The Effect of Stress-Playing Style Exercises on the Development of Some Biomotor Abilities of Young Football Players

Qasim Muhammad Ali Hazim[1], Ahmed Abdulameer Hamzah[2]

[1]Ph.D. Student, [2]Prof. Dr., Faculty of Physical Education and Sports Sciences/ University of Babylon, Iraq

Abstract

The football game has witnessed a great development in terms of the speed of play, possession and pressure on the ball carrier. Those involved in the game have to keep pace with this development through the use of integrated training programs that contain basic and advanced exercises that take care of most details of the game in addition to paying attention to the physical and movement that the player needs during the performance, such as Strength, speed, endurance, flexibility, ability, agility, coordination. and what is associated with it, especially during defensive or offensive football performance, which contributes to controlling the course of the game. The importance of the research is that it is a research attempt that is concerned with consolidating the idea of a stress playing style in the reality of Iraqi clubs and teams training through this defensive method to achieve the desired goal, as well as experimenting with the use of defensive exercises characterized by rapid application and high accuracy together, and to know the extent of the impact of exercises in the style of compressive play on the development of some biomechanical capabilities of young football players in a step aimed at strengthening the sports field with practical experiments and service to researchers in the sports field. The research aims to identify the impact of exercises with a stress playing style on the development of some biomechanical capabilities of young football players. The researchers identified the research community, who are the (23) players of the Al-shuohda football Club, and the research sample was chosen by a random method (lottery) of (10) players, appropriate statistical means were used to find differences in the pre and post-tests. The researchers came out with the following conclusions: Compressive play style exercises developed some biomechanical capabilities (movement speed, agility and compatibility) for the experimental group under discussion, compressive play exercises simulated the player for the same conditions of the match.

Keywords*: Development, Biomotor abilities, young, effect.*

Introduction

The football game is the same as other games that depend mainly on the biological capabilities, which are the basis that enables the player to demonstrate his skill and planning capabilities, whether defensive or offensive, and in a manner consistent with the style [1] of playing the team and the formation implemented by the team on the field and these capabilities are the basis on which they are based The rest of the aspects are success in achieving the desired goal that the coach and the players seek to achieve.

From the foregoing, we see the necessity of using modern methods and methods in the process of sports training, as well as playing with modern methods that can serve the method that the coach [2] deems appropriate during the competition, especially with the diversity of methods used by competitors, and from here lies the importance of research as it is a research attempt concerned with establishing the stress-playing style in the reality of the training of Iraqi clubs and teams through this defensive method to achieve the desired goal, [3] as well as experimenting with the use of defensive exercises characterized by rapid application and high accuracy together, and to know the extent of the impact of exercises in the style of compressive play on the development of the most important biomechanical capabilities of young football players in a step aimed at strengthening the sports field with practical experiments and

a service for researchers in the sports field [4].

Research problem:

The football game is in continuous development and this development came as a result of modern methods based on scientific foundations through studies, research, analysis and correct planning and did not come in vain or random, and that these methods have significantly and remarkably developed the performance of the teams, some of which focus on attack and some that focus on defense Some of them focus on offense and defense, according to what each team has, among the methods that have emerged in recent times is the stress playing style, which made a clear shift for the teams that used it in terms of results in the local league or external participations, one of the teams that used this method is the English club Liverpool, led by German coach Jürgen Klopp, who was known for this style in the 2015 season in the English League and through the experience of the two researchers, being two former players in the Iraqi Premier League and holding the (C and B) asian football tournament, and through his follow-up to the Iraqi Premier League and the Iraqi teams, he did not use the pressurized style of play as a style he is famous for in local or foreign competitions. Rather, it is used poorly during competitions and matches, as well as using traditional methods in the process of developing the physical side of the players the researchers decided to prepare exercises using a stress playing style and to know their effect on some of the biomotor abilities for young football players.

Research objectives:

- Preparing stress-playing style exercises to develop some biomotor abilities for young football players.

- Identify the effect of stress-playing style exercises on the development of some capabilities of young football players.

Research hypotheses:

- Stress-playing style exercises have a positive effect on the development of some biomotor abilities for young football players.

Research fields:

The human field: Young players Al-shuohda club football.

Time field: From 15/12/2019 to 16/5/2020.

Spatial field: The Al-shuohda Club Sports Stadium - Waist Governorate.

Research methodology and field procedures:

Research Methodology:

The researchers used the experimental approach to design the one experimental group with standard pre and post-test that are compatible with the nature of the research problem, and to achieve the desired goals

Community and sample research:

The research community included the youth of the Martyrs Sports Club in football, whose number is (23) players. The research sample was chosen by a simple random method (lottery). The number of the research sample was (10) players, and it constituted 43.47% of the research community.

Homogeneity of the research sample:

The researcher conducted homogeneity for the sample members in terms of height, mass, age, training age, and the physical research variables.

Table (1) Show the homogeneity coefficients of the research sample in (length, training age, mass, and the research variables) for experimental group.

N	Variables	Measuring unit	Mean	Std. Deviation	Levine	Skew ness
1	Length	cm	171.00	2.943	0.1	0.512
2	Mass	Kg	69.500	6.650	0.41	0.811
3	Training age	Month	53.88	4.272	0.511	0.624
4	Agility	second	25.465	1.923	0.393	0.411
5	Motor velocity	Number	28.80	2.740	0.514	0.929
6	Coordination	second	7.133	0.476	0.055	0.045-

The table shows the homogeneity of the variables, as the values are confined to (± 1) in the torsion coefficient, and the coefficient of Fen was greater than the level of significance (0.05).

Devices, tools and means used in the research:

Means of data collection:

- Arab and foreign sources and the internet.
- Personal interviews.
- Tests and measurements.
- Note.
- Special forms for recording test results for players.

Tools and devices used:

- football yard .
- (15) footballs.
- Small goals, number (4).
- Number of suppression (20).
- T-shirt or exercise shirt, count (10).
- Number (1) whistle.
- One stopwatch.
- (8) collars.
- A height of 1.5 sign (5).
- Burke.
- camera.
- Calculator for (Lenovo) laptop type, (1).
- A Chinese electronic device for measuring height and weight.
- Office tools (papers and pens).
- A tape measure (40 meters)..

Field research procedures:

Determine the tests for the skills studied:

Kinematic velocity test for two legs:[1]

Agility Test:[2]

Circuits Numbered Test:[3]

The first exploratory experience: The two researchers conducted the exploratory experiment and its purpose.

- In order for the two researchers to identify the suitability and suitability of the tests for the research sample.
- Identify the appropriateness of the exercises prepared by the researcher.
- In order to identify the most important obstacles that may face the researcher in using these exercises.
- To know the time required for the exam as well as the arrangement of search tests.
- Explanation of the duties of the assistant work team for the tests that will be conducted.
- Legalizing the training loads for the exercises of the curriculum prepared by the researcher.
- Knowing the time of exercises prepared by the researcher in the main part.

Pre- tests:

The pre-tests for the research sample (experimental group) for biomechanical abilities were conducted on Sunday 5/1/2020 at three in the afternoon at the Al-shuohda Club Stadium.

Main experience:

The two researchers, after reviewing the scientific sources and previous studies, prepared exercises in the style of stress playing, which aim to develop biomechanical abilities, and these exercises would be in line with and in conformity with the nature and conditions of football matches, they will be distributed in the training units appropriately, taking into account the components of the training load (intensity, size and comfort) so that these exercises are able to achieve development in the biomechanical abilities in football.

These exercises will be applied during the start of the main experiment as follows:

- The number of training units is three units per week.
- Training days during the week will be (Saturday, Monday, Wednesday).
- The number of weeks is (8) weeks.
- The total units are (24) training units.
- The exercise time is from 25 to 30 minutes from the main part.

Post-test:

After completing the main experiment, the post-tests of the research sample related to biomechanical abilities were conducted on Saturday 3/14/2020 at three in the afternoon for the experimental group and in the same conditions that took place in the pre-tests.

Statistical methods used:

- Mean.
- Skew ness
- Percentage Law.
- Std. Deviation.
- (T) test for symmetric samples.
- Levine.

Presentation, analysis and discussion of results:

In order for the two researchers to reach the goals of his research, and to achieve his hypotheses, he presented the arithmetic means and standard deviations in explanatory tables after performing all the necessary statistical operations, in order to facilitate the process of observing the results, and a comparison between the experimental group in tests (pre and post) according to precise scientific foundations, in order to achieve the objectives and hypotheses of the research, by identifying the effect of exercises in the style of compressive play on the development of some biomotor abilities of young football players.

Presentation and discussion of the results of the tests for the biomotor abilities of the experimental group.

Table (2) show the arithmetic mean and standard deviations of the pre and post-tests, the calculated (t) value, the level of significance and the significance of the differences in the values of the variables for the biomechanical capabilities of the experimental group.

N	Variables	Measuring unit	Pre-test		Post-test		Value (T) Calculated	Difference means	Standard error	Level sig	Type sig
			Mean	Std. Deviation	Mean	Std. Deviation					
1	Motor velocity	Number	28.80	2.740	37.40	3.470	5.763	8.60	4.718	0.000	Sig
2	flexibility	Second	25.465	1.923	21.472	2.099	4.374	3.993	2.887	0.002	Sig
3	coordination	Second	8.133	0.476	6.322	0.804	5.407	1.811	1.059	0.000	Sig

At a degree of freedom (9) - a level of significance 0.05, and the tabular value of (t) = 2.262

It is clear from table (2) that:

The researchers attribute the reason for the development to the nature of the exercises for the experimental group. The exercises used by the researchers, stress playing exercises, have effectively contributed to the development of the biomechanical abilities of the experimental group players, as the use of stress playing exercises by the experimental group and in the main section of the training unit had a clear impact on the development of the physical variables under study, as the main section contained exercises prepared by the researchers, which was a new method that removed the boredom that dominated the players as a result of using the exercises The usual, as well as the training method used that had a great impact on developing physical abilities as it led to the players' rush to perform their exercises seriously and with great interaction as a result of competition and pleasure in performing their exercises which were similar to the conditions of competition in addition to the use of the scientific method in the application of exercises in terms of intensity, repetitions, rest and number groups and exercises in the main section of the training unit, the advantage of this method is that working in it is similar to the nature of specialized activity in many situations, and this method aims to develop the physical, skill or tactical elements in football [(4)]. The use of these programs and the exercises they contain similar to the situations and situations that occur during the match have a positive impact on the players of the experimental group as Dellal, et al2012 indicates that these exercises are a way to frequently incite players to situations that they may encounter during matches and permanently expose the players For these situations, it helps them develop their physical, skill and planning abilities and also helps them in developing their ability to make correct decisions while playing [(5)].

Conclusions and recommendations:

Conclusions:

- The stress play style exercises developed some of the biomechanical abilities (movement speed, agility, and compatibility) of the experimental group in question.

- Playing stress exercises worked to simulate the player the same conditions of the match.

Recommendations:

- Teaching and training novices and juniors the style of stress playing, which is appropriate for each stage, to be a basic base for them in the future.

- The use of stress playing style in the development of skill and planning performance.

- Conducting other studies and research using stress play and on various football centers and samples.

Financial Disclosure: There is no financial disclosure.

Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved and all experiments were carried out in accordance with approved guidelines.

References

1. Hassanein MS. Measurement and Evaluation in Physical Education and Sports, C1, 3rd Edition, Cairo, Arab Thought House. 1995.
2. Allawi M, Radwan M. Kinetic Performance Tests. 3rd Edition: (Cairo, Arab Thought House). 1994.
3. Abu Zaid I. Planning and the scientific basis for building and preparing the team in the Group Games, Alexandria, Knowledge Facility. 2007.
4. Dellal, A. "Small-sided games versus interval training in amateur soccer players: Effects on the aerobic capacity and the ability to perform intermittent exercises with changes of direction". J Strength Cond Res. 2012.
5. Allawi M. Encyclopedia of Sports Games, 3rd Edition, Cairo, Dar Al Maaref. 1983.