
Side Ball Receiving Without Jumping	3.47 ± 0.31	4.81 ± 0.478	4.01	0.002	Significant
Clearing Returned Balls	3.96 ± 0.41	4.82 ± 0.39	3.67	0.001	Significant
Transitional Speed	3.53 ± 0.374	4.79 ± 0.356	3.33	0.005	Significant
Explosive Power (Legs)	3.66 ± 0.345	4.541 ± 0.312	4.26	0.001	Significant

PRE- AND POST-TEST RESULTS OF THE EXPERIMENTAL GROUP FOR THE STUDIED VARIABLES

Table 2. Demonstrates the mean, standard deviations, calculated t-values, and the significance of differences in the pre- and post-tests for the experimental group

Variables	Pre-Test	Post-Test	t-value	SIG	Statistical Significance
High Ball Catching Test	3.87 ± 0.36	6.26 ± 0.37	6.95	0.000	Significant
Side Ball Receiving Without Jumping	3.65 ± 0.41	6.39 ± 0.410	6.74	0.000	Significant
Clearing Returned Balls	3.74 ± 0.36	6.24 ± 0.34	6.03	0.000	Significant
Transitional Speed	3.46 ± 0.32	6.82 ± 0.36	6.17	0.000	Significant
Explosive Power (Legs)	3.46 ± 0.46	6.88 ± 0.42	7.32	0.000	Significant

POST-TEST RESULTS OF THE CONTROL AND EXPERIMENTAL GROUPS FOR THE STUDIED VARIABLES

Table 3. Demonstrates the mean, standard deviations, calculated t-values, and the significance of differences in the post-tests for both the control and experimental groups

Variables	Control Group	Experimental Group	t-value	SIG	Statistical Significance
High Ball Catching Test	4.10 ± 0.424	6.26 ± 0.37	5.32	0.000	Significant
Side Ball Receiving Without Jumping	4.81 ± 0.478	6.39 ± 0.410	6.98	0.000	Significant
Clearing Returned Balls	4.82 ± 0.39	6.24 ± 0.34	5.16	0.000	Significant
Transitional Speed	4.79 ± 0.356	6.82 ± 0.36	6.41	0.000	Significant
Explosive Power (Legs)	4.541 ± 0.312	6.88 ± 0.42	6.56	0.000	Significant

The results from Table 3 demonstrate that the post-test means for the experimental group significantly surpassed those of the control group. The t-values exceeded the tabulated value of 1.73 at a degree of freedom (18) and a significance level (0.05), confirming significant differences favoring the experimental group.

The researcher attributes the observed improvements in post-test performance to enhanced fast muscular power in the leg muscles, positively impacting speed and stimulating a greater number of muscle fibers. The training regimen incorporated skill-specific exercises, including zigzag running (with and without the ball), dynamic changes in direction, and exercises targeting muscle groups involved in rapid and controlled movement.^{7,8}

Furthermore, the training equipment and tailored exercises provided a motivating and engaging environment, reducing the physical and psychological load on the goalkeepers. The importance of targeted, consistent training in improving complex reaction times and physiological responses.^{9,10}

In conclusion, the comprehensive and innovative training program led to significant skill development in young football goalkeepers, enhancing their performance in both defensive and offensive roles.¹¹

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

1. The competitive drills implemented in the training program contributed to improving the physical and technical abilities of the research sample.
2. The experimental group outperformed the control group in all post-tests of the research variables.

RECOMMENDATIONS

1. It is essential to adopt the competitive drills used in the training program due to their impact on developing certain physical and technical abilities of female youth futsal players.
2. Conducting similar studies on other age groups and employing alternative training methods is highly recommended.

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