

# Remembrance and learning skills and their relationship to academic achievement among university students

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**Abstract:** The study aimed to identify the memory and learning skills and their relationship to academic achievement among university students in Jordan. The descriptive approach was used in addition to the questionnaire as a tool for the study. The study sample consisted of (1000) university students from different universities, colleges, specializations and levels of study in different Jordanian universities, and the study was applied. The study was conducted in the second semester of the academic year (2020-2021), and the study reached a set of results, which is that university students in general possess a high level of learning skills, recall and academic achievement, in addition to the existence of a direct relationship between learning, recall and academic achievement for the members of the research sample. The study found that there are significant differences in the skills of learning, memorization and academic achievement between the academic disciplines of the female students) Scientific and Humanitarian) and for the benefit of scientific specialization.

**Keywords:** remembrance, learning skills, academic achievements

Introduction and importance of research:

The learning process is one of the necessary stages in a student's life, as it is not limited to the practical material only, but also the educational and educational aspect of all aspects of life, and all of these elements work to evaluate the student's personality and determine the level of academic achievement.

Therefore, learning and memorization skills are among the most important stages of the student's learning process and depend on what the student acquires of information based on the material given to her during the lesson and the nature of the student's mental processes through which she can program what she has obtained from the material and keep it in her imagination to benefit from it in the exam. There is a difference between individuals in the process of retaining the scientific material,

as there are individual differences between them in mental operations, and thus this will affect the academic achievement process.

Through what was mentioned previously, the importance of the research is evident in trying to identify the level of memory and recall skills and the level of academic achievement among university students in various Jordanian colleges and universities, as well as identifying the differences in the level of the two variables for female students according to the variable nature of the academic specialization (human, scientific)

#### *Research problem*

The learning and memorization processes and their major role in determining the nature of the student's scientific level, but also depends on the nature of the student's keenness and many important aspects, so this difference will also generate a difference in the academic level, so we will try through this research to determine the extent to which the students in the research sample possess the skills of memorization and learning As well as the level of academic achievement they have, as well as identifying the type of relationship between the two variables in question, and whether the type of specialization (scientific and humanitarian) has a role in the existence of a difference between the sample members.

#### *Research aims*

1-Identifying the level of learning and memorization skills and the level of academic achievement among university students.

2-Identifying the relationship between learning skills, recall and academic achievement among the research sample.

3-Identifying the differences in the level of learning, recall and academic achievement between the nature of the academic specialization (humanity, scientific).

#### *Research hypotheses*

- There is a statistically significant relationship between the learning and memorization skills and the level of academic achievement of the research sample.

- There are statistically significant differences between learning skills, memorization and academic achievement in the type of specialization (scientific, humanitarian).

#### *Search parameters*

The human field: female university students in various Jordanian universities and at different levels of study.

Time domain: The study was applied in the second semester of the academic year (2020-2021).

Spatial domain: The study was applied in a number of Jordanian universities and in various faculties, whether scientific or humanitarian.

*Theoretical framework:*

## The concept of learning and recall skills:

Many definitions of the concept of learning and recall skills have emerged, including one that expresses a behavioral pattern that the student acquires through her repeated practice of collecting knowledge and information and mastering experiences and skills, and this behavioral pattern varies with different individuals, and varies with different disciplines.[1]

They are also learned behavioral patterns that are repeated in similar situations, and help to save time and effort, and to master the educational experiences of students, and they differ according to different disciplines and individuals. [2]

They also represent special behavioral patterns that the student acquires through her repeated experiences in achievement and gaining experiences. [3]

Or it is the special methods that the student will follow in understanding the subjects she has studied, or that she will study, through which the student learns facts, examines opinions and procedures, analyzes, criticizes, interprets phenomena, solves problems, invents new ideas, masters and creates performances. She requires speed and accuracy and acquires new behaviors that benefit him in her field of specialization.[4]

So, through what was mentioned previously, we can define learning and recall skills as the most important practices and behavioral methods that female students usually practice when they remember and learn the subjects.

The concept of academic achievement: Achievement is of great importance in the life of the individual and society, and arises from needs such as the pursuit of excellence, the achievement of lofty goals, and success in difficult work.

Custom (Worren) 1934 Academic achievement as: competence in performance, which is an acquired ability rather than an inherited ability, and is usually measured by a specific assignment or a standardized test[5].

Know him (English) 1958 It is: the acquired ability to perform school tasks, and the ability may be general or specific to a particular academic subject[6].

And he knew him (Finger and Scores) 1965 It is the tendency to make an effort to achieve school success[7].

And know him (Jude 1973) is: acquired knowledge or skills in school subjects, usually determined by test or teacher assessments, or both[8].

It also represents the amount of desire and inclination to make an effort to perform duties and school tasks well[9], so through what was mentioned previously, we find that the concept of academic achievement is the amount of desire and inclination of the student to make the effort, as this can be inferred from the degree obtained by the student through her answer on the scale used to measure the level of academic achievement motivation.

### Forming Achievement Behavior:

The achievement can be formed from the influence of the following factors: [10]

#### A-family Family:

The family plays an important role in shaping academic achievement needs. Academic Achievement Parents who score high on achievement tests emphasize the importance of success and independence, and these parents reward their children for accomplishments, such as becoming pioneers, making friends, trying to do difficult tasks themselves, and persevering in performance. Children) with strong needs for achievement to participate emotionally in the work performed by their children that is related to achievement.

The need for achievement also exists strongly in families that give their children opportunities to be independent and self-reliant at an early age.

#### b-teachers Teachers:

Teachers play an important role in developing achievement-related behavior, as during the last years of primary school they use feedback patterns. Feedback Which helps the ability and efficiency in the situations of achievement.

It is worth noting that the primary school years have a major impact on the development or impediment of the need for achievement in the secondary stage, and then the impact of both stages on achievement during the university stage.

#### c - society Society:

Society plays an active role in the development of achievement in individuals, as William James pointed out William James that there are valuable achievements in American society; Including (for example): ((that the individual should be ranked first)) and ((progressing forward))..etc. Often, achievement in America is accompanied by material rewards: material profits, influence, and a distinguished social position. As a result, American children develop strong needs for achievement.

McClelland has done McClelland And his colleagues conducted studies on the need for achievement. In his study of human civilizations, he found that advanced peoples are distinguished by the strong level of need for achievement in them, as they seek success, mastery and control of their physical environment.

#### Research methodology and field procedures:

##### *Research Methodology*

The researcher used the descriptive approach to the appropriateness of the nature of the research problem and objectives.

#### Research community and sample:

The research community included female university students in different Jordanian universities, and the sample was randomly selected with a rate of ( 1000 ) female students, and table (1) illustrates this.

Table (1)

It shows the distribution of the sample according to the type of study specialization for the female students

Specialization	the number	percentage
scientific	500	50%
Humanitarian	500	50%
Total	1000	100%

Search tools:

The scientific sources and the learning and recall skills scale of (Nurjan Adel Mahmoud) were relied upon. [11] Which consists of (112) items. As for the academic achievement scale, it was based on a scale of (Ibrahim Ismail Hussein)[12] It consists of (40) paragraphs. The two scales were presented to a group of experts and specialists in the disciplines of measurement and evaluation, curricula, teaching, and psychological and educational counseling. They expressed their opinion on their suitability with some minor changes, and they appeared in the final form as in Appendices (1) and (2).

Survey experience:

It was conducted experiment on 12/4/2021 on ( 30 ) students from the same study population, but from outside the designated during which to identify the extent of understanding of the sample phrases measure whether there is ambiguity mentioned in the answer to avoid every possible problem to occur in the main application process scale.

The method of correcting the two scales:

The memorization and learning scale consists of (112) items and the answer to them is according to (5-1) degrees for each item and according to the five alternatives, which are (always, often, sometimes, rarely, never) and with values according to the sequence (1,2,3,4,5) For negative paragraphs and vice versa for positive. As for the academic achievement scale, it consists of (30) items, and the answer is (5-1) and according to the alternatives (strongly agree, agree, I don't know, disagree, strongly disagree) and evaluated according to the sequence (5,4,3,2,1) for negative paragraphs and vice versa for positive.

Calculation of the total score:-

Since the memorization and learning scale consists of (112) items, the highest score for the answer will be (560), the lowest score is (112), the arithmetic mean is (431,54), and the standard deviation is (34,90). As for the academic achievement scale, it consists of (40) Paragraph, the highest score is (200) and the lowest score is (40), and the arithmetic mean of the scale is (194.72) and the standard deviation is (10.12).

The validity and reliability of the study tool

Honesty:

Honesty is one of the scientific conditions and characteristics of a good test, since honesty means "that the test measures what it is designed to measure and does not measure anything else." [13] The validity was achieved when the two scales were presented to the experts and they showed their suitability for the research work.

Stability

Cronbach's alpha equation was used to extract the stability coefficient, and it reached for the memorization and learning scale (0.84) and for the academic achievement scale (0.82), which is a high indicator of the stability of the two scales.

3-4-6 The main experiment

This was done during the break between lectures where he was in the period 2/5/2021 until 27/5/2021 was distributed interferometers forms to sample the (1000) student after Tohireha by the sample was collected forms to get search results.

Statistical methods used:

Program (21 . was used ) spss To find the following statistical methods:

(arithmetic mean, standard deviation, law T For one sample, law Tfor two independent samples) .

Presentation and discussion of the results:

Identifying the level of memorization and learning and the level of academic achievement of university students :

After collecting the data, we had to identify what the sample possesses of recall and learning skills, so this required extracting the value of (t) between the arithmetic mean and the hypothetical mean of the research sample and the table (2) shows that.

Table (2)

Shows the relationship between the arithmetic mean and the hypothetical mean of the memory and learning skills

Variable	Sample number	Arithmetic mean	Standard deviation	Hypothetical mean	Degree of freedom	Values T		Indication
						Calculated	Tabular	
University students	1000	324 , 62	8 , 13	321	148	3 , 89	2 , 02	Moral

It is clear to us from Table (2) that the arithmetic mean value of the sample has reached its arithmetic mean (324, 62), which is higher than the hypothetical mean, which indicates that the female students possess a high level of memorization and learning skills.

As for the academic achievement variable, the arithmetic mean, standard deviation, and hypothetical mean were extracted, as shown in Table (3).

Table (3)

Shows the relationship between the arithmetic mean and the hypothetical mean of the academic achievement variable

Variable	Sample number	Arithmetic mean	Standard deviation	Hypothetical mean	Degree of freedom	Values T		Indication
						Calculated	Tabular	
University students	1000	214 , 21	7 , 89	138	142	4, 17	2 , 88	Moral

As it becomes clear to us from Table (2) that the value of the arithmetic mean of the sample has reached its arithmetic mean ( 214 , 21 ), which is higher than the hypothetical mean, which indicates that the sample possesses a high level of academic achievement.

Identifying the relationship between memory and learning skills and academic achievement among the study sample:

In order to identify the type of relationship between the variables of study, learning and academic achievement, we had to find a Pearson test between the two variables and Table (4) shows that.

Table (4)

It shows the relationship between the research variables

T	Variables	correlation coefficient	degree of freedom	Calculated t value	T-Table Value	Link type
1	Remember and learn	0. 231	281	3 , 02	2 , 21	moral
2	Academic achievement					

- degree of freedom = 281

- Table T-value = 2 , 21

- Significance level = 0.05

Table (4) shows that the correlation between the two variables of the research is a significant correlation, that is, it is a positive correlation, and this is due to many factors, despite the different specializations of the students, but the process of students recalling information and the process of retaining information is based on the information they possess during the study period. The college and study materials have a major role in the process of students recalling information and thus achieving the new academic achievement. The parents also have a great role in guiding the student towards good achievement and providing the appropriate conditions to achieve this, as the educated and conservative family greatly affects the student's academic achievement and in many aspects related to her life. University and increase motivation towards excellence. Commitment to family directives.

Knowing the differences in the level of learning and memorization skills in the light of the academic specialization variable (scientific - human).

And in order to extract it it had to be us Igga d value (t) calculated between the disciplines of study for students ( scientific and humanitarian) and as in Table 5.

Table (5)

It shows the significant differences in the level of memory and learning skills in the light of the female students' academic specialization variable

Variable	Arithmetic mean	standard deviation	Calculated t value	T-Table Value	Indication
Scientific	298 , 21	34 , 13	9 , 45	2 , 18	Moral
Humanitarian	277 , 45	22 , 30			

Table (5) shows the significant differences in the level of memory and learning skills in the light of the students' academic specialization (scientific, human) and in favor of the scientific specialization , due to the nature of the study and the different practices dictated to the student, which are represented in the practical field practiced by the scientific side, which strengthens the sobriety of the student's information .

Knowing the differences in the level of academic achievement in the light of the variable of academic specialization for the female students (scientific - human).

In order to know this, it is necessary to find the value of (t) calculated between the scientific and humanistic disciplines , as shown in Table (6).

Table (6)

It shows the significant differences in the level of academic achievement in the light of the variable of academic specialization for the female students (scientific, human).

The group	Arithmetic mean	standard deviation	Calculated t value	T-Table Value	Indication
Scientific	115,89	17,34	9,56	1,96	Moral
Humanitarian	113,23	23,75			

It becomes clear to us by observing Table (6) the significant differences in the level of academic achievement in the disciplines (scientific, human), where we find that the relationship is significant between the two variables in favor of the scientific specialization , because the nature of female students in the scientific specialization has a higher level of academic achievement and for many reasons, including the Scientific.

*Conclusions and Recommendations*

**Conclusions**

1-University students in general possess a high level of learning skills, memorization and academic achievement.

2-There is a direct relationship between learning, recall and academic achievement for the research sample members.

3-The existence of moral differences in the skills of learning, recall and academic achievement between the academic disciplines of the female students (scientific and human) and in favor of the scientific specialization.

**Recommendations**

1-Orienting students to the importance of good academic achievement, which has a major role in strengthening the student's personality.

2-Involve female students in artistic and sports activities in order to diversify their activity and increase the desire for achievement by creating a new and enjoyable atmosphere for the student.

3-Benefiting from the results of the research in the opening of new programs that meet the needs of students and the community, including the development of new curricula that are of medium difficulty and do not provoke them boredom, in line with the current developments and developments in society, and help to achieve adaptation to the changes and needs of society through the formation of the appropriate personal experience to achieve this In order to ensure the solution of the students' scientific, social, psychological and economic problems.

4-Conducting a similar study of the current research variables and on the male sample in order to compare with females in the results reached and to identify the reasons for the differences, if any, between the sexes.

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