

THE IMPACT OF TRAINING IN ACCORDANCE WITH THE DIVISION OF PLAY AREAS ON SOME MOTOR SKILLS AND ACCURACY PERFORMANCE OF SOME OF THE BASIC SKILLS IN SOUASH

Fakhri Al-Din Qasim*

*Ph.D. Physical Education College / Diyala University

Abstract

Research objectives:

- Preparation of training according to the division of play areas on some motor skills and accuracy of the performance of some basic skills in squash.

- Knowledge of the effect of exercise in accordance with the division of play areas on some of the motor skills of squash players.

- Knowledge of the effect of exercise in accordance with the division of play areas on the accuracy of the performance of some of the basic skills of squash players.

Research hypotheses:

- There are significant differences between pre and post tests on some of the motor skills of squash players.

- There are significant differences between pre and post tests on the accuracy of the performance of some of the basic skills of squash players.

Research Methodology: The researcher used the experimental method to design one set of suitability research topic. The research sample: included national team players squash for men (applicants), number (8) players.

Conclusions:

1 - The use of play areas by dividing the exercise a positive influence in the development of some motor skills to the research sample.

2 - Exercises that divide the regions play a positive influence in the development of some basic skills in the game of squash.

3 - The proposed exercises led to the achievement of objectives in the development of performance skills include the fact that the exercises were a special skill exercises inside the stadium.

4 - Exercises that divide the play areas have led to the development of agility and compatibility among a sample search. **KEYWORDS: Interactive training. Duel game.**

1. INTRODUCTION

The world has witnessed a significant and rapid development in all spheres of life and physical education is a vital and important one in this field.

Since the game of squash from the modern Games which characterized by speed, strength and intelligence and correct prediction and gained an attention and development in the recent years in terms of modernization and development in the ways and methods of training where athletic training generally contribute in various sporting activities and particularly in a game of squash a significant contribution to achieve the advanced levels through good planning for its programs as recently happened in the growing interest in motor abilities in every kind of sports and its components as it is one of the most important requirements of the skilled performance and the basis upon which depends the performance of different offensive skills especially in a game of squash so the modern training programs rely greatly on increasing the concentration of specialized movements where the squash is considered one of the competitive individual games which is distinct from the rest of the tennis games with excitement and suspense and speed in playing because the player deals with the racket and ball and competitor player inside the court and perhaps the most important characteristic of this game is the distinctive pleasure felt by the practitioners players and this is what calls for adults and children of both sexes to play this game where the advantage of this game is to force practitioners on continuous movement through the exchange of playing ball and it is characterized by the direct challenge and requires awakening and ensure the correct prediction, balance and harmony and agility by



the player to keep up with an opponent during the exchange of playing the ball (Jamal Al-Shafei 2001: 5). Motor abilities occupy great importance and the proportion of importance differs from one game to the other game especially the game of squash that requires the rapid movement and in different directions inside the court and that the presence of the player with the opponent inside the court which is bounded by walls makes the competition between them large and the winner in this competition is the player who focuses on the weak points of an opponent player during the movement and guide the ball to regions away from the presence of the opponent and thus earning points

So the importance of the research is to find out the effect of compound exercises on some motor abilities and accuracy of performance of the offensive skills in squash which consists of several basic skills that must be mastered especially the flied frontal and the background strike as well as low-lying frontal and background strike.

Research problem:Through the field experience of the researcher in the training of the national team in a game of squash noted lack of accuracy in the performance of the offensive skills specially the flied frontal and background strikes and the low lying frontal and background strikes during the movement of players inside the court and the researcher attributes that to the fact that there is a weakness in their kinetic abilities , as the player of squash during playing in a state of continuous movement and needs to change his body conditions through the movement to the corners of the court and the compatibility between the eye and the feet to perform the various skills especially the offensive skills and because the two skills of the flied and low lying strikes are offensive skills that made attention to aspects of weakness in the side of the motor abilities which in turn lead to a positive development in the accuracy of performance of these skills in the squash . And a game of squash is one of the games that a precision plays an important aspect in winning the game through diversification in the performance of the offensive skills as that " the accuracy in the performance of a strike is one of the most important characteristic of a game of squash and the success is measured in the ability to deliver the ball in the right place" (Ratib Ahmed and Khalid Al- Kordi 1996: 100).

Hence the problem of the research in using compound training on some motor abilities and the accuracy of performance some offensive in squash.

Research Objectives:

- Preparation of compound exercises to develop some of the motor capabilities of the squash.
- Preparation of some compound exercises to develop some offensive skills in squash.

- Understanding the impact of the compound training on some motor abilities and accuracy of performance of the offensive skills in squash

2. MATERIAL AND METHODS

Research hypotheses: There are significant differences between tribal and posteriori tests in the development of some motor abilities of the game of squash and in favor of a posteriori tests differences.

- There are significant differences between tribal and posteriori tests in the development of some of the offensive skills of the game of squash in favor of a posteriori tests differences.

Research Methodology: The experimental method is used which is based on a scientific basis for the appropriateness of the research topic.

The research sample: Sample "is the part that represents the parent community or the model that the researcher do all his work on it " (Wajeeh Mahjoub 310: 1993) as the research sample was chosen in a manner of experimental group with the tribal and posteriori tests and by the intentional way which included players of the Iraqi national team (Youth) in the game of squash and their number are (8) players who represent the parent community as true and sincere representation and who conducted on them the main experiment of the research .

Devices and tools of the research and methods of collecting information

- Rackets and balls of Squash (number 10) stopwatch number (2) and type (Tico Japanese).
- Metric metal tape measure. Adhesive tape to determine the tests. Thrower balls device.
- A laptop computer type (ASUS). Arab and foreign sources. Observation and experimentation.
- Personal interviews. Tests and measurements.

Research tests:



- Test of the straight low-lying frontal strike from the back part of the court (Khalid Mohammed Fadi 84: 2008)
- Test of the low-lying background straight strike from the back of the court (Khalid Mohammed Fadi 85: 2008)
- Test of the flied frontal straight strike toward the back corner of the squash court (Ali Hassan Shukur 46: 2012)
- Test of the flied straight background strike towards the background corner of the squash court (Ali Hassan Shukur 47: 2012)
- Test of zigzag running by Barrow way (Ali Saloom Jawad 123: 2004)
- Test of the numbered circles (Ali Saloom Jawad 150: 2004)

Tribal tests: Was performed on Thursday $28 \ 11 \ 2013$ on the research sample (players of Iraq team that amounting to (8) players before starting the implementation of the training program where the skilled tests of the research and with the help of assistant team and on the courts of Faculty of Physical Education in Jadiriya at fourth p.m.

The main experiment :After the completion of the tribal tests and knowing the level of players through the skilled tests of the research and in order to reach for a solution of the research problem and achieve the objectives of the research, the researcher prepared a proposed training exercises and adopted in the design of these exercises on the analysis of the scientific sources content that interested in the process of training and preparation the training curricula and in order to release its impact in the development of some motor abilities and that the accuracy of performance of some offensive skills in .

The researcher observed the gradient and spikes in the training loads in all training units to suit the level of the players and their physical and skilled abilities, where the training curriculum begun on Saturday $30 \ 11 \ 2013$ and ended on Tuesday $28 \ 1 \ 2014$ where the training curriculum consisted of (24) training unit that spread over 8 weeks, three training modules in the week (Saturday, Monday, Wednesday), the gradient was used in weekly training modules and the traffic load during the month was (1: 3) and these exercises identified in the main part of the training module at time up to (45 minutes) in the preparation stage of the training season, the intensity was identified through the optimum duplications of the exercises (Mohammad Reda Ibrahim 104: 2008)

Where these exercises have been applied by the team's coaches and under the direct supervision by the researcher , the used skilled exercises are carried out by the player himself at the beginning of the curriculum as well as exercises with two players and exercises with three players to enter the competition and making the training similar to the circumstances of the game, as the exercises of moving were used to the pillars inside the court at different times as well as using the directive exercises by numbers by the coach to move with the specific areas from the frontal and the background of the court and exercises with the rubber cords that bind on the waists player to move inside the court to the corners of the court and exercises by the training stair , all this to develop the kinetic speed for the players, while the skilled compound exercises that used for the development of offensive strikes carried out by the same player at the beginning of the curriculum as well as exercises with two players and exercises with three players to enter the competition and make training similar to the circumstances of the game and used thrower balls device to deliver balls to the player and training to perform repetitions from the frontal and the background of the court and the performance of the offensive strikes through diversification in place of directing the ball to get the development of the level.

Posteriori tests: After completion of the training program, posteriori tests were conducted on the research sample in order to know the effect that happens as a result of using these the exercises and that by research tests and find out how effective these exercises to develop the kinetic abilities and the most important offensive skills that selected on Thursday $30 \setminus 1 \setminus 2014$ through own research and on the courts of Faculty of Physical Education in Jadiriya at third o'clock afternoon.

3. RESULTS

Displaying and analyzing test of the numbered circles and test of zigzag running by Barrow way and test of players speed to the corners of the court and test of the frontal and background strike towards the opposite corner and test of accuracy of the side frontal and background strike.

| posteriori tests of the research sample. | | | | | | | | |
|------------------------------------------------|------------|-------|------|------|------|--------------|-----------|--------------|
| Variables | The test | Α | SD | Α | SD | Value of (t) | | Significance |
| | | | | | | calculated | tabulated | |
| Test of the low lying straight strike from the | Tribal | 10.62 | 0.74 | 1.00 | 0.53 | 5.29 | 2.36 | significant |
| background part of the court | posteriori | 11.62 | 0.51 | | | | | |
| Test of the low lying straight background | Tribal | 10.62 | 0.74 | 0.75 | 0.70 | 3.00 | 2.36 | Significant |
| strike from the background part of the court | posteriori | 11.37 | 0.51 | | | | | |

Table 1 shows the arithmetic means and standard deviations and values of calculated and tabulated (t) between tribal and



| The flied frontal straight towards the | tribal | 37.62 | 1.06 | 1.50 | 0.32 | 4.58 | 2.36 | Not |
|----------------------------------------------|------------|-------|------|------|------|------|------|-------------|
| background corner of the squash court | posteriori | 39.12 | 0.64 | | | | | significant |
| The flied background straight strike towards | tribal | 36.37 | 0.91 | 2.25 | 0.36 | 6.14 | 2.36 | Significant |
| the background corner of the squash court | posteriori | 38.62 | 1.06 | | | | | |
| Test of zigzag running by the barrow way | Tribal | 26.87 | 0.99 | 1.12 | 0.83 | 3.81 | 2.36 | Significant |
| | posteriori | 25.75 | 0.70 | | | | | |
| Test of the numbered circles | tribal | 6.62 | 0.51 | 1.12 | 0.64 | 4.96 | 2.36 | significant |
| | posteriori | 5.50 | 0.53 | | | | | |

Table (1) shows the results of the low lying straight frontal strike from the background part of the court as follows; the arithmetic mean of the tribal test reached to (10.62) and standard deviation (0.74) while the arithmetic mean of the posteriori test reached to (11.62) and standard deviation (0.51) and in order to know the significance of differences between the arithmetic means of the tribal and posteriori tests, law of (T) of the symmetrical samples was used as the results showed the existence of differences between tribal and posteriori tests and in favor of posteriori test as the value of calculated (t) (5.29) which is greater than the tabulated value which is (2.36) and with degree of freedom (7) and of the possibility of error (0.05).

While the results of test of low lying background straight strike from the background part of the court as follows; the arithmetic mean of the tribal test reached to (10.62) and arithmetic mean (0.74) while the arithmetic mean of the posteriori test reached to (11.37) and standard deviation (0.51) and to know the significant differences between arithmetic means for the two tests, (t) law for the symmetrical sample has been used, its results showed the existence of differences between tribal and posteriori tests and for favor of the posteriori test, as the value of calculated (t) reached to (3.00) which is greater than the tabulated value (t) which reached to (2.36) and with degree of freedom (7) and of the possibility of error (0.05).

While the results of the test of the flied straight frontal strike towards the background corner of the squash court as follows; the arithmetic mean of the tribal test reached to (37.62) and standard deviation (1.06), while the arithmetic mean of the posteriori test reached to (39.12) and standard deviation (0.64) and in order to see significant differences between the arithmetic means, law of (t) for the symmetrical samples has been. its results showed the existence of differences between tribal and posteriori tests and for favor of the posteriori tests as the value of calculated (t) (4.58) which is greater than the tabulated value which is (2.36) and with the degree of freedom (7) and of the possibility of error (0.05).

The results of the flied straight background strike towards the background corner of the squash court as follows; the arithmetic mean of the tribal test reached to (36.37) and standard deviation (0.91) while the arithmetic mean of the posteriori test reached to (38.62) and standard deviation (1.06) and in order to know significant differences between the arithmetic means for the two tests, (t) law for the symmetrical samples has been used and its results showed the existence of differences between tribal and posteriori tests and in the favor of the posteriori tests as the value of calculated (t) reached to (6.14) which is greater than the tabulated value (2.36) and with the degree of freedom (7) and of the possibility of error (0.05).

The results of the zigzag running test by the barrow way as follows; the arithmetic mean of the tribal test reached to (26.87) and standard deviation (0.99), while the arithmetic mean of the posteriori test reached to (25.75) and standard deviation (0.70) In order to know the significant differences between the arithmetic means of the tribal and posteriori tests, a law of (t) of the symmetrical samples has been used and its results showed the existence of significant differences between tribal and posteriori tests and for the favor of the posteriori tests as the value of calculated (t) reached to (3.81) which is greater than the tabulated value that reached to (2.36) and with the degree of freedom (7) and of the possibility of error (0.05).

While the results of the numbered circles test as follows; the arithmetic mean of the tribal test reached to (6.62) and standard deviation (0.51) while the arithmetic mean of the posteriori test reached to (5.50) and standard deviation (0.53) and in order to know the significant differences between the arithmetic means of the tribal and posteriori tests, a law of (t) for the symmetrical samples showed the existence of significant differences between tribal and posteriori tests and for the favor of the posteriori test as the value of calculated (t) reached to (4.96) which is greater than the tabulated value which reached to (2.36) and with the degree of freedom (7) and of the possibility of error (0.05).

The results of the test of accuracy of the background sided strike as follows; the arithmetic mean of the tribal test reached to (35.50) and standard deviation (1.77) while the arithmetic mean of the posteriori test reached to (36.75) and standard deviation (1.28) and in order to know the significant differences between the arithmetic means of the tribal and posteriori tests, the law of (t) for the symmetrical samples has been used and its results showed the existence of significant differences between tribal and posteriori tests and for the favor of the posteriori test as the value of calculated (t) reached to (3.98) which is greater than the tabulated value which reached to (2.36) and with the degree of freedom (7) and of the possibility of error (0.05).



4. DISCUSSION

According to the statistical findings that reached by the researcher the results has been discussed as follows; as shown in Table (1) the existence of a statistically significant difference between the results of the tribal and posteriori tests and in the favor of the posteriori test for the tests of the motor abilities, compatibility and agility and these significant distinctions are due to using the compound exercises that proved its affectivity in the development of some of the kinetic abilities and precision of the performance of some offensive skills of the game of squash, where the proposed exercises focused on the player performance for more than one skill through his movement inside the court and to change his body conditions by playing balls into the corners of the court, as well as using instruct exercises by the coach to move to the corners of the court as well as instruct exercises by the numbers through numbering the divided regions and the player should move according to instruct of the coach, which proved its affectivity in the development of agility and compatibility among the research sample, as pointed by (Ratib Ahmed and Khaled Al-Kurdi) to that one of the most important qualities that should be available in squash player is an agility in his movement inside the court and in the various directions and without an obstacles the opponent from playing his ball obstruction (Ratib Ahmed Qobaiaa and Khaled Al-Kurdi, 44: 1996) which led to the development of some of the motor abilities and accuracy of performance of the selected offensive skills and the game of squash one of the games that the accuracy of performance plays main role in the superiority of player upon his opponent through the performance of the offensive strikes and with accuracy which do not give the opportunity to the opponent from replying the ball, as the main component in the development of motor precision and adjusting the new motor skills and continuing to add some exercise and motor skills during the athletic training process contribute to ensuring the kinetic workmanship (Qassim Hassan Hussein and Abd Ali Nassif 238: 1988) and from these exercises the performance of the flied frontal and background strikes and the low-lying strikes through the balls thrower which leads to repeat the performance of the skills by moving the player from the middle of the court and exercises by providing the colleague by the balls from different areas of the court to make the exercise similar to the circumstances of the game as the accuracy of the squash is very important to the performance of the player in the game being able to perform the strikes in the right place during the play, leading to control the game and winning (Ian mekenise, 1997: 66).

It was a gradient in the performance of the exercises from easy to difficult in terms of performance and duplications and time of performance of each exercise. And the exercises performed by the players were focused on both sides of the court ; left and right to develop the low lying straight frontal and background strikes in a balanced manner because the good player should move inside the court and perform the frontal and the background strikes accurately and with high concentration and in a balanced manner and should not show to the opponent player his point of weakness through performance frontal strikes only that make the opponent increases playing background balls and makes the player under pressure and thus lose the points . the level of physical and kinetic abilities should be high in order to be the skilled performance best where (Mufti Ibrahim) indicates to "that there is a direct correlation between the level of skilled statement in any sporting activity and the development of the physical abilities and the freedom of this activity "(Mufti Ibrahim 26: 1998). And there was graduation in the exercises from easy to difficult through minimizing and maximizing the divided areas and should be for the player to move and guide the ball to these areas and systematically led to the development of agility and compatibility as well as accuracy of performance of some offensive skills in squash in line with the training phase of the players and this is shown by the results, as the skills especially the offensive ones need to be very precise in the hit on the frontal corners of the court by directing the ball to areas far from the presence of an opponent (Amin Anwar Al-Kholi 2: 2007).

The researcher believes that squash player needs a great deal of accuracy in performance because squash is characterized by sudden change of the ball track for the purpose of deceiving the opponent and not knowing its direction as the sudden change of the various body positions needs a high dynamic accuracy of the possibility of successful rapid response (Qassim Hassan Hussein and Abd Ali Nassif 233: 1988).

5. CONCLUSIONS

- 1. The use of the compound exercise has a positive influence in the development of some of motor abilities of the research sample.
- 2. The compound exercises have a positive impact in the development of some offensive skills in the game of squash.
- 3. The compound exercises led to the development of accuracy in the performance of the flied frontal and background strikes and the low-lying frontal and background strikes.
- 4. The proposed exercises led to the achievement of its objectives in the development of the skilled performance as the tests include special skilled training exercises especially inside the court.
- 5. The development of the results came suitable and appropriate to the research sample and led to obtain a significant development of the performance.
- 6. The compond exercises led to the development of agility and compatibility among the sample research.



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7. APPENDAGES

Appendage 1 shows the used exercises

| Rank | Type of exercise | Exercise shape |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1 | A performs frontal Side strike, B performs a short counterproductive strike, C performs frontal strike toward the background wall, A performs long frontal sided strike, B performs frontal sided strike, C performs a short counterproductive strike. | K |
| 2 | 4 players stand in the middle of the court , from each side there is player and move to the 4corners by signal from the couch | X |
| 3 | Two players stand in the middle of the court and by signal from the couch they move randomly by the rackets to one of the 6 corners | |



| 4 | Putting a group of balls (4) in each part of background court corners and the player move to the middle and transport the balls to the middle of the court inside can | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 5 | Putting a group of balls (10) in each side of the frontal court corners and the player move to the middle and transport the balls to the middle of the court inside can | A 7.5. * |
| 6 | The couch puts 4 rackets on the ground in the four corners of the court and 3 balls on one racket and then transport the balls one by one to the corners by moving on them and then return to the middle of the court | |
| 7 | The couch stands in the middle of the frontal part of the court and holds with his hand 3 balls and throws ball on any corner of the court and the couch holds it and return it to the couch to be able to give another ball to another corner | |
| 8 | The couch stands in the middle of the frontal part of the court and gives the signal by numbers after numbering of each corner and moving according the signal of the couch about the number of the corner and the couch then return to the middle of the court | 2 A 1 3 X 6 |
| 9 | The couch stands in the middle of the court and by the presence of the rubber ropes on the waist of the player and the couch tighten the two ends of the ropes and the player should move to the four corners from the court | |
| 10 | The player stands in the middle of the court and the balls thrower device to the left from the left sending site to provide the balls with the straight background picture to enable the player to move and perform straight background strikes | 1 |
| 11 | A perform frontal sided strike, B perform high strike on the right sending square, C perform flied strikes to the frontal corners of the court | A. A. |
| 12 | A perform long grounded frontal strike to be rebound from the background wall, B perform long grounded frontal strike to be reboun from the background wall | |
| 13 | A perform long grounded background strike to be rebound from the background wall, B perform long grounded background strike to be rebound from the background wall | |
| 14 | A perform grounded frontal strike under the cutting line, B perform grounded background strike above the cutting line to be rebound from the background wall and so on | |



| 15 | A perform grounded background strike under the cutting line, B perform grounded background strike above the cutting line to be rebound from the background wall and so on | |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 16 | A perform the balls to the player B who do grounded background straight strikes under the cutting line | A B B B B B B B B B B B B B B B B B B B |
| 17 | A perform the balls to the player B who do straight frontal grounded strikes under the cutting line | |
| 18 | The player A perform frontal strikes by the sided wall while the player B perform straight background grounded strikes after the background strikes that done by the player A by the sided wall and the player B perform straight frontal strikes | |

Address for correspondence

Authors: Assistant Professor Dr. Fakhri Al-Din Qasim. Physical Education College / Diyala University

E-mail address: fakhir64@yahoo.com