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The Role of Sports Training in Developing the Player's Goal Scoring Skills and Knowing Future Results

Hussein Ali Abdyasir*

Al-Furat Al-Awsat Technical University

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*Correspondence: Hussein Ali Abdyasir
Email: hussien.yasir.iku@atu.edu.iq

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Abstract: This study aimed to know the direct effect of sports training on players according to scoring goal and the predictive value of scoring goals for the age group ranging from 13 to 18 years were divided to two groups, 40 samples and 40 comparison group. It focused on the programming process or practical principles of sports training and the relationship of the physical aspect and its connection to the physical and skill aspects, and the use of the content of traditional training with and without the ball. The coaching profession is considered to be the organization and management of the sports educational experience to become an applied experience for the sports coach. It is a profession that depends first and foremost on individual competence and the ability to impose discipline, which must be present in the coach before working in this profession, so that he must have a high ability to understand training and how to use methods, techniques and technical procedures related to organizing and directing the players' experiences. The data for this study was collected and analysed using the statistical analysis program SPSS IBM Soft 22.0 where several measures were addressed to determine the type and strength of the statistical relationship between the two groups. After presenting and submitting the results, we concluded the following: there is a weak direct relationship between the first group, which included samples, and increased goal scoring skill, there is a strong direct relationship between basic skills and physical abilities, which is linked to the sports performance of players with the amount of goals scored, there is a strong direct relationship between Assessment outcomes of study according to Expected Goals (xG) With scoring goals in the future.

Keywords: Expected Goals (xG), Scoring, Assessment, Goals, Physical, Sports Training

Introduction

The planning of the training of young people in different sports activities has become a necessary means to improve the situation of the players (Côté & Gilbert, 2009; Cushion et al., 2003; Gilbert et al., 2006), since the great scientific progress in training methods and numbers of players is based on the sample facts provided by various other sciences, whether in the field, psychological, social or technological, which have led to the improvement of the implementation of the training process (Hill-Haas et al., 2008; Jones et al., 2003; Jowett & Wylleman, 2006).

The principles governing entry to the port are general guidelines that draw on the experience of port cities, and particularly on the fields of education, psychology and biology. It is important to interpret these principles as guides and not dogmas that must be applied in all situations (Baggini, 2018; Balagué et al., 2017; Bocchi et al., 2014). Exceeding the maximum number of allowable tolerances can have significant effects, which can be directly transmitted to the health of those receiving training (Bowes & Jones, 2006). It is crucial to maintain awareness of thresholds and limits during athletic training (Bruineberg & Rietveld, 2014). A single athlete may adjust their thresholds over one or more seasons, elevating their stimulation threshold as their body adapts to the training. This is a necessary aspect of objective athletic training (Button et al., 2020).

Therefore, when using these training methods, the researcher focuses on developing physical and skill aspects in conditions that enable easy access to performing the skill in an atmosphere that emulates competition. (Coutinho et al., 2016) However, this approach is not applied in training programs for coaches of the youth sector (Davids, 2014; Denison et al., 2019). Despite the crucial role of introductory games in enhancing physical abilities and specific basic skills, due to their diverse motor performance, effort, and emphasis on practicing the best ways to implement sports skills (Dunwoody, 2006; Henriksen & Stambulova, 2017).

The previous study insights into the role of sports training in developing goal scoring skills in different sports where focuses on handball and finds that a skillful training curriculum significantly influences the development of shooting skills in young players (Ives et al., 2021).

The effects of meditation and relaxation techniques on goal scoring skills in soccer players and reveals significant improvement in goal scoring skills among the experimental groups where Wilson (2020) examines the relationship between dribbling speed and goal-scoring success in junior soccer players, finding positive associations between dribbling speed and goal-scoring ability and Lastly (Hoffman, 2014), Hoffman, J., 2014 investigates the effect of Sports metrics Soccer Training on landing error scoring systems (LESS) and dynamic balance in soccer players, aiming to prevent injuries and improve performance. In summary, these papers collectively suggest that specific training curricula, including skillful training, meditation, relaxation techniques, and Sports metrics Soccer Training, can contribute to the development of goal scoring skills in various sports (Lobo et al., 2018; Lopez-Felip & Turvey, 2017; Potrac et al., 2012; Sullivan et al., 2021).

From this standpoint, the problem of the study emerged, represented by the following general question: Does using and planning different training methods play a role in developing the player's goal scoring skills (Renshaw & Chow, 2019; Ribeiro et al., 2019).

Through this study, we aim to:

a) Establishing an advanced training program aimed at developing some of the physical attributes and basic skills of football players.

In addition to that, knowing the direct effect of these characteristics on physical characteristics and knowing the predictive results for the samples of this study.

Methodology

This study was based on the design of the experimental approach, through the use of two groups represented by the sample and comparison, and this approach was relied upon because it is compatible with the functional objectives that were identified in this study, which are represented in a population and the research sample of players in the city of Najaf in the period from March. From 2022 to March August 2022, 80 players were collected between the ages of 13 to 18 years. They were divided into two groups, 40 samples and 40 comparison groups

A. Research hypothesis

Based on the presence of a statistically significant difference between the first group and the second group in the level of scoring accuracy. Tests used in research:

a) Running and changing direction
b) Jumping
c) Deception and camouflage with the body:
d) Basic skills with the ball
e) Receiving the ball
f) Shooting on goal
g) Shoot 8 balls
h) Expected Goals (xG)

B. Statistical analysis

The data was collected and analysed according to the statistical analysis program SPSS IBM Soft 22.0, where several measures were addressed in this study to determine the type of statistical relationship in addition to the strength of the statistical relationship between the two groups. The validity of the tests and measures to the research variables was also calculated.

Result and Discussion

Table 1. General Characteristics of Sample (80 Players)

Variable	Sample	Comparison	P value
Age (m±sd)	15.7±1.3	16.1±1.5	0.838

Variable	Sample	Comparison	P value
Weight	59±6.6	58.3±4.4	0.03
Height	169±4.3	167.3±3.2	0.747

Table 2. Outcomes of Samples According to Primary Test

Variable	Sample	Comparison	P value
Running the Curves	8.57±0.12	9.11±1.1	0.032
50m running test	7.7±1.2	8.8±1.2	0.01
Dribbling test around the field	6.9±0.89	7.7±0.87	0.66
Evasion test	7.11±0.77	8.2±0.99	0.055
Head-up test	6.99±0.55	7.2±1.4	<0.01
Forward movements without the ball	6.7±0.75	7.3±1.4	<0.01

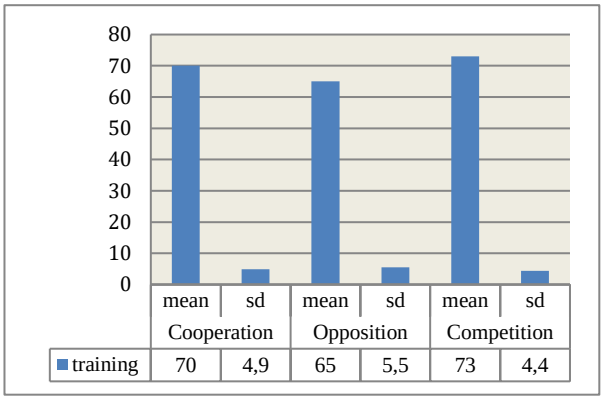

Figure 1. Secondary Outcomes of Study according to Training and Drill Items

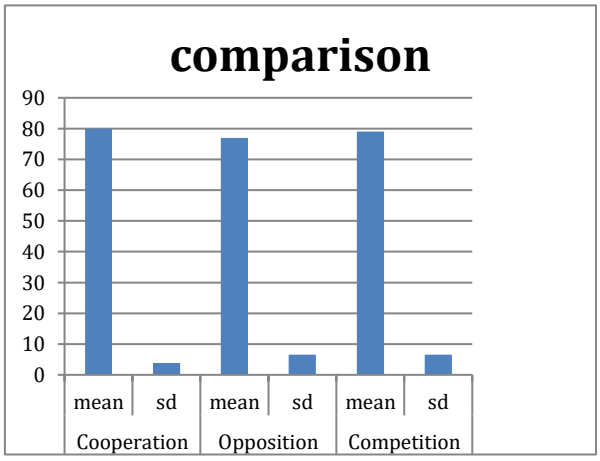

Figure 2. Secondary Outcomes of Study according to Training and Drill Items (Group Comparison)

Table 3. Evaluating the Results According to Methods for Measuring the Scoring Skills of Football Players

Variable	Sample	Comparison	P value
Goals from every 8 shoot	2.2±0.8	2.9±0.5	0.98
Scoring opportunities that the player converts into goals (8 match)	1.1±0.45	1.5±0.77	0.045
Contributing to the goal scoring process (8 match)	2.2±0.33	2.5±1.11	0.01
The average time it takes a player to score a goal	66.3±4.4	54±6.2	<0.05

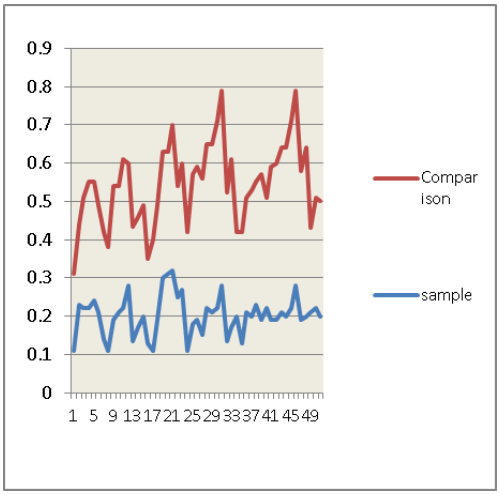

Figure 3. Assessment Outcomes of Study according to Expected Goals (xG)

Table 4. Final Results Related to Player Statistics after Applying Modern Training

Variable	Sample	Comparison	P value
Commuting distance	5.3±1.1	6.1±0.99	<0.01
Number of launches	40.3±3.9	50.2±3.2	0.001
Vertical jumps	2.9±0.8	3.1±1.1	0.09
Struggle for the ball	19.1±5.5	25.2±3.3	0.02987
Number of passes	30.5±2.2	35±3.9	0.044
Number of times the ball is monitored	20.9±2.87	28.2±3.99	<0.01
Number of quirks	2.33±1.22	3.34±0.8	0.048

Table 5. Assessment Correlation between 2 Groups according to Expected Goals (xG)

Value	Positive results	Sample	Comparison
R correlation	1:0	0.1	0.93**
sig	--	0.5	0.01
n		80	

Discussion

This study discussed the role of the effect of training on the player's scoring contributions, in addition to knowing the prediction results for football players. In this study, 80 eyes were collected and divided into two groups, the pre-group and the comparison group, who were subjected to advanced training processes, and the average work rate in this study was Ranging from 13 to 18 years. In Table Two, note the superiority of the second group (comparison) in all stages and training elements, which included running, dribbling evaluation, and how to choose a recording center.

Our study has consistently shown a strong relationship between dribbling ability and goal-scoring success in soccer where we found that faster dribbling speed was significantly associated with higher goal-scoring success while other studies both highlighted the importance of speed and agility in improving dribbling ability which Further supported these finding our study demonstrating the validity and reliability of a dribbling agility test in evaluating dribbling performance in young soccer players. These studies collectively suggest that enhancing dribbling all over the field, particularly through improved speed and agility, can lead to more successful goal-scoring opportunities.

Our outcomes has shown that a combination of speed and power abilities, particularly straight sprints and jumps, are crucial in goal situations in professional football which Individual attacking actions leading to goals also rely on motor skills, with significant associations found between lower limb use, foot contact zones, turn direction, and body orientation where Creativity also plays a significant role in goal scoring, with more creative actions closer to the goal and in the lead-up to the shot being associated with greater success.

In this study, several elements were relied upon to measuring the scoring skills of football players It consisted of the following:

a) Goals from every 8 shoot
b) Scoring opportunities that the player converts into goals (8 match)
c) Contributing to the goal scoring process (8 matches)
d) The average time it takes a player to score a goal

Our finding has explored different methods for measuring the scoring skills of football players

Where these variable above which used to assess choice reaction time, pass skills, and agility, finding that these skills did not necessarily correlate with playing in higher leagues and emphasized the importance of cognitive, perceptual, and motor skills in soccer

performance, but noted the need to consider factors such as cost and validity when choosing assessment methods.

Through testing the strength of the statistical relationship, it was noted that there are statistical differences at all levels in relation to the comparison group and their relationship with the amount of goal scoring, where a positive direct relationship was found. This indicates the strength of physical training and its clear effect in developing positive aspects.

These differences in the scores of the experimental sample, that is, for the members of the experimental group, may be attributed to the training program the proposal, using different training methods and planning the programmed training within its folds in order to develop and enhance the the physical qualities and basic skills of the soccer players in the experimental group, compared to their teammates in the control group Which I keep as a group as a witness to the developments taking place.

In Figure 3, we evaluate the results of different programs through the use of Expected Goals (xG).

The XG rule, also referred to as expected goals, has become a crucial concept in football science. Coaches have recently adopted this rule to enhance their team's scoring ability.

XG provides a more comprehensive and stimulating outlook on the game. As supporters long for a stronger tie with their preferred teams and players, these data-led characteristics enable them to fully engage with the tactical intricacies and exhilarating events that render sport truly exceptional.

When assessing a team's chances of scoring goals, the XG rule relies solely on numerical data, specifically 0, 1, and values in between, to objectively evaluate the significance of each opportunity. This eliminates subjective assessments and promotes clear, concise language with a logical flow of information.

According to previous study we have explored the use of Expected Goals (xg) in football to assess player and team performance where Hewitt (2023) developed a machine learning model to predict xg values, outcomes that more attacking players tend to accumulate higher xg. This was further supported by Mead (2023) who show value of xg in predict team success and develope model performance. Rathke (2017) focused on the factors associated with xG, highlighting the importance of shoot distance and angle. These studies collectively suggest that xG can be a valuable tool in assessing the performance of football players and teams.

Conclusion

The impressive growth of international sport can be attributed to significant scientific advances in sports training methods and principles, as well as the physical, technical and psychological preparation of athletes. These advances are based on scientific facts provided by various relevant fields of study, from which coaches and athletes can benefit by refining their training processes. An essential aspect of this process is the establishment of a robust and comprehensive foundation for sports performance.

We conclude there are statistically significant differences between the players of the control group and the players of the experimental group in the post-measurement and it emphasizes the role of planning in modern training in developing basic skills and related physical attributes in the game of football for the players in the experimental sample.

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