



The Effect of Tactical Decision-Making Training During Attack on Quick Response and Fast-Break Performance in Youth Handball Players

Ahmed Salman Jasim⁽¹⁾, Zeyad Aneed Salman⁽²⁾, Husham Hameed Hashlm⁽³⁾

*Corresponding Author, E-mail: ahmed94salman0@gmail.com

^{1,2}General Directorate of Education in Babylon / Ministry of Education, Iraq.

³General Directorate of Education in Karbala / Ministry of Education, Iraq.

Abstract

The importance of this study is highlighted through the preparation of tactical decision-making training during attacks to develop quick response and fast-break performance in youth handball players. The study also aimed to identify the superior effect between the two research groups (experimental and control) in post-tests. The researcher used the experimental method with equivalent groups (experimental and control), including pre-test and post-test measurements. The research population consisted of youth players of Karbala Handball Club for the 2025–2026 season, totaling 20 players. Each group consisted of 10 players. Data were presented, analyzed, discussed, and statistically processed using the SPSS statistical package. The results revealed several conclusions, including the superiority of tactical decision-making training over the control group's training in the variables of quick response and fast-break performance. The study recommends implementing tactical decision-making training in handball training units and during the special preparation phase, due to its importance in preparing players for participation in tournaments.

Keywords: Tactical Decision-Making; Attack Training; Quick Response; Fast-Break Performance; Youth Handball Players.

Introduction

Recently, the world has witnessed significant developments in various sports fields, particularly in the training domain across different sports. Among the sports that have received attention for training development is handball, which is considered one of the most important team sports globally.

Tactical decision-making training during attacks is an effective and modern training method that has recently spread for developing quick response and fast-break

performance. These abilities are essential for handball players during attacks and are considered key factors for achieving superiority and success. Players face many stimuli related to opponents and the ball, requiring high response speed and coordination in performance, as they must react within fractions of a second depending on their position. This can be achieved through tactical decision-making training and coordination among players to modify tactical formations according to game situations, confusing the opposing team and building fast-break attacks to score goals. This is evident in global courses and tournaments observed today.

Quick response is one of the critical physical attributes that plays a significant role in achieving high performance in handball. The sport involves numerous situations that require speed in attack, quick movement across the court, fast ball transitions between players, and quick off-the-ball movements to disrupt the opposing team.

Hence, the importance of this study lies in preparing highly capable handball players who can respond effectively to tactical decision-making during attacks and execute offensive skills according to modern requirements, through tactical decision-making training during attacks designed by the researcher, which enhances quick response and fast-break performance to reach elite performance levels.

Research problem:

Handball skills are considered complex skills that involve an interaction of physical, motor, technical, and cognitive abilities in various situations during the match. The game environment, with opponents attempting to disrupt the team's plans, imposes constant challenges on players.

Through the researcher's observations of matches and training sessions of Karbala Youth Handball Club, as well as personal interviews with coaches, it was found that the players exhibited a clear weakness in responding to immediate offensive tactical movements. Based on the researcher's experience as a university instructor and former coach, it was deemed necessary to use modern training methods to develop quick response and fast-break attack skills, in order to keep pace with developments in handball training worldwide.

Therefore, the researcher decided to design tactical decision-making training during attacks, aiming to improve quick response and fast-break performance. Most existing studies in handball training have not focused on this specific training method, creating a need to study it and make it available to coaches, players, and researchers.

Research objective:

- To develop tactical decision-making training during attacks for youth handball players.
- To identify the effect of tactical decision-making training during attacks on improving quick response and fast-break performance in youth handball players.
- To determine the superior effect between the experimental and control groups in the post-test measurements of the research sample

Research Hypotheses:

- There are statistically significant differences in the development of quick response and fast attack performance in favor of the post-test for young handball players.
- There are statistically significant differences in the post-tests in favor of the experimental group in the development of quick response and fast attack performance for handball players.

Research fields:

- Human field: Youth Handball Players of Karbala Club for the 2025-2026 Season
- Time field: (1/12/2025) to (1/2/2026)
- Spatial field: The Muhammad Baqir al-Hakim Indoor Sports Hall

Research Methodology and Field Procedures:

Research Methodology

The researcher used the experimental method, as it is suitable for the nature of the research problem. The method employed two equivalent groups (experimental group and control group) with pre- and post-testing, as shown in Table (1).

Table (1) shows the experimental design in the research.

Group	Pre-Test	Experimental Design / Intervention	Post-Test
Experimental	- Quick Response Test	Tactical Decision-Making Training	- Quick Response Test
Control	- Fast-Break Performance Test	Coach’s Standard Training Method	- Fast-Break Performance Test

Research Population and Sample:

The research population was defined as the youth handball players of Karbala Club for the 2025-2026 season, totaling (24) players. After excluding the (4) goalkeepers, the research sample was selected using a comprehensive enumeration method, comprising (20) players. These players were randomly and equally divided into two groups (experimental and control), with each group consisting of (10) players. To ensure homogeneity of all members of the research sample (height, mass, and training age), the researcher used the Levene test before conducting the main experiment on both groups (experimental and control), as shown in Table (2).

Table (2) shows the homogeneity of the research sample.

No.	Variable	Unit of Measurement	Levene's Test (F)		Type sig	Homogeneity
			Calculated	Sig		
1	Height	cm	0.196	0.829	Non-sig	Homogeneous
2	Body Mass	kg	0.428	0.659	Non-sig	Homogeneous
3	Training Age	years	1.260	0.297	Non-sig	Homogeneous

To enable the researcher to control the variables and determine the differences in post-test results and the extent to which they were affected by the experimental variable, the

researcher performed equivalence testing of the experimental and control groups using a t-test, as shown in Table 3.

Table (3) Equivalence of the Research Sample

Variable	Unit	Control Group		Experimental Group		T value calculated	Level Sig	Type Sig
		Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation			
Quick Response	seconds	1.217	0.140	1.183	0.154	0.457	0.655	Non-sig
Fast-Break Performance	seconds	6.25	0.12	6.12	0.09	0.72	0.481	Non-sig

Methods, Equipment, and Tools Used

Data Collection Methods

- Observation.
- Personal Interviews.
- Questionnaires.
- Tests and Measurements.

- Equipment and Tools Used in the Research

- Electronic Height and Weight Measurement Device (1)
- Electronic Timer (Chinese Type) (2)
- Quick Response Training Device (American Type)
- Sony Video Cameras (2)
- Whistles (2)
- Training Cones (4)
- Regulation Handball Court
- Linen Measuring Tape
- Iron Stand (2)
- Camera Tripod (2)
- Laser discs (3)
- Digital discs (4)
- Adhesive tape
- Tall stands (2).

Field Research Procedures

Identification of Variables and Tests Used in the Study

After reviewing scientific sources and references, and consulting with experts in sports training and handball, the study's variables were determined according to their relevance to the research objectives. A questionnaire form was prepared to identify the tests for

quick response and fast-break performance, which was then reviewed by the experts and specialists.

Description of the Tests

Quick Response Test for Defensive Movement Skill (Saleh, 2013)

- **Purpose of the Test:** To measure the quick response of players in defensive movements (defensive confrontation) in handball.
- **Equipment:** Quick response device, video camera, handball court.
- **Test Administration:**
A photographer and a test administrator were assigned to conduct the test.
- **Performance Description:** The player stands near the quick response device, with digital markers placed 3 meters away, representing the defender's movements in handball. When the player passes in front of the device, it emits an auditory signal randomly indicating a number from 1 to 4. The player must respond to this number and move to the corresponding zone. The performance is recorded by video to measure the response time accurately.



Figure (1) show the quick response device.

- **Scoring:** The response time is calculated in seconds and fractions thereof, from the moment the stimulus appears until the foot touches the designated number, as captured by imaging. The subject is given two attempts, and the better attempt is recorded.

Fast break test in handball: (Al-Lami, 2007):

- **Purpose of the test:** Measuring the speed of individual fast break in handball.
- **Tools:** Handball court, handballs (6), stopwatches (4), cones, adhesive tapes, whistle, measuring tape.
- **Test field:** Two zones are defined, one called zone (A), which is running without the ball, and the other zone (B), which is the ball reception zone, as shown in Figure (2).
- **Performance method:** A starting area is determined for the player at a distance of (1 m) from the goal line and (1 m) from the sideline. The participant stands at the

starting point, and the ball is with the goalkeeper. Upon hearing the whistle, the participant runs at maximum speed until reaching the midline. The goalkeeper starts passing the ball, ensuring that the participant's running path is diagonal toward the goal, as shown in Figure (2). When the participant passes the mark on the ground, which represents the end of zone (A), the first stopwatch is stopped. When the participant receives the ball, the second stopwatch is stopped, and the distance of the reception point in zone (B) is determined.

- **Scoring:** The unit of measurement used in the test is (m/s).
 - The first speed is calculated from the moment of starting until crossing zone (A), by calculating the time taken to cover the distance.
 - The second speed is calculated from the distance between the end of zone (A) and the point of receiving the ball in zone (B), as well as the time calculated by taking the difference between the first and second stopwatches.
 - For the purpose of excluding the effect of the goalkeeper's throw, as it may vary from one participant to another when dealing with samples, the arithmetic mean of the second speed ratio for each participant is taken by dividing the total speed by the first speed for each participant. Then, the arithmetic mean is added to the first speed, and thus the individual fast break speed in handball is obtained.

- **Conditions:**

A- A successful attempt is the one that ends with scoring on the goal without considering the accuracy of scoring.

B- Three attempts are given for each participant, and the fastest attempt is adopted.

C- The attempt is considered unsuccessful:

- 1- When receiving the ball in zone (A).
- 2- When the goalkeeper fails to deliver a correct pass.
- 3- When the participant fails to receive the ball.



Figure (2) shows the individual fast break test in handball

Exploratory Experiment

The exploratory experiment is important as it allows the researcher to identify and address any shortcomings encountered during pre-tests, post-tests, or the main experiment. This enables the researcher to avoid and eliminate these problems. Furthermore, it allows for the verification of the tools and equipment used during testing, the assessment of surrounding conditions, and the recording of any observations regarding the tests. Finally, it helps in establishing the scientific basis of the tests. Therefore, the researcher, with the assistance of the support team, conducted the exploratory experiment with a group of five players. The objectives of the experiment were as follows:

- 1- To assess the players' capabilities and the adequacy of the support team in conducting the tests.
- 2- Practical training for the researcher and their support team to identify and overcome any difficulties that may arise during the administration of the tests, in terms of necessary equipment, tools, and devices.
- 3- Initial understanding of the testing schedule used in the research.
- 4- Assessing the suitability of the testing facility.

Scientific Foundations of Testing:

One of the most important and fundamental aspects of conducting any research is establishing the scientific foundations of testing. Using any test and applying it in the field to a research sample without fulfilling numerous conditions, according to the specific scientific principles of each test, is essential for it to be valid for measurement. The more evidence there is of these calculated characteristics, which indicate its accuracy and ability to measure what it was designed to measure, the more reliable the measurement of the intended characteristic can be. Therefore, those interested in measurement have focused their efforts on increasing the accuracy of the scientific foundations, which can serve as indicators of its accuracy in measuring what it was designed to measure and conducting the measurement process with the fewest possible errors. Measurement scientists have emphasized that validity and reliability are among the most important characteristics of measurement. Without them, one cannot trust the ability of the instrument to measure what it was designed to measure, nor the accuracy of the results obtained when using it. (Al-Khiykani & Al-Jubouri, 2016)

Validity:

Validity is one of the most important criteria that researchers rely on to ensure the accuracy of the instrument used to measure the phenomenon being measured. Tests gain content validity by presenting the questionnaire used in the research tests to experts and specialists to determine the appropriate tests for each variable.

Reliability:

Reliability is a crucial factor that must be ensured in any test because it depends on the consistency and validity of the results. Without these, the test results cannot be relied

upon. A test must also possess high accuracy. "A reliable test is one that yields the same results when repeated on the same individuals under the same conditions. A reliable test must be consistent to be valid. A reliable test is one that consistently measures the intended skill" (Bahi & Omran, 2007). To confirm the reliability of the test results, the researcher established reliability using the test-retest method. The test was administered to a sample of (10) handball players representing the research population, and then repeated after (7) days under the same conditions. The first test will be administered, and then the researcher will use Pearson's simple correlation coefficient to determine the reliability of the tests. The results should show high correlation coefficients, indicated by significance values less than 0.05, thus confirming the test's high degree of reliability, as shown in Table 4.

Objectivity:

Objectivity is a crucial element in most scientific research. Although the tests in this research are clear and straightforward, it is preferable to ensure the objectivity of the tests. This minimizes the subjective judgment of the reviewers and prevents disagreement in their assessment of the player's performance. "Test objectivity means that the reviewers do not differ in their judgment of a particular thing or subject" (Bahi & Omran, 2007).

Therefore, the objectivity of the results for the researched variables was calculated using the simple Pearson correlation coefficient between the scores of the first and second reviewers. The results are shown in Table (4). The degree of objectivity is considered high as it approaches (± 1).

Table (4) shows the reliability and objectivity coefficients for the research variables.

No.	Variable	Reliability Coefficient	Sig.	Objectivity Coefficient	Sig.
1	Quick Response	0.898	0.000	0.899	0.000
2	Fast-Break Performance	0.901	0.000	0.902	0.000

Pre-tests:

The researcher conducted the pre-tests on Friday, December 5, 2025, at the Muhammad Baqir al-Hakim Hall in the holy city of Karbala. The researcher carefully planned the testing conditions, including location, time, equipment, implementation method, and support team, to ensure similarities to the post-tests. Before the field application, the researcher explained the tests in detail to the research sample. The researcher then conducted the tests to further clarify the concepts for the participants. Before beginning the tests, the participants were given time to warm up and avoid injuries that might result from the high level of exertion. The results were then recorded using a specific method for each test.

Main Experiment (Applying Tactical Action Drills)

The researcher reviewed scientific sources, references, and previous studies related to the research topic. Tactical action drills were prepared and organized based on the

researcher's experience to ensure their benefit to the players. The drills aimed to develop quick response and fast attack skills in handball for the youth players of Karbala Club, enhance player efficiency, and enable them to perform at their best by raising the level of the research variables. The researcher ensured that the drills were suitable and consistent with the conditions of a handball match. The drills were applied as follows:

- 1- (24) tactical action drills were prepared for the attack, progressing from easy to difficult to bring the players to peak readiness.
- 2- The exercises were given during the special preparation period and at the beginning of the main part of the training session.
- 3- The exercises were distributed as (3) exercises per training session.
- 4- The total time for the exercises was 40-53 minutes per training session.
- 5- The training load was structured in terms of (intensity, volume, and rest), with the intensity of the exercises being (80-100%) as the nature of the training requires.
- 6- The rest periods between sets were (2-4) minutes, and between repetitions, (1-2) minutes.
- 7- The training units were distributed at a rate of (3) training units per week, on (Friday, Monday, Wednesday).
- 8- The total number of training units is (30) training units, divided over (10) weeks.
- 9- The control group follows the curriculum prepared by the trainer, which is implemented on the same training days as the experimental group.

Post-Tests:

After completing the tactical response training during the attack, the post-tests were conducted with the assistance of the support team on (Monday), February 23, 2026, for the quick response and quick attack skills of the research sample. The tests were held in the Muhammad Baqir al-Hakim Hall in the holy city of Karbala, under the same conditions as the pre-tests.

Statistical Methods:

The researcher used the SPSS statistical package to analyze the results, relying on the following statistical methods:

- 1- Arithmetic mean.
- 2- Standard deviation.
- 3- Leven's test.
- 4- T-test for similar and independent samples.
- 5- Pearson's simple correlation coefficient.
- 6- Chi-square.

Presentation, Analysis, and Discussion of Results

Presentation, Analysis, and Discussion of Pre- and Post-Test Results for Both Research Groups

Presentation and Analysis of Pre- and Post-Test Results for Both Research Groups

To test the first hypothesis, the researcher used a matched samples t-test to determine the significance of differences between the pre-test and post-test results for the two research groups, as shown in Tables 5 and 6.

Table 5 shows the means, standard deviations, calculated t-value, and the level and type of significance for the control group in the pre-test and post-test.

Test	Unit	Pre-Test		Post-Test		T value calculated	Level Sig	Type Sig
		Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation			
Quick Response	Seconds	1.217	0.140	1.152	0.140	5.654	0.001	Sig
Fast-Break Performance	Seconds	1.12	0.04	1.17	0.05	3.365	0.000	Sig

Table (5) shows the statistical indicators of the pre- and post-test results for the research variables in the control group. The results showed that the mean values for all variables were better in the post-test than in the pre-test. Specifically, the mean values for the variables (quick response, quick attack) were lower in the post-test than in the pre-test, indicating a significant difference between the two tests in favor of the post-test. This is because the measurement is inverse, meaning that the lower the mean, the better the performance. This is supported by the significance levels, which were less than the 0.05 level, indicating significant differences between the two tests.

Table (6) shows the means, standard deviations, calculated t-value, and the level and type of significance for the experimental group in the pre- and post-tests.

Test	Unit	Pre-Test		Post-Test		T value calculated	Level Sig	Type Sig
		Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation			
Quick Response	Seconds	1.183	0.154	1.001	0.111	9.718	0.000	Sig
Fast-Break Performance	Seconds	1.16	0.05	3.11	0.146	51.781	0.000	Sig

Table (6) shows the statistical indicators of the pre- and post-test results for the research variables in the experimental group.

The results showed that the mean values for all variables were better in the post-test than in the pre-test. Specifically, the mean values for the variables (quick response, quick attack) were lower in the post-test than in the pre-test. A significant difference was observed between the two tests, favoring the post-test, as the measurement is inverse; that is, the lower the mean, the better the performance. This is indicated by the significance levels, which were less than the 0.05 level, demonstrating a significant difference between the two tests.

Discussion of the results of the pre- and post-tests for the two research groups:

Regarding the control group, the improvement in quick response and attack was a result of continued training using helpful training methods. Furthermore, interconnected training improves skill performance, in addition to the principle of organizing these exercises and implementing them within training units by qualified and specialized trainers. These trainers organized the training on the studied variables in accordance with the desired goal and the principle of progression from easy to difficult and from simple to complex. The principle of progression helps in coordinating and regularly linking the exercises used in the training unit and the progressive increase in their intensity and volume, depending on the player's training level (Hussein, 1998). Moreover, continuity and regularity in standardized training lead to development. Developing the skill and bringing it to the correct tactics and automaticity in performance, and the ability to recognize and identify errors" (Mahjoub, 2001). As for the experimental group, the researcher to the adopted defensive tactical response training, which works extensively on quick response and quick attack, and depends on them at the same time, attributes the development that occurred in the tests of the studied variables between the pre-tests and post-tests. The nature of the training used in the training units, which was similar to the studied dependent variables (somewhat similar to the movement paths), as well as the intensity and volume used in the training program, are similar to and higher than the intensity and volume used in the actual performance of those speeds. (This is because the special training, which resembles the performance movements of the skill, using the same muscle groups and in the same general direction of performing the same game, works to reach To the highest level (Riyadh , 2000), and also that continued training "plays an important role in the player reaching the highest level in terms of technical performance of the skill, and in terms of accuracy, integration, and consolidation of the mechanism of high technical performance" (Mahmoud, 1994). Furthermore, organized sports training leads to increased efficiency in the functioning of functional systems, especially the nervous and muscular systems. This is directly evident in the muscles' ability to produce force with an increase in the speed of muscle contraction, as "organized sports training leads to increased efficiency in the functioning of functional systems, especially the nervous and muscular systems. This is directly evident in the muscles' ability to produce force with an increase in the speed of muscle contraction. All of this contributes to the effectiveness of performance" (Allawi & Abdel-Fattah, 1984). These prepared exercises also worked Regarding the development of the studied variables and in a manner similar to performance, stated that the player's physical attributes, especially speed, help the player perform defensive and offensive skills well (Drog, 2002).

Presentation and Analysis of Post-Test Results for the Two Research Groups

Presentation and Analysis of Post-Test Results for the Two Research Groups

Table (7) shows the arithmetic means, standard deviations, calculated t-value, and the level and type of significance between the post-test results for the two research groups.

Test	Unit	Control group		Experimental group		T value calculated	Level Sig	Type Sig
		Arithmetic	Standard	Arithmetic	Standard			

		mean	deviation	mean	deviation			
Quick Response	Seconds	1.152	0.140	1.001	0.111	2.387	0.032	Sig
Fast-Break Performance	Seconds	1.17	0.05	3.11	0.15	47.32	0.011	Sig

Table (7) shows the arithmetic means, standard deviations, and significance of the differences between the post-test results for the control and experimental groups. Upon reviewing the test results, it becomes clear that there are significant differences between the post-test measurements, favoring the experimental group, as the significance level values were less than the error level (0.05). This is consistent with the second hypothesis of the research.

Discussion of the Post-Test Results for the Two Research Groups:

The variables will be discussed as follows:

Quick Response:

The researcher attributes the improvement in the quick motor response results to the use of tactical behavior exercises. Their correct application led to this improvement, which continued for ten weeks. Furthermore, these exercises, which include quick motor response, overlapped with play situations related to the skill performance of the research sample. Guided training, with its gradual progression in volume, intensity, and rest, helps to refine performance and ensure correct movement patterns. Some specialists point out that "when developing an athlete's technical skills, increasing the workload gradually involves linking it to the demands of quick motor response, such as changing the timing of movement, combining different motor elements, and altering the initial position" (Abdel-Khaleq, 2003). Quick motor response is a crucial characteristic in handball, as physical, technical, and tactical performance in modern handball is indispensable to this quality. The player is required to focus on performance in two directions: correct execution of the skill and speed of execution of the required skill. This is what specialists have noted: "In ball sports, the player performs multiple reactions towards the ball. Many sports require a quick reaction to keep pace with the movement of the body parts." The team. The player generates reactions to twenty or thirty situations in less than one second (Khiyoun, 2002). Similarly, the tactical behavior exercises developed by the researcher and applied to the experimental group, which utilized the anaerobic energy system, improved their quick response. Some specialists believe that during speed training, the player must perform the exercises with maximum effort, and the speed of decision-making, which translates into a motor response, must be developed. Therefore, a sound scientific methodology must be followed in speed training to develop the player's ability to sense, pay attention to, and anticipate various game stimuli and situations, or to make decisions quickly based on the opponent's movements, reactions, and responses (Ahmed, Nasr El-Din, 2003). Furthermore, the use of high-intensity interval training and repetitive methods has an effect. Effective in the development of the nervous system and its adaptation to quick decision-making, improving the function of receptors and neurotransmitters, increasing neuromuscular coordination within the muscle, and

increasing the frequency of nerve impulses that quickly stimulate muscles (Ahmed, 1999). The researcher also focused on developing quick motor responses through tactical action drills, which work to improve the speed of simple and complex reactions, in addition to providing speed training over short distances. This is found in most sports training science sources (Adel Abdel-Basir, 1999).

Fast Attack:

The researcher attributes the development of fast attacks to the fact that tactical training for handball players involves training their ability to perform high-intensity movements throughout the match. It is important to note that high-intensity interval training is the most effective method for developing this ability. Based on this principle, handball players perform exercises involving high-intensity, high-powered, and high-speed movements (running, jumping, and lateral stepping) with high repetitions and relatively short rest periods. These exercises are also linked to game-like movements. The best team is the one that plays at a high intensity throughout the match, and the fittest player is the one capable of short, fast runs, high jumps, and quick shots throughout the match (Cardinale, 2006).

The researcher also attributes the development to the fact that successful attempts to implement certain defensive skills were often... This leads to the defending team possessing the ball, which in turn increases the team's chance of executing a quick attack. Defense has a significant advantage; when a team succeeds in defending and winning possession, it first prevents the opponent from scoring a goal, and then initiates an attack to score against the opposing team. In other words, using individual defensive skills appropriately helps to noticeably raise the level of performance during matches with regard to quick attacks. This agrees with what Ahmed Oraibi pointed out, that "coaches should give more importance to defense than to attack, and the reason for this is that when a team improves its defense and winning possession of the ball, it can attack steadily and quickly, thus denying the opposing team the opportunity to quickly recover and reorganize its ranks" (Ahmed Oraibi, 2004, p. 55).

also asserts that "if any defender manages to gain possession of the ball, it marks the beginning of multiple attacking phases, involving the attackers gaining numerical superiority over the defenders for a short period. The attackers must be stopped as quickly as possible (a fast break) and at the earliest opportunity before the defending team can compensate for the numerical disadvantage and adopt appropriate defensive formations" (Ali, 1986).

This underscores the importance of a solid defense and its application in quick counter-attacks to score goals, given its impact on the match result. It also demonstrates the strong relationship between individual defensive skills and methods, and their utilization in achieving quick and simple goals through quick attacks before the defenders retreat to their defensive positions and re-establish their defensive formation. This is what pointed out when he stated, "The quick counter-attack phase begins as soon as the defending team

transforms into an attacking team. At this point, the team that has gained possession of the ball must think as quickly as possible about how to reach the opponent's goal with the fastest time and the least possible effort" (Dabbour, 1996). Thus, the research objectives were achieved.

The researcher believes that tactical behavior training contributes significantly to the development of all sports activities, and handball in particular, due to the game's requirement for the work of numerous muscle groups for extended periods and at high intensity. This, in turn, necessitates efficient functioning of the muscular systems. Recent years have demonstrated the significant advancements in handball, and it has become clear that a team cannot reach a high level of performance and strong competition without continuous and intensive training based on modern scientific and physiological principles to keep pace with global developments.

Conclusions:

- Tactical behavior training develops quick response and fast attacks among the youth handball players of Karbala Club.
- Tactical behavior training develops diverse defensive movements among the youth handball players of Karbala Club. - Tactical behavior training has a better impact than regular training in developing quick response and fast attack skills among the youth handball players of Karbala Club.
- Tactical behavior training had a greater effect on the experimental group than the control group in developing quick response and fast attack skills among the youth handball players of Karbala Club.

Recommendations:

Great emphasis should be placed on tactical behavior training for all age groups.

- Tactical behavior training should be used to develop certain defensive skills.
- It is essential to use tactical behavior training to develop quick response and fast attack skills.
- Similar studies should be conducted with other levels of players to examine the impact of tactical behavior training on them and on other sports.

References:

- Abdel-Basir, A. (1999). *Sports training: Integration between theory and practice*. Cairo: Dar Al-Fikr Al-Arabi.
- Abdel-Khaleq, E. (2003). *Sports training* (2nd ed.). Cairo: Dar Al-Fikr Al-Arabi.
- Ahmed, A. A., & Nasr El-Din, A. (2003). *Physiology of physical fitness*. Cairo: Dar Al-Fikr Al-Arabi.
- Ahmed, B. (1999). *Theories of sports training*. Cairo: Dar Al-Fikr Al-Arabi.
- Ali, I. H. (1986). *Stages of attack for Iraqi premier league handball clubs* (Master's thesis, University of Baghdad, College of Physical Education).
- Al-Khiykani, A. S., & Al-Jubouri, A. H. (2016). *Guide to writing theses and dissertations* (1st ed.). Najaf: Dar Al-Diya for Printing and Design.
- Al-Lami, H. A. (2007). *The effect of maximum speed training and creatine phosphate on developing some biochemical variables and individual fast-break attack in*

handball (Unpublished master's thesis, University of Al-Qadisiyah, College of Physical Education).

- Allawi, M. H., & Abdel-Fattah, A. A. (1984). *Physiology of sports training*. Cairo: Dar Al-Fikr Al-Arabi.
- Bahi, M., & Omran, S. (2007). *Tests and measurements in physical education* (1st ed.). Cairo: Anglo Egyptian Bookshop.
- Cardinale, M. (2006). *Performance in handball: Physiological considerations* (S. M. Ismail, Trans.). *Scientific Sports Journal*, (1).
- Dabbour, Y. M. H. (1996). *Modern Handball, Alexandria, Manshaat Al-Maaref*.
- Drog, W. (2002). *Free radicals in the physiological control of cell function*. American Physiological Society.
- Hussein, Q. H. (1998). *Comprehensive sports and physical encyclopedia in games and sports sciences*. Amman: Dar Al-Fikr Al-Arabi.
- Khiyoun, Y. (2002). *Motor learning between principle and application*. Baghdad: Al-Sakhra Office.
- Mahjoub, W. (2001). *Learning and practice scheduling*. Amman: Dar Al-Awael Publishing.
- Mahmoud, H. (1994). *Football coach* (1st ed.). Cairo: Dar Al-Fikr Al-Arabi.
- Ouda, A. A. (2004). *Handball and its basic elements* (2nd ed.). Baghdad: Dar Al-Salam.
- Riyadh, O. (2000). *Sports medicine and handball*. Amman: Dar Al-Fikr Al-Arabi.
- Saleh, H. A. J. (2013). *The effect of special strength exercises using various methods on developing certain types of speed and skills of youth handball players* (Doctoral dissertation, University of Babylon, College of Physical Education and Sport Sciences).