

## **The effect of visual memory on primary school students who have difficulties learning to draw**

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### **Abstract**

Dealing with all that hinders the learning process from mental, physical, financial, performance and executive problems that can create difficulties that hinder the learning process and may prevent it, and consequently generate a disorder that leads to defect, disability or even loss at all levels and levels. Then reveal its causes and causes and what stands behind it and thus find successful means that can facilitate the learning process and make it in its simplest forms in the direction of achieving the desired results.

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#### **1 - Research problem:**

Dealing with all that hinders the learning process from mental, physical, financial, performance and executive problems that can create difficulties that hinder the learning process and may prevent it, and consequently generate a disorder that leads to defect, disability or even loss at all levels and levels. Then reveal its causes and causes and what stands behind it and thus find successful means that can facilitate the learning process and make it in its simplest forms in the direction of achieving the desired results.

#### **2- The importance of research:**

The importance of the research comes from the importance of learning in that it is the focus of progress, development and civilization. The absence of processes means no changes in behavior or experience, and it is sensitive to the degree that it has diverse causes and diverse results, that what we

#### **4- Limitations of the search:**

want from learning is to direct, control, evaluate and modify behavior in an easy way Individuals have to adapt to all environmental, social and cultural variables, and thus it is possible to

towards raising the behavioral efficiency of the individual. Learning difficulties mean losing this mechanism, which could be the main reason behind building more civilized and civilized societies. Since ancient times and until now, the interest in these vocabulary has been and continues to be continuous and to stand on the breaks, barriers and difficulties that can impede learning and thus cause a loss in the cohesion and building of societies.

#### **3- Objective of the research:**

A - The effect of visual memory on the difficulties of learning drawing on primary school students.

Objective limits..Visual memory and its relationship to the technical characteristics of children's drawings for the age group (9-12) years of both sexes.

Spatial boundaries.. The official primary schools in Karbala Governorate, Iraq. Academic year.

Time limits ... the academic year 2019-2020.

Define terms:

First: the effect

1- Effect linguistically: the thing that is already verified about another thing, i.e. in a sense synonymous with the cause of the thing

2- Effect idiomatically: It is the result of a thing and it has several meanings, the first meaning meaning the result, which is the result of the thing, the second meaning the sign, which is the characteristic that indicates the thing and the third meaning the news and it is called the words of the predecessors, not their actions.

Second: visual memory:

Visual memory in language and convention: It is a type of memory that describes the relationship between visual mental perception, mental storage, and the ability to retrieve stored scenes, which means that the individual remembers them. (visual memory) called in English

It is a state of sensory representation associated with memory based on long periods of time and related to the movements of sight in a place, which is the means of transferring the image from memory. (brain) when you need it.

One of the types of mental visual perception that leads to the expansion of the circle of visual perceptions.

The free encyclopedia defined it as a tool for moving feelings towards an image, event or phenomenon(2

Procedural definition of visual memory: It is a type of memory in the human mind that is responsible for the visual stimuli that appear to the sight in the form of colors, lines, shapes or images and drawings that express ideas and signs that are interacted with through sight.

The second chapter is the theoretical framework:

The first topic

The concept of learning difficulties.

Learning disabilities is a general term that describes a group of students in the regular classroom who show a decline in academic achievement compared to their normal peers, although they have normal intelligence above average, but they show difficulty in some processes related to learning: such as understanding, thinking, perceiving, paying attention, or Reading, writing, spelling, pronunciation, arithmetic operations or the skills related to each of the previous operations and excludes from cases of learning difficulties those with mental disabilities, emotional disturbances, people with hearing and vision diseases, and people with multiple disabilities, as their disability may be a direct cause of the difficulties who suffer from it

As for the Association of Children and Adults with Educational Difficulties, learning difficulties are a continuous condition, which is supposed to be due to neurological factors that interfere with the development and integration of verbal and non-verbal abilities. The educational difficulty exists as a clear disability case with mental abilities ranging from normal (medium) to extra ordinary, and sensory systems Integrated mobility with adequate and appropriate educational opportunities, and this case varies in the degree of its appearance and the degree of its severity.

This condition can affect a person's life-long self-esteem, education, occupation, social adjustment or activities of daily living. While the Joint National

Committee on Learning Disabilities defined learning difficulties as a general term that refers to a heterogeneous group of disorders, which express themselves through developmental difficulties. A function that leads to difficulties in acquiring and using listening, speaking, reading, writing, reasoning, or mathematical abilities.

These disorders are endogenous, supposed to be due to a defect in the central nervous system that can occur during the life of the individual and can be associated with problems of self-control, problems of perception and social interaction. These problems do not, or do not, themselves create learning difficulties.

Although learning difficulties can occur simultaneously with some other disability conditions, it is noted on this definition that it accommodates the following:

- Difficulties of self-control of behavior.
- Difficulties of social cognition.
- Difficulties of social interaction.
- Indicating that learning difficulties occur throughout an individual's life, indicating emotional disturbance.
- Referring to external influences that they are not the result of psychological factors of origin.

Causes of learning difficulties:

Mental health specialists stress that as long as no one knows the main cause of learning difficulties, the parents' continuous search to find out the possible causes is useless for them, but there are many possibilities for the emergence of this disorder.

The most important thing for the family is to move forward to reach the best methods of treatment. Scientists have made a lot of efforts to study the causes and possibilities to find ways to

prevent the occurrence of these disabilities, but recent studies have shown that scientists believe that there is one reason for the emergence of these disabilities, not multiple and overlapping causes for this disorder, and there are New evidence shows that most of the educational disabilities lie in the difficulties of assembly and linking that occur due to a defect in one or a specific area of the brain.

Classification and Patterns of Learning Disabilities:

There is almost agreement between specialists and workers in the field of learning difficulties to classify these difficulties under two main classifications:

1 - Learning Developmental Disabilities.

2 - Learning Academic Disabilities.

The first: developmental learning difficulties, which are difficulties related to brain functions, and the mental and cognitive processes that the child needs in his academic achievement, and the cause of their occurrence may be functional disorders related to the central nervous system, and they mean those difficulties that deal with pre-academic processes that are cognitive processes related to attention.

Perception, memory, thinking and language, on which academic achievement depends, as in Table (1), and constitute the most important foundations upon which the individual's mental activity is based. These difficulties can be divided into two sub-types, namely: -

- Initial difficulties: such as attention, perception, and memory.
- Secondary difficulties: such as thinking, speaking, understanding and oral language.

Developmental learning disabilities affect three main areas:

1 - language development.

## 2- Cognitive development.

## 3-Development of visual-motor skills.

appearances	Difficulties	
<p>The difficulty of attention affects mental processes such as (such as memory and cognition...) as it appears in the form of academic difficulties such as (difficulty reading, difficulty drawing) and this affects academic achievement in general. Among the manifestations, we find:</p> <p>-1 Speed of attention shift.                  2-Difficulty concentrating on schoolwork.                  3-Lots of movement and jogging.                  4- Difficulty recognizing things.                  5-Difficulty distinguishing between shapes and symbols and their opposite.                  6- Difficulties perceiving the whole through the part and difficulties of kinesthetic perception.                  7- Difficulties in auditory perception.                  8- Difficulties in visual discrimination.                  9- Difficulties in perceiving the spatial relationship.</p>	Attention	Developmental and cognitive difficulties
	perception	

Table No. (1) represents the manifestations of learning difficulties

### Learning theories :

Learning theories can be viewed as organized attempts to generate knowledge about human behavior, organize it and assemble it into frameworks of facts, principles and laws in order to explain, predict and control behavioral phenomena.

The main objective of learning theories lies in understanding human behavior in terms of how it is formed, determining its variables and causes, and trying to explain the processes of change and modification that occur in this behavior, with the aim of formulating general principles and laws to control and direct it. Despite the multiplicity of The first category: associative theories and includes Pavlov's theory of classical conditioning, John

learning theories and the different related fields, there is not yet a comprehensive theory that can be relied upon to explain all manifestations of human behavior.

Perhaps this is due to the breadth of the learning process and the multiplicity of its variables and factors and the fields it includes. Learning theories are classified into two groups:

1- Behavioral theories: The group of behavioral theories includes two categories:

Watson's views on correlation, Addon Jethry's theory of coupling, as well as William Estes' theory.

These theories emphasize that learning is tantamount to forming connections between environmental stimuli and certain responses, and they differ among themselves in explaining the nature of the connections and how they are formed.

The second category: the functional theories and includes the theory of Edward Thorndike (the trial and error model), Clark Hill (the theory of motivation) and the theory of Bruce F. Snicker (the procedural learning), which emphasizes the functions performed by the behavior with attention to the processes of association that are formed between stimuli and behavior.

2- Cognitive theories: These include Gestaltian theory, Piaget's cognitive development theory, information processing model and Edward Tolman's hypothesis theory. These theories are concerned with the processes that occur within the individual such as thinking, planning, decision-making and expectations rather than external manifestations of behavior.

Individual differences and learning difficulties:

From a humanitarian standpoint, the child is first and foremost a human being, regardless of his distinction or delay - qualified for everything befitting a human being, and every child has his own personality, characteristics and features, and every child is different in his abilities and areas of distinction or weakness. The points of distinction often outweigh the weaknesses of children, but there are children whose weaknesses outweigh the strengths, and these children are the ones who are called "special needs," meaning they have learning difficulties that vary from one individual to another.

Children with special needs are defined educationally as those who face educational difficulties and problems that prevent them from showing all their abilities that help them to progress and develop, and therefore they need special educational intervention and support, and therefore

"special education" or "special needs education" is understood as education directed to children with special needs. Special educational needs, in order to provide them with the greatest amount of support that contributes to their learning and advancement in society, like any other child through the allocation of appropriate educational methods, various resources and effective academic support

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In the past, special education was an isolated education in institutions and special schools for children with mental, sensory or physical disabilities, and for children who dropped out of school for reasons beyond those common disabilities. Today, with the issuance of the United Nations Human and Child Rights Document,

“education for people with special needs” has become an important part of regular education and regular schools, which contain within them children who need special educational support.

The concept of integrating students with special needs in regular schools in one context has spread entirely with ordinary children, and the need to clarify the individual and personal needs of each child in order to obtain the educational care he needs has surfaced.

From this point of view, there is care for teachers who work in this field and holding courses for them under the title of “learning difficulties” in order to increase the teacher’s awareness and knowledge of this category present in schools and in regular classes, and not be unable to deal properly and justly with all his students.

So that he has all the means and capabilities that help him to do that and also takes into account the individual differences of students, as different environments contribute to creating individual differences between students because they are also from different classes, which creates different concepts, family circumstances and its social and educational situation contributes to the existence of individual differences between students, and not only Students who have disabilities have learning difficulties.

#### Common Symptoms of Learning Disabilities or Characteristics of Learning Disabilities

- Slow linguistic development with an inability to find the right words.
- Difficulty learning numbers, letters, colors, shapes and days of the week.
- Exhaustion and ease of distraction.
- Difficulty interacting with peers.
- Difficulty following instructions and routine.

- Slow development of motor skills.
- Change the sequence of numbers and confuse arithmetic operations.
- Difficulty remembering.
- Slow learning of new skills with heavy reliance on memory.
- Impulsivity and difficulty planning.
- Poor ability to hold the pen.
- The problem of learning to tell time.
- Poor coordination and seemingly unaware of the surrounding environment.
- Unable to complete tasks within certain time frames.
- Reverse letters and mess up words.

#### Diagnosis of learning difficulties:

Diagnosis is based on a specific set of symptoms that the child is exposed to and helps narrow the possibilities, as the diagnosis identifies several factors, the most important of which are:

- What are the other symptoms that coincide with each other.
- What is the appropriate medication if there is a need for medication.
- Treatment plans that the child may need, such as resorting to a language specialist or a psychiatrist.

The diagnosis helps parents and caregivers access information about the relevant set of symptoms, communicate salient features of the child's challenges to all people involved in the child's care, and possibly interpret certain behaviors differently in light of the diagnosis, obtain information about what can be done to help the child, and determine where



and how to help and access the child. to financing or services that might not be otherwise accessible.

If your child is not treated adequately, he will suffer from other difficulties in addition to learning difficulties, which are:

- Difficulties following instructions within the home, nursery/kindergarten or school environment.
- Vocabulary difficulties in which the child cannot communicate his message clearly due to limited knowledge of words.
- Difficulties in learning to speak and the clarity of speech.
- Difficulties with self-esteem and confidence when realizing that their skills do not match those of their peers.
- Bullying when others become more aware of a child's difficulties.
- Difficulties with fine motor skills (such as writing, drawing, and storytelling).
- Difficulties in self-regulation and behavior because the child is unable to organize his time and attend lessons for long periods.
- Difficulties in accessing the curriculum because they are unable to attend their lessons long enough to complete the assessment criteria.
- Anxiety and tension in a range of situations, which stands between them and the achievement of their goals academically.
- Difficulties in academic performance such as developing reading and writing skills and adapting to the study environment.
- Difficulties in academic assessment such as completing exams and exams in higher education.

Fine motor skill development:

This is a child's ability to use small muscles, particularly their hands and fingers, to pick up small objects, hold a spoon, turn pages in a book, or use a crayon to draw.

Gross motor skill development:

This is the child's ability to use large muscles. For example, a six-month-old learns how to sit with some support, a 12-month-old learns to stand on a stand holding furniture, and a five-year-old learns to jump.

Older children with developmental thinking difficulties can display deficits in memory, social skills, and problem-solving skills. A lack of distinctions between socially permissible and socially unacceptable may also be a sign that a child has this disorder not because the child is "rebellious", but because he has difficulties in Interpret signs of appropriate behavior in a given situation.

Children with developmental thinking difficulties often have difficulty with coping skills, or tasks of daily living, that children do not usually have.

Developmental learning difficulties of memory:

Memory problems are one of the most common learning problems Memory difficulties often accompany other problems such as reading difficulties, performance difficulties or ADHD, but they can be a stand-alone problem.

It can be difficult to recognize a developmental learning disability of memory, let alone how to minimize the impact of the problem on your child's learning.

Most people think of memory in terms of short-term and long-term memory so what is the difference in learning memory?

In short, memory is our ability to hold information in our mind for short periods (this is the part of

memory) in order to do something with it (this is the part that helps with learning). Questions in class and inability to follow instructions as they take longer to write assignments.

Indicators of the theoretical framework:

1- Visual memory is an instant perception when certain variables occur in the human brain and a visual mental action that accompanies those variables, especially if the perception is through symbols, signs and visual signals.

2- Symbols, signs and signs are embodied in visual memory, and it is possible to deal with the technical characteristics of children's drawings more than other influences.

3- A number of scientists have discussed visual memory based on several theories, especially in the field of learning theories, including (evolutionary theory, behavioral theory, cognitive theory, and German scientist Schentiner's theory).

4- Children's drawings develop and this development is stored in the visual memory between the five and six years of the child's age.

### Chapter III

#### Search procedures

First: Research Methodology:

The researcher adopted the descriptive approach by (analysis) method in analyzing the samples of the research sample in line with achieving the goal of the current research.

Second, the search community:

The current research community included primary schools in the center, districts, and districts of Karbala, with a total of (980) male and female students. The researcher has been excluding some schools in remote areas due to the difficulty of accessing them.

Table (1) shows the distribution of the research community by grade and gender

The percentage of the total	total	sixth grade		fifth grade		Sex/no.
%38,20	387	%15,99	162	21,22	215	male
%61,79	626	%25,96	263	35,83	363	female
%100	1013	%41,95	425	57,05	578	total

Third: the research sample.

The researcher tested the research sample using the regular sampling method, at a rate of (25%), which was for primary school classes, boys and girls for the research sample.

Fourth: The search tool:

The researcher built a content analysis tool form that included the fields of study, the main and secondary characteristics of visual memory, and the characteristics of children's drawings. It was subject to validity and reliability, and it was in two stages:

1- The first stage: the tool in its initial form.

2- The second stage: the tool in its secondary form has been applied to the research sample.

Fifth: Visual Memory Scale:

For the purpose of achieving the goal of the research, the researcher was asked to use (a scale of visual memory \*) in addition to the research tool that the researcher built and presented to experts and extracted its validity and stability.



The scale included four axes, and each axis had a number of levels, in addition to containing the correction key consisting of a number of illustrated alternatives to answer each paragraph.

The positive items on the scale were:

The negative items on the scale are:

Scale validity:

Honesty is one of the best procedures in evaluating the test, which means the scale's ability to measure the phenomenon for which it was used.

Here, the researcher used the apparent honesty in which the scale was presented to a number of arbitrators in psychology, teaching methods, scale, evaluation, arts and art education, to express their opinion on the validity of the scale on each of the paragraphs. (84%) after deleting some paragraphs and adding others, so that the scale in its final form consists of (34) paragraphs.

Scale stability:

Stability is one of the important procedures for the purpose of ensuring the stability of the scale in measuring the phenomenon required in the research. Here, stability is intended to be the consistency of the test degree, the accuracy of the results, and making sure that no variable affects it, which may lead to affecting the results and will give the same results if it is re-applied again.

The researcher verified the stability of the scale by (re-testing) on a sample of thirty female and male students representing (13%) of the total original sample after (15) days of the first test, and re-applying the scale after the passage of this period is an appropriate period, and after correcting Answers The stability was extracted using the (Pearson) equation, where the percentage of stability was 82%.

The final application of the scale:

As for the axes of the scale were as follows

The first axis - spatial visual memory \_\_\_\_\_ four levels

The second axis - short-term visual memory \_\_\_\_\_ four levels

After extracting the validity and reliability of the scale, the researcher applied it to the research sample of (950) female and male students for the period from (10/2/2021) to (10/4/2021) through the following:

The researcher personally supervised the implementation phase.

After distributing the scale to the selected students, the researcher made a simplified explanation of how to answer the scale's paragraphs after clarifying the title of the research and the importance of the current study.

- The researcher asked the students to answer with complete accuracy because their answers serve the scientific research and the curriculum.

- After the students' answers to the scale forms, the researcher sorted the answers on the scale's degree and analyzed the statistics to extract the results of the current research.

Sixth: The Mathematical and Statistical Means Used

-percentage

Cooper's equation to calculate honesty

$$Pa \frac{ag}{ag+dg} * 100$$

Whereas

agreement ratio = Pa

agreement no. = Ag

Not agreement no.(1) =Dg

Scott's equation (SCOOT arithmetic)

$$Ti = \frac{PO - PE}{1 - PE} * 100$$

Whereas

stability coefficient =Ti

The first percentage of those who agree =po

The second percentage of those who agree(2) =pe

the fourth chapter

First: the research results and their discussion

This chapter included a presentation of the research results and their interpretation, which were reached by the researcher, in addition to the conclusions, recommendations and suggestions as follows:

Show results:

The researcher applied (the search tool and the visual memory scale) to the fifth and sixth graders (boys and girls) in the schools of Karbala governorate, the center and districts and districts of the governorate, and the results were:

1- The technical characteristics of girls' drawings were distinguished more than boys' drawings, and they were statistically significant at several levels, especially in the involuntary paragraphs of drawing, recalling forms, attending meditation and imagination, and expressing desires.

2- In the students' drawings, the paragraph was inspired by the elements of the environment as an artistic feature with statistical significance distinct from the drawings of girls.

Second: the conclusions

1- The human mind (the brain) contains multiple centers of visual memory called short-term memory and long-term memory, and there is a difference between them regarding the senses and the variables of remembering and forgetting, especially the signals of sight, hearing and other senses.

Third: Recommendations:

In light of the results and conclusions of the current research, the researcher recommends the following:

1- The need for attention by those concerned (children) to support them in learning and innovation in drawing and the development of the mind practically, scientifically and artistically, in order to develop visual memory through this.

Fourth: Suggestions:

The researcher suggests conducting the following study to complete the current research process:

1- Personal characteristics of secondary school students in Iraq and their relationship to visual memory.

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