

Habits Of Mind Among The Students Of The Educational Sciences Department Of Ajloun University College

Manal Al-Momani, Zain Al-Kayed, Amjad Abdel Aziz

Article Info	Abstract
<p>Article History</p> <p>Received: April, 2021</p> <p>Accepted: July, 2021</p> <hr/> <p>Keywords : Habits of Mind, students of the Department of Educational Sciences, Ajloun University College</p> <p>DOI: 10.5281/zenodo.5120948</p>	<p><i>This study aimed to investigate the degree to have habits of mind among female students of the Department of Educational Sciences at Ajloun University College by answering the following questions:</i></p> <p>1- <i>What is the degree in which female students of the Department of Educational Sciences at Ajloun University College possess habits of mind?</i></p> <p>2- <i>Are there statistical differences at the level of significance ($\alpha \leq 0.05$) in the degree to which female students of the Department of Educational Sciences at Ajloun University College possess habits of the mind on the scale of habits of mind according to the two variables (specialization and academic year)? For achieving the objectives of the study, the researcher choose a random sample of (65) female students, by 25% of the total original society (262). A measure of the habits of the mind was used by the researcher for the aims of this study, consisting of (30) items. The results of the study: The degree to which female students of the Department of Educational Sciences at Ajloun University College possessed habits of mind was medium. There were statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the degree to which female students of the Department of Educational Sciences at Ajloun College possessed habits of mind, according to the variable of specialization and the academic year. The differences were in favor of specialization in special education and the fourth academic year.</i></p>

Introduction

The improvement of the individual's mental capabilities has become a necessity imposed by society's demands for progress and a major goal that the curricula seek to achieve (Khoon, 2005). The critical and creative capabilities contribute to building a human personality that is characterized by perseverance, flexibility and open-mindedness to solve problems (Tishman, 2000).

Therefore, it became necessary to advance the individual according to integrated educational mechanisms to help him grow balanced and liberate his creative energies in order to adapt to the surrounding environment and face the challenges and changes around him. The aim of education is to make the learner think effectively and not just acquire content and skills. Rather, employing education and developing the habits of the mind so that the individual can learn by himself, whatever he wants to know and in the different stages of life, in a way that makes teach lifelong (Mohammed, 2005)

Habits of mind play a vital role in the success and progress of individuals inside and outside educational institutions, because their performances in academic and educational skills, tests and life situations are the products of their thinking, and according to which the extent of their success and failure is determined (Abbas, 2018).

The habits of the mind and the behaviors and practices that emanate from them are based on the cognitive theory that is based on a set of basic principles and assumptions. The most important of which is that the individual is able to build and develop knowledge, and learning involves an active process in which learners construct meaning by connecting new existing ideas, related experiences and interacting with the social environment around them (Zaitoon & Aish, 2010).

Habits of the mind are important variables as they are related to academic performance in different stages of learning. There are many studies that have emphasized the importance of habits of the mind and its development (Kotami, 2004). Studying habits of mind is a recent vision and a relatively contemporary trend, the learner must behave in an intelligent manner that becomes a professional in his mind, abilities and unlimited potentials to reach a mind that possesses mental habits that are more effective and productive (Anqara, Al-jarah, 2015).

Also, the habits of the mind are a pattern of intelligent performance that lead the learner to productive actions, because it is formed as a result of the individual responding to certain types of problems and questions that require thinking, research and reflection. That is, habits of the mind focus on the ways in which learners produce knowledge, not recalling it or reproducing it in an earlier pattern (Costa, Kallike, 2000).

Abdel-Wahhab and Al-Wolaimi (2011) defined the habits of the mind, it is an individual's mental direction that determines the characteristic of his behavior pattern. Depending on the individual to employ his previous experiences and benefit from them in achieving the desired goal.

Al-mutrub and Shura (2014) defined the habits of the mind, as a pattern of mental performance through which mental skills and processes are employed while facing a new experience or a problem, so that the best and most effective responses are chosen in terms of strength, speed and importance. A lot of theoretical approaches that dealt with habits of the mind, the most important of which is the Costa and Kallik model (Costa & Kallik, 2002) the model includes sixteen mentalities. Costa and Kallik assert that the essence of successful professions and active participation is in the learners' acquisition of habits of mind.

Gardner revealed referred to in (Weimer, 2002) that the university student who deeply thinks about being exposed to learning opportunities has become a rarity. And the experience that acquired by university college students is irregular and does not focus on the academic curricula. University lectures require passive listening, remembering, memorization, and a low level of comprehension; students obtaining high grades are not necessarily indicators of students' abilities to undertake the required thinking.

Based on the above, it is clear that the habits of the mind are a basic requirement for all age groups, in general, and especially for university students, due to its extreme importance and its clear influence in various fields in general and decision-making in particular. As it enables the individual to achieve his goals, aspirations correctly, soundly and successfully based on the proper selection of life and practical decisions in light of the mental habits he acquired.

Statement of the study

Habits of mind are an important tool in forming thinking and its skills, which may affect the ability to make sound decisions for individuals, and since university students are the leaders of the future, they are the ones who make the next decisions on the level of their public and private lives (Al-waouda, 2016). In light of the researchers' experience and their work in the field of university education, a feeling is generated that there is a failure to give the topic of habits of mind the sufficient amount of attention required. In this context, this study came to investigate the degree to which students of the Department of Educational Sciences possess habits of mind. More specifically, the study problem is represented in the following two questions:

- 1- What is the degree to which female students of the Department of Educational Sciences at Ajloun University College possess habits of mind?
- 2- Are there statistical differences at the level of significance ($\alpha \leq 0.05$) in the degree to which female students of the Department of Educational Sciences at Ajloun University College possess habits of the mind on the scale of habits of mind according to the two variables (specialization and academic year)?

The significance of the study

The importance of the study lies in identifying the habits of mind among the female students of Ajloun University College. So, its topic may receive the attention of decision-makers in the university in taking appropriate measures to pay attention to the habits of the mind. This study may constitute an impetus for other students to carry out other studies in the field of habits of mind to address other student segments.

Objectives of the study

Knowing the degree of possessing habits of mind among female students of the Department of Educational Sciences at Ajloun University College

Knowing the differences in the habits of the mind according to a number of variables (specialization, school year)

The limitations of the study

Limitations of the study by the following:

- By time: 2019/2020
- By place: Al-Balqa Applied University / Ajloun University College
- Sample responses from Ajloun University College students

Operational Definitions

Habits of mind: It is a set of skills, attitudes, and values that enable an individual to build preferences from smart performances or behaviors based on the stimuli to which he/she is exposed. So that it leads him to select a mental process, performance, or behavior from a set of options available to confront a problem or issue or apply a behavior effectively and maintain this approach (Nofel, 2008). It was measured by the procedure the degree obtained by the students in the scale prepared for this purpose.

Literature review

A review of what was available from research in scientific education on the subject of the study was presented. The following is a summary of these studies.

Al-Dossary (2020) a study aimed at dealing with the habits of mind and their relationship to the ability to make decisions among students of the College of Education at Princess Noura University in light of some variables. The descriptive survey method was used. The tool consisted of the habits of mind scale and the measure of the ability to make a decision. The sample consisted of 200 university students. The results revealed a positive relationship between habits of mind and ability to make decisions.

Abu Riach and El-Gendy (2019) a study aimed at identifying the level of ownership of female students of field training in the specializations of learning difficulties and primary education at the Open University of the habits of mind. The sample consisted of 289 female students, 135 female students specializing in learning difficulties, and 154 female students in primary education. The tool consisted of a measure of habits of mind according to the Costa mode. The results revealed that the study sample possesses the habits of mind at a high rate, and there are also statistically significant differences in favor of primary education students.

Abu Latifa's (2019) a study aimed at identifying the level of graduate students' possession of habits of mind in the College of Education at Al Baha University. The sample consisted of 36 Postgraduate students. The tool consisted of the habits of mind scale. The results revealed that the level of the study sample's possession of habits of mind included in the scale was high.

Al-Shammam and Bint Katila (2019) a study aimed at identifying the prevailing level of habits of mind among middle school students in mathematics from the point of view of their school. The sample consisted of 69 schools of mathematics teacher. The results revealed that there is a difference in the mental habits prevailing among middle school students in mathematics from the viewpoint of their teachers.

Belgic(2018) a study aimed at investigating the mathematical habits of the mind in solving mathematical problems in the Marmara region in Turkey. The sample consisted of 791 math teachers. The researcher used the descriptive and analytical method. The results revealed that the participants showed a remarkable improvement in the use of the mathematical habits of the mind after the program.

Abdul Rahim (2018) a study aimed at identifying the effect of habits of mind and mental motivation on positive learning efficiency among students of the College of Education in Sohag. The study was conducted on 260 male and female students from the third year enrolled in the College of Education, and the Habits of Mind scale was applied to them. The results revealed the existence of a differently significant correlation between the habits of the mind with its dimensions of mental motivation with its dimensions and the efficiency of learning with its dimensions.

Andriani (2017) a study aimed at investigating the effect of using problem-based mathematical habits of mind on students' creative mathematical thinking. The sample consisted of 70 students from the seventh grade. The results revealed that there are differences between the experimental group and the control group in favor of the experimental group.

Pumice (2016) a study aimed at identifying the habits of mind among kindergarten teachers according to the variable of age, duration of service and marital status. The sample consisted of 100 teachers from the First Rusafa Education Directorate in Iraq and 50 teachers from the Second Rusafa Directorate. A measure of the habits of mind was prepared. The results revealed that there is a statistical indication in the degrees of mental habits according to the variable of age and the length of service, while there was no difference in the degrees of mental habits according to the variable of marital status.

Al-Awada (2016) a study aimed at identifying the habits of mind most common among students of Mu'tah University and their relationship to the ability to make decisions and emotional balance. The sample consisted of 994 students, and the Habits of Mind scale was used. The results revealed the prevalence of persistence as the most prevalent habits of the mind, followed by perception and innovation, as well as the existence of a relationship between the habits of the mind and between decision-making and emotional equilibrium.

Anaqara and Al-Jarrah (2015) a study aimed at identifying the habits of the mind and multiple intelligences and the relationship between them among students of the preparatory year at Taiba University in Saudi Arabia. The sample consisted of 523 students to whom the Rogers Scale of Habits of Mind and the McKinsey Scale of Intelligence were applied. The results revealed a high level of practicing habits of mind among the study sample, while the degree of practice of multiple intelligences reached a medium degree of practice, and there was also a statistically significant relationship between each of the habits of the mind and intelligence.

Calik,Turan and Coll(2014) A study aimed at investigating the extent to which future teachers (Turkish University students) practice the scientific habits of mind in social issues and compare their point of view with academic performance and program type. Descriptive method was used. The sample consisted of 1600 male and female students in several majors, and a questionnaire was used to measure the habits of the mind. The results revealed a decrease in the degree of students' practice of habits of mind in general.

Literature Review

The variety of the study sample in previous studies between the university level as reported in the studies of Al-Dosari (2020) Abu Latifa (2019) Abdul-Rahim (2018) Al-Awada (2016) Anaqara and Al-Jarrah (2015). While the other studies dealt with the basic primary and middle school stages. The current study agreed with previous studies regarding University stage.

The current study benefited from the previous studies as follows: Selecting the sample, implementing the descriptive design of the study, controlling the variables, field application and how to implement its steps, preparing the study tool and statistical methods.

The current study agreed with previous studies on the importance of habits of the mind and the need to develop them among students at various school levels. The addition made by the current study was the use of a different measuring instrument, The study was applied to a different sample, and the application of this study at a time when distance learning and the need to use habits of mind effectively due to the challenges posed by distance learning.

Sample of the Study:

The sample was selected by random stratified method, and the percentage is equal to 25% of the total of the original community of (262). The sample reached 65.

Table No. (1) Shows the number of students distributed according to their academic level and specialization.

specialization	The total number of students	The level		Total	Percent
		first	fourth		
Special education	143	17	18	35	55%
Psychological and educational counseling	119	15	15	30	45%
Total	262				100%

Instrument

The researcher prepared a scale for the habits of the mind by referring to the psychological literature and the results of some previous studies and the scales used to measure the habits of the mind, it may consist of (30) paragraphs in its final form. Appendix (1) the paragraphs of this scale are responded to according to Likert's quintuple hierarchy (strongly agree, agree, hesitate, disagree, strongly disagree). The psychometric properties of the scale were calculated according to the following:

Validity

The validity of the scale was verified before its application, by submitting it to nine experienced and competent arbitrators, to ensure the accuracy of the linguistic wording in terms of the integrity of the language, the clarity of its meanings, the appropriateness of the paragraphs, and the relevance of the scale content to its goal. Also asked the arbitrators to suggest any other modifications they deem necessary to be made to the test.

Reliability

The consistency of the scale was verified by calculating the degree of total stability of the scale vertebrae using the mid-segmentation method. The habits of mind scale has a reliability score of (0.81), and this value is considered acceptable for the purposes of this study.

Statistical treatment

Frequencies and percentages

Main scores and standard deviations: study

Binary comparisons test(Independent samples T-Test)

Conclusion

Results that related to the first question: What is the degree to which female students of the Department of Educational Sciences at Ajloun University College possess habits of mind?

In order to analyze the data, the five-point Likert scale was used in answering the paragraphs, to interpret the main score of the estimates of the study sample individuals on each of the scale paragraphs. The following statistical criterion, shown in Table (2), was used:

degree	1	2	3	4	5
Answer	Strongly disagree	disagree	hesitant	agree	Strong agree

As for the limits adopted by this study when commenting on the main score of the variables contained in the study model, to determine the degree of approval, the researcher has identified three levels (low, medium, and large) Based on the following equation:

The length of the period= (Alternative Upper Limit - Alternative Lower Limit) /
Number of Levels

$(1-5)/3=1,33$ Thus, the levels are as follows:

- Low approval score; the arithmetic mean ranged between -1.00 less than 2.33.
- Average degree of approval; the main score ranged between 2.33 - less than 3.66.
- A high degree of approval; as the arithmetic mean ranged between 3.66-5.

To answer this question, the main score and standard deviations of the estimates of the study sample individuals were extracted from the items of the study tool and the tool as a whole. Which aimed to find out the degree to which female students of the Department of Educational Sciences at Ajloun College possess habits of mind. Table No.(3) explain it.

Table 3

Main scores and standard deviations of the estimates of the study sample individuals for the items of the study tool arranged in descending order according to the main score

Rank	Number	Item	Mean score	Standard deviation	Degree of possession
1	1	Do the best to achieve my goals	3.69	0.89	High
2	2	I think deeply when I want to make a decision.	3.68	0.94	High
3	9	Benefit from the opinions of others.	3.63	0.99	Mean
4	20	I love cartoons	3.62	1.00	Mean
5	24	I participate in cultural competitions.	3.61	1.11	Mean
6	3	I abided by the tasks required of me	3.51	1.03	Mean
7	19	Participate in the discussions that take place in the lectures	3.50	0.92	Mean
8	11	I review whatever work I do before I make a decision.	3.49	0.94	Mean
9	13	I plan my goals before starting any work.	3.43	0.92	Mean
10	21	Love solving crossword puzzles.	3.42	1.06	Mean
11	6	If I am unable to order any question on a test I will write no answer	3.41	1.12	Mean
12	14	Slow down and calm when facing a problem.	3.40	0.95	Mean
13	7	Slow down before doing anything.	3.38	1.16	Mean
14	10	I am not obligated to continue negotiations when purchasing any commodity.	3.37	1.05	Mean
15	15	Use the information I learn in new situations	3.26	1.14	Mean
16	5	Keep solving the problem I'm facing	3.20	1.28	Mean
17	18	Enjoy individual chores more than group activities.	3.19	1.09	Mean
18	8	Look at any problem from all sides	3.09	1.00	Mean
19	17	Focus with the teacher during the explanation	3.08	1.18	Mean
20	30	Have fun discovering things during the learning process.	3.06	1.13	Mean
21	22	I like to have fun with others.	3.03	0.95	Mean
22	12	Listen carefully to others.	3.00	1.09	Mean
23	4	Use more than one method to solve the problem I am facing.	2.86	1.12	Mean
24	23	Use more than one sense in the learning process	2.85	1.46	Mean

25	28	I communicate well with my friends.	2.83	1.08	Mean
26	16	Take advantage of my mistakes in later situations.	2.77	1.01	Mean
27	26	I like questions that need thinking	2.74	1.27	Mean
28	29	I follow the steps I specify when completing a task that is required of me.	2.72	1.31	Mean
29	27	I want to create unique activities.	2.66	1.36	Mean
30	25	I make sure that whatever work I do is accurate	2.63	1.39	Mean
The degree to which female students of the Department of Educational Sciences at Ajloun College possesses habits of the mind as a whole			3.20	0.79	Mean

Table No. (3) Shows that the arithmetic averages of the study sample's estimates regarding the items of the study tool ranged between (2.63-3.69). As the most prominent recurrence was the degree of medium possession, followed by the high degree of possession. The main score of the tool as a whole is (3.20), a moderate degree of ownership.

2-Second: finding related to the second question: Are there statistical differences at the level of significance ($\alpha \leq 0.05$) in the degree to which female students of the Department of Educational Sciences at Ajloun University College possess habits of the mind on the scale of habits of mind according to the two variables (specialization and academic year)?

To answer this question, main scores and standard deviations of the estimates of the sample members were extracted on the tool as a whole according to the two variables (specialization and school year). A test has also been applied (Independent Samples T-Test) on the tool as a whole according to the two variables (specialization, and academic year), and the findings are presented below:

Table 4
Findings of a test application (Independent Samples T-Test) on the tool as a whole, depending on the variable (specialization) (No=65)

Specialization	Main score	Standard deviation	T	Degree of freedom	Statistical significance
Special education	3.73	0.51	8.422	63	0.00
Counseling	2.59	0.58			

Table No. (4) shows that there are statistically significant differences at the significance level ($\alpha \leq 0.05$) in the degree to which female students of the Department of Educational Sciences at Ajloun College possess habits of mind according to the variable of specialization; the value of (T) for the tool as a whole according to the variable of specialization reached (8.422), which is a statistically significant value. When reviewing the main scores, it was found that the differences are in favor of specialization (special education); the main scores of female students in the special education major were higher than that of female students in the specialization of counseling.

Table (5)
Findings of a test application (Independent Samples T-Test) on the tool as a whole, depending on the variable (academic year) (No=65)

Academic year	Main score	Standard deviation	T	Degree of freedom	Statistical significance
First year	2.57	0.48	10.523	63	0.000
Fourth year	2.82	0.47			

Table No. (5) shows that there are statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the degree to which female students of the Department of Educational Sciences at Ajloun College possess habits of mind according to the variable of the school year, the value of (T) for the tool as a whole according to the

variable of the school year reached (10.523), which is a statistically significant value. When reviewing the main scores, it was found that the differences are in favor of the fourth year as the main scores of fourth-year students were higher than those of first-year students.

Discussions

The results of the first question showed that the general score that measures the degree of possessing students of Ajloun University College for Mind (3.20) and mediate degree. This result is attributed to the fact that the distance learning environment in which the students live has encouraged them to strive hard, work continuously, manage attitudes, emotions consciously, balanced, it supports their administration in research, thinking, organizing experiences, following up on everything new, searching for activities that support learning and enhance the interaction of students and their participation in building and generating knowledge. University students also have a strong drive for achievement, diligence and self-learning more than previous school stages. The results of this study are in agreement with the results of many previous studies, such as: Abu Rayyash and Al-Jundi (2019), Abu Latifa (2019), Al-Dossary (2020), Anaqara and Al-Jarrah (2015) and Abdel-Rahim (2018).

The results of the second question showed that the existence of statistically significant differences in favor of the fourth year, and this result can be attributed to what distinguishes fourth-year students from first-year students of academic and life experience by the difference of the age factor, as it is supposed to increase knowledge and knowledge. Also, the results showed the existence of statistical differences in favor of special education and attribution of this result to the nature of the courses taught by students, which focus on self-learning, independence of students, field action and dealing with a class of individuals you need.

Recommendation

Encourage students to develop the habits of mind.

Applying workshops to teach students how employ habits of mind in appositive way.

Doing more educational studies that deals habits of mind in other University specialties.

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Author Information

Dr. Manal Al-Momani

Professor / Al-Balqa Applied University

Dr. Zain Al-Kayed

Professor \ Al-Balqa Applied University

Dr. Amjad Abdel AzizProfessor / Al-Balqa Applied University
