The Level of Cognitive Processing among Students of the History Department in the Faculties of Education in the Universities of Baghdad Governorate

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The aim of the research is to identify the cognitive treatment of students of the Department of History in the Faculties of Education in the universities of Baghdad Governorate. The sample consisted of (300) male and female students from the history departments of the Faculties of Education in the universities of Baghdad Governorate, which are the University of Baghdad, Al-Mustansiriya University and the Iraqi University. The two researchers relied on (Tattoo Scale, 1983), which defined a race and ethnicity, on the environment of the Iraqi researcher (Al-Ghariri, 2003). After applying the tool and using appropriate statistical methods, the researchers reached a statistical difference. Important for the usefulness of the sample mean, that is, the sample has high levels of cognitive processing.

Key words: *level, cognitive processing, history students*.

Research problem

The informational knowledge processor is one of the approaches to cognitive learning that T. students help in the processes of receiving encoded and stored information, and then processing it by classifying and deriving relationships with similar relationships in building knowledge. The decisive factor in any learning and work success is the way in which we recover information and relationships from memory, process what is recalled, and employ it to reach new, innovative and lasting things for life. Cognitive processing plays an effective role in everything that is new. The individual reaches him and how he can solve the problems he faces in the way that the individual

is satisfied with himself (Al-Askari, 2005: 15)One of the reasons for the lack of university learning is the poor ability of students to cognitive processing of information, which makes them not invest their minds when reading and studying. And that the speed of cognitive processing of information is positively related to intelligence, which is the basis of individual differences in intelligence, and that cognitive processing is related to the speed of response (Nor Wood, 1987: 406). The students 'lack of ability to recall information prior to failure is due to factors in encoding information or the inaccuracy of the stored vinegar in processing cognitive information, the present low grade and the interest shown by the student during treatment (Ottom 2004: 137-138) The research problem lies in asking the following question: What is the level of cognitive processing among students of the Department of History in the Faculties of Education in the Universities of Baghdad Governorate?

Importance of research

The cognitive processing of the information system is an interactive human system, where the information stored in the memory affects and is affected by the processes of perception and attention, and learning and thinking occurs from the point of view of cognitive processing of information as a result of the interaction between environmental stimuli and the information that must be learned and thought about, and the learner who performs the cognitive processing of information (ghari) 2007: 146)). Information and how this stores information and retrieves it again, Fa aa There was no good reception of learning the information would not happen, and if we could not remember the information for use then the learning would not occur, then there is no pathway and n we have the ability to retain that information (Slim, 2003: 453). The researchers believe that what students do in terms of treatments, processes and representations on the subject of the input. It depends on what is presented on their experiences, knowledge and information as they build knowledge and Maimitl being a store of knowledge and broad and deep or narrow and superficial, and around that, the student has skills, experiences and information that are carried out regularly through the educational activities or activities that were carried out during his academic life, and from These regular activities are teaching and preservation methods through which information, knowledge and skills are acquired and pushed to build the stored knowledge and acquired experiences that an individual possesses. Linked to cognitive processing When students are clearly related to individual differences, they represent differences in the abilities of preservation, understanding, application, storage and use of information, processing and recalling when needed, which makes students differ in cognitive levels of information, it becomes so to these levels, the value of predictors of high academic and academic achievement The Specialist (Al-Samurai, 1994: 24). And slapped Schme ck, 1983)) that there are statistically significant differences in the same statistic between the performance of the surprise test and each of the deep treatment and the detailed and extended treatment, right up to the deep treatment (42) and the extended treatment, the detailed (51.0) and this correlation factor is positive between These two scales (Greyre, 2003: 10) Musk (Mesick: 1984) pointed to several methods of cognitive processing of information by distinguishing individuals from each

other, as they see them as expressive methods and the ways that individuals practice in forming a cognitive processing of information and processing it, which are the individual differences between them in Methods for organizing perceptions and experiences, forming and processing information (26: M esick: 1984). According to the study by Kirby and Robinson (Kirby and Robinson, 1997) (students' difficulty in remembering information is due to the difficulty in using cognitive processing in the early stages of education (Kirby and Robinson, 1997: 122). Justice, 1990, where he mentioned the demonstrated effect of repetition and levels of cognitive processing on memorization and recall. (Al-Adl 1990: 15) Time and treatment of a large number of factors, the most important of which is the psychological and emotional state of the individual during the state of receiving in pounds or retrieval, if this factor affects the low degree of completeness and memory interest in retrieving information, as well as the degree of piety of the individual for memory in terms of personal importance Or its harmony with his ideas and directions, and the degree of confidence in the material to be recovered, the more important, harmonious and trustworthy a thousand answers, the easier it will be for him to retrieve them, the more complete and accurate the memory, as well as the effectiveness of cognitive processing during coding, analysis and encoding, and the more effective cognitive therapy, Memory increased perfection and accuracy (Daivs & Palladion, 2004: 105). It is assumed that university graduates receive honest, high-level information, which makes treatment part of the outcomes of the education system. Academic University (Al-Gharyri 2007: 2).

Research Aims

The current research aims to know the cognitive treatment of students of the Department of History in the Faculties of Education in the universities of Baghdad Governorate .

Research limits

The current research is determined by students of history departments in colleges of co-education in Iraqi universities in Baghdad governorate, which are the Faculties of Education at the University of Baghdad ,Al-Mustansiriya University and the Iraqi University, for the academic year 2018-2019.

Defining terms

Cognitive therapy: defined by:
  A. Shmak: It is the process of processing information inside the brain, and the processing methods include the depth at which this information is processed and extends between the surface and the depth (Schme c k, 1983: 221)
  B. Chapman: A Cross of Knowledge (TSH) looks at differences in strategies only for individuals with distinct disease in perception, thinking, remembering, problem solving, and the way an individual uses to counter progress in addressing stimuli (Shapman & Environment Shapman, 1985: 299)

C. Al-Ghariri: a cognitive process that occurs in the mental field to expand perception, through organizing, classifying, coding, analyzing, evaluating and criticizing information in order to represent, assimilate, retain and retrieve, and that extends between the surface and the depth and the expansion of information according to the nature of the goal of learning (Al-Gharyi, 2003): 21)

D. Ramadan: The mechanisms of distress and the skills acquired in the manner designated for employing various mental or cognitive activities, the cognitive processes that occur between the processes of receiving and retrieving information or remembering or between the inputs and outputs of memory (Ramadan 2005: 22)

E. Walt Master of Cognitive Theoretical Therapy: Hay Z Researcher That Defined Tattoo (Schmeek, 1983)

F. Exposure in procedural cognitive therapy: is the score obtained by the student through the response of the S Paragraphs evaluator, cognitive treatments used not for research purposes like me.

Theoretical aspects and previous studies

Cognitive processing

Cognitive therapy depends on the reactive effects of the goal directives more than it relies on a single record of directing the goal, and its compound effect may differ from its individual effects (Abu Hatab, 1990: 194). The goal of cognitive processing is the student's attempt to understand the specific processes involved in performing cognitive tasks, and to try to gain a deeper understanding of how individuals retrieve information stored in memory, and what is done on this information in terms of treatments and the possibility of using it in new situations (Al-Tayyib, 2006: 16). A person spends much of his life processing information when he pays attention, perceives, learns, solves problems and deduces them in his world, that is, a person acquires, stores and excludes knowledge. Some psychologists indicate that thinking is the cognitive processing of information, as when individuals perceive information, symbolize it, represent it, store it, and restore it, they think (Al-Khairy, 2012: 21-23).

The human system in cognitive processing of information

The nature of the human mind system in cognitive processing is affected by the structure of the brain in determining the human method in the cognitive processing of information. Talking about the human mind and the nature of its structure is the basis from which it is assumed. To begin when analyzing the reasons for the difference between individuals in the pattern of cognitive processing of information. The human mind system consists in cognitive processing of information from sensory inputs, processors, motor outputs, and memory, and memory plays a major role in information processing, preservation and retrieval. Wan memory consists of storage groups, which are: sensory memory, short-term memory, and long-term memory.

1- Sensory Memory

It is sometimes called the portal of awareness, because knowledge passes through it, especially when an individual repeats or hears the information presented to him. This memory represents the first receptor for sensory input from the outside world, through which a large amount of information is received about the properties of the stimuli that interact with it through the various sensory receptors, whether visual, auditory or tactile (phlebitis). And Al-Qatawneh, 2010: 136 (This system plays an important role in memory processes, and is represented in transmitting the image of the outside world with a high degree of accuracy as received by the human senses, and the duration of this image usually ranges between (0.1-0.5) of a second, which leads to an explanation of how fast The sensory systems receive the information received from the stimuli, and the process of storing the visual sensory information is usually related to the characteristics of the response time of the visual senses. The system takes the student to extract the meaning of the information that the senses receive from external stimuli for a period of time longer than the period of time it takes to appear, the stimulus or the visual object In front of the individual, which makes the sensory information storage system play an important role in the processes of perception and recognition in order to deal with the information received from this system (Sharqawi 1991: 129).

2- Short-term memory

This memory is called working memory because it receives information from the sensory memory, encodes and processes it, and then sends it to the long-term memory for retention. The continuity of information and its retention in this memory depends on the level of activation of the information contained in it, as well as the reception of information that must be remembered from long-term memory, and some mental processes such as its organization and the transformation to a specific performance is made on it. In general, the existence of information in this memory takes a very short time, ranging from 20-30 seconds, and its capacity is very limited. Therefore, the rate of forgetting in this memory is very large due to the limited storage capacity and the short time in which the information can be preserved.

3- Long-term memory

It is a memory system used to store large amounts of information for very long periods. Learning occurs when information travels from short-term memory and settles into the storehouse of long-term memory, which is where an individual's lifelong experiences accumulate. One of its most important functions is changing information, giving it meaning, organizing it, linking it to others, and analyzing it in order to preserve it. We conclude from the above that the students' cognitive processing system is the one that controls the process of preserving and retrieving information, and that this framework in general and its structure is fixed for all students. But the nature of the mental processes that occur in the brain varies from person to person. This is due to several factors, including the student's experiences and personal characteristics, which are reflected in

the form of a different response from students to the same information, which creates something in individuals in their cognitive processing of information.

Similarities between computers and humans in cognitive processing of information

Many scholars believe that the processes (inputs, processes, and outputs) that underlie the work of computers are similar to the process of machine learning (Al-Zayat, 1996: 404-405) having similarities between the cognitive processes that a human performs practices during problem solving, and the processes that one performs. The electronic computer in receiving and processing information or external stimuli, which is a description that makes the electronic computer perform a series of actions that represent the cognitive or behavioral actions that occur by a person such as this work, meaning that we program the electronic computer to go in the same steps that a person might take. The reason why the computer performs work instead of the human being in a short time, quickly and without errors, and this leads to an economy in time, effort and balance between the psychological system and the device, and the result has been this direction, or the so-called cognitive processing of the theory of composition, are terms in psychology Most of them are borrowed from the language of electronic computers, the most important of which are:

1. Input: It includes information, triggers, data, data and instructions.
2. Output: means the final result.
3. Processing (processing): It is a process that mediates between inputs and outputs (Al-Ghali, 2003: 29-30).

In light of the foregoing, we can address the similarities and integration between computers and humans according to the following:

1. The computer obtains the information through the information reader, depending on the operations and on
2. Learned tuning and control programs.
3. Humans provide, store and process information based on learned operations and programs.
4. Processing information by computer is prepared according to the existing program or programs Graduated from the computer in print and in the same way that the person processes the information according to "processing parameters, verbal, kinesthetic or performance responses emerge" (Alwan, 2009: 25)

Assumptions of cognitive processing of information

The main assumption upon which the direction of information processing is based is that mental processes can be better understood if we view them as a statement of input (processing) and

output, which is the context that the human mind produces during the process of symbolic recording of information, its storage and retrieval:

1. The process of information processing is an active cognitive, mental and activity process, in which the individual is dynamic and active.
2. Information represents any event that increases certainty or reduces the amount of uncertainty.
3. More than one method can be used to process the information of a person at the same time.
4. It expands the human direct memory in processing more than one information unit simultaneously.
5. Processing refers to the stage of storing information and what may happen to it in terms of modification or exposure to loss during this stage.
6. The basic unit of analysis in most cognitive theories is the cognitive processing of information.
7. Primary cognitive processing includes the self-representation of objects or symbols. He can translate the components of the sensory representations into conceptual representations or convert the conceptual representations into another conceptual representation, or the conceptual representation translates into a complex product.
8. The aim of the thinking process in cognitive processing is to understand the world and facilitate its understanding (Qatami, 2003)
9. A person is active and active during the learning process, as he searches for knowledge and does not wait for it until his knowledge comes, as he processes this information or extracts what is appropriate from it, making use of previous or previous experiences. Learn.
10. The processing that the student experiences on the information takes place through stages that include interest in the information, coding it, then converting it into mental representations and then storing it in memory in an easy way. Call it and remember it when needed.
11. The treatment process depends on the factors of attention or perception, as what is processed is the information that the student focuses on his attention at any given moment, because there are limits to quantitative information that the student can process in a specific case (Zagoul, 2011: 229).

Levels of cognitive processing of information

Individuals can cognitively process information on three levels:

1. Surface treatment level: - The information contained in it is processed according to its physical and sensory properties or according to its formal characteristics, such as the visual images of the alphabet.

2. The deep level: - In it the information is processed according to its voice and after the character and its classification, as units of speech that distinguish the pronunciation of one word from another and this level is deeper than the surface level.

3. The deeper level: - The information contained in it is processed according to its meaning and the most recent correlations between the derived meanings and other things in the individual's cognitive structure. Several levels of comprehension can be distinguished, each of which effectively differs in the procedure for selecting information from short-term to long-term memory (El-Sharkawy, 1991: 218-219).

Stages of cognitive processing

1. Receiving information: - While receiving it, the information passes through the so-called sensitive records. This information is in the form of raw perception and its reception period ranges from (0.5-1) seconds, and during this transitional period some concepts turn into short-term memory. The degree to which the information is used and used depends on the amount of information the subject can convey and carry in short-term memory.

2. Processing speed: It is the ability to focus on relevant information and exclude irrelevant information. It is a very important mental process for memory, because it contributes to the individual's ability to transfer general information from sensory memory to working memory, focus on it and process it cognitively.

3. Coding: After the information is recorded by the sensory recorders, it replaces the working memory or the short-term memory, and in some cases the long-term memory that is used directly in other processes, where the information is subjected. During its transmission or transmission to what is called encoding information (Al-Zayat, 1996: 406-409).

Justifications for choosing the SCMC model for cognitive information processing

1. The Shamak model is the closest in dealing with students 'study materials in preserving and processing information.

2. The Shamak model gives the perception that there are wrong methods in the study, such as memorization without understanding.

3. The model for cognitive processing was presented to students in an integrated manner in terms of theory and practice .

Previous studies

The Study of Justice (1990) Egypt

The study aimed to identify the effect of the information processing strategy, IQ and level of achievement on university students 'performance in short-term recognition and recall tasks. The

sample consisted of (156) male and female students from the Faculty of Education, Zagazig University, in Egypt. The research tool consists of an Information Processing Scale, Academic Achievement Score (GPA), and a mental ability test. Studies found:

1. The presence of a significant impact for each of the information-processing strategy, IQ, and the level of achievement on students' performance in short-term recognition and recall tasks.
2. The strategy of sequential processing of information is better than the method of accurate processing in the performance of identification and recall tasks.
3. There are differences in favor of highly accomplished and intelligent people in performing tasks that require careful information processing (Justice, 1990: 263-302).

The Samurai Study (1994) Iraq

The study aimed to find out the relationship between the methods of cognitive processing of information and study habits of sixth intermediate school students, and to find out whether there are statistically significant differences in the cognitive processing of information according to the variables of sex and branch of study. . The study sample consisted of (433) male and female students from the sixth grade of middle school, the scientific and literary branches. The study tool consisted of a list of learning styles and information processing (Shamak) to measure cognitive processing methods, and the researcher built a measure of study habits. The study reached the following results:

1. There is a positive correlation between the methods of cognitive processing and study habits of the male sample female.
2. There are no statistically significant differences between treatment methods and between males in the (scientific - literary) branch versus females in the scientific - literary branches.
3. The existence of statistically significant differences between treatment methods between students of the scientific branch and students of the literary branch in favor of students of the scientific branch (Al-Samarrai, 1994: 1-175).

The study of the net (2000) Saudi Arabia

The study aimed to identify the differences in information processing strategies (sequential) and (intentional), the level and speed of processing referred to in the academic specialization (scientific - literary) and academic achievement (high - low). The study consisted of a sample of university students. College of Education, King Khalid University - Abha, where the sample was (75) male and female students. The study included a study of sequencing word retrieval, an advanced-level grapple test (Raven) and a task of processing speed. The study found. There were statistically significant differences in favor of students of the scientific department in the successive treatment and caution at (0.05, 0, 01, respectively), and in favor of the superior in the successive treatment (0.01) and the level of treatment) in (0.02) Al-net, 2000: 1- 24)

Al -Ghariri Study (2003) Iraq

The study aimed to identify the effect of the information processing strategies program on academic achievement and the transmission of the training effect to the teachers college students according to their level of intelligence. The research sample consisted of (70) male and female students in the second grade of Teachers College. The sample students were divided into two groups, each group comprising (35) male and female students. The study tool consisted of an educational program for information processing strategies prepared by the researcher. The researcher also built two tests, one for academic achievement for the subject of educational psychology and the other to impart the impact of training. The study found the following results :

1. The existence of statistically significant differences in the average academic scores and the effect of training transmission between students of the experimental group and the control group in favor of students of the experimental group.
2. The existence of statistically significant differences in the mean of academic achievement scores, and the effect of transferring training among students of the experimental group according to the gender variable in favor of females.
3. There are no statistically significant differences in the mean scores of the effect of transferring training between students of the experimental group according to their level of intelligence.
4. There were statistically significant differences in the mean scores of the effect of training transmission among the experimental group students according to their level of intelligence in favor of good intelligence.
5. There are no statistically significant differences for the interaction in increasing academic achievement and the effect of training among students of the experimental group (gender x level of intelligence) (Al-Gharyri, 2003: 15-159)

Benefit from previous studies

Presenting the previous studies contained in the identification of studies that were conducted on the research variables and provided our explanations that helped in determining the dimensions of the problem, setting goals, and following the measures of anxiety percentage to achieve good sample selection and selection. Appropriate statistical methods that helped in achieving the requirements of the current research as well as benefit in interpreting the results.

Research methodology and procedures

First: Research methodology

The researcher adopted the descriptive approach to know the level of cognitive processing among students of the history departments in the Faculties of Education, and adopted our descriptive approach in general, which seeks to determine the current situation of the

phenomenon under study, and then describe it. It is a study of the phenomenon based on what is in reality and concerned with an accurate description (Melhem, 2002: 324).

Second: Research community and its sample

The research community consists of student sections from history in all my educational data / Baghdad governorate mosque data. The research sample consisted of (300) students from the departments of history in the governorate of Baghdad in the universities of the Faculties of Education, and this sample from the current research community chose the new variety randomly. (100) students were selected from each of the three colleges, then (25) students were selected and a student from each of the four stages of the history department.

Table(1) Research sample by college and stage

Total	Stage				the college	the University	No.
	The fourth	The third	the second	First			
100	25	25	25	25	Education - Ibn Rushd	Baghdad	1
100	25	25	25	25	Education	Al-Mustansiriya	2
100	25	25	25	25	Education for the humanities	Iraqi	3
300	75	75	75	75	Total		

Third: The Research Tool: The Scale of Cognitive Information Processing:

After reviewing the previous standards in the field, the researcher found that the tattoo scale (Schmik, 1983), which was translated (Al-Ghariri, 2007) fits the research sample and achieves its goal, the scale and consists of four areas: depth of treatment, studies the methodology of scientific facts and maintains them, and detailed treatment. The field of in-depth treatment consists of (18) paragraphs, the field of systematic studies (23) paragraphs, the field of retaining scientific facts (7) paragraphs, and the field of detailed mineral cliffs (14). A paragraph.

Correction method

The researcher adopted that the method of correction (0.1) for alternatives to the scale paragraphs is (it applies to me, it does not apply), so the lowest score that the sample members get on the scale is (zero) and the highest score is (62)

Check the scale

The validity of a scale is a psychometric property that reveals to what extent the scale performs the purpose for which it was set up, or the extent to which it measures what it was measured (Odeh, 2005: 478). Na has verified its apparent validity by presenting the scale to a group of judges in the educational and psychological sciences to prove its validity in applying it to the current research sample. It has been adopted as our standard for accepting the promise of the paragraph is valid if it is expressed (80%) above the arbitrators and their approval after the completion of the review visas, it turns out that the experts agreed on the validity of the paragraphs of the scale, except for three paragraphs that were removed from the scale upon application.

Exploratory application of the scale

For the purpose of information on the clarity and accuracy of the scale and the time required to answer it to ensure the accuracy of its application, the researcher said that an experimental application of the scale test was the application consisting of (5 samples 0) students, and the student was randomly selected from the students of the History Department of the College of Education - Ibn Rushd, and the paragraphs were clear For students, the average time taken by the respondents in their answers on the scale was (7) minutes. .

Scale stability

Scale invariance shows to what extent individual differences in scale scores are attributed to true differences in measured characteristics, and it also shows to what extent differences are attributed to errors of chance (Anastasi, 1988; 109). To detect the stability of the current measurement indicators, the Kiodrrichardson equation 20 was contracted - and it is more common in estimating the stability and measuring the internal consistency of the paragraphs. (0.83), which is a good stability and reliability coefficient.

Final version of the Cognitive Processing Scale

The scale became in its final form consisting of (59) items, and the total score of the scale ranged between as the lowest score and (59) as the highest score, with a hypothetical average of (2.5 2)

Fourth: The final application of the scale

After confirming the validity of the scale, it was applied to the research sample of 300 male and female students. The researcher is keen to distribute restricted forms from Q on his supervision, in order to answer that the students express his opinion freely from embarrassment or repetition, as well as encouraging him not to leave Any paragraph without an answer because it is used for scientific purposes, and after completing the application, the researcher empties the data to extract and search it. Use the results for the Statistical Social Sciences (S PSS).

Presentation and Explanations of the result

To achieve the goal of the research, the T-test was used for one sample, and the result showed that the calculated T value (51,221) is higher than the tabular T value of (1.96) at a level of significance (0.05) and a degree of freedom (299), which means that there are significant differences A statistic between the average of the sample's scores and the hypothetical average of the scale and this difference in favor of the average of the sample scores, and this indicates that the students of the history departments in the Faculties of Education enjoy the cognitive treatment. Table (2) illustrates this.

Table (2) Significance of differences between the mean of the sample scores and the hypothetical mean of the cognitive processing scale

Indication level	T-value		Degree of freedom	Hypothesized mean	standard deviation	SMA	sample	variable
	Tabular	Calculated						
D at a level 0,05	1,96	51,221	299	29,5	6,062	45,667	300	Cognitive processing

Explanations of the results

The result showed that there are statistically significant differences between the arithmetic mean as a whole and the hypothetical average of the cognitive processing scale, with the arithmetic mean of the sample being superior to the default average, and this indicates that students of history departments in colleges of education enjoy cognitive processing and this is confirmed by the model Carroll (Corroll, 1976)given that performance on mental tests is done by having relatively few basic components of cognitive processing and the SCM model. Schmeek 1983 students remember information better when processed in depth that includes interest in the meaning and classification of the idea that that symbol denotes.

Conclusions

1. Cognitive therapy helps students of history departments in Faculties of Education to diversify the use of treatment levels.
2. Cognitive processing helps students of history departments in colleges of education to improve memory functions and how to deal with information in terms of coding, preservation and retrieval.

Recommendations

1. The possibility of using the cognitive treatments scale from the Ministry of Higher Education and Scientific Research in all universities in Baghdad and the governorates to know the level of cognitive processing among students.
2. Directing educational institutions to pay attention to cognitive treatments for students to advance the educational process.
3. Curriculum preparers should help students to increase the levels of cognitive treatments by developing curricula and educational programs prepared according to this purpose.
4. Developing approaches that include how it can be used in the cognitive processing of information and enable it to reduce the erosion that occurs in memory due to poor handling of information.

The proposals

1. Conducting a study on cognitive processing and its relationship to some variables such as: personality patterns, psychological compatibility, and social adjustment.
2. Conducting a comparative study between students of public universities and private universities in methods of cognitive processing of information.

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Finalized cognitive processing scale

College Name
The theater

Dear student, dear student

N put in your hands a scale to know the treatment reflects your way of thinking, each paragraph contains two alternatives (application or not), n regio Read each paragraph carefully and carefully, and if you find a paragraph that applies to you, check before the paragraph (application), and we want to deal with your real and realistic answer With the scale paragraphs, noting that the scale is intended for scientific purposes and there is no need to mention the name.

It does not apply	Apply	Paragraph	No.
		I find it difficult to deal with questions that require comparison of other concepts	1
		I find it difficult to come to conclusions	2
		I find it difficult to organize the information I remember	3
		I find it difficult to remember the course material during the exam that I took	4
		I find it difficult to answer questions that require critical evaluation	5
		I answer well for essay exams	6
		I often struggle to express my thoughts in appropriate words	7
		I find it difficult to learn how to study for a specific subject	8

		I find it difficult to plan my studies when I am facing a complex subject matter	9
		I get good grades on reporting	10
		Often times I memorize material that I don't understand	11
		I find it difficult to notice the differences between seemingly similar ideas	12
		I can determine the basic significance behind the films I watch and the books I read	13
		I am thinking fast	14
		Most of my teachers deliver their lectures very quickly	15th
		I can usually make a good guess, even if I do not know the correct answer for the exam questions	16
		Ignore the differences between information from different sources	17
		Read critically	18
		Reduce as much information as possible for examination purposes	19
		I have regular revision periods every week	20
		I find it difficult when starting and reading my courses	21
		I review the course material periodically during the semester	22
		I keep a daily schedule of my school hours	23
		I often write a summary of the material I'm reading	24
		I spend more time studying than most of my friends	25
		Prepare many course notes from many sources	26
		I often read more than what is given to me in class	27
		I often refer to multiple sources to understand the idea	28

		Summarize all the subjects you have studied when approaching the end of the semester or academic year	29
		Increase my vocabulary by preparing lists of new terms	30
		Use the thesaurus or dictionary frequently	31
		I continued my study of the subject and mastered learning it	32
		I draw shapes and make simple diagrams to help me remember the subject	33
		I always make an exceptional effort to obtain all the details of the subject matter	34
		Study by solving scientific exercises	35
		I have a steadfast place in studying	36
		I can easily find texts in textbooks when required	37
		I prefer reading the original article instead of its summary	38
		List potential questions and their answers when reading for the exam	39
		I learn formulas, names and dates very well	40
		Answer well for tests that require definitions	41
		My answers are good in exams that require completion of the solution and the missing information	42
		I find it difficult to remember the definitions	43
		I can say that my memory is very weak	44
		For exams, memorize the material as it is in the book or in the lecture book	45
		I am constantly looking for reasons beyond the facts	46
		New concepts make me think of similar concepts	47
		Through my studies, I try to find answers to the questions on my mind	48

		I usually design my own ways to solve problems	49
		After reading any subject, I reflect on and think deeply about the topics I have read	50
		Learn new words and ideas to visualize a situation in which they could occur	51
		When I learn a lesson from the subject in my own style	52
		I learn new concepts by expressing them in my own words	53
		I review mentally the topics I study during the day	54
		When I study, I design a system to remember the course material	55
		I associate new words and ideas with words and ideas that I already know	56
		I learn new ideas and compare them to similar ideas	57
		I turn facts into laws that I extract from my experience and my experience	58
		When learning new concepts, I often put practical applications into them	59