



مجلة جامعة ذي قار لعلوم التربية البدنية
مجلة علمية محكمة تصدرها كلية التربية البدنية وعلوم الرياضة



Self-efficacy and its relationship with the performance of handball and shooting skills among young handball players

Eyad Kamel Shaalan 1 ayad.kamel.shalan@uodiyala.edu.iq

Alaa Kamel Jabbar 2 alaa.kamel@uodiyala.edu.iq

Samer Saadoon Abdulridha 3 <https://orcid.org/0009-0005-2079-9467>

samer.sadoon@uodiyala.edu.iq

Muhanad Faisal Khalaf Jasim 4 muhanad.faysal.khalaf@uodiyala.edu.iq

*University of Diyala / College of Physical Education and Sport
Sciences 1.2.3*

ABSTRACT

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The research objective was to identify self-efficacy and its relationship with performance with the skills of tapping and shooting in handball, and the descriptive approach was used as it is the most appropriate approach to address the research problem, and the research sample was selected by the deliberate method, which are the young players of Al-Karkh Sports Club, which are (18) players, as the percentage of the research sample reached 100% of the original population, and the researchers concluded that the results of the research showed that there is a statistically significant correlation between self-efficacy and the performance of the knocking skill among the players Young handball, which indicates that the high level of self-efficacy contributes to improving control and control during motor performance under pressure, and there is a moral correlation between self-efficacy and shooting skill, which means that the player who possesses a positive self-image is more able to make the appropriate decision and carry out the shooting accurately in realistic play situations. Self-efficacy is an important psychological indicator in assessing the psychological readiness of the player, and it contributes effectively to enhancing self-confidence, regulating emotions, and reducing anxiety during competition, and researchers recommend the need to include psychological training programs aimed at enhancing self-efficacy within the training plans of young players, as it has a direct impact on improving skill performance, and encouraging coaches to use methods to enhance self-confidence and positive feedback to strengthen the player's sense of ability to achieve and succeed in performing difficult skills, and to prepare periodic psychological tests to measure the level of self-efficacy in players, and to follow up on their development in parallel with skill and physical training.

1 – Introduction:

Psychology is one of the oldest sciences that has received wide attention by researchers and scholars, due to its fundamental role in understanding the human psyche, its characteristics, and the characteristics of each age stage, as this science focuses on the study of the individual's personality and the possibility of developing and controlling it to achieve the required balance in the cognitive construction of humans.

Sport psychology is one of the specialized branches of psychology, as it seeks to understand the behavior of the athlete and his experiences related to physical activity, and researches the traits, characteristics, and psychological states that characterize the sports personality, with the aim of developing performance and achieving the best results in competitions.

An effective athlete is defined as one who is able to adapt flexibly to the variables of training and competition, ensuring success, continuity and progress. A highly self-efficacious athlete is constantly seeking to discover new adaptations in the context of competitions or exercises, relying on good analytical thinking that enhances his motivation and improves his athletic behavior. (Al-Shazli: 2024: 54)

Handball is a team game through which the athlete seeks to explore his abilities and achieve creativity in skill and planning performance, with the aim of controlling the requirements of training and competition. This level of performance requires the athlete to have a high sense of self-efficacy, as it plays a pivotal role in enhancing his ability to face difficult tasks and achieve athletic achievement. Studies indicate that low self-efficacy is negatively reflected on the level of performance, and reduces the athlete's ability to overcome pressures Competition-related, which affects one's motivation and competitive behavior (Zimmerman: 2000: 87) (Bandura: 1997: 134)

In light of the above, the importance of this research is highlighted by shedding light on the concept of self-efficacy, as a psychological factor affecting the performance of the athlete, especially in light of the pressures he is exposed to during training or competition. Hence, there is a need to measure the level of self-efficacy among young handball players, and to identify the nature of its relationship with their performance in basic skills, especially the tapping and shooting skills, as they are of direct importance in achieving tactical and technical effectiveness during the course of play.

Research Problem:

The concept of self-efficacy is a key element in the formation of self-image in athletes in general, and handball players in particular. When a player has high self-efficacy in an area he considers important, it contributes to the formation of a positive self-image, while low self-efficacy may lead to a negative sense of self and limit his ability to perform and develop.

From this perspective, the research problem emerges that the game of handball involves complex and changing competitive conditions that require the player to invest his maximum physical, skillful, and cognitive strategic potential, especially in light of facing an opponent that may not be known in advance, which requires the player to fully self-regulate his thoughts, behaviors, and emotions. A low level of self-efficacy may negatively affect performance, and weaken the player's sense of ability to progress and face challenges, which negatively reflects on his motivation and behavior during the competition.

Therefore, there is a need to measure self-efficacy in handball players and to identify how it relates to performance in basic skills, especially tapping and aiming skills, as vital skills in the game.

Research objective: To identify self-efficacy and its relationship with performance with banging and handball shooting.

Research hypothesis: There is a statistically significant relationship between self-efficacy and performance with the skills of tapping and shooting in handball.

2- Research Methodology and Field Procedures:

2-1 Research Methodology:

The descriptive method represents "the accurate perception of the mutual relations between society on the one hand and trends, tendencies, desires and development on the other hand, so that it gives a picture of the reality of life, sets indicators and builds future predictions (Mahjoub: 1988: 219). Survey studies are the collection of information that can be analyzed and interpreted and then conclusions can be drawn from it (Al-Shawk, Al-Kubaisi: 2004: 56).

2-2 Research Sample:

The research sample was selected by the deliberate method, and they are Young players of Al-Karkh Sports Club The percentage of the research sample reached 100% of the original population.

2.3 Research Tools and Means of Information Collection:

Tools are the means or method by which researchers can reach a solution to their problem, and these tools are as follows:

- Scientific sources and references.
- Personal interviews.
- International Information Network (Internet).
- Data Dumping and Collection Form.
- Electronic Calculator .
- Questionnaire (Appendix 1)).
- Indicators.
- Whistle.
- Legal handballs.
- A legal handball goal.
- Stopwatch.
- Duct tape.
- Tape measure.

2.4 Field Research Procedures:

2.4.1 Application of the self-efficacy scale:

The researchers used the (Self-Efficacy) Scale prepared by (Wafa Turki Mazal Al-Ghurairi, 2005) which consists of (6) domains (mental self-efficacy, anticipatory self-efficacy, emotional self-efficacy, social self-efficacy, physical self-efficacy, and skill self-efficacy) while the number of phrases reached (24) phrases and (four alternatives) which are (never applicable to me, apply to a small degree, apply to a moderate degree, apply to a great degree) in reaching the highest value of the scale (96) and the lowest score of the scale (24). (Al-Ghurairi: 2005: 161)

2.4.2 Tests used in the research:

First: Drumming Skill Test: (Terminal: 2013: 333)

Test Name : Zigzag Tapestry between Markers for a distance of 30 meters.

Objective of the test: Measuring the tolerance of the drum.

Tools: 5 handballs, stopwatch, tape, measuring tape, whistle, 5 indicators.

Performance Specifications: Installation of five vertical indicators on the ground in a straight line and the distance between each two indicators is (3 m) and the start is drawn (3 m) away from the first indicator.

The tester stands behind the starting line when he hears the start signal and bounces the ball while running in a zigzag between the signs back and forth.

The player runs back and forth, continuously, and according to the specified time.

Registration: The number of markers is calculated within 60 seconds.

Second: Accuracy of Shooting Test (Al-Khayyat: 2001: 485)

Objective of the test: Measure the accuracy of the handball aim.

Method of Performance: Drawing a handball goal on a front wall in the form of two posts and a crossbar (2 x 3 m) so that the shape that represents the two posts is in contact with the ground (the line of the wall and the floor of the field), then the goal is divided to measure the accuracy of the handball shooting into (9) rectangles and a line is drawn on the ground that is (9) meters away from this shape.

The player shoots from behind the line with a pivotal step, taking into account that the one whose ball hits the rectangles (1, 3, 7, 9), which represent the four corners of the goal, which are dimensions (60×100 cm), will also receive the final score, which is four degrees. If the ball hits the rectangles (2 and 8), which represent the area above the goalkeeper's head and between his feet, which are dimensions of (60×100) cm, he will also receive three points. If the ball hits the rectangles (4 and 6) If the ball hits the middle rectangle – number five – which represents the goalkeeper's chest and torso (80×100) cm, which is one degree. If the ball comes out of that, the player gets zero.

After completing the necessary warm-up, each player performs ten attempts, and this is the grand end of the test.

2.4.3 Exploratory Experiment:

A reconnaissance experiment was conducted on 15/3/2025 in the hall of Al-Karkh Sports Club for Handball, on a sample of (4) players from outside the research sample, and this experiment aimed to verify the validity of the tools used, and the suitability of the skill performance tests under study (tapping and aiming), as well as determining the clarity of the instructions provided to the players, determining the total time taken to implement the tests, as well as monitoring any difficulties that the researchers may face during the actual application.

The experiment also sought to ensure the accuracy of the devices and tools used, and to train the assistant staff on measurement and recording procedures to ensure objectivity and consistency, and to ensure that the search procedures were conducted in an orderly manner during the main application.

2.4.4 Main experience:

The main experiment was carried out on Sunday, 23/3/2025, in the hall of Al-Karkh Sports Club for handball, on young players. This experiment came within the practical context of the research with the aim of collecting the basic data of the three study variables:

Self-efficacy, and accuracy of the performance of the tapping and aiming skills.

The researchers relied on the adjusted self-efficacy scale to suit the members of the research sample in the game of handball, and the scale included (24) phrases, as the scale was distributed to the sample members before starting the application of the tests and in the presence of the assistant team, and after completing the answer to the scale, all the forms were withdrawn, and saved for the purpose of processing them after the completion of all tests. The zigzag drum test was conducted between (5) indicators evenly distributed at a distance of (30 meters), where the player performs Taping zigzagging between the crossbars back and forth for (60 seconds), and calculating the number of markers that the player passes through correctly. This test is an indicator of the accuracy of controlling the ball while moving and the speed of performance under time pressure, while the shooting accuracy test was carried out by drawing a goal shape

on the wall with dimensions of (2 m × 3 m), and divided into (9) rectangles that aim the player from a distance of (9 meters) using a pivot step, which is given different grades according to the scoring area, and before the tests are carried out All instructions were explained to the players before the start of the application, and the roles were distributed to the assistant team between monitoring, recording and judging, and it was ensured that the appropriate environment (lighting, floor, test instruments) was created, and all data was recorded accurately according to pre-prepared tables for subsequent statistical analysis.

2–5 Statistical methods: The researchers used the SPSS statistical package to process the data.

3- Presenting, analyzing and discussing the results:

3.1 Presentation and analysis of the results of arithmetic media, standard deviations of the research sample:

Table (1)

It shows the values of arithmetic media, standard deviations, and the correlation coefficient between self-efficacy and typing skill among the members of the research sample.

Significance Level	Error Percentage	Correlation coefficient	Standard Error	Standard deviation	Arithmetic mean	Variable
Moral	0.000	0.685	1.301	5.522	79.501	Self-Efficacy
			0.717	3.044	36.721	Patting

Table (2)

Shows the values of arithmetic media, standard deviations , and the correlation coefficient between self-efficacy and aiming skill among the research sample members

Significance Level	Error Percentage	Correlation coefficient	Standard Error	Standard deviation	Arithmetic mean	Variable
Moral	0.000	0.752	1.301	5.522	79.501	Self-Efficacy
			0.787	3.343	28.675	Correction

3.2 Discussion of the results between self-efficacy and the application of the skills under study:

Through the results that appeared, the researchers found that there is a significant correlation between self-efficacy and the accuracy of the performance of the batting and shooting skills in young players, and the researchers attribute these results to the psychological variable, as self-efficacy is an important and necessary factor for every sports activity, and some believe that sports does not mean competition only, as the process of sports training alone does not involve any meaning, but it acquires its meaning from the preparation of the team in order to achieve its best level in the Athletic competition is nothing but a test of athletic training processes.

Self-efficacy is seen as an essential psychological component of athletic training; it gives the training process its value, as individual athleticism is only manifested within the team framework and the actual competition. In other words, training sessions only gain full meaning when they are prepared to prepare the team to perform at its best in competitions—which is the true test of the effectiveness of those trainings This self-efficacy does not just mean confidence, but rather reflects the athlete's ability to interpret training as an opportunity to improve and acquire skills, rather than just as a routine activity. A comprehensive systematic review showed that there is a

moderately positive relationship between the level of self-efficacy before competition and athletic performance outcomes, confirming the motivational role of this variable in raising the level of athletic achievement.

Self-efficacy is one of the crucial psychological variables in the training process, as sports activities give their true meaning, especially when training is employed to prepare the team to achieve the highest possible level of performance during the competition, which in turn is a realistic test of the player's abilities and skills. The role of self-efficacy is not limited to just believing in one's own abilities, but also extending to enhancing internal motivation, regulating effort, and controlling emotions, all of which directly affect the quality of athletic performance.

This (Muhammad Jassim Arab, 2009) confirms that "we should not only look at sports competition as a type of test, but also as an important type of educational work, as it has a share and another in influencing the development of the individual's skills and abilities and the formation of his moral and administrative traits" (Arab: 2009: 11).

Self-efficacy requires the need for the individual to use his maximum mental and physical powers and abilities and to try to record the best possible level, and this aspect is considered one of the most important features of sports competitions that affect the individual's personality in an educational way and contribute to the development and development of many psychological characteristics and traits, especially moral and administrative traits.

Self-efficacy is doubly important in fast-paced team games such as handball, which require the player to make timely decisions under the pressure of competition and playing time. In this context, self-efficacy is not just a feeling of confidence, but a key determinant of a player's ability to face complex situations such as solid defense, moving from attack to defense, or meticulously executing batting and shooting skills in unstable situations.

The researchers attribute the significance of the correlation to moral, but the team viewed the competition as a type of mathematical test and did their best during the competition, as they worked to develop their competitive behavior, as well as exploit it correctly to reach the desired and desired results from this competition, and for this reason, the players must have the desired motivation and effectiveness for themselves to achieve the best. Handball is one of the team games in which the athlete tries to realize his abilities and achieve creativity in skill performance, and he plans to control the requirements of training and competition, and this requires him to have a high sense of self-efficacy because the effectiveness of the low self greatly affects the achievement of any performance, and affects his ability to face difficult tasks, which affects his motivation for athletic achievement and his behavior in sports competition (Ayad:2024: 21), "Players with a high level of psychological integrity – emotional balance, the ability to control behavior, and react positively – perform better in shooting, compared to players with poor effectiveness, suggesting the role of a stable psychological dimension in facilitating the implementation of fine skills." (Full:2024:32)

Handball players with a high level of self-efficacy are more able to control their emotions, and show greater determination to succeed despite pressure, and their performance of skills such as tapping under defensive pressure or shooting at critical corners of the goal is positively related to their self-awareness of their abilities, which has been confirmed by the results of recent studies such as the study of Keegan et al. (2023), which showed that athletes with high self-efficacy achieve significantly better performance. (Keegan:2023: 222)

The performance of handball and shooting, which are executive skills that require high concentration and precise timing, can be directly affected by the level of

self-efficacy. When a player believes in his ability to successfully execute the skill, motor errors are reduced, and the proper voluntary direction of the ball increases, enhancing the effectiveness of the skill performance under competitive conditions. (Abdulridha:2023: 287)

Al-Rubaie (2021) pointed out in his study that "psychological abilities are a psychological determinant of skill performance in handball, especially in the shooting skill, which is closely related to an individual's appreciation of his abilities." The results of his study showed that players with balanced self-efficacy achieve higher accuracy in shooting compared to their colleagues who rely solely on skill abilities. (Reda:2021: 57)

Therefore, the development of self-efficacy in the handball training environment should be considered one of the educational and psychological priorities, as it has a direct role in raising the efficiency of the implementation of basic skills, and achieving mental and physical excellence in matches.

4. Conclusions and Recommendations:

Conclusions:

- The results of the research showed that there is a statistically significant correlation between self-efficacy and the performance of the drumming skill among young handball players, which indicates that the high level of self-efficacy contributes to improving control and control during motor performance under pressure.
- There is a moral correlation between self-efficacy and aiming skill, which means that a player with a positive self-image is better able to make the right decision and execute the aim accurately in realistic situations.
- Self-efficacy is an important psychological indicator in assessing a player's psychological readiness, and it effectively contributes to boosting self-confidence, regulating emotions, and reducing anxiety during competition.
- The results showed that the difference in the level of self-efficacy between the players is reflected in the difference in their skill performance, which indicates the importance of this variable in revealing the individual differences between them.

Recommendations:

- The need to include psychological training programs aimed at enhancing self-efficacy in the training plans of young players, as they have a direct impact on improving skill performance.
- Encourage coaches to use self-confidence and positive feedback to strengthen a player's sense of ability to accomplish and succeed in performing difficult skills.
- Preparing periodic psychological tests to measure the level of self-efficacy in players, and following up on its development in parallel with skill and physical training.
- Researchers are invited to conduct similar studies to measure self-efficacy in other skills (e.g., defense, handling, sprinting), and for different age stages, to broaden the knowledge base in this field.
- Employing the results of this research by the training and educational departments in academies and specialized schools to provide psychological support directed to players, taking into account individual differences in self-confidence and emotions during performance.

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Supplements

Appendix 1 Self-Efficacy Scale

Highly applicable	Apply to a medium degree	Apply to a lesser degree	Never apply to	Paragraphs	t
				I am becoming more aware of the duties I complete related to training matters	1.
				I have a high sense of victory when a goal is scored by my colleague	2.
				Organize my thoughts before I enter the competition with any other handball team	3.
				My perception of the game of handball increases when he shows me games for advanced teams	4.
				Focusing on where I am making mistakes increases my handball skills	5.

				I can control my nerves in the crucial moments of competition	6.
				My coach thinks I'm a calm player in tough situations of competition	7.
				I have a high desire to excel in handball performance	8.
				Feel high self-confidence when I score a handball goal	9.
				I suffer from confusion and embarrassment in friendly meetings	10.
				My personal and family problems led to my lack of activity in training	11.
				I think I am tolerant of those who have wronged me among my colleagues	12.
				I think I have good long handling skills	13.
				I have a high ability to perform the penalty shooter	14.
				My trainer believes that my skill should be increased through long training	15.
				I possess the high skill of handling all kinds as a result of my long experience	16.
				When a player hinders me from scoring a goal, I do my best to get the penalty shot.	17.
				The coach thinks that I don't put in a lot of physical effort during training	18.
				When I score a goal with a handball it's because I put in a lot of effort	19.
				The coach believes that my physical ability during the competition is lower than during training	20.
				I expect injury at any moment because of my weakness in physical strength	21.
				I feel scared when I watch the audience	22.
				I expect defeat in the absence of the coach	23.
				It's easy for me to achieve my goals.	24.