



The impact of group play on developing the social skills of fourth-grade primary school students

Researcher: Asmaa Sattar Khader

Supervisor: Prof. Dr. Mohsen Ali Musa

**College of Physical Education and Sport Science, University of Thi-Qar, Thi-Qar,
64001,Iraq
asmaa.sattar@utq.edu.iq**

Abstract

lies in several aspects, which can be explained as follows :

1. **Educational significance** : The research contributes to introducing a modern educational method based on group play, which helps improve the educational environment within classrooms by promoting a spirit of cooperation and positive interaction among students .

2. **Psychological and social importance** : The proposed program helps develop social skills such as cooperation, discipline, and respect for others, which contributes to building a balanced personality capable of interacting with the school community .

1- **Physical importance** : The program enhances some important elements of physical fitness at this age, which positively reflects on the general health and motor development of the student . As for **the research problem** : In light of modern trends in education, the need has emerged to employ new educational methods such as educational programs based on group play. Because of its role in enhancing social interaction and developing academic skills in a fun and stimulating way, and benefiting from group games in educational importance, and developing some social skills that help the student to achieve an advanced level as well as reach the best results, and from here stems the problem of this research in the following main question : To what extent does a play-based educational program contribute to developing social skills among fourth-grade primary school students? This main question leads to another question : What is the effect of the program based on group play in developing the social skills of fourth-grade students ? **The objectives of the research were** to prepare a program based on group play to develop the social skills of fourth-grade primary school students , to build and standardize a scale of social skills among fourth-grade primary school students , and to identify the level of social skills among fourth-grade primary school students . The researcher followed the descriptive **method using the survey method, and the experimental method** by designing two equivalent groups, the control and the experimental (with pre- and post-test) to achieve the objectives of the research, as it is the most appropriate scientific method for the current research procedures. The **research community** was identified , represented by fourth-grade primary school students at the central government school in Dhi Qar Governorate, numbering (200) students . **The research sample** was determined intentionally, and they are fourth-grade primary school students at the central government school, divided into five classes, with (40) students for each class, for the academic year (2023-2024). The sample was divided randomly and by lottery. Among the most important **conclusions**: The group games and the games they include, prepared by the researcher, have achieved better development than the school curricula.

Keywords: group play , social skills , for fourth grade primary school students



1- Definition of induction

1-1 Introduction and importance of the research

The progress of scientific research in the field of sports is characterized by new scientific additions that reveal weak points and address many sports and psychological problems. This is in order to keep pace with scientific progress, which is making great strides forward in various scientific fields to reach the highest levels of sports.

The primary stage is one of the most important educational stages, witnessing rapid growth in various physical, mental, emotional, and social aspects of the student, making it a crucial stage in shaping his personality and behavior. Group play is considered one of the effective educational and pedagogical methods that contribute to the development of social and physical skills in students, as it provides an interactive environment that helps students express themselves, communicate with others, and learn through experience. Group games constitute an important part of educational and applied activities and constitute a significant area in training motor, physical, psychological, and other skills to achieve the best development results. Furthermore, they achieve an advanced level of performance because they are characterized by the presence of elements of motivation, enthusiasm, and competition, and they provide opportunities to acquire various skills, while taking into account the different developmental characteristics of each age group in terms of ease and complexity. Practicing these games is an important means that contributes to the development of social and basic skills in students.

Social skills are one of the important and determining factors for a student's interaction with others and his ability to continue. The interest in social skills is due to the fact that they are one of the important elements that determine the nature of students' daily interactions with those around them, with their various components, an important psychological variable that serves as a good indicator of the student's psychological health. They are closely linked to the self and require agreement with himself to achieve complete harmony. The student who is receptive and aware of his internal and emotional experiences is consistent because they contribute to preparing a mature personality. Therefore, the normal student enjoys a stable and balanced personality whose basic components of thought, feelings, and behavior are compatible and balanced in its internal interactions, as well as being compatible with external life circumstances. The importance of this research lies in several aspects, which can be explained as follows :

1. **Educational significance** : The research contributes to introducing a modern educational method based on group play, which helps improve the educational environment within classrooms by promoting a spirit of cooperation and positive interaction among students



2. Psychological and social importance : The proposed program helps develop social skills such as cooperation, discipline, and respect for others, which contributes to building a balanced personality capable of interacting with the school community .

3. Physical importance : The program enhances some important elements of physical fitness at this age, which positively impacts the student's general health and motor development.

1-2 Research problem

Social skills are essential aspects that must be developed in primary school students, as they contribute to building a balanced personality capable of interacting positively with the surrounding environment. However, educational observations and research findings indicate that many primary school students suffer from weak social skills due to the adoption of traditional educational methods that do not take into account their psychological and social needs and do not provide them with opportunities for effective interaction and cooperation within the classroom environment. In light of modern trends in education, the need has emerged to employ new educational methods, such as educational programs based on group play. Because of its role in enhancing social interaction and developing academic skills in a fun and stimulating way, and benefiting from group games in educational importance, and developing some social skills that help the student to achieve an advanced level as well as reach the best results, and from here stems the problem of this research in the following main question :

To what extent does a play-based educational program contribute to developing social skills among fourth-grade primary school students?

This main question leads to another question : What is the impact of a group play program on developing the social skills of fourth-grade students?

1-3 Research objectives: -

- 1- Preparing a program based on group play to develop social skills for fourth-grade primary school students.
- 2- Constructing and standardizing a social skills scale for fourth-grade primary school students.
- 3- Identifying the level of social skills among fourth-grade primary school students.

1-4 Research areas:

1-4-1 Human domain : - Fourth grade primary school students at the Central Primary School in Dhi Qar Governorate, Nasiriyah District.

1-4-2 Time frame: 9/24/2023 – 5/1/2025

1-4-3 Spatial area: Central Elementary School



2 - Research methodology and field procedures:

2-1 Research methodology:

It imposes on the researcher to choose the appropriate method to reveal the presented truth,
(1)

Therefore, the researcher followed the descriptive method with the survey method, and the experimental method with the design of two equivalent groups, the control and the experimental (with pre-test and post-test) to achieve the research objectives, as it is the most appropriate scientific method for the current research procedures, because the experimental method “does not stop at merely describing the situation or determining the case that is subject to study, but rather uses the independent factors and determines them and how they affect the dependent factors, and this is done under controlled conditions” (2).

Table (1)

The experimental design of the research sample shows

T	Groups	The method followed	Number of sample members
1	Officer Section (A)	School curriculum	20
2	Experimental Section (B)	Group games program	20
the total		40	

2-2 Research community and sample:

The research community was identified as the fourth grade primary school students in the central government school in Dhi Qar Governorate, numbering (200) students.

Muhammad Hassan Alawi and Osama Kamel Rateb: Scientific Research in Physical Education and Sports (1)
.Psychology , Cairo: Dar Al Fikr Al Arabi, 1999, p. 232

Kamil Hassoun Al-Qayyim: Methods and Approaches of Scientific Research in Humanities , Baghdad, Al-Sima (2)
.Design and Printing, 2007 AD, p. 92



“ One of the things that are taken into consideration in scientific research is the research sample, as it is the part that represents the original community on which the researcher is conducting his work” ⁽³⁾ . Therefore, the sample is the main axis of the work , and the research sample was determined intentionally, and they are the fourth-grade primary school students at the central government school, divided into five classes, with (40) students in each class for the academic year (2023-2024), for the following reasons:

- 1- To provide a sufficient number of research samples needed by the researcher.
- 2- Providing the tools the researcher needs in her research.
- 3- Indoor halls and outdoor playgrounds are available.
- 4- Students' regular attendance.
- 5- School administration and teachers responded to the researcher.

The sample was divided randomly and by lottery as follows:

- The sample for constructing the social skills scale consisted of (130) students from classes (A, B, C, D, E), representing (65%) of the original community.
- The sample of the exploratory experiment for the social skills scale and tests is (10) students from Section (B) and represents (5%) of the original community.
- The stability sample, numbering (10) students from section (D), constitutes (5%) of the original community, and the application sample, numbering (40) students from section (A-B), represented the control and experimental groups and constituted (20 %) of the original community.

Table (2)

Shows the distribution of the research sample

T	The branch	community of origin	Building sample	Sample application		exploratory experiment	stability sample	The excluded
				empiricism	The officer			
1	A	40	20	20				
2	for	40	10		20	10		
3	H	40	35					5
4	D	40	35					5
5	h	40	30				10	
6	the total	200	130	20	20	10	10	10

2-2-1 Sample homogeneity and equivalence of the two research groups:

2-2-1-1 Sample homogeneity:



Before starting to implement the tests and in order to control the variables that affect the accuracy of the research results, the researcher took the initiative to verify the homogeneity of the research sample in the variables related to the morphological measurements, which are (height, mass, and age) , as shown in Table (3).

Table (3)

It shows the homogeneity of the research sample individuals for the experimental and control groups.

Statistical features Variables	Unit of measurement	arithmetic mean	standard deviation	The mediator	Standard error	Coefficient of skewness
height	poison	137,616	1.051	137,730	0.166	0.311
mass	kg	37,838	0.807	37,995	0.127	0.744
the age	month	108,728	0.610	108,650	0.096	0.590

2) shows that all values of the skewness coefficient are between ± 1 , which indicates the homogeneity of the sample in the above variables. Whenever the resulting scores are confined between ± 1 in the normal distribution curve, this indicates that the scores are distributed normally with the presence of homogeneity in the selected sample ⁽¹⁾.

2-3 Research methods, devices and tools used:

2-3-1 Methods of collecting information:

The researcher used the following research methods:

- 1- Arabic and foreign references and sources.
- 2- Previous studies and research.
- 3- The Internet.
- 4- Survey form.

2-3-2 Data collection methods

- 1- Personal interview .
- 2- Tests and Measurements
- 3- Data registration form

2-3-3 Data analysis methods

- 1- Statistical methods.
- 2- Computer and manual programs.

2-3-4 Equipment and tools used:

- 1- Two medical scales for measuring mass.
- 2- Laptop type lenovo number 1



- 3- 2 electronic timers.
- 1 Sony camera .
- 5- 2 flexible fabric measuring tapes for measuring lengths and distances.
- 6- Whistle number 1.
- 7- 25 rubber balls of various sizes and colors.
- 8- 3 colored adhesive tapes.
- 9- 10 signs.
- 10- 10 hoops.
- 11- 2 empty cardboard boxes.
- 12- 4 small chairs.
- 13_ Colored columns.
- 14_ 2 wooden sticks, 120 cm long.
- 15- Benches.
- 16- Cloth bags
- 17- Colored cones and short ropes

2-4 Field research procedures:

2-4-1 Procedures for constructing the social skills scale

Muhammad Hassan Alawi and Radwan (2000) indicate that there is a set of basic steps that can be followed when constructing tests or scales and how to link the scale units to measure the overall aspects of the trait, characteristic, or ability ⁽¹⁾.

2-4-1-1 Determining the goal and purpose of developing the scale:

social skills scale for fourth-grade primary school students, the researcher identified social skills and prepared a suitable scale to measure social skills.

2-4-1-2 Defining the phenomenon to be studied:

Before starting the descriptive study and building, standardizing and preparing the study in accordance with the theoretical framework of reference and arriving at a solution to the problem, the phenomenon to be studied must be defined and its concept and limits must be completely clear. The phenomenon to be studied is the social skills of students. The researcher relied on the theoretical framework, so the researcher had to identify the social

Muhammad Hasan Alawi and Muhammad Nasr al-Din Radwan: Measurement in Physical Education and (1)
.Psychology , 1st ed., Cairo, Dar al-Fikr al-Arabi, 1979, p. 366



skills of students and then build scales that are characterized by accuracy and comprehensiveness in measuring the social skills of students.

2-4-1-3 Determine the scope of the scale:

In order to determine the scope of the social skills scale for students, the researcher reviewed various sources, studies and previous research that addressed the research topic and personal interviews with some specialists in sports psychology. The researcher adopted the theoretical framework and determined the scope of the scale as follows:

- The first dimension is cooperation
- The second dimension is respect
- The third dimension is peer relations.
- The fourth dimension is participation
- The fifth dimension is competition
- The sixth dimension is interaction
- The Seventh Dimension: Making Friends
- The eighth dimension is taking responsibility.
- The ninth dimension is communication

2-4-1-4 Determining the validity of the scale domains :

In order to determine the scale's fields, the researcher presented the fields to a group of experts and specialists in the field of sports psychology, social psychology, and sports management, numbering (13) experts, in order to state their opinion on choosing the validity of the scale's fields. After analyzing the answers, the researcher obtained a percentage of agreement for the experts' opinions, as shown in Tables (3).

Table (4)

Shows degree CA2 calculated for experts' responses to the social skills scale

T	Fields	Those who agree	Disagreements	KA ²	Sig.	significance
1	cooperation	11	0	11	0,000	moral
2	respect	13	Zero	13	0,000	moral
3	peer relationships	13	8	0.69	0.40	Non-moral
4	Participation	13	12	9:30	0.002	moral
5	competition	13	Zero	13	0.000	moral
6	Interaction	13	8	5	0.69	Non-moral
7	making friends	10	1	7.36	0.007	moral
8	Take responsibility	13	9	1.92	0.16	Non-moral
9	communication	13	8	0.69	0.40	Non-moral



Significant at the significance level: 0.05

According to the table above, some fields were accepted whose significance level was less than (0.05), and four fields whose significance level was greater than (0.05) were excluded after presenting them to experts and specialists, according to the test. KA² The researcher focused on the following areas:

- 1- cooperation
- 2- respect
- 3- Participation
- 4- competition
- 5- making friends

2-4-1-5 Preparing the initial formula for the scale:

The researcher took several steps to develop the initial formula for the scale, which are:

2-4-1-5-1 Preparing the scale paragraphs:

After reviewing the Arab and foreign sources and references and similar studies, in addition to a group of scales related to social skills and in order to benefit from the meanings of the paragraphs in light of the theoretical definition of social skills and its fields, the researcher relied on phrases for each field of the scale and accordingly (25) paragraphs were formulated distributed over the fields of the scale as follows.

- 1- Cooperation (5) paragraphs.
- 2- Respect (5) paragraphs
- 3- Participation (5) paragraphs
- 4- Competition (5) paragraphs.
- 5- Making friends (5) paragraphs.

Five paragraphs were formulated for each field, in line with the mental and cognitive level of the students, in measuring the areas of social skills and enhancing their ability to interact effectively in and outside the school sample. Two illustrative pictures or a visual scene were added to each paragraph with the aim of supporting understanding and enhancing interaction with the content of the scale. The researcher took into account, in formulating the paragraphs and accompanying them with pictures, representing various social behaviors that provide the skills required for each paragraph of the scale, in a way that ensures the comprehensiveness and accuracy of the tool in measuring the various dimensions of social skills.

2-4-1-5-2 Determining the validity of the scale items:

- 1- The researcher presented the scale's items to the linguistic evaluator to ensure they were sound and free of linguistic errors before determining their validity. She took into account the linguistic evaluator's comments on the domains and items to ensure they were linguistically sound.



2- The researcher presented the fields and paragraphs in a questionnaire to a group of (13) experts and specialists in educational, psychological and sports psychology, in order to judge their validity in terms of formulation and suitability for measurement. And to make whatever they deem appropriate in terms of amendments, evaluations, rephrasing, merging, deleting and adding to the paragraphs. And to determine the validity of the paragraph or not by placing a mark (✓) to the left of the phrase, and finally, the experts were assured to record their observations and suggestions regarding the general form of the scale. The researcher analyzed the experts' opinions and extracted the value of Chi ^{-square}, as shown in Tables (5):

Table (5)

Chi- square values show the opinions of experts and specialists on the validity of the items of the social skills scale:

First field	Paragraph number	Experts	Those who agree	Non-conformists	KA ²	Sig	significance
Cooperation	1	13	12	1	9:30	0.002	moral
	2	13	11	2	6.23	0.001	moral
	3	13	12	1	9:30	0.002	moral
	4	13	13	zero	13	0.000	moral
	5	13	12	1	9:30	0.002	moral
The second field	Paragraph number	Experts	Those who agree	Non-conformists	KA ²	Sig	significance
Respect	1	13	11	2	6.23	0.001	moral
	2	13	13	zero	13	0,000	moral
	3	13	12	1	9:30	0.002	moral
	4	13	12	1	9:30	0.002	moral
	5	13	13	zero	13	0,000	moral
The third field	Paragraph number	Experts	Those who agree	Non-conformists	KA ²	Sig	significance
Participation	1	13	13	zero	13	0.000	moral
	2	13	12	1	9:30	0.002	moral
	3	13	13	zero	13	0,000	moral
	4	13	11	2	6.23	0.001	moral
	5	13	11	2	6.23	0.001	moral



The fourth field	Paragraph number	Experts	Those who agree	Non-conformists	Ka ²	Sig	significance
Competition	1	13	13	zero	13	0,000	moral
	2	13	11	2	6.23	0.001	moral
	3	13	12	1	9:30	0.002	moral
	4	13	13	zero	13	0,000	moral
	5	13	11	2	6.23	0,000	moral
Fifth field	Paragraph number	Experts	Those who agree	Non-conformists	Ka ²	Sig	significance
	1	13	11	2	6.23	0.001	moral
	2	13	12	1	9:30	0.002	moral
making friends	3	13	12	1	9:30	0.002	moral
	4	13	13	zero	13	0,000	moral
	5	13	13	zero	13	0,000	moral

After the researcher analyzed the specialists' responses by using the (Ka²) law, it became clear from Table (4) that no paragraph was excluded from the social skills scale, so that (25) paragraphs obtained agreement on their suitability in measuring social skills, and the researcher took into account all the observations made by the experts and specialists , for the purpose of applying the scale to the building sample .

2-4-1-5-4 Mechanism for answering the scale paragraphs:

The scale aims to measure the social skills of students and contains (25) questions. With each question, two different tests are presented, each of which includes a picture that illustrates a social situation. The student chooses the most appropriate picture that reflects his reaction or behavior in that specific social situation.

Social Skills Scale Steps

1- Ask the question related to the picture.

The subject teacher asks the question verbally and explains it in simple language, avoiding giving any hints to the students.

2- The student chooses his answer either orally, by pointing with his finger, or using a pen. After completing the students' answers to the scale items, they were statistically analyzed to obtain the student's total score, which is calculated by adding the scores the student receives. The following grading scale was chosen, as shown in Table (6).

Table (6)

Shows the method of correcting the scale items .



The scale	The most appropriate	Not suitable
Visual social skills	1	zero

2-4-2 Exploratory experiment for the social skills scale :

After completing the selection of the final paragraphs for the test, the researcher applied the social skills scale consisting of (25) paragraphs to a survey sample of (10) students on Sunday, February 18, 2024 AD. After completing the experiment, the researcher collected the data for the sample members and implemented it in tables in preparation for its statistical analysis.

In order to build a high-quality scale and to verify the clarity of the instructions, the understanding of the phrases and words by the respondents, as well as to identify the method of answering, and to calculate the time taken to answer, it was necessary to test the scale by conducting a survey experiment, as the purpose of conducting the survey experiment was:

- 1- Identifying the difficulties facing the researcher during the basic experiment .
- 2- Identify the time taken to answer the scale items.
- 3- Check the clarity of the phrases to ensure the correctness of their language, and measure all paragraphs clearly.
- 4- Identify the efficiency of the support team and research tools, a team with experience and practice.
- 5- To determine the validity of the sample and the feasibility of conducting the study, the validity of the scale for the sample was confirmed.

2-5 Applying the scale to the building sample:

The purpose of applying the scale items to the building sample is to analyze them statistically and select the valid ones and exclude the invalid ones based on their discriminatory ability using methods (pregroups and internal consistency) in preparation for preparing the final version of the scale and extracting indicators of validity and reliability. The scale was applied to the building sample, which numbered (130) students.

The researcher stressed the necessity of answering all the scale items honestly and truthfully on Tuesday and Wednesday (20-21/2/2024) in the students' classrooms.

2-5-1 Statistical analysis of the scale items:

2-5- 1-1 Item difficulty factor

The difficulty coefficient of the paragraphs has an important role in identifying the percentage of those who answer correctly on the paragraphs of the scale and those who answer incorrectly, and the method of distributing and spreading both right and wrong in relation to the society or sample that represents it. It indicates the extent of the suitability of the level of the paragraphs of the scale or test with the level of the examinees subject to it. This means that any paragraph of its paragraphs should not be too easy that all the examinees



succeed in answering it or too difficult that all of them fail in answering it ⁽¹⁾. The researcher extracted the difficulty coefficient using the method of the two extreme groups by following the following steps ⁽²⁾:

- The total correction of the scale items is carried out to obtain the total score obtained by each individual in the test items.
- The overall scores are ranked from highest to lowest for the group as a whole.
- The total grades are divided into two parts, with each part comprising (50%) of the total grades for the sample of (130) students.
- Extract the number of students who answered the paragraph correctly from the two groups.
- Extract the difficulty factor:

After statistically processing the scores of the sample members, no item of the scale was excluded, as test and scale designers recommend excluding items whose difficulty coefficient is less than (0.10%) or more than (0.90%) ⁽³⁾. Table (7) shows this.

Table (7)

Shows the difficulty and ease coefficients for the social skills test items.

Parag raph sequ ence	Difficulty factor	Ease factor	Paragrap h calendar	Paragra ph sequence	Difficul ty factor	Ease Lab	Paragraph calendar
1	0.40	0.60	Valid	14	0.60	0.40	Valid
2	0.69	0.31	Valid	15	0.65	0.35	Valid
3	0.38	0.62	Valid	16	0.60	0.40	Valid
4	0.75	0.25	Valid	17	0.42	0.58	Valid
5	0.49	0.51	Valid	18	0.51	0.49	Valid
6	0.67	0.33	Valid	19	0.51	0.49	Valid
7	0.65	0.35	Valid	20	0.40	0.60	Valid
8	0.56	0.44	Valid	21	0.53	0.47	Valid
9	0.67	0.33	Valid	22	0.79	0.21	Valid
10	0.77	0.33	Valid	23	0.69	0.31	Valid
11	0.73	0.27	Valid	24	0.77	0.33	Valid

Mustafa Hussein Bahi: Scientific Transactions between Theory and Application , 1st ed., Cairo, Kitab Publishing (2)
 .Center, 1999, p. 92

Evaluation and Measurement , Baghdad, Dar Al-Hikma for Printing : Mustafa Mahmoud Al-Imam (and others) (1)
 .pp. 109-110 ,and Publishing, 1990

Laila Al-Sayed Farahat: Measurement and Testing in Physical Education , 1st ed., Cairo, Kitab Publishing (3)
 .Center, 2005, p. 70



12	0.72	0.28	Valid	25	0.62	0.38	Valid
13	0.67	0.33	Valid				

2-5-1-2 The discriminating power of paragraphs

After the researcher reached the answers related to the stages of constructing the social skills test from the construction sample, the researcher calculated each paragraph, arranging them in descending order. Then the researcher took (27%) of the answers of the construction sample that obtained the highest scores and called the upper group. She took (27%) of the answers of the sample members that obtained the lowest scores and called the lower group, whose number was (35) students, as the construction sample amounted to (130) students. The researcher followed these procedures to know the discriminating power of each paragraph of the scale and distribute it in a moderate distribution (extreme group). For the purpose of calculating the discriminating power of the paragraph, we apply the following equation ¹:

Whereas:

T = discrimination power of the paragraph.

Sum of correct answers of the upper group.

MD = Sum of correct answers of the lower group.

2/1 K = half of the sample individuals in each of the upper and lower groups.

After completing the statistical operations to extract the paragraph discrimination coefficient, the following became clear:

The discrimination power of the items for the social skills scale ranged from (0.66-0.40).

Abel was laid Eble 1972 has set values for the discrimination coefficient of paragraphs, in which the paragraph is considered very good when its discrimination power is (0.40) or more. ⁽²⁾

Therefore, the researcher adopted this coefficient, and all paragraphs had a discrimination coefficient greater than (0.40), and Table (8) shows that.

Table (8)

Demonstrates the discriminating power of social skills test items

Paragraph number	T	Type of indication	Paragraph number	T	Type of indication
------------------	---	--------------------	------------------	---	--------------------

.Jalil Ibrahim and others): Psychological Tests and Measurements , Iraq, University of Mosul, 1980, pAbdul 1)

Ebel RL: Essentials of education measure0.ment, prentice – Hall Englewood cliffs, New Jersey, 1972.) (2



1	0.66	Distinctive	14	0.43	Distinctive
2	0.63	Distinctive	15	0.50	Distinctive
3	0.40	Distinctive	16	0.56	Distinctive
4	0.66	Distinctive	17	0.63	Distinctive
5	0.46	Distinctive	18	0.66	Distinctive
6	0.53	Distinctive	19	0.58	Distinctive
7	0.40	Distinctive	20	0.40	Distinctive
8	0.58	Distinctive	21	0.50	Distinctive
9	0.46	Distinctive	22	0.63	Distinctive
10	0.56	Distinctive	23	0.43	Distinctive
11	0.65	Distinctive	24	0.65	Distinctive
12	0.63	Distinctive	25	0.40	Distinctive
13	0.53	Distinctive			

2-5-2 Internal consistency coefficient:

2-5-2-1 Internal consistency coefficient of the scale as a whole:

The use of the coefficient of ease, difficulty and discriminatory power cannot be used to determine the degree of homogeneity in the cognitive achievement test, as there may be similar items that may measure other traits. Therefore, items that have no value in the test can be excluded and depend on the method of internal consistency, which is the ability of the scale to track the individual's actual performance in the field of the trait to be measured. Therefore¹, the researcher found the simple Pearson correlation coefficient between the score of each item in the total score of the test as the method of internal consistency adds the following features to the scale:

A- Highlight the connection between paragraphs.

B- The internal consistency procedure is the extraction of the stability of the paragraphs.

C- Internal consistency is one of the aspects of construct validity.

D- "To make the scale homogeneous in its ability, where each paragraph measures the same behavioral dimension that the entire scale measures"⁽²⁾. Internal consistency between paragraphs is the process of stability of the total score of the scale. After this procedure, no paragraph was excluded from the scale, and thus the total number of the scale became (25) paragraphs, and Table (9) shows this, noting that the maximum score for the student is (25) degrees and the minimum score is (zero).

¹,Abdel-Rahman Muhammad Asawi: Measurement and Experimentation in Psychology and Education , Alexandria (1)

.Dar Al-Maaref, 2003, p. 46

²,Muhammad Abd al-Salam Ahmad: Psychological and Educational Measurement , Cairo, Nahdet Misr Library (2)

.p. 295 ,2002



Table (9)

Shows the values of the correlation coefficients between the test item scores and the total score to indicate internal consistency.

Paragraph number	Correlation coefficient	Sig	Type of indication	Paragraph number	Correlation coefficient	Sig	Type of indication
1	0.63	0.000	moral	14	0.76	0.000	moral
2	0.57	0.000	moral	15	0.71	0.000	moral
3	0.66	0.000	moral	16	0.65	0.000	moral
4	0.74	0.000	moral	17	0.64	0.000	moral
5	0.67	0.000	moral	18	0.68	0.000	moral
6	0.60	0.000	moral	19	0.77	0.000	moral
7	0.59	0.000	moral	20	0.64	0.000	moral
8	0.62	0.000	moral	21	0.76	0.000	moral
9	0.58	0.000	moral	14	0.76	0.000	moral
10	0.66	0.000	moral	22	0.65	0.000	moral
11	0.87	0.000	moral	23	0.53	0.000	moral
12	0.72	0.000	moral	24	0.77	0.000	moral
13	0.79	0.000	moral				

* Significant at the level $\leq (0.05)$

It is clear from Table (11) that the results of the correlation coefficient are high, and the correlation coefficients are close to statistical significance, with a significance level of (0.05) for the sample. This means that the scale items are consistent in measuring what they were designed to measure.

2-6 Scientific foundations for the social skills scale:

2-6-1 Test validity:



A valid test is a test that measures what it was designed to measure, or that achieves what it was designed for. The test may be valid and of a high degree of validity for a specific goal, of average validity for another goal, and of weak validity for a third goal ⁽¹⁾.

The test items were presented to a group of experts and specialists to determine their validity in measuring the social skills test for students. Their opinions were taken into account through statistical analysis of the test questions. Validity was also verified using the two-party group method and the method of extracting the internal consistency coefficient for the test, which is one of the most common methods in the field of physical education.

2-6-2 Stability of the scale:

It is considered one of the basic elements in preparing tests and relying on their results. It means the stability of the results when the test is re-administered to individuals, and maintaining the true variance of the test ⁽²⁾. That is, a test or scale that is characterized by stability is one that produces the same results if it is re-administered to the same individuals and under the same conditions ⁽³⁾. There are several methods through which the stability coefficient can be extracted. The researcher chose the split-half **method**. This method relies on dividing the required test to determine its stability into two equal parts, after applying it to a single group. There are several methods for dividing the test. The first half of the test may be used in contrast to the other half, and odd-numbered questions may be used in contrast to even-numbered questions. This method saves effort and time, as it requires only one test. It is one of the most widely used methods in educational and psychological studies to determine reliability. Then, the simple correlation coefficient (Pearson) was calculated between the two halves of the test, which reached (0.837). Since this coefficient is to measure half of the stability, it was necessary to use the (Spearman- Brown) equation to measure the full stability. Thus, the coefficient value for the stability of the test reached (0.986), which is an indicator of the existence of high stability in the social skills scale.

Table (10)
Shows scale stability

The scale	Pearson's Pre-Correction Reliability	Stability after Spearman correction
Visual social skills	0.837	0.986

,Rahim Younis Karou Al-Azzawi: Measurement and Evaluation in the Teaching Process , 1st ed., Amman, Dar Dijlah (1) .p. 93 ,2008

.Muwaffaq Asaad: Tests and Tactics in Football , Jordan, Dar Dijlah, 2007, p. 22 (3)

.Issam Al-Nimr: Measurement and Evaluation in Special Education , Jordan, Al-Yazouri Printing House, 2008, p. 77 (2)



2-7 The final scale :

After completing all the requirements for designing the scale and its procedures, it became ready for application . It consists of (25) paragraphs distributed over five areas. It included cooperation (5) paragraphs, respect (5) paragraphs, participation (5) paragraphs, competition (5) paragraphs, forming friendships (5) paragraphs, and each paragraph has two pictures, one suitable for the question and the other inappropriate. The scale became ready for application to the experimental and control groups.

2-9 Exploratory experiment:

One of the important recommendations made by scientific research experts for the purpose of obtaining accurate and reliable results is to conduct a pilot study, which is a preliminary experimental study conducted by the researcher on a small sample before conducting the pilot study with the aim of testing the research methods and tools ⁽¹⁾.

The researcher conducted the exploratory experiment on Sunday, November 5, 2024, at nine o'clock in the morning, on a sample of 10 students, with the help of the support team. The researcher's goal in conducting the exploratory experiment is:

- 1- Determine the length of time tests and games take.
- 2- Ensure the safety of the tools and equipment used in the research.
- 3- Diagnosing the obstacles and negatives that the researcher and the work team will face.
- 4- To determine the validity of the tests for the level of the sample individuals.
- 5- Identify the capabilities of the support team.
- 6- Finding scientific foundations for tests

2-10 Main search procedures:

2-10-1 Pre-tests:

Pre-tests were conducted on the research sample members and on the experimental and control groups before starting to implement the program prepared for group games in classrooms and sports fields, under the direct supervision of the physical education teacher, the supervisor, and the work team assistant.

This will be on Sunday, Monday and Tuesday, corresponding to 25-26-27 February 2024. All conditions related to the tests have been confirmed and established as follows:

- 1- Social Skills Scale Application.
- 2- Basic skills tests (running, jumping, hopping, walking).
- 3- Physical fitness tests (flexibility - coordination - balance - agility).

2-10-2 Implementing the group games curriculum :

-1 Analysis stage



This stage aims to understand the educational context, analyze the characteristics of the target group, and determine the general objectives of the curriculum.

- General objective: To develop social and basic skills and some elements of physical fitness among students through group games.
- Appropriate content: Movement and educational games that promote social values and basic skills.

2- Determine the subject matter

- Subject: Physical Education
- Content: Group games

-3 Beneficiary category

- Level: Primary school students, fourth grade.
- Characteristics: Children aged 9-10 years, characterized by liveliness, the need for social interaction, and learning through movement and play.

-4 The educational environment

- Location: Schoolyard, Classrooms
- Resources: Simple sports equipment (balls, hurdles, ropes, stakes, medicine ball, etc.), educational cards, motivational signs.
- Support : Supervision by the physical education teacher, support from the school administration .

-5 Educational needs

- Skills : A- Social (cooperation, respect, participation, competition, friendships)
B- Basic (running, jumping, skipping, walking)
C- Physical fitness: (flexibility, agility, balance, coordination)
- Need to develop : running, skipping, walking, jumping, balance, coordination, flexibility .
- Social : Promoting teamwork, respect for others, leadership .
- Emotional : developing self-confidence, controlling emotions, dealing with winning and losing .
- Cognitive : Understanding the rules of the game, following instructions, making group decisions .

6- Curriculum objectives

1. Developing social and basic skills
2. Improve physical fitness .
3. Promote team spirit and class work
4. Teaching the rules of fair play .
5. Stimulate collective thinking and planning .

7- Sources of group games

You can get ideas for group games from :



- School physical education books .
- Educational sites like [PE Central](#) Or [TeachPhys Ed](#) .
- YouTube channels for physical education (such as PE Games).
- Educational platforms such as Pinterest Or Teachers Pay Teachers.
- Official approved physical education curricula

8- Full schedule: 8 weeks – 16 units

week	Unity	Game name	Educational and motor objectives	Required tools
the first	First	Crossing the hills	Developing balance	Bench No. 2 2 jumping boxes, medicine ball
		Zigzag running	Developing agility and balance	Four flags
	Second	jumping legs	Partridge skill and balance	whistle
		rabbit race	Jumping and walking skills	-
the second	First	sprint relay race	Running and teamwork skills	relay stick
		mutual passing	Compatibility and cooperation	medium-sized ball
	Second	Pass the ball from above and then return it by passing between the legs	flexibility	medicine balls
		Balance Mail	balance skill	One book per team
the third	First	jump circle The partridge	Jumping, hopping and balance skills	geometric shapes
	Second	number stick	fast running skill	Stick with a length of (120) cm
		Stop and remove signs	Flexibility and agility	4 signs
Fourth	First	synchronized balls	Harmony and teamwork	medium-sized balls
		balanced race	Walking and balance	Small pad - cones to mark the walking path
	Second	leg race	Partridge and balance	small barriers
		Hidden injury	agility	balls
Fifth	First	Exchange places	running	-
		Color chase	agility	colored cones



	Second	balanced train	harmony and balance	A stick for each team
		jumping method	jump	Cones - Short ropes - Collars - Trauma markers
Sixth	First	Flexibility Tunnel	flexibility	Hoops - Barriers - Colored ribbons - Colored poles
		step-walk race	walking	cones - short ropes
	Second	Crossing the hoop	running	collars
		Crossing walls	running and jumping	25cm high benches
Seventh	First	The hunter	Flexibility and agility	Football - Black and White Shirt
		Postal transfer of the indicator	balance	4 hoops - 4 markers - 4 benches
	Second	balanced race	Walking and balance	Small pad - cones to mark the walking path
		synchronized balls	Harmony and teamwork	medium-sized balls
The eighth	First	balanced train	harmony and balance	A stick for each team
		Hidden injury	agility	balls
	Second	jumping legs	Partridge skill and balance	whistle
		sprint relay race	Running and teamwork skills	relay stick

9- Time to implement the group games curriculum:

The group games curriculum, specially prepared for fourth-grade primary school students, was implemented for the period from 3/3/2024 to 4/25/2024. The curriculum was applied practically on a sample of students representing the experimental group, and the teacher's method used on the control group was used .

10- General notes on implementation :

- Preparation (10 minutes) : Light exercises + game explanation .
- Main part (20-25 minutes) : Implement the game by dividing the teams and repeating the attempt .
- Closing (5 minutes) : Cool-down + positive feedback + quick verbal feedback .

2-10-3 Post-tests:

After completing the application of the group games curriculum, post-tests were conducted on the control and experimental groups as follows:



1- The social skills scale tests were conducted on Sunday, April 28, 2024, in the classrooms.
3- The basic skills and physical fitness tests were conducted for the control and experimental groups on Monday and Tuesday, April 29-30, 2024, in the sports field of the elementary school. The researcher sought to create the same conditions in terms of time, place, equipment, tools, method of implementation, and support team, in order to work as much as possible to create the same or similar conditions in which the pre-tests were conducted.

2-11 Statistical methods:

arithmetic mean

The mediator

Standard deviation.

Coefficient of variation .

percentage

Simple correlation coefficient (Pearson).

T - test for correlated samples.

T - test for independent samples.

Difficulty factor law.

3- Presentation, analysis and discussion of the results:-

3-1 Presentation of the results of social skills for the control and experimental groups:

3-1-1 Presentation and analysis of the results of the two measurements (pre- and post-test) in developing the social skills of the control group:

Table (11)

Shows the results of the pre- and post-tests of the social skills scale for the control group

Processors	Pre-test	Post-test	t- test	sig	The result
-------------------	-----------------	------------------	--------------------	------------	-----------------------



Variables	arithmetic mean	standard deviation	arithmetic mean	standard deviation			
social skills	10.34	1.25	15.43	1.46	4.63	0.011	moral

From Table (11), it is clear that there are significant differences between the pre-test and post-test of the control group for social skills, because the t value for the correlated samples is (4.63) and the sig value is $\leq(0.05)$.

3-1-2 Presentation and analysis of the social skills results of the experimental group

3-1-2-1 Presentation and analysis of the results of the differences between the post-measurements of social skills for the experimental group

Table (12)

Shows the results of the pre- and post-tests of the social skills scale for the experimental group

Processors	Pre-test		Post-test		t- test	Sig	The result
Variables	arithmetic mean	standard deviation	arithmetic mean	standard deviation			
social skills	11.24	1.38	21.27	1.59	9.64	0.000	moral

From Table (12), it is clear that there are significant differences between the pre-test and post-test of the experimental group for social skills, because the t value for the correlated samples is (9.64) and the sig value is $\leq(0.05)$.

3-1-3 Presentation and analysis of the results of the differences between the post-measurements of social skills for the experimental and control groups

Table (13)

Shows the results of the post-test of the social skills scale for the experimental and control groups

Processors	The officer	empiricism	t- test	Sig	The result
Variables					



	arithmetic mean	standard deviation	arithmetic mean	standard deviation			
social skills	15.43	1.46	21.27	1.59	7.48	0.000	moral

From Table (13), it is clear that there are significant differences between the post-tests of the control and experimental groups for social skills, because the t value for independent samples is (7.48) and the sig value is $\leq(0.05)$.

3-1-4 Discussion of the results of the social skills scale for the control and experimental groups

The results of the study, as shown in Table (15), showed no significant differences in the social skills of the control group students between the pre- and post-tests, indicating that traditional activities that did not rely on group play did not have a clear impact on developing the students' social skills. Despite the presence of some slight improvement in the arithmetic averages, this improvement is not considered statistically significant, indicating that it was weak and did not reach the required level of development in social skills .

The researcher attributes this weakness to traditional methods that rely on repetitive and limited activities, which do not provide real opportunities for students to interact effectively with their peers. Repeating the same games without innovation or diversification makes the activity less exciting, leading to boredom and a decrease in motivation, which negatively impacts the development of skills such as respect, cooperation and collaboration among peers, and social participation among students ⁽¹⁾ .

Conversely, the results of the experimental group - as shown in Table (16) - showed a clear improvement in social skills after implementing the group play program. This improvement is due to the fact that group play contributed to creating a stimulating educational environment, as it provided multiple opportunities for students to interact positively with their peers through activities that require cooperation, role exchange, and respect for others. This led to strengthening team spirit, developing verbal and nonverbal communication skills, and instilling the values of respect and mutual assistance .

The researcher believes that group play allowed students to express their feelings and opinions and deal with various social situations, which positively impacted their overall behavior inside and outside the classroom. The nature of group play, which includes challenges and positive competition, also enhanced self-confidence, social engagement, and the ability to interact with others with flexibility and acceptance.

⁽¹⁾Developing social skills for gifted children with school behavioral problems : Amani Farhat Abdel Majeed (1)

.Master's thesis, published, Damanhour University, Faculty of Physical Education and Sports Sciences, 2009 , p



Previous literature has supported this trend, and Group games programs bring about fundamental changes in students' behavior, especially with regard to building social relationships and enhancing group dialogue and support skills. Moreover, practicing social games teaches students important social skills such as patience, bearing responsibility, self-reliance, and respecting group rules .⁽¹⁾

Hence, it can be said that implementing group games within the classroom environment is an effective strategy for enhancing students' social skills, especially at this critical age, which requires a stimulating environment for psychological and social growth. Providing students with the opportunity to actively participate and interact positively with their peers opens up broad horizons for them to build healthy relationships based on cooperation and understanding, which contributes to the development of their personalities and their interaction within the school community .

4 - Conclusions and recommendations:

4-1 Conclusions:

In light of the results reached by the researcher, she came up with a set of conclusions, which are:

1. The group games prepared by the researcher contributed to developing the social skills of the experimental and control groups.
2. The group games and the games they include, prepared by the researcher, have achieved better development than the school curricula.
3. The control group outperformed the fourth grade students in the post-tests in social skills.
4. The experimental group outperformed the fourth grade students in the post-tests on social skills.
5. The experimental group outperformed the control group in the post-tests of social skills for fourth-grade students.

5-2 Recommendations:

- 1- Relying on the research results to determine the vocabulary of special programs to develop social skills for ages (9 years).
- 2- Using the Visual Social Skills Scale as a tool to measure social skills among fourth-grade students in schools
- 3- Diversify the use of group games, utilizing available tools to implement these games in a way that attracts students' attention, encourages them to compete, and motivates them to demonstrate their aptitude and inclinations.
- 4- Conduct further research and studies to find the best programs used in physical education to develop social skills for the remaining primary grades.

.p. 67 , Sohair Muhammad: Developing Life and Social Skills , 1st ed., Zahrat Al Sharq Library, Cairo 2015 (1)



Sources:

- Ahmed Badr: Principles and Methods of Scientific Research : Kuwait, Publications Agency, 1988 .
- Amani Farhat Abdel Majeed : Developing Social Skills for Gifted Children with School Behavioral Problems, Master's Thesis, Published, Damanhour University, Faculty of Physical Education and Sports Sciences, 2009.
- Rahim Younis Karou Al-Azzawi: Measurement and Evaluation in the Teaching Process , 1st ed., Amman, Dar Dijlah, 2008 .
- Suhair Muhammad: Developing Life and Social Skills , 1st ed., Zahrat Al Sharq Library, Cairo 2015 .
- Abdul Jalil Ibrahim and others: Psychological Tests and Measurements , Iraq, University of Mosul, 1980 .
- Abdul Rahman Muhammad Asawi: Measurement and Experimentation in Psychology and Education , Alexandria, Dar Al Maaref, 2003 .
- Issam Al-Nimr: Measurement and Evaluation in Special Education , Jordan, Al-Yazouri Printing House, 2008 .
- Kamel Hassoun Al-Qayem: Methods and Approaches of Scientific Research in Humanities , Baghdad, Al-Sima Design and Printing, 2007 .
- Laila Al-Sayed Farahat: Measurement and Testing in Physical Education , 1st ed., Cairo, Kitab Publishing Center, 2005 .
- Muhammad Hassan Alawi and Osama Kamel Rateb: Scientific Research in Physical Education and Sports Psychology , Cairo: Dar Al Fikr Al Arabi, 1999 .
- Muhammad Hasan Alawi and Muhammad Nasr al-Din Radwan: Measurement in Physical Education and Psychology , 1st ed., Cairo, Dar al-Fikr al-Arabi, 1979 .
- Muhammad Abd al-Salam Ahmad: Psychological and Educational Measurement , Cairo, Nahdet Misr Library, 2002 .
- Mustafa Hussein Bahi: Scientific Transactions between Theory and Practice , Cairo, Book Center for Publishing, 1999 .
- Mustafa Hussein Bahi: Scientific Transactions between Theory and Application , 1st ed., Cairo, Kitab Center for Publishing, 1999 .
- Mustafa Mahmoud Al-Imam (and others) : Evaluation and Measurement , Baghdad, Dar Al-Hikma for Printing and Publishing, 1990 .
- Dictionary of Language; Dictionary of Psychology and Education , Vol. 1: Cairo, General Authority for American Printing Affairs, 1984 .
- Muwaffaq Asaad: Tests and Tactics in Football , Jordan, Dar Dijlah, 2007 .



- (1 (Ebel RL: Essentials of education measurement, prentice - Hall Englewood cliffs, New Jersey, 1972.

Appendices:

Presentation of the domains of the social skills scale

University of Dhi Qar

Physical Education and Sports Sciences

Postgraduate studies

M/ Expert Opinion Questionnaire

Dear Mr.

Best regards

The researcher intends to present Her thesis entitled " **The impact of group play on developing the social skills of fourth-grade primary school students** . Given your experience and scientific standing , we kindly ask you to express your valuable scientific opinions on the suitability of these areas or not . This is done by placing a check mark (√) next to the area that you deem appropriate for conducting the research .

note :

Please add any area Another one not listed , whose presence in the questionnaire you find appropriate and necessary . We appreciate your cooperation in serving the sports and scientific movement in our beloved country.

social skills A set of behavioral patterns , whether verbal or nonverbal, by which the student influences the responses of others in the context of personal relationships, by which he obtains desirable outcomes and avoids undesirable outcomes, which includes self-expression .

❖ **Name :**

❖ **title :**

❖ **Date of acquisition:**

❖ **Specialization :**

❖ **Job location :**

❖ **Signature :**

❖ **Date :**

T	Fields	Suitable	Not suitable	alternative
1	<u>Cooperation</u> (students work together as a team, help each other, and share tasks and ideas in order to achieve a common goal, such as completing a school project, solving an exercise, or keeping the classroom clean)			
2	<u>Respect</u> (we treat others with kindness and politeness, listen to them without interrupting, and take care with our words and actions so as not to hurt anyone)			



3	<u>Peer relationships</u> (friendships and interactions that occur between students of the same age or grade, and are based on cooperation, respect, play, and understanding)			
4	<u>Sharing</u> (we give or share what we have with others, such as toys, tools, or ideas, and participate with them in activities, play, and work)			
5	<u>Competition</u> (Each student tried to do his best to be successful or win a game or competition, while respecting and encouraging others even if he did not win)			
6	<u>Interaction</u> (we participate and respond to others by speaking, listening, moving, or helping, whether in the classroom, during play, or in activities)			
7	<u>Making friends</u> (get to know our colleagues, treat them kindly, play and talk with them, and always be ready to help and respect them in order to build a good and lasting relationship)			
8	<u>Taking responsibility</u> (we do our duties and complete what is required of us diligently, we admit our mistakes and seek to correct them, and we maintain the tasks or			
9	<u>Communication</u> (we express our thoughts and feelings through speech, gestures, or even writing, and we listen to others carefully so that we understand them and they understand us)			