

# THE EFFECT OF QUALITATIVE EXERCISES ON THE DEVELOPMENT OF STATIC STRENGTH AND ENDURANCE OF COMPOUND SKILL PERFORMANCE FOR PLAYERS UNDER 18 YEARS OF AGE

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#### **Abstract**

The world of training is considered one of the most important fields in which a lot of developments have taken place in recent years due to scientific experiments and research, which were and still are their only concern to raise the technical level of sports in general and to reach the level of athletes to the highest possible level, as there is no limit to reaching it and stopping at it, but it has become all Something that can be used to develop the level of the athlete. One of the things that must be provided to sustain the training process in general is crystallized in the use of correct scientific methods and modern scientific training curricula that contain physical, skillful, tactical and psychological preparation, as "the basis for raising the level of athleticism in sports, including basketball, is comprehensive physical preparation", which It is concentrated using correct scientific training methods that are consistent with the element to be developed, whether it is physical or skillful. The game of basketball is one of the collective sports that need muscular strength permanently (fixed force and mobile force), which contribute significantly to the development of the numbers of players in terms of physical and skill, as the diversity is Muscular contractions work to develop muscle strength by a greater percentage. Therefore, care must be taken to prepare the players in an integrated preparation in all respects, and to develop offensive skills during the training process, the most important of which are peaceful scoring and targeting by jumping and handling. Special exercises are an important factor in developing these skills if they are done scientifically according to the capabilities and capabilities of the players Hence the importance of research in the use of special exercises in the development of fixed and mobile strength and some of the basic skills of players in basketball. And because of its benefit in developing the players and raising the physical and skill capabilities to reach the higher levels.

#### Introduction

# Research problem

The research problem lies in answering the following questions:

- 1. What is the reality of the fixed strength of basketball players under 18 years of age?
- 2. What is the reality of bearing the complex skill performance of basketball players under 18 years of age?
- 3. Do specific exercises have a role in developing static strength for players under 18 years of age?

4. Does specific exercises have a role in developing the combined skill performance of basketball players under 18 years of age?

# **Research Objectives**

- 1. Preparing specific exercises and applying them to basketball players under 18 years old.
- 2. Identifying the effect of specific exercises on static strength for ages under 18 years.
- 3. Identifying the impact of specific exercises on the ability to perform compound skill in basketball for players under 18 years of age.

# **Research Hypotheses**

- 1. Specific exercises have a positive effect on the static strength of players under 18 years of age.
- 2. The specific exercises have a positive effect on the ability to perform the compound skill in basketball for players under 18 years old.

# Research Areas

First - the human field: Samawah Sports Club players, ages (16 18)

Second - the temporal field: for the period from 9/11/2022 to // 2023.

Third - the spatial field: the closed room in the Western Youth Forum

# Research methodology and field procedures

# Research methodology

The experimental approach is the closest research approach to solving problems in the scientific way, as it is an attempt to control all the variables and basic factors except for one or more variables that the researcher changes in order to determine and measure its scientific effect, and because the nature of the research needs knowledge of (a specific) effect, so the researcher used the experimental approach and designed (two equal groups) the control and the experimental.

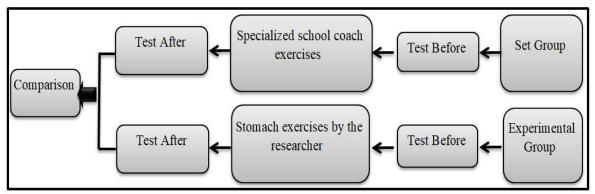


Figure (4)Demonstrates the experimental design of the research groups

# The research community and its sample

The researcher identified his research community represented by the National Center for Gifted Care, the Specialized School for Basketball for ages under 18 years in Al-Muthanna Governorate, and the number is (17) players. The original community as the community was randomly divided into two control and experimental groups, and each group had (6) players, while the sample of the exploratory experiment amounted to (3) players

#### Research tools and devices used

What is meant by the means or method by which the researcher can solve his problem, whatever it is, such as tools, data, samples, or equipment, and for this he used many of them in order to reach that:

#### **Data collection methods**

- Arab and foreign sources.
- Tests and measurement.
- Registration Form.

Tools and devices used in the research

- stopwatch.
- Medicine ball weighing (3 kg)
- measuring tape.
- Characters.
- Adhesive tape.
- Basketball number (10)
- weights in the form of tablets.
- Electronic Calculator (LENOVO)

# **Research Procedures**

#### Determine the search variables

The researcher conducted a survey study on a number of scientific sources and previous studies, and in the opinion of the supervisor, it was agreed on the research variables that we need in the current research:

First - constant force variables

- fixed strength of the arms.
- fixed strength of the two men.

Third - variables of basketball skills

•Carrying compound skill performance.

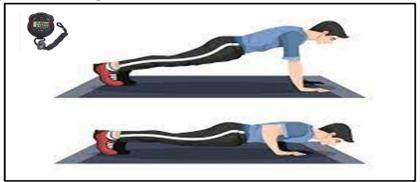
#### **Description of research tests**

# Characterization of static strength tests

First - testing the static strength of the arms

- 1. Name of the test: Forward leaning test at an angle of 45 degrees
- 2. The aim of the test: to measure the fixed strength of the muscles of the arms.
- 3. Tools and capabilities: stopwatch, flat ground.
- 4. Description of the test: The player takes the front support position on the arms so that the arm with the torso forms an angle of 90 degrees as a starting position, and after giving the signal to the player, he starts leaning the shoulder forward so that the arm with the torso forms an angle of 45 degrees, in which the player is fixed in this position and it is confirmed by the laboratory The arbitrator does not create any angle in the hip joint or make a curvature, which leads to a reduction in muscle tension in the body and reduces the resistance arm on the arms and shoulders.
- 5. Registration:

- The tester is given two attempts and the result of the longest period of stability is calculated for him.
- It is preferable for the arbitrator to stand near the laboratory so that he can direct the laboratory on the correct position.



appearance(1) Demonstrates static strength test of the arms

Second - Testing the fixed strength of the two men

- 1. Name of the test: Fixed strength test for the two legs (1)
- 2. The aim of the test: to measure the fixed strength of the muscles of the two legs.
- 3. Tools and capabilities: stopwatch, flat ground, iron discs (4)
- 4. Description of the test: Each two iron discs are placed on top of each other to form a height of (10) cm from the ground, while the distance between the iron discs is (70) cm. The other is placed on the back discs as an initial position, and after giving the signal to the player, he begins to extend the body forward so that the front leg forms an angle with the thigh at 90, while the other leg performs the bending process so that the knee of the back leg becomes close to the flat surfaces, then he extends the arms forward to increase Muscle tension on the legs, in which the player is fixed in this position, and it is verified on the laboratory by the arbitrator in the angle of the front leg and the cell leg or lowering the arms, which leads to a reduction in muscle tension in the body.
- 5. Registration:
- The tester is given two attempts and the result of the longest period of stability is calculated for him.
- It is preferable for the arbitrator to stand near the laboratory so that he can direct the laboratory on the correct position.

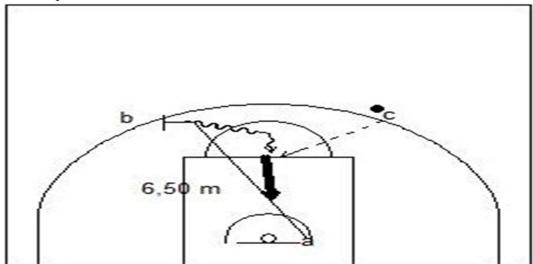


appearance(2) Demonstrates the static strength test of the two legs

#### Motor skills tests

Composite skill performance endurance test(Offensive booking and rotation (roller), receiving the ball and shooting peacefully)

- 1. The aim of the test: measuring the ability to perform the combined skill (offensive blocking, spinning, receiving the ball and shooting peacefully)
- 2. Test time: 40 seconds
- 3. Equipment and tools: basketball court, basketball number (5), adhesive tape, indicators number (5), whistle, stopwatch.
- 4. Description of performance: The player stands at point (a) when he hears the starting whistle, he goes to point (b), which is (6.50) meters away to make an offensive reservation, then turns and starts to receive the ball from point (c) and makes a peaceful shooting towards the goal, as shown in the figure above. Repeat the performance for 40 seconds.
- 5. Registration:
- Three points are awarded for each successful attempt (which ends with a successful goal)
- For each failed attempt (which ends with a failed attempt), two points are calculated.
- In case the time expires before completing the attempt, one point is calculated for the skill that was performed.



appearance(3) Demonstrates compound skill performance stress test

### **Exploratory** experience

Scientific research experts recommend conducting exploratory experiments for the tests used in research in order to obtain the necessary reliable results and information, to benefit from them when conducting the main experiment. Accordingly, the researcher conducted an exploratory study on (3) players from the National Center for Gifted Care and the Specialized School for Basketball for ages under 18 years in Al-Muthanna Governorate. Three o'clock in the afternoon

#### The aim of conducting the exploratory experiment is based on several points.

- Identify the negatives and positives that meet the researcher in the main tests
- Knowing the safety of devices and ensuring their validity.

- The availability of the required capabilities in terms of the appropriateness of the specified places to conduct the tests on them, as well as the availability of appropriate equipment and tools for the tests
- The adequacy of the assistant team and their understanding of how to apply the vocabulary of the test and their distribution to know their tasks when conducting tests for the research sample.
- The suitability of the specified time period for the test for one player and for the rest of the players.
- Extracting the scientific foundations of the tests (honesty, reliability, objectivity)

# This experiment served its purpose

#### The scientific basis for the results of the tests

#### Validity of the test

It means that the test actually measures the ability, trait, attitude, or willingness that the test is set to measure. That is, it actually measures what it intends to measure. External or internal, since the correlation of the test score with an internal or external criterion is an indicator of the validity of that test, and since the researcher did not have a suitable external criterion, he resorted to the total score of the test being the best criterion in calculating this relationship, and accordingly the researcher relied on the correlation coefficient (Pearson) between scores The sub-tests, and the total score of the test in calculating the coefficient of honesty, and the table shows that.

#### **Test stability**

The constant means "that the test gives the same results or close results if it is repeated more than once on the same group and in the same conditions" The stability of the test was calculated using the method of (testing and re-application of the test). Therefore, the researcher repeated the tests on Saturday 12/24/2022 AD on the sample of the same reconnaissance experiment and under the same conditions and context, and the stability coefficient between the two tests was extracted by the law of the correlation coefficient (Pearson) As shown in the tables

#### **Objectivity of the test**

Objectivity means "the tests used are not affected by the change of the arbitrators since the objectivity of the tests was taken in the presence of two arbitrators\*, as Pearson's correlation coefficient was extracted for their results, and the results came out with high objectivity for the arbitrators, as shown in Table

Table(1) Shows the scientific basis for the results of the tests									
Stability coe	efficient	Stability co	efficient	honesty co					
significanc	value	significan	value	significan	value	v			

Stability coe	bility coefficient   Stability coefficient   hones		honesty co	efficient		
significanc	value	significan	value	significan	value	variants
e level	R	ce level	R	ce level	R	
0.000	0.999	0.000	0.992	0.000	0.971	Static strength of the arms
0.000	0.999	0.000	0.988	0.000	0.948	The steady strength of the two men
0.000	0.999	0.000	0.976	0.000	0.971	Carrying out composite skill performance

# **Main Experience**

#### Pre-tests

The researcher conducted the tests, after preparing the research requirements, tools and the assistant work team, as the tests were applied to (12) players, as the tests were applied in the Western Youth Forum at three o'clock in the afternoon, according to the following sequence:

# On Tuesday 12/27/2022 AD.

The researcher has confirmed all the variables related to the tests, such as place, time, and method of implementation.

# Homogeneity and parity

In order to avoid the influences that may affect the results of the research due to the individual differences that exist among the students, and to reach a single and equal level for the sample in the variables studied, which are considered influential in the experiment, they must be controlled, and for this the researcher conducted homogeneity and equivalence, that

Table(2) Homogeneity of the research sample

Statistical	significan	LEVE	exper	imental	the c	control	measrui		
significanc	ce level	N	gr	oup	gr	oup	ng unit	variants	
e	cc icvei	value	p	s	p	S	ing unit		
homogeneo	0.947	0.005	4,463	41,717	4,631	41,383	second	Static strength of	
us	0.547	0.003	7,703	71,/1/	4,031	+1,505	second	the arms	
homogeneo								The steady	
us	0.854	0.036	3,174	53,182	3,252	52,852	second	strength of the two	
us								men	
homogeneo								bearing	
homogeneo	0.507	0.480	1,602	9,833	1,722	9,167	degree	performance	
us								Composite skill	

Table shows that the significance level of the (Leven) test was greater than (0.05), and this indicates the existence of homogeneity among the sample members of each group.

Table(3) Equivalence between the control and experimental groups

Statistical significan	significa nce level	value(t) calculat		imental oup		control coup	measrui ng unit	variants
ce	fice level	ed	p	S	p	S	ing unit	
non-moral	0.901	0.127	4,463	41,717	4,631	41,383	second	Static strength of
non-morai	0.701	0.127	7,703	71,/1/	7,031	71,303	sccond	the arms
non-moral	0.862	0.178	3,174	53,182	3,252	52,852	second	The steady strength
non-morai	0.002	0.170	3,174	33,102	3,232	32,632	second	of the two men
								bearing
non-moral	0.503	0.694	1,602	9,833	1,722	9,167	degree	performance
								Composite skill

Table (3) shows that the significance level values of the (t) test for the independent samples were greater than (0.05), and this indicates that there are no significant differences between the control and experimental groups.

# The second reconnaissance experiment

The researcher conducted a second exploratory experiment on Monday 2/1/2023 AD at the Western Youth Forum at 3:00 pm, as all stomach exercises were applied by the researcher, and the aim of conducting the second exploratory experiment is:

- Extracting the maximum intensity for each exercise used.
- In order to know the appropriateness of the exercises for the players.
- Knowing the time of each exercise.
- Standing on the difficulties when performing the exercises and finding a solution to them.
- Knowing the appropriate rest period to do the repetitions.
- Ensure the availability of the necessary tools for the exercises.
- Knowing the number of exercises that will be applied during one training unit.

#### The Curriculum

The researcher proceeded to apply the prepared exercises under his direct supervision on the experimental research sample for the period from 1/21/2023 to 3/15/2023. The researcher took into account the following when developing the curriculum:

The exercises were applied for 8 weeks.

- The number of training units reached (24) training units, at a rate of (3) units per week.
- The exercises were applied on the days (Saturday, Monday, Wednesday) of each week.
- The researcher took into account the principle of fluctuation and gradient when setting the training intensity.
- The researcher took into account, when developing the exercises, the level of difficulty and the extent of their suitability for the players.
- The exercises were applied in the main part and immediately after the warm-up, so that the player could be at a high level of physical and mental readiness.
- The researcher used the training intensity, which ranges from (90-100%) when setting the training load.

#### Post-test

After completing the application of the exercises, the post-exams were conducted on (12) players, as the tests were applied at three o'clock in the afternoon, according to the following sequence:

On Tuesday 3/16/2023 AD, for basketball skills tests.

#### **Statistical Methods**

The researcher used the statistical system (SPSS) for statistical information and the program (EXCEL)

- 1. Arithmetic mean.
- 2. Standard deviation.
- 3. The value of the LEVEN test.
- 4. The simple correlation coefficient (Pearson)
- 5. The value of (t) for correlated samples.
- 6. The value of (t) for the independent samples.
- 7. Cohen's effect size value.
- 8. Eta value.

9. The law of the rate of development.

# Presentation, analysis and discussion of results

# Description of the distribution of the results of the research sample

Table(4) (Shapiro-Wilk) test and the level of significance for the distribution of the data of the two research groups in the study variables

experimental group					the cont			
Dimensio	onal tests	Pre-t	ests	Dimensional tests		Pre-tests		
significan ce level	the value Statistic al	significa nce level	the value Statisti cal	significa nce level	the value Statistic al	significan ce level	the value Statistic al	variants
0.252	0.876	0.209	0.865	0.523	0.922	0.186	0.859	Static strength of the arms
0.745	0.951	0.168	0.853	0.101	0.827	0.577	0.930	The steady strength of the two men
0.473	0.915	0.425	0.908	0.820	0.960	0.830	0.961	bearing performance Composite skill

The results of the above table show that the significance values resulting from the (Shapiro-Wilk) test for the results of the research sample in all variables were greater than the value of the error percentage - (0.05), and this means that the values are subject to the normal distribution, and thus the condition of using (t) for comparison between averages is fulfilled.

# Presenting the results of the pre and post tests

Table(5) Arithmetic means, standard deviations, (t) value, and the significance of differences between the pre and post tests of the research variables of the control group

Statistical	significa	value(t)	Post-test		Pretest		measruin	
significanc e	nce level	calculate d	р	S	р	s	g unit	variants
moral	0.008	4,287	2,828	50,000	4,631	41,383	second	Static strength of the arms
moral	0.012	3,843	2,123	56,353	3,252	52,852	second	The steady strength of the two men
moral	0.009	4,111	1,049	13,500	1,722	9,167	degree	bearing performance Composite skill

The results of the table above show that the significance level values of the (t) test for the correlated samples of the research variables were smaller than the error percentage (0.05) at the degree of freedom ((5), and this means that there are differences between the pre and post tests and in favor of the post test of the control group sample.

Table(6) Arithmetic means, standard deviations, (t) value, and the significance of differences between the pre and post tests of the research variables of the experimental group

Statistical	significa		Post-test		Pretest			
significan ce level	(t) calculat ed	p	S	p	S	measrui ng unit	variants	
moral	0.000	7,195	1,662	57,517	4,463	41,717	second	Static strength of the arms
moral	0.000	7,928	1,421	62,385	3,174	53,182	second	The steady strength of the two men
moral	0.002	5,754	1,033	15,667	1,602	9,833	degree	bearing performance Composite skill

The results of the above table show that the significance level values of the (t) test for the correlated samples of the research variables were smaller than the error percentage (0.05) at the degree of freedom ((5), and this means that there are differences between the pre and post tests and in favor of the post test for the sample of the experimental group.

Presenting, analyzing and discussing the results of the control and experimental groups in the post-tests

Table(7) Arithmetic means, standard deviations, (t) value, and the significance of differences between the control and experimental groups in the research variables of the post-tests

Statistical	significan	value(t)	/   1000 1000		Pretest		measruin	
significanc e	ce level	calculate d	p	s	р	s	g unit	variants
moral	0.000	5,613	1,662	57,517	2,828	50,000	second	Static strength of the arms
moral	0.000	5,783	1,421	62,385	2,123	56,353	second	The steady strength of the two men
moral	0.005	3,606	1,033	15,667	1,049	13,500	degree	bearing performance Composite skill

The results of the table above show that the significance level values of the (t) test for the independent samples in the search variables were smaller than the error percentage (0.05) at the degree of freedom ((10), and this means that there are differences between the control and experimental groups in the research variables in the post tests and in favor of the experimental group.

# Discussing the results of the control and experimental groups in the post-tests

That what was stated in the tables above and through the test (T) and the size of the effect, it

was found that there are clear differences in the results of the post-test from the pre-test in (fixed strength), as the researcher attributes the reason for the development of the control group to the effect of the exercises provided by the trainer, in addition to the continuation of And the regularity of the players, which had a clear role in its development, given that the continuation of training, whatever the goal, will have an impact, even if it is simple, on the functional aspect of the player's body. As for the experimental group, the researcher attributes the reason for the development of (fixed force and moving force) to the effectiveness of the exercises prepared by the researcher because Strength training qualitatively leads to the development of speed and strength of performance and to maintain the effectiveness of performance and improve it." Therefore, the researcher was keen to pay attention to its training through exercises of a physical skill nature that were performed by all players with accuracy and high proficiency, "because these exercises aim to raise the physical ability and physiological capabilities of the athlete Using skills and motor direction close to the type of specialization (similar to the required sport)" and employing these exercises using the same muscle groups involved in motor performances, as muscle strength is an independent factor from general endurance, indicating that physical ability depends on muscle strength and the efficiency of the link between them and the nervous system While general endurance depends mainly on the efficiency of the circulatory and respiratory systems in transporting oxygen and nutrients necessary for the continuation of muscular work and the speed of disposal of metabolic waste. It also turns out that there are differences between the pre and post test and in favor of the post test in the experimental research group in the mobile force. As the researcher attributes the development of the mobile force to the exercises prepared by him first, and to the regularity in training secondly, as "(1) the exercises carried out by the players (the experimental group) include the use of rubber resistances and medical balls in developing strength endurance (for the legs and arms), where the forms of these exercises were Closely related to the offensive skills researched in basketball, as it included jumping movements and front, back and side movements with resistances that are quite similar to the movement of a basketball player. optimal and appropriate Where we find that there is a clear difference between the experimental group and the control and in favor of the experimental group in the post-measurement, as the researcher attributes the reason for this difference to the use of exercises in a qualitative manner, which would develop the various working muscles in the body, in addition to the organization and gradation by increasing the training load and focus through exercises To raise the susceptibility of the muscles, especially the muscles of the legs and arms, through the use of force-bearing exercises by means of medicine balls, rubber, partridges, and jumping from different positions. Bearing strength for the muscles of the body, as (strength endurance training is determined by the ability of the large load size when compared to the conditions of competitions and work with high resistance). For development. All of these things that were mentioned contributed effectively to showing positive results between the two post-tests for the experimental and control groups, and in favor of the post-test for the experimental group. Where we find that there is a clear difference between the experimental group and the control and in favor of the experimental group in the post-measurement, as they attribute the researcher the reason for this difference to the use of exercises in qualitative methods, where the performance of the exercises prepared by the researcher was at the beginning of the main section to exploit the safety of the central nervous system and it is implemented as quickly as

possible during The training unit "Because the training intensity in team games is very complex to keep the match going quickly and the intensity changes and changes constantly between high and low. In order to meet the needs of these requirements, the coach must include in his training curriculum how to use a variety of formations on an ongoing basis". That what was stated in the tables above () and through the test (T) and the size of the effect, it was found that there are clear differences in the results of the post-test from the pre-test in bearing the special offensive and defensive performance (offensive reservation, rotation, shooting, handoff, and defensive movement of the crests), as the researcher attributes the reason for the development of the control group To the effect of the training provided by the coach, in addition to the continuity and regularity of the players, which had a clear role in the development of endurance offensive and defensive performance, given that the continuation of training, whatever the goal, will have an impact, even if it is simple, on the functional aspect of the player's body. As for the experimental group, the researcher attributes the reason for the development to the fact that the basketball player needs high strength in all its forms and types to perform skills and play plans in conditions similar to competition conditions. But this situation changes when the opposing player is close to the player in possession of the ball and tries to cut it. In this case, the player must have sufficient strength to perform ball skills. To play to get rid of the opponent with quick movements with the ball and the ability to switch from one movement to another, and this was confirmed by the researcher in the playing exercises through the use of pressing defense in a man-to-man manner on the player carrying the ball, which in turn helped to develop the player's technique and estimate the different playing conditions and find appropriate solutions for them. The specific exercises used were performed using the ball and in the presence of the defender to give the player enough time to repeat the skills, especially for what is characteristic of this stage of the player's life, as the player at the age of 17-18 years must master most of the complex skills and the skills that are performed with a colleague, which have a major role in The success of the offensive and defensive tactics before moving to the playing stage with the advanced class to avoid the difficulty of harmony and understanding the tactical moves, and this is the most difficult thing facing young players. Recently, most of the skill, speed and strength exercises take place with the ball in all exercises, and this leads to building the required sports condition and skill and thus achieving Perfection in technique "linking the technical performances with the special physical capabilities in the game of basketball has a positive effect on the level of those performances, as each of the player's movements requires muscular work with strength and a certain speed, and carrying the player to perform the skill for a good period of time during the match is one of the goals of the training prepared by The researcher, by integrating muscular strength training with skill training, added to that, teaching the player how to perform skills with a colleague and under the pressure of the defender. Tadeusz also explained that "choosing the opponent is the basis of the work, and how the opponent is, the height of the load and the intensity of the work, and the choice of the opponent depends on The period and degree of training and the skillful application of repetition." He also added that this method is suitable for those who have many years of training and less suitable for others. Then receiving and shooting or performing the handoff skill with reservation, peaceful shooting, defensive footwork, and all these skills have become used mainly in most modern basketball plans, so the researcher was keen to focus on performing these skills and repeating them, taking into account the speed and strength of performance as modern basketball and with The individual and team defense has greatly developed. The player must perform the skill with high efficiency throughout the match period.

The specific exercises, their content and speed were identical to the movement performed by the player on the court at the time of the match, because the movement of the basketball player is characterized by a continuous change in the intensity of performing the skill work, taking into account that the movement of the player in compound skills necessitates him to make difficult movements with the ball in performing the skill with Defender presence

And where we find that there is a clear difference between the experimental group and the control group, and in favor of the experimental group in the post-measurement, as they attribute the researcher the reason for this difference to the use of exercises in a standardized qualitative way, as the link between these skills and how to produce them optimally in all periods of the match requires continuity in running and non-stop. Where I added qualitative exercises to use the same muscle groups involved in motor performance and develop the characteristic of special endurance and skillful performance under conditions and situations similar to situations and conditions of matches, and this is one of the goals of qualitative training because it contains complex exercises similar to the duty of the player in real play and shortening the training time and adding the element of suspense and excitement

This is what is called qualitative training as one of the basic principles of training in collective games, which is to direct the training process and focus on the performance requirements of the game in terms of physical, skill and planning, in addition to the use of specialized qualitative exercises that aim to improve the basic skills of the game and the working muscles during the various performances.

Maintaining the level of performance and its mechanism, especially when performing the skillful and tactical requirements, can only be achieved through the development of physical capabilities, including muscular strength, which in turn works to develop skillful performance, and the same element of strength in its various types contributes to mastering defensive and offensive skill work. Our addition to the ability to act in changing and sudden situations in the match by resisting fatigue for a longer period. It is also known that the game of basketball is a game of seconds, and it is possible that the last seconds are decisive in the match. The beginnings and ends of movement, changing its timing, and placing it in various combinations to increase the ability to integrate performances with each other in proportion to the requirements of the situation during the actual competition and training on it in difficult and different conditions. Therefore, the player must possess muscle strength at a high level to perform complex skills to win matches, and this is what has been focused On him in training in the manner of playing. Clara confirms this. "One of the benefits of qualitative training is that the players with these exercises are exposed to several different cases of applying the exercise, and this makes all players interact in performing the skill effectively, in addition to providing the players with knowledge and physical knowledge about the playing environment and competition, and teaching them to modify performance in a way that suits the playing environment, its variables, and its features."), so all skills were integrated during the exercises with special physical abilities to achieve the desired research goals, and this is what the members of the experimental group showed in the skill performance endurance tests prepared by the researcher

#### Conclusions and recommendations

#### **Conclusions**

- 1. The exercises prepared by the researcher contributed to the development of the fixed strength of the arms and legs of the basketball players.
- 2. The exercises prepared by the researcher contributed to developing the ability to perform the compound skill with basketball for him.
- 3. The sample of the experimental group outperformed the sample of the control group in the search variables.

#### Recommendations

- 1. The researcher recommends the use of prepared exercises because of their role in developing strength and skill.
- 2. The researcher recommends the use of strength exercises in the training curricula because of their role in developing skills.
- 3. The researcher recommends conducting other studies by applying specific exercises to skills other than those discussed by the researcher
- 4. The researcher recommends conducting other studies by applying specific exercises to an activity other than basketball.

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