



## Effect of Pressure Training by Assisting Tools to Improve Some Skills & Physical Abilities in Junior Football Players U17

1. Dr. Jassim Majeed Judah

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<sup>1</sup> Middle Technical University  
Administrative Technical College /  
Baghdad  
sportjm66@mtu.edu.iq

**Abstract:** The research was divided into four chapters, the first one covered the introduction and significance of study. The researcher explained research importance, pointing out that it takes a lot of effort and hardship to prepare a football player on a professional level and that it is expensive to get high level of football. Specifically, by using appropriate and proper training techniques that enhance the players' skills and physical abilities and in a manner that is consistent with their position on the pitch. As a player, coach, and technical director in several clubs throughout my career in football and sports in general noticed a problem where some coaches choose not to incorporate pressure training into their training sessions or approaches, which caused a weakness in their performance accuracy and adversely affected the players' performance in the game, and that is why pressure training is crucial to develop players' abilities. The study's objectives are to use pressure training by assisting tools to help junior football players U17 to gain some skills in addition to improving their physical abilities. Additionally, to understand how pressure training by assisting tools affects junior league players U17 in terms of their skill and physical ability. As for the research hypostasis, there are statistically significant differences between the pre-post test results for both experimental and control groups, favoring the post-test. While the post-test results for the experimental and control groups show statistically significant differences, favoring the experimental group. In terms of the research sample, the human field included Al-Sinaa' Sport Club junior division players who were U17, and the study period went from 15/10/2022 until 1/2/2023. While the spatial field was Al-Sinaa' Sport Club's stadium, and the researcher utilized an experimental approach, the research sample consisted of (20) Al-Sinaa Sport Club players U17, The players were

divided into two groups. (10) for the experimental group and (10) for the control group. The researcher utilized the (SPSS) statistics programs to obtain the results. the researcher came to the conclusion that the effects of pressure training by assisting tools on junior players U17 were credible and legitimate, because of its positive impact, Therefore, the study advises coaches to pay attention to the offensive aspect of their daily training for football junior players.

**Key words:** Skills, Physical Abilities, Junior, Football.

## 1. Introduction

Research is important because its aim is to advance football. Specifically, by using appropriate and proper training techniques that enhance the players' physical abilities and skills in a manner that is consistent with their position on the field. Football is one of the most popular sports in the world, and its efforts to entice the public have increased the attendance of both spectators and players, hastening its growth. During training, the level of performance in its various aspects is dependent on the careful planning of the process and on its link with other sciences in order to enhance the player abilities to the highest levels, and there is no doubt that the diversity in skills benefits the player. According to (Christo Vikov) a player's varied motor skills are reflected in the development of their physical attributes which makes it easier for them to pick up new motor skills. Therefore there is a relationship between the player's skills and physical qualities on the one hand, and the new skills they will acquire on the other. during the match time, which is (90) minutes, the player moves on pitch of play using running at times and walking at other times, resulting in the diversity of the player's energy production systems. Thus, the nature of skill performance in football is what determined the physiological requirements and their difference according to the different rate of play during the matches, which requires the player to possess high physical abilities and master good basic skills that help the player to perform well within the field of play.

### Research Problem:

The training process to prepare the player for a professional level takes a lot of effort and hardship to get high level. It is also an extremely expensive process.

Through the researcher football career as an Ex-player, coach and technical director of several sports clubs in which, he noticed that there are coaches who do not use pressure training during sessions, which led to a weakness in the accuracy of their performance and its effects on the levels of the players in the match. Pressure training is an important factor in developing their offensive performance capabilities, which contributes to scoring goals, and that's reflected positively because of the development of their skills and physical abilities, all while uplifting scientific foundations and this helps the coaches in fulfilling their plans, and for this reason the researcher is encouraging to study the impact of pressure training by assisting tools to improve some skills and physical abilities of football players U17.

### Research Objectives

1- Preparing pressure training approach by assisting tools to improve some physical and skills abilities for junior football players U17.

2- Identify the effect of pressure training by assisting tools to improve some physical and skill abilities on junior football players U17.

### Research hypotheses

1- There are statistically significant differences between the pre-post test results for the experimental and control groups and in favor of the post-test.

2- There are statistically significant differences between the post-tests results of the experimental and control groups and in favor of the experimental group.

### Research Areas

- Samples: Al-Sinaa' Sport Club players U17.
- Time period: from 15/10/2022 to 1/2/2023.
- Spatial field: the stadium of Al-Sinaa' Sport Club.

### 2. Methodology:

In scientific research methodology is crucial, since the quality of the study and its findings are intertwined. The researcher used the experimental approach by designing an experimental and a control groups that are equivalent to suit the nature of the research.

### Research Sample:

The process of selecting a research sample and to collect data and information is important, often the researcher determine the community of his research, then he chooses a sample based on the phenomenon or problem for his research. the researcher chooses a sample that represents the original community. The sample was picked in a deliberate manner from the junior players of Al-Talaba's Football Club U17. The number of the players used in the research was (20) players and they were divided into two groups, control and experimental. the two groups were equal in skills and physicality, as well as basic skills. The experimental group training was using compound exercises on some variables (physical and skill) and their impact on the offense line in junior division.

### Physical tests:

1- 30 meter sprint test with dynamic start:

Purpose: To evaluate speed

Tools: A stopwatch and a small flag

Details: The player performs the test by jogging to the starting line, which means running a distance of 15 meter, then he sprints from the original starting line which is marked by a flag until he cross the finishing line.

conditions:

- The player performs a second attempt after all team finishes performing their test.
- Each player preforms the test individually without competition.

Recording: The player is given two attempts, the highest is recorded.

2-Vertical Jump Test:

Purpose: Measuring power of legs' muscles.

**Tools:**

- A wooden board placed on a wall or a scale on a wall with a height of 4 meters.
- A piece of chalk.

Details: The player holds the piece of chalk and then extends his arm as high as possible to mark the wall at that point then stands the side of his body is facing the wall, one arm fixed behind the body and the other hand is free and holding the chalk after that he bends his knees and jump while swinging the arm to reach the highest point he can above the chalk mark. Pay attention to push from the ground with both legs and stay stable.

conditions:

- 1- The measure starts from a meter high from the ground with 25cm line drawn vertically on the wall.
- 2- The players are given three attempts and the best score be recorded.

Recording: The distance between the line the player made in a standing position with his arm high and the mark he made when he jumped is measured and recorded.

**Skill Tests**

1- kicking the ball to the farthest distance:

Purpose of the test: Measuring kicking the ball to pass.

Tools: 2 football balls – measuring tape - 5 small flags.

Details: The ball is placed on the side goal line towards the center circle. Flags are placed at a measured distances from the starting point, when the start signal is heard, the player kicks the ball and sends it high to the farthest distance.

Conditions: The player performs this test twice for each leg, once with his right foot and again with the left foot.

Recording: the player is given two attempts with the right foot and two attempts with the left foot and we record the longest distance he gets.

duration: from (1-3minutes) approximately, and the performance is done individually.

2-Scoring accuracy test:

purpose: to measure the accuracy of the scoring skill.

Tools: A wall with drawn circle of 2m diameter, a football balls.

Details:

The starting line is drawn 12 m farther from the scoring wall then make a parallel line in front of the scoring wall at a distance of 2 m from it. On the scoring wall a circle is drawn with a diameter of 2 m. The player stands at the starting line with the ball When he hears the start signal, the player kicks the ball from a distance of 12 m towards the circle drawn on the wall.

Conditions: The player's attempt is considered successful if the ball bounced back at least 2 m from the wall.

Recording: The player is given 10 attempts and the ones where the ball hit the circle and bounces back 2m or more are the only one that get counted.

**Exploratory experiment:**

The exploratory experiment was conducted on a sample of (6) junior players from Al-Talaba Sports Club from the junior league for the football season 2022/2023 from Baghdad. The tests took place on 16/9/2022 at four o'clock in the afternoon, at Al-Talaba Sports Club Stadium, in order to know the time, it takes to conduct the tests and the difficulty the researcher may face and to know the capability of the assistant team and whether they know how to use the devices and tools, as well as the time it takes for the tests.

**Pre-tests:**

The researcher with the help of the work team, applied the compound tests (physicality and skills) on the main research sample, that includes (20) players, at exactly four o'clock in the afternoon on 17/10/2022 at Al-Sinaa Sports Club Stadium. After completing the tests, the proportionality between the experimental and control groups in the pre-tests was extracted using the (T) Test for unrelated samples.

**Prepare Pressure training exercises:**

The researcher set up the pressure training method using helping tools with some variation in (skill and function) and their impact on the development of the offensive style in the individual for the junior division under (17) years old. It was distributed over (30) training units for a period of (10) weeks from 19/10/2020 to 6/1/2023, which is a sufficient period for Changes to occur in the way the players execute certain movements and body postures. We did three training unites per week, on Sunday, Tuesday and Thursday. The training time used daily was around 40 minutes per training unit.

We must take into account The individual differences of the research sample between the players, and the differences between their abilities and levels, in terms of pressure training and using helping tools that help them acquire some skills and physical abilities in order to master the work inside the field of the stadium as well as relying on some references and scientific sources in the science of sports training and the rest of the sciences as well as the opinions of experts and football specialists. The research also relied on the principle of "gradation in training loads" and how to use them optimally for exercises as a way to increase the intensity in performance from easy to difficult within the curriculum prepared by the researcher. The curriculum that was prepared by the researcher is set according to an accurate and thoughtful scientific information to help players master the qualities of basic football skills in the beginning of the execution of the exercises down to increase the ability and potential of the players and show their levels of performance during the match.

**Post-tests:**

The researcher conducted tests after the completion of the executing the training intervention method on some functional and skill variables and their impact on the development of the offensive style in the individual on 8 / 1/2023. The researcher made sure to match the conditions and place used to implement the post-test for the pre-test as much as possible.

**Statistical methods:** The researcher used the (SPSS) statistical program to process the data obtained.

1. Mean
2. Standard deviation
3. Pearson correlation coefficient
4. Tests (T) for independent samples
5. symmetrical samples tests
6. Percentage.

### 3- results:

This section included a detailed presentation of the results of all the tests in the research, and these results were analyzed through the applied procedures carried out by the researcher to get the results that were processed in the statistical tables

Presentation of Mean, standard deviation, the calculated (T) and the statistical significance for pre-tests of the Physical tests for the sample.

Table (1) shows the Mean, standard deviation, calculated (t) and significance differences for pre-tests for physical & skill variables for the control & experimental groups.

**Table (1)**

Pre-test Variables	Group	N	Mean	St.d	Std. Error mean	Average differences	St.d error	Calculated (t)	Fre. degree	Sig.
Running 30m	Experimental Group	10	7.5000	.84984	.26874	.231	.820	.10000	18	.43333
	Control group	10	7.6000	1.07497	.33993					
Vertical Jump	Experimental Group	10	1.9510	.07015	.02218	-1.784	.091	.08500	18	.04765
	Control group	10	2.0360	.13335	.04217					
Kicking the ball to the farthest distance	Experimental Group	10	37.0000	3.23179	1.02198	.396	.697	.60000	18	1.51438
	Control group	10	37.6000	3.53396	1.11754					
accuracy	Experimental Group	10	1.4000	.51640	.16330	.447	.660	.10000	18	.22361
	Control group	10	1.3000	.48305	.15275					

$0.05 > \text{Significant}$

### Discussion of The Physical Test

Through the presentation and analysis of the results, we found significant differences between the physical tests, The 30m sprint test, the vertical jump test (Surgent test) the pre- and post-tests and in favor of the post-test for both the experimental group and the control group, despite the different exercises that the two groups went through, which indicates that there was a change in this variable after the main experiment and the researcher attributes this change in the control group to the approach that the coach implemented. The aim is to enhance the level of the player depending on his field experiences and since football needs these physical characteristic to elevate the player's level and make him gain the ability to run with or without the ball or jump during the match. As for the development in the experimental group the researcher attributes this development to a new training method, referring to pressure training method with the assisting tools that was prepared by the researcher, by continuing the process of training according to an accurate scientific facts that are based on the science of training and other sciences, which enables the player to improve his level because these exercises are scientific and the training load is distributed equally. Since the game of football requires the player to make different movements for the purpose of mastering physical qualities and the use of these exercises helped the sample to improve, which benefits the players in developing their potential using pressure training with assisting tools to apply what he learned from the approach. Repetition leads to mastering the exercises quickly and elevate the ability of the player physically, which is considered a weapon in pitch.



Table (2) shows Mean, standard deviation, calculated (t) and significance differences the post-test for physical & skill variables for control & experimental group.

**Table (2)**

Post test	Group	Mean	N	St.d	Std. Error mean	Average differences	differences deviation	St.d error	Calculated (t)	freedom degree	Sig.
Running 30m	Con.	7.5000	10	.84984	.26874	6.9921	.22111	1.9001	6.332	9	.000
	Exp.	6.1000	10	.56765	.17951						
Vertical Jump	Con.	1.9510	10	.07015	.02218	.14518	.04591	.01715	-2.636	9	.027
	Exp.	2.0720	10	.20719	.06552						
Kicking the ball to the farthest distance	Con.	37.0000	10	3.23179	1.02198	2.40370	.76012	-3.2805	-6.578	9	.000
	Exp.	42.0000	10	2.74874	.86923						
accuracy	Con.	1.4000	10	.51640	.16330	.51640	.16330	-1.03059	-8.573	9	.000
	Exp.	2.8000	10	.42164	.13333						

*0.05 > Significant*

### Discussion of the skill test

Through the presentation and analysis of the results we found significant mental differences between the pre- and post-tests result and in favor of the post-test for both the experimental and control group, despite the different exercises that the two groups went through. There was an improvement in the post-test for both groups. The researcher attributes this improvement in the control group to the curriculum that the coach implemented, which aims to improve the player's skills concerning the game of football as well as the player's efficiency. As for the development in the experimental group, it's due to the approach that was adopted in this study by researcher. This approach relies on the science of modern training techniques which helps the player during the match and minimize his mistakes throughout. it also helps them focus more and speed up their performance. This approach improves their playing level and their potentials in a way that compatible with science of training and other sciences. All of that assist the players with enhancing their skills in addition to mastering the basics which might help the players to lessen their mistakes on the field in a way that is designed to fit the game of football.

Table (3) shows the statistical parameters and the calculated (t) and the significance level of the pre- and post-tests of the physical test for the control group.

**Table (3)**

variables	Test	Mean	N	St.d	Mean Std.Error	Average differences	Differences Deviation	Difference St.d error	Calculated (t)	Free. Degree	Sig.
Running 30m	pre	7.6000	10	1.07497	.33993	.56765	.17951	.50607	.30607	9	.591
	post	7.7000	10	.67495	.21344						
Vertical Jump	pre	2.0360	10	.13335	.04217	.03765	.01191	.05894	.00506	9	.025
	post	2.0680	10	.13935	.04407						
Kicking the ball to the farthest distance	pre	37.6000	10	3.53396	1.11754	3.43188	1.08525	-3.45502	1.45502	9	.381
	post	38.6000	10	2.87518	.90921						
accuracy	pre	1.3000	10	.48305	.15275	.31623	.10000	1.12622	.67378	9	.000
	post	2.2000	10	.42164	.13333						

*0.05 > Significant*

### Discussion: Physical test

The differences between the post-tests were statistically significant between the experimental and control groups and in favor of the experimental group. The researcher believes that the development in physical performance is the result of exercises prepared by the researcher for training, which contributed to raising the players' physical ability, which had a major role in the development of players through the approach prepared by the researcher. That helped to develop the players' endurance during the time of the match and achieve victory. Since the game of football is constantly evolving in terms of speed and performance, especially physical, which is the key to winning every match. And the analysis of the results shown in the tables shows that there are differences in the experimental and control variable, which indicates a development in the physical aspects and the impact of exercises in the style Pressure training using helping tools and for the benefit of the experimental group. The researcher attributes this significant development to the quality of the exercises used, which contained a group of rapid exercises, as the researcher used the method of pressure training during the training units, which worked to increase the confidence of the players in the match. Football depends on physical abilities, which leads to the improvement of training time for players and the development of their physical potential, which helps players to reduce errors on the field in order to achieve their goal.

Table (4) shows the statistical parameters and the calculated value of (t) and the significant level of the pre- and post-tests of the skill test for both the experimental and the control group

**Table (4)**

Post-test variables	Groups	Mean	N	St.d	Std. Error	Calculated (t)	freedom Degree	Sig.
Running 30m	Experimental	10	6.1000	.56765	.17951	-5.737	18	.000
	Control	10	7.7000	.67495	.21344			
Vertical Jump	Experimental.	10	2.0720	.20719	.06552	.051	18	.960
	Control.	10	2.0680	.13935	.04407			
Kicking the ball to the farthest distance	Experimental	10	42.0000	2.74874	.86923	2.703	18	.015
	Control.	10	38.6000	2.87518	.90921			
accuracy	Experimental	10	2.8000	.42164	.13333	3.182	18	.005
	Control.	10	2.2000	.42164	.13333			

$0.05 > \text{Significant}$

### Discussion of Skill Tests and Post-tests:

Through the presentation and analysis of the results of the tests shown in the table, statistically significant differences appeared, which indicates a clear development in the endurance of the players and the researcher attributes the reason for this development to two reasons, the first reason is the nature of the exercises prepared in the training curriculum placed within the foundations of the process while taking into account the realizing of tactics depending on the type of sport practice.

Through the presentation and analysis of the results we noticed significant differences between the kicking the ball farthest distance test and the accuracy of aiming test for the pre- and post-test and in favor of the post-test and for both the experimental and control groups, despite the different exercises practiced by the two groups, which indicates the development of this variable after the main experiment. The researcher attributes his development of the skill variable for the control group, to the curriculum that the coach implemented. which aims to develop the player's level and these basic skills are a necessity in football. As for the development in the experimental group, the researcher credits this improvement to the new training method that was used by him. The training method in question is Pressure Training with the aid of helping tools. This approach helped him develop the experimental



group during the research period with the help of a well-studied and distributed approach according to the precise science by the researcher. The development is also due to continuing the training process organized scientifically to improve performance. The player acquires the ability to develop his skill in line with the tactical side. These exercises helped the members of the research sample to develop, the players benefitted from during their performance, which positively affected the improvement of their level. This improvement comes using training technicians a lot of repetition, which is needed for the long passing and shooting accuracy drills. All of this increase the player's skill susceptibility and optimize his mentality, because scoring needs accuracy and speed and to move the ball quickly to reach the area of the opponent's defenses.

#### 4- Conclusions:

- 1- Pressure Training has an impact on some skill and physical variables. The researcher used it with positive results in the development of the offense line of junior football players.
- 2- The Pressure Training method that the researcher used led to the development of the right foot much more than the left foot in terms of strength and speed, as well as developing the accuracy of shooting.
- 3- When the players master offense it will help to develop more complex offensive plans for the opponent.

#### 5-Recommendations:

- 1- Emphasize the use of pressure training and give it great importance in their training approach, especially in pre-season and competitions of different age groups in football to improve offense.
- 2- Focus on the development of physical and skill abilities as it is the basis for building skill performance and tactical side.
- 3- Paying attention to building basic skills according to fundamental science, which saves time and effort and improves the offensive performance in all its forms better.

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