



P-ISSN: 2394-1685
E-ISSN: 2394-1693
Impact Factor (RJIF): 5.38
IJPESH 2023; 10(3): 342-346
© 2023 IJPESH
www.kheljournal.com
Received: 04-01-2023
Accepted: 07-02-2023

Riyadh Alsaeed
College of Physical Education
and Sport Science, University of
Basrah, Basrah, Iraq

Yousif Hasan Khalaf khalf
College of Physical Education
and Sport Science, University of
Basrah, Basrah, Iraq

Wael Alaboudi
College of Physical Education
and Sport Science, University of
Basrah, Basrah, Iraq

Lamyaa Aldywan
College of Physical Education
and Sport Science, University of
Basrah, Basrah, Iraq

Zainab
College of Physical Education
and Sport Science, University of
Basrah, Basrah, Iraq

Kadim
College of Physical Education
and Sport Science, University of
Basrah, Basrah, Iraq

Corresponding Author:
Riyadh Alsaeed
College of Physical Education
and Sport Science, University of
Basrah, Basrah, Iraq

International Journal of Physical Education, Sports and Health

Biomechanical analytical study of some obstacles affecting the development of football players

Riyadh Alsaeed, Yousif Hasan Khalaf khalf, Wael Alaboudi, Lamyaa Aldywan, Zainab and Kadim

DOI: <https://doi.org/10.22271/kheljournal.2023.v10.i3e.2967>

Abstract

Football is the most popular game in the world and is played by both sexes and all ages. To develop it requires great effort by the players, coaches, management, as well as the infrastructure. The study focused on the obstacles that football players face in Basra Governorate, southern Iraq. The research sample included 261 players from several institutions interested in football, all of them were over 18 years old. A questionnaire was distributed to some experts in the field of football to diagnose the most important obstacles from the training programs, the use of biomechanical and analytical software. Important results are the lack of using sports sciences. Important recommendations are making coaches and players learn biomechanics and kinetic analysis, working on establishing development courses for coaches and players in this field and providing infrastructure for age groups.

Keywords: Biomechanical, kinetic analysis, influencing obstacles, football

Introduction

Practicing sports is one of the important things for a person in society, which contributes greatly to building his personality and preserving public health. Humanity from practicing sports activities and fulfilling the duties required of the individual belonging to the group, team and club. The individual obtains physical, health, psychological, cognitive, moral and other gains, ^[1] thus becomes a productive citizen who can perform his duties towards society through his practice of various sports. The Forming committees for training, arbitration, and tournament management, that the football game contains many basic skills as well as various playing centers that require physical, skillful, tactical, psychological requirements, mental and cognitive capabilities, ^[2-3]. The focus of these operations is the football player, where the learned player needs continuous practice and according to the stages of learning for the cubs, juniors and youths to reach advanced levels of skill and performance in the stage of applicants in order to obtain good results in matches and tournaments, this requires the availability of successful management and good coaches as well as the infrastructure of stadiums and sports facilities to achieve development in the game. In addition to providing sports equipment and laboratories for analyzing the motor performance of players, which contain software and specialized cameras for photography and devices computer to store information, videos, motion snapshots and other technologies, based on the laws and mechanical foundations used in kinesiology and sports biomechanics ^[4-5]. The role of specialized schools and clubs and sports federations responsible for developing the game in spreading cultural and sports awareness in order to build the correct rules for education and training, and thus generations are built Coming on the right foundations for competition, hence the importance of the study by identifying the errors and problems that exist in the lack of development of the game and thus developing solutions and treatments that contribute to building the sports base and obtaining energies to represent teams, clubs and national teams, by working on planning and implementing programs. In reality In order to build, practice and refine football talents and thus develop the football game, ^[6] the researcher has diagnosed some of the obstacles and reasons for not developing the players.

which need to be studied according to scientific bases in analyzing the performance of the players during exercises and matches through the application of mechanical principles, foundations, and laws followed in kinesiology and sports biomechanics [7], as well as with the help of other sciences, including the science of sports training and the rest of the supporting sports sciences [8], and the use of modern means, techniques and software, which contribute significantly to correcting errors and developing performance among football players, as well as Lack of capabilities and lack of interest in training for these important rules, as well as the lack of infrastructure for sports institutions, including clubs, including stadiums⁹, halls, and sports facilities.

Objectives of the study

1. Identifying some of the most important obstacles in the development of soccer players in the province of Basra among the study sample.
2. Identifying some areas affecting the development of soccer players in Basra Governorate among the study sample.

Study methodology and field procedures

The researcher used the descriptive method in the survey method due to its suitability and the nature of the study. A sample and the research community were chosen randomly from Basra club players, Basra University players, youth and

sports forums, Basra education schools' players, physical education teachers and coaches, and their number was (261), and Table (1) explains that.

Table 1: Shows the numbers of the study sample on which the study was conducted

No.	Sample	Percentage	Sample
1	Players of Basra clubs	49.4%	129
2	Basra University players	15.3%	40
3	Youth and Sports Forum players	12.6%	33
4	Players of Basra Education Schools	11.4 %	30
5	Coaches and teachers of physical education	11.1%	29
Total			261

After reviewing previous studies and sources and conducting personal interviews with experts and specialists, the important areas in the questionnaire were developed for some of the most important obstacles in the development of football players in Basra Governorate, which are (training curricula, learning and training according to biomechanical foundations, the use of analytical programs), and the areas were presented to specialists.

For the suitability of the fields for the members of the study sample, and after reviewing them, it was agreed on all the fields presented by (70%) or more, and Table (2) shows this.

Table 2: Shows the weighted arithmetic mean for the items of the fields of study and the sum of the weighted means and standard deviations for the sum of the paragraphs of each field.

No.	Fields of study	Standard Deviations	Mean	Paragraph (4)	Paragraph (3)	Paragraph (2)	Paragraph (1)
1	Training curricula	0.84	3.1	3.1	3.2	3.2	3.9
2	Learning and training according to the basics of biomechanics	0.46	2.9	2.9	2.8	3.1	2.8
3	Using analytical software	0.83	2.8	2.8	2.6	2.7	2.9
4	Interest in training age groups	0.45	2.9	2.9	3.1	2.9	2.3

Then, the researcher prepared the paragraphs of the questionnaire according to the most important obstacles affecting the development of football players, which are (20) paragraphs for all fields of study, i.e. (5) paragraphs for each field, where the study was presented to experts and specialists in the field of training science, biomechanics, football, and training of age groups from Young people to applicants in the fields of study, and to clarify the extent of the impact of obstacles on the game of the members of the research sample,

and after submitting their answers to the paragraphs of the questionnaire, the final version of the paragraphs was reached for the purpose of conducting the study and presenting it to the sample (see Appendix No. 1).

Discussing the results of the study

1. Presentation of the tables related to the results of the most important obstacles in the fields of study

Table 3: Shows the arithmetic means, standard deviations, the highest value and the lowest value for the fields of study

No.	fields of study	Lowest Value	Highest Value	SD	Mean
1	Training programs	2.97	3.18	0.84	3.9
2	Learning and training according to the biomechanics	3.13	3.24	0.46	2.8
3	Using analytical software	3.23	3.26	0.83	2.9
4	Interest in training the age groups	2.81	3.29	0.45	2.3

In order to achieve the objectives of the study, the statistical results were proven in Table 3 regarding the most important obstacles in the development of soccer players in sports clubs in Basra Governorate through the value of the weighted arithmetic medians of the total paragraphs for each field of study, and it was found that the value of the weighted arithmetic medians for the field of using analytical programs

got at the highest amount

This is followed by the field of learning and training according to biomechanical foundations, then the field of training curricula, and finally the field of interest in training age groups. Interest in the game of football and its results related to the level of players.

2. Displaying and analyzing the results of the percentages of obstacles in the first field (training curricula)

Table 4: Shows the percentages of the questionnaire items for the field of training curricula

No.	Reasons	Never	Rarely	Often	Always
1	Lack of interest in training curricula	8%	12.6%	33.2%	46.2%
2	Double the continuation of training	8.7%	11.5%	33.6%	46.2%
3	Lack of trainers for age groups	9.5%	13.8%	32.4%	44.3%
4	Training is not interested in the specializations of the game	9.1%	18.6%	38.7%	33.6%
5	Does not take into account the stages of training and the components of pregnancy	10.7%	15.4%	33.6%	40.3%

3. Presenting and analyzing the results of the percentages of obstacles in the second field (learning and training according to biomechanical foundations)

Table 5: Shows the percentages of the items of the questionnaire in the field of learning and training according to the biomechanical foundations

No.	Reasons	Never	Rarely	Often	Always
1	Poor learning and training according to biomechanical foundations	9.1%	12.6%	34.8%	43.5%
2	Poor use of techniques and analysis software	11.6 %	11%	22.9%	54.5%
3	There are no cameras and display screens	13%	11.1%	22.1 %	53.8%
4	There are no specialists in biomechanical evaluation	13.1%	12.3 %	23%	51.6 %
5	Lack of interest of trainers in motor analysis	8.4 %	11.4 %	31.6 %	48.6 %

4. Displaying and analyzing the results of the percentages of obstacles in the third field (using analytical programs)

Table 6: Shows the percentages of the items in the questionnaire about the use of analytical software.

No.	Reasons	Never	Rarely	Often	Always
1	No use of motion analysis software	13%	8%	22.5 %	56.5 %
2	Poor knowledge of skills analysis techniques	8.3 %	15%	25.3 %	51.4%
3	There are no numerical values of performance	10.3%	12.6 %	22.9 %	54.2 %
4	Lack of pictures and videos of skill techniques	9.5 %	15.4 %	37.5 %	37.5 %
5	There is no information in the posters for player analysis	12.3%	11 %	23.7 %	53 %

5. Presenting and analyzing the results of the percentages of obstacles in the fourth field (training of age groups).

Table 7: Shows the percentages of the items of the questionnaire in the field of age group training.

No.	Reasons	Never	Rarely	Often	Always
1	There is no interest in training the age groups	5.2 %	15.4 %	38.9 %	40.5 %
2	There is a lack of interest on the part of the Football Association	10%	11.9 %	31.3 %	46.8 %
3	Lack of playgrounds and equipment needed for the game	9.9 %	11.8 %	28.9 %	49.4 %
4	The weakness of schools, universities and clubs with players	9.1 %	10.7 %	33.2 %	47 %
5	Few specialized schools attract age groups	8.7 %	11.8 %	28.9 %	50.6 %

6. Presenting the results of the fields of study and the most important obstacles in the development of football players in Basra Governorate

Table 8: Shows the arithmetic mean, standard deviations, and ranking of some of the obstacles in the fields of study

No.	fields of study	places	SD	Mean
1	Use of analytical software	1st	0913	3.179
2	Learning and training according to biomechanical foundations	2nd	0450	3.178
3	Training Curriculum	3rd	0949	3.103
4	Training age groups	4th	4054	3.0166

Discussion of the results

From table (8), we note that the field of using analytical programs ranked first and a high percentage in the reconnaissance test for the players of Basra Governorate, and this explains that the players, through their experience as players in the football game, did not benefit from the analytical programs used globally and in neighboring countries, and we are in The time of scientific leaps in analytical programs and various techniques, including kinetic analysis programs, and that the mechanical techniques used are methods for measuring the bio-kinematic variables of the inertia characteristics of the members participating in the

performance (3: 100), as well as scanning and imaging techniques to determine the inertia percentages of the different body parts and with a variety of techniques. As for the field of learning and training according to the basics of biomechanics, it took place

On the second rank of obstacles to the development of football players in Basra, and this indicates poor use of the bases of biomechanics, and thus technical errors occur in the performance of the player, and it is evident through the research conducted on the players of our clubs, despite their reaching good levels, but there remains a great need for learning and training according to mechanical movement

engineering For the purpose of reaching advanced levels, and that the purpose of following the biomechanical foundations is to search for the ideal technique, which means biomechanical analysis of the goal of movement (2: 18), and the field of training curricula ranked third, which indicates to the sample of the exploratory study that there is a clear weakness in the processes and curricula of sports training. Today, sports work is produced through practice and the application of the best training methods to reach the basic skills, and from here we can explain the reality that indicates weakness and lack of interest in football players from the lack of the required training ingredients and foundations and confusion in reaching the desired results and the progress achieved by international teams. In training the game according to scientific foundations, where the training scholars see (that sports training means the complete preparation of the body and the soul for a game achieving the best results, which is a parallel development with the development of human society), (4:11). As for the field of age group training, it ranked last among the obstacles to the development of football players in Basra, and here it indicates the existence of randomness in playing the game at the governorate level, and this means that there is no good interest in the popular base, but rather it needs to increase training for age groups with physical, skill, psychological and other factors. Among the factors, through paying attention to the ages of players who practice the game from beginners to advanced stages of life, and that functional changes and performance efficiency multiply with practice and training age, and the potential of energy stores increases by aerobic and anaerobic methods (1: 142).

Results

1. The lack of sports administrative planning responsible for the game and its inability to seek and demand the advancement of the reality of the game through coaches and officials.
2. The poor ability of sports federations, clubs and youth centers to attract trainers and specialists in movement analysis and modern techniques, which is the reason for not using analytical programs.
3. There is no clear vision according to a curriculum prepared by specialists for the game and for different age groups according to the components of pregnancy and the stages of public and private preparation and competition.
4. There are no tournaments and leagues at the level of juniors and juniors and for different age groups, as they are the basic basis for the game, which affected the development of football in the province.
5. Weakness in conducting training, analytical and biomechanical courses in order to develop the capabilities of trainers in training, analysis and biomechanical evaluation of basic football skills.

Recommendations

1. Urging those in charge of school sports, youth forums and sports clubs to work according to a curriculum prepared annually to promote and develop the game.
2. Work on carrying out training and development courses to learn training curricula and biomechanical analysis programs to develop their capabilities and urge the responsible sports authorities towards that.
3. 3 - The use of academics, coaches and experts specialized in the game of football to carry out intensive lectures in youth forums and sports clubs for all ages.

4. Emphasizing the establishment of tournaments and tournaments for the game of football for all ages, and providing them with financial and media support.
5. Directing officials in the governorate and districts to provide the infrastructure, supplies and sports equipment, as well as the establishment of various stadiums in all regions of the governorate.
6. Accountability of those responsible and negligent for all sports institutions that are not supportive of the development of the football game and placing the appropriate person in it.

Appendix

Questionnaire form for some of the most important obstacles in the development of football players in Basra Governorate Fields and paragraphs are always often sometimes not found Obstacles in the field of training curricula.

1. Weak interest in training curricula.
2. Times the continuity of training.
3. Lack of trainers for age groups.
4. Training is not interested in game disciplines.
5. Does not take into account the stages of training and the components of pregnancy.
Learning and training according to biomechanical foundations.
6. Poor learning and training according to biomechanical foundations.
7. Poor use of techniques and analysis software.
8. There are no cameras and display screens.
9. There are no specialists in biomechanical evaluation.
10. Coaches' lack of interest in motor analysis.
Use of analytical software.
11. No use of motion analysis software.
12. Times the knowledge in skills analysis techniques.
13. There are no numerical values as criteria for performance.
14. Lack of pictures and videos of skill techniques.
15. There is no information in the posters for player analysis age group training.
16. There is no interest in training age groups.
17. There is great negligence by the volleyball association.
18. Lack of playgrounds and equipment needed for the game.
19. Times the number of schools, universities and clubs with players.
20. Lack of specialized schools that attract all age groups.

References

1. Aldewan L, Hchaya H, Oudah M. Building a scale of systems thinking in tennis. *Journal of Studies and Researches of Sport Education (JSRSE)*. 2022;32(2):18-27. DOI:10.55998/jsrse.v32i2.341
2. Qasim M. The Effect of the Educational trial and error method on raising self-confidence and learning some offensive skills basketball for beginners. *Journal of Studies and Researches of Sport Education (JSRSE)*. 2022;32(2):208-218. DOI:10.55998/jsrse.v32i2.344
3. Al-Saeed R. Hip and Knee Joints Biomechanics of Karate Players during training and competition style Kicks; c2018.
4. Al-Saeed R, Pain MTG. Descriptive analysis of hip and knee joint loading during reverse roundhouse kick (hook) karate kick performed in training and competition modes. *ISBS Proceedings Archive*. 2017;35(1):9.
5. Al-Saeed R, Pain MT, Lindley M. Hip and knee loading of karate players performing training and competition

- Style Versions of a roundhouse KICK. Published online; c2016.
6. Salim T, Al-Hamdani T. A Study of the Relationship between the emotional suppression of coaches and the psychological resilience of players from the point of view of the players of the northern region football clubs in Iraq: *Journal of Studies and Researches of Sport Education (JSRSE)*. 2022;32(2):67-82. DOI: 10.55998/jsrse.v32i2.324
 7. Farhan A, Kadum S. The Effect of a proposed training program (FIFA the 11) on Reducing Sports Injuries and Improving Some Physical Abilities of Football Players Aged (14) Years in Iraq. *Journal of Studies and Researches of Sport Education (JSRSE)*. 2022;32(2):83-94. DOI: 10.55998/jsrse.v32i2.330
 8. Elbadawi G. The Reality of Psychological Preparation from the Point of View of the Players of The Excellent Sports Teams in Sudan. *Journal of Studies and Researches of Sport Education (JSRSE)*. 2022;32(1):128-139. DOI:10.55998/jsrse.v32i1.282
 9. Alarabi zuhair, Dakhil R, Abdalreda A. A Study of the Reality of Rehabilitation of Sports Injuries for Players of the Iraqi Premier League Clubs in Football. *Journal of Studies and Researches of Sport Education (JSRSE)*. 2022;32(1):113-127. DOI: 10.55998/jsrse.v32i1.280