The effectiveness of a proposed program for school readiness in developing multiple intelligences for second-grade students in the city of Al-Ahsa?

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Abstract

The study aimed to identify the effectiveness of a proposed school readiness program in developing the multiple intelligences of second-grade students in primary school in the city of Al-Ahsa. The researchers used the experimental method, and the study sample consisted of (61) male and female students who were divided into two samples, one experimental and the other a control group. The program consisted of (32) diverse activities. The results of the study showed that there were statistically significant differences between the arithmetic averages of the students' estimates of the second grade of primary school due to the effectiveness of the proposed program on the pre and post applications in favor of the post application on all intelligences and on the total degree and the absence of statistically significant differences at the level of significance (0.05) between the average ranks of the students for the degree of The possession of second-grade male and female students of behaviors indicative of the types of multiple intelligences , After applying the training program and on the total degree according to the gender variable, except for natural intelligence and personal intelligence and for the benefit of females, the study recommended the importance of paying attention to school readiness programs for their importance and effectiveness in achieving learning goals.

Keywords : School readiness, multiple intelligences.

Introduction

The first years of a child's life are the subject of attention and appreciation from the world, so preparing him at this stage is a great responsibility of the parents, educators, and all those concerned in the field of childhood, especially at the present time, which is witnessing rapid development in all fields, which in turn affects the growth of the child.

Educators agree that the child in his early stages is affected by the experiences and appropriate learning opportunities that are provided to him that contribute to supporting his growth and development through educational programs that meet his needs in all areas of growth and contribute to increasing his willingness to learn.

[1]indicates the importance of children's education programs that depend on the concept of school readiness to learn in order to reach a level of maturity that enables them to possess experiences and skills in addition to other influencing factors such as private and public abilities that enable them to receive these experiences.

Many children attend school with an overwhelming desire to learn, and it is only weeks until we notice that a number of them have lost the interest and eagerness to learn as a result of their failure. Usually teachers believe that this failure is due to either the child's stupidity and there is no hope in him, or he is a retarded child, and time and a lot of training are enough to enable him and keep pace with his peers. From this point of view, it is necessary to focus on the importance of modernization and renewal in the field of motivational activities and teaching strategies followed with children because of their importance and their role in creating a balance between life and the rapid changes that the world is witnessing, Studies confirm that this renewal is through providing an active and rich environment that contributes to diagnosing strengths and weaknesses in academic, cognitive, social, emotional and kinetic performances, which in turn affect the child's readiness for school and his educational performance in the future.

School readiness is seen not only on the basis of pre-academic readiness, but rather it is the child's readiness for the new school world as a whole and in various fields such as cognitive readiness, emotional readiness, physical readiness, motor readiness, and social readiness.

Duncan and others [2]point out that there are several main factors that affect school readiness, such as a child's possession of academic, social and emotional skills... in addition to factors that later affect reading and mathematics.

As for the study [3], it clarified the relationship between school readiness and the existence of a quality physical environment, with the experiences and knowledge it provides that contribute to promoting the growth and learning of the child.

Therefore, this study came to identify the role of a program in school readiness in developing the multiple intelligences of the child as an entrance to increase children's motivation to learn.

The problem of the study is clarified in answering the following questions:

What is the effectiveness of a proposed program for school readiness in developing the multiple intelligences of second-grade students in primary school in the city of Al-Ahsa?

What is the degree to which the second grade students possess behaviors indicative of the multiple types of intelligences after applying the training prograAre there statistically significant differences at the level of significance (0.05) to the degree to which the second grade students possess the behaviors indicative of the types of multiple intelligences after applying the training program according to the gender variable?

The important of the study

The importance of study could be seen from the role to the availability of school readiness activities, as it contributes to increasing children's motivation to learn and helps them to overcome some educational problems.

The current study may provide those interested in the field of teaching and learning with a procedural model that demonstrates how to use school readiness activities in developing multiple aspects of the child.

- The current study may contribute to the development of new strategies that help increase children's interest in learning and enable educators to identify strengths to

enrich them and weaknesses to address them in flexible ways away from stereotypes and imitation.

The newly and originality of the study, as the researchers did not have a study carrying the same variables; Therefore, it is expected that this study will constitute a cognitive addition in its handling of a topic of interest to many interested in the field of early childhood.

The aims of the study

Due to the importance of childhood and the issue of school readiness, especially after returning to face-to-face education, and the scarcity of studies in this field - within the limits of the researchers' knowledge -.

This study aims to:

Defining the effectiveness of a proposed school readiness program in developing the multiple intelligences of second-grade students in Al-Ahsa.

Recognizing the degree to which the second grade students possess the behaviors indicating the types of multiple intelligences after applying the training program.

Recognizing the statistically significant differences in the degree of possession of the behaviors indicative of the types of multiple intelligences of the second grade students of primary school after applying the training program according to the gender variable?

The limits of the study

The limitations of the research are as follows:

Human limits: a sample of second-grade students in Future Vision private schools for boys and girls

Time limits: the first semester of the year 1442-1443, for a period of 4 weeks, with 8 activities per week.

Spatial Limits : Future Vision National Schools - boys and girls in the city of Al-Ahsa.

Study Items

School readiness: It is defined as a multi-dimensional process that occurs in a specific time period according to a social context that aims to prepare the educational environment with all its elements and provide the requirements of the educational and educational process in it to help the teacher identify the total patterns of response, and the capabilities that exist among his students at a certain time. Taking into account the physical and mental maturity, and the responses learned by the individual qualify him to achieve academic success [4].

The proposed training program: I

t is defined as a set of organized and sequential steps according to a theoretical framework that is being applied to children, including a set of objectives, procedures, activities, content, and appropriate assessment methods for children of the second grade of primary school, and related to school readiness activities aimed at developing multiple intelligences in children (intelligence). Linguistic intelligence, logical-mathematical intelligence, natural intelligence, spatial intelligence, social intelligence, personal intelligence, kinesthetic intelligence).

Multiple intelligences

Are defined as: a set of latent abilities in children, which are born while they are equipped with multiple mental competencies, some of which are weak and others are strong, as effective education can develop the learner's weak competencies and at the same time work to increase the development of what is strong Has [4]Second grade students

They are the children enrolled in schools in the Kingdom of Saudi Arabia, whose ages range from 7 to 9 years.

Previous studies

Previous studies related to the subject of the current study and which were reached, can be presented in two axes arranged chronologically from the oldest to the most recent as follows:

First - previous studies related to academic readiness

Second - previous studies related to multiple intelligences.

First: Studies related to academic readiness:

[5], which aimed to prepare a training program and know its effectiveness for developing reading and writing readiness skills among a sample of pre-school children aged (5-6) years in a kindergarten in Makkah. The researcher used the experimental method in his training program to develop reading and writing readiness skills. The results showed: There are statistically significant differences between the mean scores of the members of the two experimental control groups to test the child's preparation for reading and writing due to the use of the proposed program for developing reading readiness skills.

- [6] Study: This study examines early childhood educators' beliefs about what children need prior to before entering kindergarten. The Study were used Qualitative methods to analyze the data. About the results educators said that three levels should be addressed to help prepare a child for school: child, home, and teacher. The child must be physically and emotionally ready to engage with others and participate in learning opportunities, acquire basic skills, such as letter recognition, and have reasoning skills that enable the child to problem-solve. At the home level, emotionally preparing the child for the transition and creating a home environment that promotes learning were reported as key to getting children for school. Teacher relationships with parents also emerged as important school readiness factor. Differences across program types are discussed.
- The study of [7] The study aimed to identify the most important writing readiness skills (pre-writing lines) among kindergarten children in the Kingdom of Bahrain, as well as the significance of gender differences in writing readiness skills, drawing skills, and levels of linguistic expression in describing drawing. In which the quasi-experimental approach was used, the study was conducted on (30) boys and girls. The study used the list of writing readiness skills, as a tool to measure the writing readiness skill of the study sample. The results revealed that there were no statistically significant differences between the sexes in the study sample.

[8], which aimed to identify the level of school readiness and its ability to predict developmental learning difficulties among kindergarten children. The study sample consisted of (83) kindergarten children in the State of Kuwait. The study used the experimental method. The results showed that there is a difference in school readiness between children with developmental learning difficulties and normal children, in favor of ordinary children, and that there is an ability for school readiness to predict developmental learning difficulties. Its percentage was 83.7%.

[9]The study aimed to identify the relationship between psychological over excitability and school readiness among gifted and intellectually gifted children in early childhood, and to reveal the differences between each of the patterns of psychological over excitability and areas of school readiness according to the variables of gender and level of school readiness. talent, the primary study sample consisted of 79 boys and girls enrolled in the second level of kindergarten in Qena Governorate. The experimental method was used, the study applied the school readiness scale, and the results showed that there were no differences between males and females in both psychological overstimulation and school readiness.

[10]Study: family characteristics and different indices of parent involvement in the GRS intervention. In addition, greater parent involvement in the GRS intervention was significantly associated with greater gains in children's early literacy, math, and self-regulatory skills. These findings suggest that parent involvement in comprehensive early interventions could be beneficial in terms of improving school readiness for preschoolers from disadvantaged families.

[2] Study: Kindergarten readiness summer program (Bridge to Kindergarten; B2K) that served children with no prior preschool experience. Collectively, the findings suggest a kindergarten readiness summer program that incorporates a self-regulation intervention leads to improved school readiness in children at higher risk for later school difficulties.

[11], which aimed to design a language readiness program based on the Camborne model for those who did not attend kindergarten from 4 to 6 years old and who did not have the opportunity to develop basic language skills, and to build a test to measure their language skills to measure their ability to possess These skills qualify them to enroll in the first grade of primary school, and the study used the quasi-experimental design - one group, and the sample of the study amounted to 30 children from first graders who did not have the opportunity to enroll in kindergarten, and the results showed the effectiveness of the prepared program in improving reading readiness skills (phonological awareness - voice Letter - Vocabulary - Reading Comprehension) for the study sample.

The study of [12] The study aimed to reveal the relationship of fine motor skills with school readiness in the areas of spoken language, reading, writing, mathematics, classroom behavior, and daily life skills, using the descriptive associative approach. The study tools included a measure of motor competency (BOTMP), and a measure of school readiness, which consisted of six sub-tests. The results concluded that there is a strong, statistically significant positive correlation between fine motor skills and between spoken language, reading, mathematics, classroom behavior and daily living skills.

Second: Studies related to multiple intelligences:

The study of [2], which aimed to prepare a training program based on the use of some activities in light of the theories of multiple intelligences that are suitable for pre-school children, and to reveal the effectiveness of the program in developing some language skills (listening - speaking - preparation for writing). The research sample consisted of (38) boys and girls from the age of 5-6 years. The research tools were applied (the drawing test, the writing test, the listening skills test, and the speaking skills test). The results revealed that there were statistically significant differences between the mean scores of the children of the experimental group in the tribal and remote measurements in the language skills test (listening - speaking - willingness to write) in favor of the post measurement, and it was found that there were no statistically significant differences between the mean scores of the experimental group children in the post measurement.

The study of [4] which aims to identify the effect of an educational program based on multiple intelligences in developing environmental awareness among Riyadh children in Jordan according to the program and gender variables and the interaction between them. The study members consisted of (60) children in the preparatory class at Lulu' Tariq Kindergarten in Jordan. They were divided into two divisions, one of them is experimental. The researchers used a card to measure the environmental awareness of children. The study concluded that there are statistically significant differences at the level (= 0.05). Attributed to the effect of the method in all dimensions and the overall degree of the environmental awareness scale, and the differences were in favor of the experimental group. And there were no statistically significant differences at the level (= 0.05) due to the effect of gender and the interaction between gender and method in all dimensions on the environmental awareness scale.

The study of [13] which aimed to identify the relationship of multiple intelligences with academic achievement among primary school students in Hotat Bani Tamim - the correlative approach was used, and the results of the study resulted in the presence of statistically significant differences in favor of educational achievement in the post-test The study also found a positive correlation between multiple intelligences and achievement among primary school students.

The study of[9], which aimed to reveal the effectiveness of a program for the development of spatial / visual intelligence, and social intelligence among a sample of kindergarten children in Jubail Industrial City, and to reveal the continuity of the impact of the program, and the study sample consisted of "30" A child and a girl and the study used a questionnaire of multiple intelligences for kindergarten children prepared by the two researchers, and the results concluded: There are statistically significant differences between the mean scores of the children of the control and experimental groups on the dimensions of spatial / visual intelligence and social intelligence from the questionnaire of the multiple intelligences of the kindergarten child after the application of the program, and the differences came in favor of the children of the group Experimental, there are statistically significant differences between the mean scores of the children of the experimental group before and after the application of the program on the dimensions of spatial / visual intelligence and social intelligence from the questionnaire of multiple intelligences of the kindergarten child, and the differences came in favor of the post application.

The study of [14], which aimed at the role of the educational pillars in developing the multiple intelligences of children from the point of view of - - mothers, and the study sample consisted of (160) mothers distributed into two categories, the first (80) mothers of the mothers of children enrolled in Riyadh With the educational pillars and the second (80) mothers of children enrolled in traditional Riyadh, and the study used the descriptive approach. The results showed that the multiple intelligences of children enrolled in Riyadh with educational pillars came to a high degree, and the results showed that the multiple developmental intelligences of children enrolled in traditional Riyadh came to a medium degree, and the results also showed that there were statistically significant differences in the total degree and sub-degrees for each of the multiple intelligences between Children enrolled in Riyadh with educational pillars and children enrolled in traditional Riyadh in favor of children enrolled in Riyadh with educational pillars, and there are statistically significant differences in the total degree of multiple intelligences between children enrolled in Riyadh with educational pillars and children enrolled in traditional Riyadh in favor of children enrolled in Riyadh with educational pillars.

[15] Study: The purpose of this study was to improve verbal of linguistic ability on singing method in B group pantai indah kindergarten north buton regency, southeast sulawesi. This type of the research is Classroom Action Research. This research was conducted in two cycles. The stages in this study follow the classroom action research. The subjects in this study were teachers and students in group B pantai indah kindergarten, amounting to 22 children consist of 7 girls and 15 boys. Based on the results of data analysis of teachers teaching activities in the first cycle as many as 15 aspects obtained a percentage of 86.7% or 13 aspects achieved, the students learning activities in the first cycle as many as 15 aspects obtained a percentage of 80% or 12 aspects achieved and from the results of childrenâ€™s learning obtained a percentage of 63.6%. The results of the analysis of data teacher teaching activity in the second cycle have increased with the percentage obtained 93.3% in the learning activities of students in the second cycle obtained a percentage of 93.3% and children learning outcomens in improving verbal abilities on singing method in the second cycle was achieved with a percentage amounted to 86.4%. Thus it can be concluded that intelligence of verbal-linguistic ability can be improved on singing methods at the group B pantai indah kindergarten north regency southeast sulawesi.

[5] Study This study aimed to explore character development through learning strategies based on the multiple intelligences classroom management. This study used a qualitative research approach method design. The data obtained include observation, interviews and documentation related to the topic and data analysis used is data triangulation with three steps: data collection, reduction and conclusion. The results showed that the internalization of character values can be generated through management classroom based on multiple intelligence; exemplary, courage, discipline, independence, responsibility and respect for others; while the strategy used is through the integration of science, technology and IMTAQ in the learning process in the digital era. The findings showed that the integration of the learning process with classroom management based on multiple intelligences can internalize the character values of students.

Commenting on previous studies:

After reviewing previous studies, researchers can say that the current study agrees with previous studies in the importance of using effective programs and moving away from traditional methods in the teaching and learning process. Previous studies have confirmed the effectiveness of the proposed programs, such as the [11], The researchers also benefited from the previous studies in formulating the study problem, building its tool, as well as in the method of statistical treatments adopted in the previous studies and interpreting the results. The current study was distinguished in terms of its interest in the independent variable represented in school readiness, and in its dependent variables, since within the limits of the researchers' knowledge, there was no study that addressed these variables in the way it is in the current study.

The educational program based on school readiness activities to develop multiple intelligences for second grade students

The program can be reviewed through the following points:

Program justifications:

Among the most important justifications for the program are the following:

1. The possibility of implementing the educational program due to its realism and suitability to achieve the objectives of the study in terms of transforming the theoretical foundations into practical activities and programs suitable for the early childhood stage.
2. Emphasis on strengthening the importance of linking theory and practice through purposeful activities that meet students' needs and abilities.
3. Strengthening the bond between children of the same grade by developing the spirit of participation among them.
4. Increasing students' motivation towards learning through the use of effective strategies away from indoctrination.

The general framework of the proposed program:-

The general framework of the proposed program can be reviewed as follows:

A- Target group?

Students of the second grade of primary, whose ages range from 7 to 9 years.

B- Program objectives:

The overall goal of the program

The development of multiple intelligences among students of the second grade of primary in the Al-Ahsa region

The specific objectives are:

- Develop students' speaking, expression and language fluency.
- Developing the ability to distinguish auditory.
- Develop the ability to read aloud
- Developing the ability to maintain public safety.
- Develop the ability to solve problems and logical reasoning
- Develop self-awareness and a sense of self and others
- Develop the ability to arrange numbers according to a specific sequence.

- Develop social skills through the ability to help others.
- Develop the ability to remember and recall.

C- Program contents:

- The program consisted of (32) diverse activities represented in (32) classes represented in story and sports activities, visual, kinetic, artistic, lyrical, group and individual performances.

D- Methods and ways used in performing the activities:

The researchers took into account the diversity in the strategies and methods used, so that the researchers employed narrative and sports activities, visual, kinetic, artistic, group and individual activities.

Integrated and multiple activities that contribute to the development of the following intelligences (linguistic intelligence, logical-mathematical intelligence, natural intelligence, spatial intelligence, social intelligence, personal intelligence, kinesthetic intelligence)

E- Program duration and time distribution:

The duration of the program is (4) weeks, with 8 activities per week.

Suggested program calendar:

The study used the following types:

- Formative evaluation: It is a continuous evaluation from the beginning of the program presentation to its end. This type was achieved through the following:
- Observing the behavior of the students in the study sample and recording observations
- Final evaluation: by applying the Multiple Intelligences Scale to the study sample, in order to know the extent of progress achieved by the students after applying the program's activities.

The validity of the program:

- To verify the sincerity of the program, it was presented in its initial form to a number of arbitrators who are specialized in the field of education, and their observations were taken and the necessary actions were taken to reach the program in its final form.

Study Variables:

The study included the following variables:

*Independent variables:

- Educational program based on school readiness activities.

Gender (male/female).

* Dependent variables.

The seven types of multiple intelligences (linguistic intelligence, logical-mathematical intelligence, natural intelligence, spatial intelligence, social intelligence, interpersonal intelligence, and kinesthetic intelligence).

Study procedures:

To achieve the objectives of the study, the researchers took the following measures:

- Preparing the existing educational program for school readiness activities, as (32) activities were approved
- Preparing the study scale, which is the multiple intelligence scale.
- Develop the time plan required for the implementation of the program.
- Conducting a pre-test for the experimental group and the control group to determine the levels of students on the multiple intelligence scale before applying the program.

Getting to know the students and spending time with them to find familiarity between them and the researchers

- The program was implemented according to the schedule prepared to achieve the objectives of this study.
- Post tests were applied to the experimental group and the control group, and after the completion of the four-week program teaching period, the post test was applied to the experimental and control groups.
- Analyzing data to draw conclusions and discuss the results according to previous studies and theoretical literature, and make recommendations based on the results.

Study Methodology and Procedures

Study Approach:

The current study followed the experimental method, where a single group design was used, before and after, due to its relevance to the nature of the study that attempts to shed light on the effectiveness of a proposed program for school readiness in developing multiple intelligences for second-grade students in Al-Ahsa.

Study community:

Based on the study problem and its objectives, the target community consists of the second grade students in the Future Vision National Schools in Al-Ahsa region, whose number is (61) boys and girls.

The study sample:

The study sample consisted of (61) male and female students divided into two groups, one experimental and the other controlling, who were chosen in an intentional way to facilitate cooperation with the school administration and to facilitate the researchers' task. Table (1) shows this.

Table (1)

Distribution of study members according to group and gender variables

Gender	control group	experimental group	Total
Male	15	15	30
Female	16	15	31
Total	30	31	61

It is clear from the previous table the distribution of the study members according to the variables of group and gender, as it was found that the number of members of the experimental and control groups were (30) male students and (31) female students, bringing the final total to (61) male and female students.

Study tool:

To achieve the objectives of the study, the researchers used the Multiple Intelligences Scale Card.

Validity of the Multiple Intelligences Scorecard:

To ensure the validity of the Multiple Intelligences Scorecard, it was presented to a number of specialized and experienced arbitrators to ensure the integrity of the language and the appropriateness of the paragraphs for the purposes of the study. Where the researchers prepared the multiple intelligences measurement card in its initial form by referring to previous literature, especially [4] and the study of [8]. The card in its initial form consisted of (45) items, The researcher observes it through three dimensions: (often, sometimes and rarely), and the scale may consist of 7 areas of

intelligence, which are (linguistic intelligence, logical-mathematical intelligence, natural intelligence, spatial intelligence, social intelligence, personal intelligence, kinesthetic intelligence) The observations unanimously agreed by the arbitrators were taken, and the paragraphs that increase the percentage of arbitrators' agreement to remain (85%) have been taken to become composed of (42) paragraphs divided into seven types of intelligence (linguistic intelligence, logical-mathematical intelligence, natural intelligence, spatial intelligence). , social intelligence, personal intelligence, kinesthetic intelligence).

Structural honesty "consistency honesty:

After confirming the arbitrators' veracity of the study tool and after the final design process of the scorecard, the researcher used the "Pearson" correlation coefficient to measure the relationship between the degree of each statement and the total degree of the axis to which it belongs. The researcher verified the internal consistency by applying it to a pilot sample. It consisted of (15) male and female students from outside the study sample, and the (Pearson) correlation coefficient was calculated between the scores of each of the paragraphs of the axis and the total score of the axis to which it belongs, using the statistical program (SPSS), as shown in Table (2).

Table No. (2)

Pearson's correlation coefficients between the paragraph and the total score for the axis and between the paragraphs and the axis in the total score **of the evaluation** card (pilot sample: n = 15)

N	Intelligence- behavior	Pearson's Axis Correlation Coefficient	Statistical significance	Pearson's correlation coefficient of behavior and the axis with the total score	Statistical significance
	linguistic intelligence			**827.	000.
1	Expresses pictures and cards displayed on it fluently	**975.	000.	**778.	001.
2	He deduces the events of the story through pictures and cards presented to him	**854.	000.	**667.	007.
3	He chooses the correct and appropriate word from among the words presented to him	**975.	000.	**777.	001.
4	Writes selected words correctly and clearly	**689.	004.	**774.	001.
5	He chooses the picture indicating the word according to his hearing.	**895.	000.	**680.	005.
6	Uses the right words to express correctly	*521.	046.	*639.	010.

7	He uses his own language as a way to persuade others and to explain and explain	**696.	004.	**645.	009.
8	He reads the sentences presented to him in a correct and expressive manner	**844.	000.	*626.	013.
	Logical Mathematical Intelligence			**757.	001.
1	Uses numbers effectively in different situations	**906.	000.	**809.	000.
2	He completes the given patterns the right way	**920.		**799.	000.
3	Classify objects according to their different properties	**900.	000.	**919.	000.
4	Extracting an answer or a conclusion based on previously given information (logical reasoning)	**839.	000.	**760.	000.
5	Perfectly identifies apparent differences in the shapes presented to it	**658.	008.	**853.	000.
6	Enjoys solving puzzles and riddles	**791.	000.	**853.	000.
	natural intelligence			**844.	000.
1	Classifies different types of animals according to a specific characteristic	**778.	001.	**906.	000.
2	Classifies different types of plants according to a specific characteristic	*567.	027.	**715.	003.
3	Distinguishes between natural phenomena (mountains, plateaus, valleys, ..) perfectly	*594.	019.	**712.	003.
4	Distinguishes between astronomical phenomena (clouds, winds, rain...) perfectly	**821.	000.	**882.	000.
5	He enjoys spending time in the school garden	**647.	009.	**777.	001.
6	Uses colors for correctly drawn shapes	**821.	000.	**882.	000.

	spatial intelligence			**885.	000.
1	Understands the relationship between things in place (not just watching them)	**730.	002.	**777.	001.
2	He remembers the details of a place he previously went to in detail	**816.	000.	**795.	000.
3	Accurately determines the similarity between images or models displayed on it	**650.	009.	*626.	012.
4	Accurately determines the difference between images or models displayed on it	*635.	011.	*626.	013.
5	Matches the shapes displayed on it without errors	**894.	000.	**742.	002.
6	Distinguishes between directions perfectly	**793.	000.	**822.	000.
7	He masters labyrinth games and forms a shape from given pieces	*555.	032.	**706.	003.
	Social Intelligence			**887.	000.
1	He is affected by the facial expressions of his teacher and peers	**951.	000.	**876.	000.
2	Helps others when needed	**890.	000.	**822.	000.
3	Speaks with others in a decent and polite manner	**883.	000.	**699.	004.
4	Listens to others speaking with satisfaction and comfort	**879.	000.	**777.	001.
5	Deals with different personalities and ages tactfully	**739.	002.	**784.	001.
6	He accepts the views and criticisms of others with open arms	**879.	000.	**777.	001.
	personal intelligence			**934.	000.
1	He does the work that suits his abilities and capabilities	**802.	000.	**882.	000.

2	Completes assigned tasks on time	**686.	005.	**681.	005.
3	He acts in different situations in proportion to his abilities and capabilities	**902.	000.	**822.	000.
4	He sets the appropriate plan to achieve his goal within his capabilities	**753.	001.	**802.	000.
5	He insists on achieving the results he wants to achieve	**867.	000.	**799.	000.
6	He expresses his feelings and feelings clearly	**867.	000.	**799.	000.
7	Leaning into games that require high concentration	**867.	000.	**799.	000.
8	He mentions events in which he had certain situations	**650.	009.	*592.	020.
	kinesthetic intelligence			**941.	000.
1	Uses his body to properly express his thoughts and feelings	**944.	000.	**919.	000.
2	He efficiently uses his hands to produce something specified by his teacher	**832.	000.	**799.	000.
3	He stops moving or dancing when asked to do so	**983.	000.	**906.	000.
4	He walks in balance, holding a ball in his hands	**861.	000.	**760.	001.
5	Focuses on performing manual works (building cubes, sculpting...)	**944.	000.	**857.	000.
6	Expresses given concepts and words without words (mimetic representation)	**776.	003.	**712.	003.

* a function at the 0.05 . level
** Function at 0.01 . level

It is clear from Table No. (2) that the values of the Pearson correlation coefficient for each of the intelligences paragraphs and the total degree of the axis to which it belongs are statistically significant at the significance level (0.05 - 0.01), and this confirms that all the statements of the observation card (evaluation) have a degree of sincerity, which indicates that Check the validity of the tool to measure what it was prepared for.

Second: the stability of the note card

To calculate the values of the stability coefficient of the tool, the researcher applied the card to the pilot sample, and the values of the reliability coefficient were calculated using Cronbach's alpha coefficient. Cronbach's Alpha Table No. (3) shows the stability coefficient of note card dimensions:

Table No. (3)

Cronbach's alpha stability coefficients for the observation card axes (pilot sample: n = 15)

N	The axis	Cronbach's alpha stability coefficient
1	linguistic intelligence	0.89
2	logical-mathematical intelligence	0.93
3	natural intelligence	0.92
4	spatial intelligence	0.90
5	Social Intelligence	0.95
6	personal intelligence	0.91
7	kinesthetic intelligence	0.94
	Total marks	0.97

It is clear from the previous table (3) that the results of calculating the stability coefficient of the study tool's axes ranged (0.89 - 0.95) and amounted to a total score of (0.97), which indicates that the study tool enjoys high stability.

3-6 How to draw conclusions:

The arithmetic mean value was interpreted after calculating it based on the number of options and categories in the card, and the following is a description of the interpretation steps in the triple estimation scale that was used in the current study:

- The range is calculated, where it equals 3-1=2
- Category length is calculated by dividing the range by the number of categories (options)

So 2/3 = 0.66

Table 4

Data extraction standards and interpretation of arithmetic mean values

Arithmetic mean range	Availability
From 1 to 1,66	Low degree
From 1.67 to 2.33	Medium degree
From 2,34 to 3,00	High degree

Study results and discussion

Presentation and discussion of the results of the first question:

The results of the first study question, which states: "What is the effectiveness of a proposed program for school readiness in developing the multiple intelligences of second-grade students in the city of Al-Ahsa?"

To answer this question, the researchers used a t-test of the linked samples to show the significance of the differences between the arithmetic averages of the estimates of second-grade students in Al-Ahsa on the assessment card in the two applications, before and after, and Table (5) shows that:

Table (5)

T-test of the linked samples to show the significance of the differences between the arithmetic averages of the estimates of the second grade students on the pre and post applications.

intelligence	Application	for arithmetic averages	standard deviations	T	degrees of freedom	Statistical significance	Cohen effect size	Impact size level
linguistic intelligence	Post	2.87	.200	5.113	30	.000	0.91	Large
	Pre	2.43	.408					
logical-mathematical intelligence	Post	2.79	.182	5.288	30	.000	0.94	Large
	Pre	2.30	.417					
natural intelligence	Post	2.63	.217	6.445	30	.000	1.14	Large
	Pre	2.12	.373					
spatial intelligence	Post	2.88	.148	8.621	30	.000	1.54	Large
	Pre	2.13	.477					
Social Intelligence	Post	2.77	.253	7.247	30	.000	1.29	Large
	Pre	2.01	.559					
personal intelligence	Post	2.83	.105	7.969	30	.000	1.42	Large
	Pre	2.13	.467					
kinesthetic intelligence	Post	2.91	.142	6.053	30	.000	1.08	Large
	Pre	2.31	.505					
Total marks	Post	2.82	.103	9.052	30	.000	1.63	Large
	Pre	2.21	.338					

It is clear from table (5) that there are statistically significant differences between the arithmetic averages of the second grade students' estimates of the effectiveness of a proposed program for school readiness in developing the multiple intelligences of second grade students of primary school in Al-Ahsa on the tribal and remote applications in favor of the dimensional application on all intelligences and on the total score. The results also showed that the effect size of Cohen on the total score amounted to (1.63) with a significant level of influence, and the effect sizes on intelligence ranged (0.91 - 1.54) with significant impact levels. Which indicates the effectiveness of the proposed program for school readiness in developing the multiple intelligences of second-grade students, and the researchers attribute this to the program's preparation of activities for the child that meet all aspects of his growth, abilities and skills and push him to work, produce and communicate in a way that achieves himself and satisfies his desires, in addition to giving the child more options for learning In a more comprehensive way, this result is consistent with the result of the [12] study that emphasized the importance of study readiness programs in achieving goals.

Presentation and discussion of the results of the second question:

The results of the second study question, which states, "What is the degree to which the second grade students possess the behaviors that indicate the types of multiple intelligences after applying the training program?"

The arithmetic averages and standard deviations of the degree to which the second grade students possess the behaviors indicative of the types of multiple intelligences have been extracted after applying the training program, and table (6) shows that:

Table (6)

Arithmetic averages and standard deviations of the degree of possession of the behaviors indicative of the types of multiple intelligences of the second grade students after applying the training program

T	Intelligent- behavior	Arithmetic averages	standard deviations	Degree
	linguistic intelligence	2.87	200.	Large
1	Expresses pictures and cards displayed on it fluently	2.97	180.	Large
2	He deduces the events of the story through pictures and cards presented to him	2.96	180.	Large
3	He chooses the correct and appropriate word from among the words presented to him	2.90	301.	Large
4	Writes selected words correctly and clearly	2.65	608.	Large
5	He chooses the picture indicating the word according to his hearing.	2.97	180.	Large
6	Uses the right words to express correctly	2.94	250.	Large
7	He uses his own language as a way to persuade others and to explain and explain	2.87	341.	Large
8	He reads the sentences presented to him in a correct and expressive manner	2.71	461.	Large
	Logical Mathematical Intelligence	2.79	182.	Large

1	Uses numbers effectively in different situations	2.90	301.	Large
2	He completes the given patterns the right way	2.77	497.	Large
3	Classify objects according to their different properties	2.81	402.	Large
4	Extracting an answer or a conclusion based on previously given information (logical reasoning)	2.81	402.	Large
5	Perfectly identifies apparent differences in the shapes presented to it	2.97	180.	Large
6	Enjoys solving puzzles and riddles	2.48	570.	Large
	natural intelligence	2.63	217.	Large
1	Classifies different types of animals according to a specific characteristic	2.94	250.	Large
2	Classifies different types of plants according to a specific characteristic	2.32	475.	Large
3	Distinguishes between natural phenomena (mountains, plateaus, valleys, ..) perfectly	2.16	523.	Medium
4	Distinguishes between astronomical phenomena (clouds, winds, rain...) perfectly	2.68	541.	Large
5	He enjoys spending time in the school garden	2.81	402.	Large
6	Uses colors for correctly drawn shapes	2.90	301.	Large
	spatial intelligence	2.88	148.	Large
1	Understands the relationship between things in place (not just watching them)	2.97	180.	Large
2	He remembers the details of a place he previously went to in detail	2.94	250.	Large
3	Accurately determines the similarity between images or models displayed on it	2.97	180.	Large
4	Accurately determines the difference between images or models displayed on it	2.81	402.	Large
5	Matches the shapes displayed on it without errors	2.68	475.	Large
6	Distinguishes between directions perfectly	2.90	301.	Large
7	He masters labyrinth games and forms a shape from given pieces	2.71	461.	Large
	Social Intelligence	2.77	253.	Large
1	He is affected by the facial expressions of his teacher and peers	2.87	341.	Large

2	Helping others when needed	2.87	341.	Large
3	He talks to others in a decent and polite manner	2.81	477.	Large
4	He listens to others speaking with satisfaction and comfort	2.77	425.	Large
5	Deals with different personalities and ages tactfully	2.74	445.	Large
6	He accepts the views and criticisms of others with open arms	2.55	568.	Large
	personal intelligence	2.83	105.	Large
1	He does the work that suits his abilities and capabilities	2.97	180.	Large
2	Completes assigned tasks on time	2.84	374.	Large
3	He acts in different situations in proportion to his abilities and capabilities	2.94	250.	Large
4	He sets the appropriate plan to achieve his goal within his capabilities	2.68	475.	Large
5	He insists on achieving the results he wants to achieve	2.84	374.	Large
6	He expresses his feelings and feelings clearly	2.94	250.	Large
7	Leaning into games that require high concentration	2.48	508.	Large
8	He mentions events in which he had certain situations	2.94	250.	Large
	kinesthetic intelligence	2.91	142.	Large
1	Uses his body to properly express his thoughts and feelings	2.94	250.	Large
2	He efficiently uses his hands to produce something specified by his teacher	3.00	000.	Large
3	He stops moving or dancing when asked to do so	2.87	341.	Large
4	He walks in balance, holding a ball in his hands	2.90	396.	Large
5	Focuses on performing manual works (building cubes, sculpting...)	2.84	374.	Large
6	Expresses given concepts and words without words (mimetic representation)	2.93	254.	Large
	Total degree	2.82	103.	Large

Table (6) shows that the total degree to the degree of possession of the behaviors indicative of the types of multiple intelligences after the application of the training program came to a large degree with an arithmetic mean (2.82) and a standard deviation (0.103), Which indicates the effectiveness of the proposed program for school readiness in developing the multiple intelligences of second grade students, and the researchers attribute this to the activities included in the program that

contribute to preparing learners for school life so that they are familiar with and adapt to it. And they have a positive psychological attitude towards school and make them feel psychological stability, which in turn leads to making the learner ready to learn naturally and gradually, taking into account individual differences and the different needs of all learners, consistent with the study of [12], Which confirmed the existence of a strong direct relationship to a large degree between daily life skills and classroom behavior and between fine motor skills and between spoken language, reading and mathematics. The linguistic intelligence obtained an arithmetic mean (2.87) and a standard deviation (0.200) and to a significant degree, and mathematical intelligence on an arithmetic mean (2.79).), standard deviation (0.301), natural intelligence on an arithmetic mean (2.63) and standard deviation (0.217) and to a large extent, spatial intelligence with a mean (2.88), standard deviation (0.148) and a significant degree, and social intelligence on an arithmetic mean (2.77) and standard deviation (0.253) and to a significant degree, and the personal intelligence obtained (2.83) and standard deviation (0.105) and to a significant degree, and the kinetic intelligence obtained an arithmetic mean (2.91) and standard deviation (0.142) and to a significant degree.

3-4 Presenting the results of the third question:

The results of the third study question, which states: "Are there statistically significant differences at the significance level (0.05) to the degree of possession of the behaviors indicative of the types of multiple intelligences by second-grade students of primary school after applying the training program according to the gender variable?"

The Mann Whitney test was used to show the significance of the differences between the average ranks of students to the degree that the second grade students possess the behaviors that indicate the types of multiple intelligences after applying the training program according to the gender variable. Table (7) shows that:

Table 7

Mann Whitney test to show the significance of the differences between the average ranks of students to the degree to which the second-grade students possess the behaviors indicative of the types of multiple intelligences after applying the training program according to the gender variable

Intelligence	Gender	Number	average rank	total ranks	u . value	Statistical significance
ilinguistic intelligence	Male	15	16.13	242.00	118.000	.932
	Female	16	15.88	254.00		
	Total	31				
logical-mathematical intelligence	male	15	15.63	234.50	114.500	0816
	Female	16	16.34	261.50		
	Total	31				
natural intelligence	male	15	12.17	182.50	62.500	0.020
	Female	16	19.59	313.50		

	Total	31				
spatial intelligence	male	15	15.93	239.00	119.000	.966
	Female	16	16.06	257.00		
	Total	31				
Social Intelligence	male	15	14.37	215.50	95.500	.315
	Female	16	17.53	280.50		
	Total	31				
personal intelligence	male	15	12.60	189.00	69.000	.031
	Female	16	19.19	307.00		
	Total	31				
kinesthetic intelligence	male	15	16.13	242.00	118.000	.925
	Female	16	15.88	254.00		
	Total	31				
Total degree	Male	15	13.80	207.00	87.000	.189
	Female	16	18.06	289.00		
	Total	31				

Table (7) shows that there are no statistically significant differences at the level of significance (0.05) between the average ranks of students to the degree that students of the second grade of primary school possess the behaviors that indicate the types of multiple intelligences after applying the training program and the total degree according to the gender variable Where this result agreed with the result of the study of both Slater (2009) and Nouri (2015), with the exception of natural intelligence and personal intelligence, there are statistically significant differences in favor of females. genetics, environmental factors, Social, and cultural, as these abilities are strengthened through the functions of the sex by the act of instructions through the process of socialization through which the individual turns into a social being, realizing it through his social roles and functions, and female students are more enthusiastic to express their personal opinions and speak in a tactful manner in an attempt to gain the love of the teacher or The researcher, with regard to natural intelligence, females had a noticeable superiority in perceiving natural variables and being able to artistically express them and naming climate changes by their correct names. The researchers attribute this to the female's aesthetic sense, free linguistic expression and their portrayal of the different aspects of nature. This study agreed with the study of Al-Shehri (2016).) which spoke of female superiority in natural intelligence through artistic expression.

Recommendations and suggestions:

In light of the results of the current study, the following is recommended:

Paying attention to school readiness programs because of their impact on increasing students' motivation to learn.

Diversification in teaching strategies and the adoption of non-traditional strategies that contribute to the development of multiple intelligences and achieve the desired goals.

Conducting similar studies on other samples and other variables to reach results that are agreed upon by most of the studies.

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