



The effect of an educational program using introductory games on the level of physical abilities specific to basic skills in basketball for beginners

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Abstract

This research aims to identify the effect of an educational program using introductory games on the level of performance of basic skills for beginners in basket ball. It used the experimental approach. The research sample included (40) novice basket ball players at Mansoura Sports Stadium. Use data collection methods: content analysis, personal interviews, tests, and scales to collect data. The most important results were the positivity and effectiveness of the educational program using introductory games on the level of performance of the skills under study in basket ball. The experimental group that used the introductory games outperformed the control group that used the traditional method.

ملخص البحث:

يهدف هذا البحث إلى التعرف على تأثير برنامج تعليمي باستخدام الألعاب التمهيدية على مستوى أداء المهارات الأساسية للمبتدئين في كرة السلة، وقد استخدم المنهج التجريبي، وقد اشتملت عينة البحث على (40) لاعباً ناشئاً بكرة السلة بإستاد المنصورة الرياضي، وقد استخدم الباحثان أساليب جمع البيانات: تحليل المحتوى، والمقابلات الشخصية، والاختبارات، والمقاييس لجمع البيانات، وقد كانت أهم النتائج إيجابية وفاعلية البرنامج التعليمي باستخدام الألعاب التمهيدية على أسليب جمع البيانين المحتوى، والمقابلات الشخصية، والاختبارات، والمقاييس لجمع البيانات المتوى أسليب جمع البيانات. تحليل المحتوى، والمقابلات الشخصية، والاختبارات، والمقاييس لجمع البيانات المعاني المحتوى، والمقابلات الشخصية، الماليب معليم الألعاب التمهيدية على أسليب المعاني المحتوى، والمقابلات الشخصية، والاختبارات، والمقاييس لجمع البيانات، وقد كانت أهم النتائج إيجابية وفاعلية البرنامج التعليمي باستخدام الألعاب التمهيدية على مستوى أداء المهارات قيد الدراسة في كرة السلة، وقد تفوقت المجموعة التجريبية التي استخدمت الطريقة التقليدية.





The effect of an educational program using introductory games on the level of physical abilities specific to basic skills in basketball for beginners

Introduction and research problem:

Life has witnessed a remarkable development to meet human needs, and this development has continued in various scientific and human fields, and physical education has a share of this progress. After sports were limited to fun and recreation, they developed and became practiced in order to prove existence, win, and achieve moral, material, and even political results. Therefore, scientists and specialists in the field of physical education sought to prepare training curricula that keep pace with modern developments.

There is also no specific and dedicated method to develop the learner's skills and abilities, so the teacher must choose the best educational methods and means that suit the learners. Therefore, the teacher must invent modern educational methods that help refine the learner's knowledge and skills. (21: 217)

Muhammad Hassan Alawi (1997) believes that introductory games are important and successful educational and teaching methods that help the individual acquire, develop, and improve his performance of motor skills for various sports activities, which increases his tendency towards practicing sports activities and works to raise his level and abilities (14: 18).

Ellen Wadih Faraj (2007) explains that preliminary games are closely related to major games and their importance is clearly evident from the physical and recreational perspective for learners, and they also contribute effectively to the educational process (5:5). Mohamed El-Sayed Ali (2002) indicates that basketball is the second most popular game after football in many Arab countries, as this sport receives a lot of attention and care from sports federations and institutions in these countries, as it is considered one of the games that many citizens of different ages love and prefer (10:13).

Through the researcher's work in the field of basketball training and as a trainer in many clubs in Mansoura and Damietta, in addition to personal interviews with a number of other trainers in different clubs and youth centers in Mansoura and Damietta, she noticed that beginners do not master the basic skills in basketball to a large extent as a result of excessive routine learning in addition to their learning in a fixed, non-diverse educational environment. Through the researcher's review of many references and previous studies in the field of basketball that she was able to access, she noticed that none of the researchers, within the limits of the



researcher's knowledge, had addressed the use of introductory games (under study) in improving basic skills in basketball for beginners, which aroused the researcher's interest in thinking about conducting this research in an attempt to design an educational program using introductory games (under study) to identify its effect in improving the elements of physical fitness and basic skills in basketball for beginners. Whereas it is expected that when the researcher uses some preliminary games (under study) in performing basic skills in basketball, this will improve the players' level in these skills because preliminary games are nothing but preparation for the big games in addition to providing the factor of fun, joy and competitive spirit and removing the boredom that may exist during the educational process and thus becomes more positive.

The importance of the research and the need for it:

- Provides researchers with additional information about the field of basketball and preliminary games related to the field.

- An attempt to present preliminary games as a physical aspect in the program and show their educational importance in developing positive traits in the age group under study.

- Contributing to serving society and the environment through sports activities and preliminary games that develop the skill aspect in basketball. **The aim of the research:**

To identify the effect of the educational program using preliminary games on the special physical abilities of the basic skills in basketball for beginners, through:

- Developing the special physical abilities of beginners in basketball.

- Developing an educational program using preliminary games on the special physical abilities of the basic skills in basketball for beginners.

Research hypotheses:

In light of the nature and objectives of the research, the following hypotheses were developed:-

- There are statistically significant differences between the averages of the pre- and post-measurements of the experimental group in the specific physical abilities of the basic skills in basketball for beginners in favor of the post-measurement.

- There are statistically significant differences between the averages of the pre- and post-measurements of the control group in the specific physical abilities of the basic skills in basketball for beginners in favor of the post-measurement.

- There are statistically significant differences between the postmeasurements of the experimental and control groups in the specific





physical abilities of the basic skills in basketball for beginners in favor of the post-measurement of the experimental group.

Research terms:

Preliminary games:

They are defined as games in the form of competitions performed with or without a tool and aim to acquire motor skills for different games in addition to developing physical abilities. (5:5).

Educational program:

A set of expected educational experiences that stem from the curriculum and everything related to its implementation (teacher, learner, teaching methods, material and human capabilities, time, content, educational technology and evaluation. (3:9)

Reference Studies

Arab Reference Studies

1/ Study by Tariq Muhammad Khalil (2016) (8), which aimed to know the effect of introductory games on overcoming learning difficulties for some racket sports skills among first-year students at the Faculty of Physical Education, Sadat City University. The researcher used the experimental method on a sample of 240 students.

The most important results were: The proposed educational program using introductory games led to overcoming the difficulties facing students in racket sports. The necessity of designing educational programs to overcome learning difficulties in all racket sports using introductory games.

2/ Study by Muhammad Abdul Rahim Muhammad (2023) (16), which aimed to identify the effect of using introductory games to develop the appropriate effort to improve the level of shooting and heading skills among football juniors. The researcher used the experimental method on a sample of 20 juniors.

The most important results were: The training program using introductory games had a positive effect on the variables of the compatibility abilities and basic skills in football for the experimental group.

3/ The study of Muhammad Ghanem Ahmed Mahdi (2024 AD) (17), which aimed to design a program that includes introductory games to develop basic skills in handball, and the researcher used the experimental method, on a sample of 110 students.

The most important results were: The students who studied using introductory games outperformed the control group.



Foreign reference studies

4/ The study of Kirk and Grotpeter (1995) (22), which aimed to identify the nature of the relationship between the child's gender, psychological and social compatibility and aggressive behavior in children, and the researchers used the descriptive method, and the study sample consisted of 491 male and female students who study in the third to sixth grades of primary school.

The most important results were: There is a positive correlation between psychological loneliness, depression, negative self-concept, and aggressive behavior in children of both sexes - the level of aggression increases in children as they age.

5/ Karlen's study (1996) (24), which aimed to identify the factors behind aggressive behavior in children, and the researcher used the descriptive approach.

The most important results were: Incorrect parental treatment methods that make the child feel rejected are among the most important factors that lead to the emergence of aggressive behavior in children.

6/ Nancy and Loise's study (1997) (25), which aimed to identify the factors related to aggression in African American boys in pre-adolescence, and the study sample consisted of 85 male children between the ages of 8-13 years, and they were studied for 3 years using different games.

The most important results were: Aggression increases in emotionally disturbed samples - Aggression increases in samples characterized by a low self-concept more than those characterized by a high self-concept.

Research procedures:-

Research methodology:

The researcher used the experimental method using the experimental design for two groups, one experimental and the other control, by pre-post measurement for each group of the research groups.

Research community:

The research community is represented by the intentional method of basketball players at Mansoura Stadium - Dakahlia Governorate, for the sports season 2023 AD - 2024 AD, where their number reached (80) players.

Research sample:

The research sample was randomly selected from basketball players at Mansoura Sports Stadium - Dakahlia Governorate, for the sports season 2023-2024 AD, representing the age group from (12-14) years for a number of (60 players). Players whose absence rate exceeded 20% of the research application period were excluded, and their number was (10



players) from the two groups. Thus, the research sample became (20 players) for the experimental group on which the proposed program will be applied using introductory games, and (20 players) for the control group on which the traditional program will be applied using the traditional command method. (20 players) were also taken as a sample for the exploratory experiment from within the research community and outside the main sample.

Percentage (%)	Number	Sample					
33.3%	20	Experimental group	Primary sample				
%33.3	33.3%	Control group					
33.3%	20	Exploration sample					
100%	60	Total researc	ch sample				

Table (1) Classification of the research sample

Homogeneity of the research sample:

The researcher conducted homogeneity among the research sample members in the variables under study by calculating the skewness coefficient for some anthropometric and physical measurements that may have an impact on the research variables, in order to ensure that the basic research sample is moderately distributed in these variables as shown in Table No. (2), (3).

 Table (2)

 Mean, median, deviation and skewness coefficient for the basic variables

 N=60

					11=00
Coefficient of	Deviatio	Media	Averag	Unit of	Basic
skewness	n	n	е	measurement	variables
0.098	0.549	13	13.175	year	Age
0.479	1.897	151	151.70	C.M	Height
0.348	1.682	50	5.30	K.G	Weight

Table (2) shows the mean, median, standard deviation and skewness coefficient for the basic measurements, where it is clear that the value of the skewness coefficient ranged between (0.098: 0.479), which are values that fall between (+3: -3), which shows the moderation of the distribution of the research sample scores in the variables under study.





 Table (3)

 Mean, median, standard deviation and skewness coefficient for the physical variables under study

N=60						
Physical variables	Tests	Unit of measureme nt	Average	Median	Deviation	Coefficient of skewness
Flexibility	Trunk flexion	number	17.3	18	1.814	0.581 -
Agility	Zigzag running	C.M	14.36	14.40	0.26	0.17
Muscular Strength of Arms	Medicine ball push	second	7.3	7	1.606	0.021
r Static Balance	Standing on a bar	second	21.525	21	1.739	0.540
Accuracy	Shooting at rectangles	degree	4.07	4.00	0.92	0.48
Muscular Strength	Broad jump	C.M	140.60	140	1.515	0.543
Speed	30 meter sprint	second	6.65	6.70	0.32	0.45-
S Coordinatio n	Numbered circles	second	9.288	9.375	0.496	0.528-

Table (3) shows the mean, median, standard deviation and skewness coefficient for the physical measurements, where it is clear that the values of the skewness coefficient ranged between (-0.581: 1.027), which are values that fall between (+3: -3), which shows the moderation of the distribution of the research sample scores in the physical variables under study.

Equivalence of the research sample:

The researcher conducted equivalence between the research sample before applying the program in some basic and physical variables, as shown in Table (4), (5): -





Table (4) Statistical significances between the two research groups (experimental - control) in the basic variables under study

N1=N2=20

" T "	Control group		Experimental group		Unit of	Basic variables	
	Deviation	Average	Deviation	Average	measure	Dasic variables	
0.860	0.552	13.10	0.550	13.25	year	Age	
0.165-	1.883	151.75	1.954	151.65	C.M	Height	
0.559-	1.820	50.45	1.565	50.15	K.G	Weight	

Table "t" value at a significance level of 0.05 = 2.093 and degree of freedom (19) * = significant

Table (4) shows that there are no statistically significant differences between the experimental and control groups in the pre-measurement of the basic variables, as the calculated "t" value ranged between (-0.165: 0.860), which is less than its tabular value at a significance level of 0.05, which shows the equivalence of the two research groups in the pre-measurement of the variables under study.

Table (5) Statistical significance between the two research groups (experimental - control) in the physical variables under study

N1=N2=20	N1:	=N2:	=20
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	Control	group	Experime	ntal group	Unit of	Disaster	
	Deviation	Average	Deviation	Average	measurement	Physica	li variables
0.17 2	1.943	17.35	1.725	17.25	number	Trunk flexion	Flexibility
0.95	0.29	14.32	0.23	14.40	C.M	Zigzag running	Agility
0.29 3	1.069	7.25	1.089	7.35	second	Medicine ball push	Muscular Strength of Arms
- 0.45 0	1.871	21.65	1.635	21.40	second	Standing on a bar	Static Balance
0.51	0.99	4.15	0.86	4.00	degree	Shooting at rectangles	Accuracy
1.48 3	1.791	140.25	1.118	140.65	C.M	Broad jump	Muscular Strength
0.97	0.31	6.60	0.33	6.70	second	30 meter sprint	Speed
0.60	0.535	9.258	0.465	9.318	second	Numbered circles	Coordination

The tabular "t" value at a significance level of 0.05 = 2.093 and a degree of freedom of (19) * = significant



Table (5) shows that there are no statistically significant differences between the experimental and control groups in the pre-measurement of physical variables, as the calculated "t" value ranged between (0.269: 1.483), which is less than its tabular value at a significance level of 0.05, which shows the equivalence of the two research groups in the premeasurement of the variables under study.

Data collection methods: Reference survey:

The researcher conducted a reference survey on Arab and foreign references, previous studies, and research on the international information network (the Internet) related to the research topic in order to determine the research variables (1)(3)(5)(9)(11)(14)(18)(22), to reach the following:

- Preparing the theoretical framework for the research.

- Designing data recording forms attached (3).

- Identifying the foundations and rules of designing educational programs and how to use them within the educational process.

- Determining the components and parts of educational units is attached (5).

Expert opinion poll forms:

The researcher prepared expert opinion poll forms to determine:

1. Expert opinion poll form on determining the plan and time schedule for the proposed educational program using the introductory games under study. By reviewing previous research and studies, the appropriate total time for the proposed program was determined (12) weeks, (3) educational units per week, with (36) educational units, provided that the time of each educational unit is (120) minutes distributed over 4 parts, parts refer to the program attached (5), which are:

- Warm-up and its time is (15 minutes) fifteen minutes.

- Physical preparation and its time is (30 minutes) thirty minutes.

- The skill part and its time is (70 minutes) seventy minutes.

- Conclusion and its time (5 minutes) five minutes

Tools and devices used:

The researcher used the following tools and devices to collect data:

- Cones, measuring tape, stopwatch, camera, medical scale to measure weight in kilograms, ristometer to measure height in centimeters, medical balls, chalk, elastic ropes, Swedish seats, dumbbells and leg weights.

Tests used:

Tests specific to the homogeneity of the research sample:

- Measurement (height - weight - age).

- Special physical variables tests (under study attached (2):



Exploratory studies:

The researcher conducted the exploratory studies during the period from 9/17/2023 to 9/28/2023, and they were conducted on a sample of (10) beginners from within the original research community and from outside the basic sample, who were selected randomly.

First exploratory study:

The researcher conducted the first exploratory study from Sunday 9/17/2023 to Thursday 9/21/2023 on (10) beginners from the same research community and from outside the basic research sample with the aim of: ensuring the suitability of the games and exercises used for the research sample.

Second exploratory study:

The researcher conducted the second exploratory study from Sunday 9/24/2023 to Thursday 9/28/2023 on (10) beginners from the same research community and from outside the basic research sample, and that In order to:

A- Verify the validity and reliability of the physical variables measurement tests used.

The results of the first exploratory experiment showed that the games and exercises used are appropriate for the nature of the age group of the sample (under study). The scientific coefficients of the tests used in the second exploratory study were also calculated.

Scientific coefficients for physical variables measurement tests: Test validity:

To verify the validity of the tests, the researcher used the discriminant validity method by applying the test to two groups, one of which is (the non-discriminant group), and the other (the distinguished group) of junior players in the same club, then calculating the differences between them to ensure the validity of the physical variables measurement tests, as shown in Table (6):



 Table (6)

 Discrimination validity in physical variables measurement tests

 N1=N2=10

Т	Difference between means	Undifferenti group Deviation	ated Average	Distinct group Deviation Average		Unit of measure ment	Physical variables	
*20.49	8.80	0.707	11.50	1.159	20.30	number	Trunk flexion	Flexibility
*8.60	1.14	0.33	15.12	0.12	14.06	C.M	Zigzag running	Agility
*8.55	3.20	1.801	5.50	0.483	8.70	second	Medicine ball push	Muscular Strength of Arms
*21.92	16.20	1.828	14.70	1.449	30.90	second	Standing on a bar	Static Balance
*6.86	2.12	0.74	5.37	0.46	3.25	degree	Shooting at rectangles	Accuracy
*37.56	37	0.843	129.60	1.247	167	C.M	Broad jump	Muscular Strength
*16.38	0.92	0.07	7.04	0.14	6.12	second	30 meter sprint	Speed
*13.060	1.06	0.465	9.318	0.535	8.258	second	Numbered circles	Coordinati on

Table "t" value at a significance level of 0.05 = 2.262 and degree of freedom (9) * = significant

Table (6) shows the existence of statistically significant differences between the distinguished and non-distinguished groups in physical measurements in favor of the distinguished group, as the calculated "t" value ranged between (8.55: 37.56), which is higher than its tabular value at a significance level of 0.05, which shows the validity of the measurement tests for the physical variables under study.

Test stability:

To verify the stability of the selected tests (under study), the researcher used the method of applying the test and repeating it by applying it to a sample of the exploratory experiment consisting of (10) beginners from the same research community and from outside the basic sample, then re-application after a week from the first application to the same group and at the same time and under the same measurement conditions as much as possible, then the correlation coefficient was calculated to ensure the stability of the measurements of the physical variables, as shown in Table (7)





n = 10

Table (7)
Correlation coefficient between the first application and the second
application in the tests of measuring physical variables

Signific		second ap	plication	first applic	cation	Unit of			
ance level	"R"	Deviatio n	Average	Deviatio n	Average	measurement	Physical variables		
0.000	*0.927	1.321	17.50	1.065	17.40	number	Trunk flexion	Flexibility	
0.000	*0.88	0.59	14.44	0.60	14.57	C.M	Zigzag running	Agility	
0.000	*0.797	1.802	7.50	1.328	7.20	second	Medicine ball push	Muscular Strength of Arms	
0.000	*0.651	1.749	20.60	1.286	20.90	second	Standing on a bar	Static Balance	
0.000	*0.85	1.38	4.50	1.19	4.20	degree	Shooting at rectangles	Accuracy	
0.000	*0.835	1.105	140.15	1.197	140.10	C.M	Broad jump	Muscular Strength	
0.000	*0.89	0.48	6.46	0.47	6.55	second	30 meter sprint	Speed	
0.000	*0.910	0.465	9.312	0.465	9.318	second	Numbered circles	Coordination	

The tabular value of "r" at a significance level of 0.05 = 0.632 and a degree of freedom (8) * = significant

The tabular value of "t" at a significance level of 0.05 = 2.262 and a degree of freedom (9) * = significant

Table (7) shows the existence of a statistically significant correlation between the first and second applications of the physical measurements tests, as the calculated "r" value ranged between (0.651: 0.927), which is higher than its tabular value at a significance level of 0.05. There are also no statistically significant differences between the first and second applications of the physical measurements tests, as the calculated "t" value ranged between (0.264: 1.406), which is less than its tabular value at a significance level of 0.05, which shows the stability of the physical measurements tests under study.

Suggested educational program: Attachment (6) The objective of the educational program:

To identify the effect of an educational program using introductory games on the level of special physical abilities for basic skills in basketball for beginners.

Considerations that must be taken into account when implementing the program:



- Explain the objective of the educational unit before the beginning of each unit.
 - The program must achieve the objective for which it was established.

• The program content must be appropriate for the age group under study.

- It must take into account the individual differences between the members of the research sample.
- It is necessary to start with simple and easy exercises so that the beginner feels confident.
- Explain the exercises used and their rules in a short and simplified manner before the beginning of the educational unit.
 - Use time as a determinant for some of the program exercises.
- Training on exercises in the full range of motion to improve and develop strength while maintaining flexibility.
- The program must include some exercises in the form of competitions to introduce enthusiasm and competition among the players.
- The factors of security and safety must be taken into account when implementing the program.
 - The program must be integrated during its various stages.

It is limited to several forms of the following activities:

A- Exercises for physical fitness elements.

B- Various exercises to develop basic skills for beginners in basketball.

C- Presenting the skill with a model and explanation.

• Technical instructions and error correction.

Implementation of the experiment:

Pre-measurements:

The researcher conducted pre-measurements in the period from Tuesday 10/3/2023 AD until Thursday 10/5/2023 AD for two days on the sample members in the variables (age - height - weight) as well as the physical variables under study.

The basic experiment:

The researcher implemented the basic experiment of the research in the period from Sunday 10/8/2023 AD until Thursday 12/28/2023 AD. The application of the experiment took (12 weeks) with (36 learning units), i.e. at a rate of (3 units per week) with a time of (120) minutes per unit, so that the experimental group was on (Sunday - Tuesday - Thursday), and the control group was on (Saturday - Monday - Wednesday).

Post-measurements

The researcher conducted the post-measurements after completing the application of the program, during the period from Sunday 12/31/2023 AD

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until Tuesday 1/2/2024 AD for two days under the same conditions and circumstances as the pre-measurements.

Statistical treatments used in the research:

The statistical treatments of the study data were carried out using the SPSS V17 statistical program. The researcher used the following statistical treatments:

Arithmetic mean, standard deviation, median, skewness coefficient, ttest, Pearson's simple correlation coefficient, and improvement ratio equation.

Presentation and discussion of the results: Presentation and discussion of the results of the first hypothesis

Table (8) Significance of the differences between the pre- and post-measurements of the experimental group in the measurements of the physical variables under investigation

Improve	" T "	Post- measurement		Pre-measur	Pre-measurement		Physical variables	
ment rate	1	Deviation	Average	Deviation	Averag e	ment unit	Measureme	int tests
%17.86	*5.715	0.944	20.45	1.725	17.25	number	Trunk flexion	Flexibility
%16.06	*21.47	0.48	12.02	0.29	14.32	C.M	Zigzag running	Agility
%21.08	*5.115	0.640	8.90	1.089	7.35	second	Medicine ball push	Muscular Strength of Arms
%46.26	12.843 *	1.026	31.30	1.635	21.40	second	Standing on a bar	Static Balance
%65.06	*21.14	0.93	6.85	0.99	4.15	degree	Shooting at rectangles	Accuracy
%19.42	52.802 *	1.669	167.50	1.118	140.65	C.M	Broad jump	Muscular Strength
%18.33	*28.23	0.35	5.39	0.31	6.60	second	30 meter sprint	Speed
%24.25	*3.951	1.596	8.412	1.624	11.254	second	Numbered circles	Coordination

The tabular "t" value at a significance level of 0.05 = 2.093 and a degree of freedom of (19) * = significant

Table (8) shows the presence of statistically significant differences in the physical variables under study between the pre- and post-measurements of the experimental group in favor of the post-measurement, as the

N=20



calculated "t" value ranged between (5.115: 52.808), which is higher than its tabular value at a significance level of 0.05, which shows the improvement of the experimental group in the physical variables under study.

Preliminary games are considered one of the important and successful educational and teaching methods that help the individual to acquire, develop and improve his performance of motor skills for various sports activities, which increases his tendency to practice sports activities and works to raise his level and abilities, and this is what Eileen Wadih Faraj (2007) (5) explains, that preliminary games are closely related to large games and their importance appears clearly from the physical and recreational point of view for learners, and they also contribute effectively to the educational process.

The researcher agrees with this and believes that introductory games are also a basis for all games, as through them the child can learn the group or individual game in general. Introductory games are included in educational classes for several reasons, including motivation, with the aim of putting the child in a position that allows him to give his own answers through self-examination, the spirit of creativity in an atmosphere of relaxation and entertainment, in addition to the preparation factor that aims to give the child physical qualities and how to accomplish motor skills, as well as transferring experiences and tactical knowledge in order to practice sports games. The researcher attributes the statistically significant differences and the improvement rates that occurred in the experimental group sample in the physical and skill variables under study to the positive impact of the educational program using introductory games, which also included various exercises to learn and perform the basic skills under study, which led to providing the opportunity to practice many and multiple motor experiences through the motor responses provided by the players, which contributed to raising the physical level, which in turn led to improving the level of performance of the skills under study, as introductory games are distinguished from team games in that they can be practiced in smaller fields, and there is an opportunity for a larger number of players allowed to participate in the games, as it is considered a suitable field for each individual to satiate his inclination to play and achieve himself, especially if he does not have the appropriate motor abilities, to practice team games. In the introductory games, the rules related to basic motor skills are applied from the simple to the more complex, in terms of speed, composition, participation with a larger number, and linking a skill to following rules and laws with the laws of the games. They are used in group games such as basketball and football, and individual games such as tennis. Preliminary



games are characterized by their clear richness in terms of motor learning and work to provide the individual with many complex motor skills, which contributes to improving coordination and the ability to comprehend motor skills and develop the qualities of agility and speed of response, whether combined or individually, in the form of a small game in which some rules can be ignored, such as the number of players or the area of the field. It is also possible to focus on some points, thus making the game more acceptable and exciting for the players. Players can also be placed through these games in situations similar to those they encounter in real matches and competitions, which gives the player good behavior and the ability to perform skills under conditions that he is likely to be exposed to in the match. Also, preliminary games require higher motor and mental abilities than small games, and they allow players with weak abilities in basic skills to raise their level by practicing these games, which give them these skills in a simplified manner. This is consistent with the results of the studies of Ahmed Abdel Azim Abdullah (2003) (3), Dekovic (2003) (23), Amr Hassan Ahmed Badran (2003) (11), Tariq Muhammad Khalil (2016) (8), Ibrahim Al-Barai Al-Sayed Qabil and Hussein Taha Atta Salem and Nour Muhammad Abdul Jalil Abdul Basit (2019) (1), Muhammad Abdul Rahim Muhammad (2023) (16)

Thus, the validity of the first hypothesis is achieved, which states that there are statistically significant differences between the averages of the pre- and post-measurements of the experimental group in the level of special physical abilities for basic skills in basketball for beginners in favor of the post-measurement.

Presentation and discussion of the results of the second hypothesis

Improvem ent rate	"T"	Post- measurement	t	Pre-measure	ement	Measurem ent unit	Physical varia	ibles
		Deviation	Average	Deviation	Average		Measurement	tests
%10.60	*2.454	1.395	19.20	1.943	17.35	number	Trunk flexion	Flexibility
%5.21	*7.61	0.28	13.65	0.23	14.40	C.M	Zigzag running	Agility
%11.72	*2.819	0.967	8.10	1.069	7.25	second	Medicine ball push	Muscular Strength of Arms
%9.93	*3.154	1.397	23.80	1.871	21.65	second	Standing on a bar	Static Balance

 Table (9)

 Significance of the differences between the pre- and post-measurements of the control group in the measurements of physical variables

N=20



%26.25	*11.92	0.89	5.05	0.86	4.00	degree	Shooting at rectangles	Accuracy
%5.42	*9.575	1.872	148.60	1.791	140.25	C.M	Broad jump	Muscular Strength
%7.46	*24.37	0.34	6.20	0.33	6.70	second	30 meter sprint	Speed
%11.39	*2.745	1.235	10.21	1.624	12.15	second	Numbered circles	Coordination

The tabular value of "t" at a significance level of 0.05 = 2.093 and a degree of freedom of (19) * = significant

Table (9) shows the presence of statistically significant differences in the physical variables under investigation between the pre- and post-measurements of the control group in favor of the post-measurement, as the calculated "t" value ranged between (2.390: 11.025), which is higher than its tabular value at a significance level of 0.05, which shows the improvement of the control group in the physical variables under investigation.

The researcher attributes the statistically significant differences and the percentages of improvement rates that occurred in the control group sample in the physical and skill variables under study to the familiarity of the control group with the measurement situations used in the physical and skill aspects to some extent, as the educational unit is performed in a coherent and homogeneous manner as it is performed in another movement group performed by the players, and the researcher attributes this result to the traditional program followed by the club and what it contains of exercises to develop the elements of physical fitness, and she also believes that this percentage is low compared to the experimental group, due to the fact that the exercises used are traditional and well-known and do not motivate the players to perform well.

The researcher also attributes the positive impact that occurred in the level of performance of the control group to the continuity and regularity of the control group within the program, which led to adaptation in education and thus an increase in the level of physical and skill performance.

Thus, the validity of the second hypothesis is achieved, which states that there are statistically significant differences between the averages of the pre- and post-measurements of the control group in the level of special physical abilities for basic skills in basketball for beginners in favor of the post-measurement.





Presentation and discussion of the results of the third hypothesis

 Table (10)

 Significance of the differences between the two dimensional measurements of the experimental group and the control group in the measurements of the physical variables under study

N = 20

Difference in percentage	ence in ntage "T"		Undifferentiated group		Distinct group		Physical variables	
change		Deviation	Average	Deviation	Average		Weasurement tests	
%7.26	*3.26	1.395	19.20	0.944	20.45	Flexibility	Trunk flexion	Flexibility
%10.85	*13.86	0.28	13.65	0.48	12.02	Agility	Zigzag running	Agility
%9.36	*2.30	0.967	8.10	0.640	8.90	Muscular Strength of Arms	Medicine ball push	Muscular Strength of Arms
%36.33	*9.69	1.397	23.80	1.026	31.30	Static Balance	Standing on a bar	Static Balance
%38.81	*9.22	0.89	5.05	0.93	6.85	Accuracy	Shooting at rectangles	Accuracy
%14	*43.23	1.872	148.60	1.669	167.50	Muscular Strength	Broad jump	Muscular Strength
%10.87	*3.86	0.34	6.20	0.35	5.39	Speed	30 meter sprint	Speed
%12.86	*1.21	1.235	10.21	1.596	8.412	Coordination	Numbered circles	Coordination

The tabular "t" value at a significance level of 0.05 = 2.093 and a degree of freedom of (19) * = significant

Table (10) shows the presence of statistically significant differences in the physical variables under study between the pre- and post-measurements of the control group in favor of the post-measurement, as the calculated "t" value ranged between (3.082:14.833), which is higher than its tabular value at a significance level of 0.05, which shows the improvement of the control group in the physical variables under study.

The researcher explains the reason for the progress of the control group sample in the post-measurement level over the pre-measurement of the physical variables under study to the effect of the traditional program followed, but it does not benefit from the exercises used in the introductory games tool as well as the various exercises in the educational program for the experimental group as applied to the members of the experimental group, and therefore the amount of change that occurred between the two groups in the results of the post-measurement is the criterion for determining the progress of the level.

Preliminary games create an interaction between perception and movement, and therefore motor perception grows and improves as motor



skills are learned. Through these preliminary games, and the above, it is clear that preliminary games can teach and master some of the basic skills of the game in the form of a small game in which some legal points such as the number of players or the area of the field can be overlooked, and some other points can be focused on, and thus the game is more acceptable, exciting and interesting for students, and it also gains important elements of physical fitness that support the speed of learning basic skills.

Therefore, the change that occurred in the experimental group compared to the control group in the measurements of the physical and skill variables under study is due to the educational program using preliminary games, which had an effective impact on those physical variables, as the preliminary games under study contributed to mastering and improving the level of the physical variables under study, and this was not available to the control group sample, which relied on traditional exercises.

The researcher attributes these differences to the use of different exercises to learn and perform the basic skills in basketball under study, and this is consistent with the results of the studies of Ibrahim Al-Barai Al-Sayed Qabil, Hussein Taha Atta Salem, and Nour Muhammad Abdul-Jalil Abdul-Basit (2019 AD) (1), Ibrahim Abdul-Rahman Ibrahim Sayed (2020 AD) (2), Fathi Mansour Muhammad Naji (2022 AD) (12), Reda Mustafa Hilal, Rahab Mahmoud Salama, and Haitham Fathi Wahbi (2022 AD) (6), Ahmed Muhammad Najib Hilmi (2023 AD) (4), Muhammad Ghanem Ahmad Mahdi (2024 AD) (17).

Through the previous results, the validity of the third hypothesis may be achieved, which states that "there are statistically significant differences between the two post-measurements of the experimental and control groups in the level of physical ability specific to the basic skills in basketball for beginners in favor of the post-measurement of the experimental group. **Conclusions:**

Based on the results of this research and in light of the method used, and within the limits of the sample and data collection tools; the researcher concluded the following:

- The preliminary games program achieved better results than using traditional exercises in the level of physical variables (muscular strength - flexibility - muscle ability - balance - coordination - agility) for the experimental group.

- The proposed preliminary games program led to the existence of statistically significant differences between the experimental and control research groups in favor of the experimental group in the level of physical





variables (muscular strength - flexibility - muscle ability - balance - coordination - agility).

Recommendations:

In light of the method used and the objectives of the research and within the framework of the sample on which the research was conducted, the researcher presents the following recommendations stemming from the conclusions reached through the presentation and discussion of the results:

- Work on applying the preliminary games program under study to the remaining stages Studying because of its clear positive impact on changing the level of the physical variables under study.

- Working on applying the preliminary games program under study to the rest of the sports because of its clear positive impact on changing the level of the physical and skill variables under study.

-Working on conducting more research on applying the preliminary games program, especially electronic games, to the rest of the sports and games and others for the young age groups.

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