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Attitudes Of Female Students At Ha'il University Towards The Environment

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Abstract:
The study aimed to identify the attitudes of female students at Ha'il University towards the Environment, and the descriptive survey method was used, the study sample consisted of (323) female students, and in order to achieve the objectives of the study, a questionnaire was designed consisting of one domain, namely: Students' attitudes towards the environment, and was applied to the study sample after ensuring its reliability and stability, and the study reached several results, the most important of which were: Students' attitudes towards the environment were highly positive. In light of the findings of the study, a set of recommendations was presented
Keywords: *Student attitudes, environment, environmental education.*

INTRODUCTION:

"The Riyadh Economic Forum at its ninth session reviewed the effects of environmental pollution on development in the Kingdom of Saudi Arabia through a study presented by Dr Sattam Al-Mojel entitled: "Environmental Problems and their Impact on Economic and Social Development in the Kingdom of Saudi Arabia." The study confirmed that the weak commitment to environmental controls and standards, the low level of environmental awareness and the spread of negative wrong practices made the Kingdom rank 86 out of 180 countries in the Environmental Performance Index (EPI). The study summarised the Kingdom's environmental challenges, including: The environmental damage of the oil and gas industry, air pollution, increased per capita waste production, food and noise pollution, and the scarcity of water resources." (Al Jazeera, 2020)

"The environment in Saudi Arabia suffers from some environmental issues such as: The disruption of ecosystems, high rates of environmental desertification, and pollution in many areas of the Kingdom." (Al-Jaban, 2003, 150) "The rate of pollution of groundwater and sea water has also increased, and the ground water level has risen in many areas. The Kingdom also suffers from poor drainage of flood water and sewage, and the accumulation of waste in some areas." (Al-Jazeera, 2020) (Abu Al-Saud, 2009, p2.)

Shalabi (1990) defines it as "the sense towards environmental issues and problems, which is formed through interaction with the components of the environment, its elements, and its various resources, and this attitude appears in the form of approval or rejection, and this is reflected in the individual's negative or positive behaviour towards the environment".

the study of Problem:

Eagles and Demar's study (Eagles & Demar, 1999) confirms that developing positive attitudes towards the environment is a condition for modifying the learner's environmental behaviour. The researchers observed negative behaviours inside the classrooms, corridors and courtyards of the college, which were represented by many students throwing study papers after the end of the exam and throwing some waste in the corridors and courtyards of the college, in addition to the results of some studies that indicated a weakness in students' positive attitudes towards the environment, which prompted the researchers to conduct this study. Based on the above, in addition to the lack of studies that have researched this topic in the local community - within the limits of the researchers' knowledge - the issue of the study is determined by the following main question:

- What are the **Attitudes of female students at Ha'il University towards the environment**?

This question is subordinate to the following questions:

1. What are the attitudes of female students at the University of **Ha'il** -shamli branch, towards the environment?

2. Are there statistically significant differences at the level of significance **(0.05)** between the mean scores of the sample members' answers to the questionnaire according to the variable (studying an environmental course).

Study Significance:

1- The results of the study may benefit officials at Hail University by identifying students' attitudes towards the environment, working on its development, and paying attention to environmental issues and problems.

2- Trying to provide specialists and those responsible for university programs with information that may help them to improve and develop courses and programs related to the environment, and support students' positive attitudes towards the environment.

Limitations of the study:

Thematic limits: Students' attitudes towards the environment.

Spatial boundaries: University of Ha'il - Al-Shamli Branch.

Human Boundary: A random sample from the University of Hail - Al-Shamli Branch.

Temporal boundaries: the second semester of the academic year (2023-2024).

Definition of terms:

Environmental Attitude: Hassan (2003, p. 15) defines it as "the sum of the concepts and environmental information that an individual has acquired and learned through various means, which are embedded in his consciousness, reflected in his feelings and emotions, and appear in his behaviour, expressions and responses towards environmental topics and issues, and are characterised by susceptibility to development and modification" (Hassan, 2003, p. 15).

The researchers define it as: The amount of knowledge about environmental issues and problems that results in positive behaviour towards the various components of the environment, measured by the total score obtained by the study sample members after answering the questionnaire's paragraphs.

Previous studies:

Many studies have been conducted on environmental attitudes and environmental behaviour and their relationship with many variables, and different studies have shown different results on the impact of different factors such as gender, major, academic achievement, environmental course and others on the level of environmental attitudes.

Hodgkinson and Innes (Hodgkinson & Innes, 2001) A study to measure the attitude towards the environment of students in the first year of study at the Australian University. The study sample consisted of (391) male and female students. The environmental attitude scale was applied to the sample members. The results indicated that students in all disciplines had a positive attitude towards the environment, due to the courses they studied, which included environmental culture, positive environmental practices and behaviours , and the existence of a difference in the degree of attitude, as scientific disciplines were more positive towards the environment compared to literary disciplines.

(Budak, et al, 2005) conducted a study aimed at assessing environmental attitudes and environmental behaviour among students of the Faculty of Agriculture at the University of Ukurova Turkey, the sample consisted of (240) students from the stage of initial studies, and the study found that only (12.9%) of students are members of environmental organizations, and have positive behaviours and positive attitudes towards the environment.

Al-Mughaissib (2007) aimed to investigate the differences in environmental attitudes among a sample of Qatar University students, in light of the variables of gender and control and the interaction between them. The sample included (112) male and female students (41 males and 79 females), and the results of the study indicated that there were no statistically significant differences in environmental attitudes attributable to the gender variable.

Hassan (2008) conducted a study on the impact of environmental attitudes on the development of responsible environmental behaviour among students of the Faculty of Education at Sultan Qaboos University in Oman. The study was applied to a sample of (632) male and female students, and to achieve the objectives of the study, the researcher used a scale of environmental attitudes for this purpose. The results revealed that there were statistically significant differences in positive environmental practices and attitudes in favour of male and female students who completed the environmental education course, while no statistical differences were found between males and females.

The study of Telksoz et al (2010), which aimed to measure the level of student teachers specialised in chemistry and their perception of the environmental education course. The study sample consisted of (60) student teachers in the final year of study at the Middle East University of Technology in Turkey. The study applied a test to measure students' environmental awareness and another tool to measure students' attitude towards the environmental education course. The results revealed that student teachers had high environmental awareness and positive attitudes towards the environment.

Esa's (2010) study aimed to measure the knowledge, attitudes and environmental practices of student teachers at the Faculty of Teacher Education at the University of Malaysia. The study was applied to all student teachers in their final year of secondary specialisation. The researcher used a questionnaire to measure environmental awareness from knowledge, attitude and environmental practice, the results revealed that there was a positive attitude towards the environment among student teachers, but knowledge and practices were very few, due to the lack of a separate environmental education course. The study recommended the introduction of an environmental education course that would be a college requirement for all educational disciplines, in order to make it easier for student teachers to communicate this environmental culture, including awareness, attitudes and knowledge, to their future students.

(Evans et al., 2012) aimed to measure the extent of student teachers' knowledge of sustainable development and environmental concepts and their level of environmental awareness. The study was applied to a sample of (30) males and females specializing in primary education at a local university in Australia. The interview was used as a tool to achieve the objectives of the study, and the results indicated that student teachers do not possess sufficient environmental knowledge and culture, nor a positive attitude towards the environment.

Kandir et al (2012, Kandir et al) conducted a comparative study of the attitudes of teachers and student teachers towards the environment, the sample consisted of two segments, the first comprising (605) student teachers in the final year of study, in the kindergarten major at Konya University in Ankara, Turkey, and the second comprising (300) teachers in the kindergarten major. The researchers applied the Environmental Attitude Scale to the sample members. The results indicated that student teachers were more environmentally aware and had a positive attitude towards the environment compared to teachers.

The study of Al-Siddiq (2014) aimed to know the general direction of attitudes towards the environment among students at the University of Khartoum and to compare between different student groups regarding their attitudes towards the environment, the sample size was (360) male and female students, the study revealed that female students have a better attitude towards the environment than male students, and there are no statistically significant differences attributed to the major, and there are no differences among students attributed to those who studied an environmental course at the university.

previous studies:

Previous studies aimed to identify the attitude towards the environment and its issues, and it became clear from the results and recommendations of the studies that the inclusion of environmental education in the school curriculum gives male and female students positive attitudes towards the environment, and it turned out that the studies conducted in this field have revealed a relationship between attitudes and some demographic variables such as gender, level of experience, and education. These studies were utilised in the construction of the

and design the instrument of the current study, and the scientific references in these studies were utilised to enrich the theoretical framework of this study.

Method and procedures:

a. Methodology of the study

The study used the descriptive survey method

b- Study population

The study population consisted of all female students at the Shumali branch of the University of Ha'il, numbering 450, who were registered in the 2023-2024 academic year.

C. Study sample

The study sample consisted of (323) female students from the College of Shumali branch of the University of Ha'il, and Table 1 shows the distribution of the sample members according to the study variables:

Table (1) Distribution of the study sample according to the research variables

Variable	Variable categories	Number	Percentage
Studying the course	Yes	130	40.2%
	No	193	59.8%
Total sample		323	100%

D- The study tool:

Section I: Personal information about the respondent.

Second section: The environmental awareness questionnaire for students of the College of Science and Arts in Sharurah, which included two domains, as shown in Table (2).

Table (2) Fields of the study

Number	Areas of study	Number of paragraphs
1	Students' attitudes towards the environment	26

E. Reliability and stability of the study instrument:

Validity of the questionnaire: The validity of the questionnaire was verified according to two methods:

a. Content validity:

The questionnaire was presented in its initial form to a group of referees and they were asked to express their opinion and suggest their comments.

The questionnaire was applied to an exploratory sample consisting of (15) male and female students from the College of Science and Arts in Sharurah, who are outside the psychometric and main study sample. The exploratory study was conducted to ensure the clarity of the instructions of the questionnaire, clarity of its items, ease of understanding and modification of unclear items, and to know the difficulties that may appear during the application in order to adjust and avoid them in the subsequent application of the questionnaire, after which the questionnaire in its final form became ready to be applied to the study sample members.

After that, the questionnaire was applied to a psychometric sample consisting of (40) male and female students from the University of Hail , which is not the main sample, in order to verify the structural validity and stability of the questionnaire.

B- Construct validity:

The construct validity of the questionnaire was ascertained after its application to the psychometric study sample, by studying its internal consistency, by calculating the correlation coefficients between the scores of each item with the score of the domain to which it belongs. The correlation coefficients of the item scores with the domain score were all statistically significant at the level of significance (**0.01** or **0.05**). The value of these coefficients for the first domain ranged between (0.311-0752.).

C. Stability of the questionnaire

The stability of the questionnaire was verified according to two methods:

Table (3) Stability coefficient values for the questionnaire The study tool

Split-half stability	Cronbach's alpha stability	Domain
0.764	0.747	Students' attitudes towards the environment

It can be seen from Table 3 that the values of Cronbach's alpha stability coefficients for the first domain (0.747), and for the second domain (0.937), and the values of the half-split stability coefficients for the first domain (0.764), and for the second domain (0.943), which are high values, so the questionnaire is characterised by high stability indicators.

We conclude from the above that the questionnaire is characterised by high reliability and stability indicators, and has the appropriate psychometric properties for the study.

D. Statistical Methods

To achieve the objectives of the study and analyse the collected data, several appropriate statistical methods were used using SPSS software.

Results and discussion of the study;

Question one - What are the attitudes of female students at the University of Ha'il towards the environment?

To answer this question, the arithmetic means, standard deviations and degree of agreement were extracted. To determine the degree of agreement, the length of the cells of the pentagonal scale (lower and upper limits), the range (5-1= 4) was calculated and then divided by the largest value in the scale to obtain the length of the cell i.e. (4 5÷ = 0.80) and then this value was added to the lowest value in the scale (the beginning of the scale which is one true) to determine the upper limit of this cell and the length of the cells became as in Table **4**:

Table (4) Coding scores for each response score and its domains

Response score	Very high	High	Medium	Low	Very low
Degree of response for positive items	5	4	3	2	1
Degree of response for negative items	1	2	3	4	5
Response range for positive items	5 - 4.21	4.20 - 3.41	3.40 - 2.61	2.60 - 1.81	1.80 - 1
Response range for negative items	1.80 – 1	2.60 - 1.81	3.40 - 2.61	4.20 - 3.41	5 - 4.21

The results were as shown in Table (5).

Table (5) Arithmetic means, standard deviations, and the degree of agreement on the items of the domain Students' attitudes towards the environment.

Items		M	S D	Degree of agreement	Rank
1	I am concerned about air pollution from fires and exhaust gas from inefficient car engines.	4.07	954.	High	13
2	I am concerned about the pollution of seas and rivers due to the dumping of waste.	4.33	961.	Very high	3
3	I am concerned about the dumping of toxic industrial waste in the seas.	4.45	845.	Very high	1
4	I feel worried when I see water running down the street.	4.39	861.	Very high	2
5	I am concerned about uncontrolled urban sprawl.	4.14	975.	Elevated	11
6	I am concerned about cutting down trees for heating.	3.91	981.	High	15
7	I am concerned about animal poaching.	4.19	947.	High	8
8	I am concerned about the decline in the numbers of some animals such as the Arabian tiger and the Arabian oryx.	4.16	997.	High	10
9	I am concerned about the noise pollution of the community, such as the use of the beeper at signals and overtaking.	4.17	942.	High	9
10	I am concerned about visual pollution such as broken down cars lying on roadsides and car repair workshops in residential neighbourhoods.	4.32	903.	Very high	4

11	I encourage officials in my country to popularise the use of alternative energy such as solar energy instead of electricity.	4.20	927.	High	7
12	Hunting wild animals is a hobby that people have the right to practise.	2.48	1.214	High	24
13	I like the idea of nature reserves to preserve wild animals from poachers.	4.28	912.	Very high	5
14	I like stuffed wild animals.	2.39	1.181	High	25
15	Vehicles that produce heavy fumes should be penalised.	3.98	1.070	Elevated	14
16	To clean the environment, the use of chemical pesticides to control insects should be maximised.	2.19	1.109	High	26
17	I am interested in participating in voluntary work that serves the local environment, such as cleaning campaigns and tree planting.	4.13	942.	High	12
18	I am in favour of establishing an environmental club at the university.	4.23	951.	Very high	6
19	Contributing to street cleaning campaigns and public parks improves my dignity.	2.85	1.517	Average	21
20	I am annoyed by the exaggerated attention paid to environmental issues, my home country does not suffer from them.	2.78	1.390	Average	22
21	I am in favour of eradicating wolves and hyenas because they are predators.	2.54	1.314	Average	23
22	It is better to set up factories inside cities, to make it easier for workers to reach them.	3.05	1.527	Average	20
23	Birth control is needed to prevent overpopulation which leads to issues with the environment.	3.35	1.369	Average	18
24	Protecting the environment is not my responsibility, it is the responsibility of the state.	3.25	1.546	Average	19
25	It is not my duty to clean my seating area after leaving the park, it is the responsibility of the cleaner.	3.80	1.557	Low	16
26	The penalties for selling firewood are exaggerated, as it is indispensable in winter days.	3.74	1.379	Low	17
	Students' attitudes towards the environment	3.67	440.	High	

The negative items in this domain are: 12,14,16,19,20,21,22,24,25,26 and it is clear from Table 5 that the degree of agreement on the domain as a whole students' attitudes towards the environment was high, with an arithmetic mean of 367.. In other words, the students' attitudes towards the environment were positive, and it is clear from the previous table that paragraph (3) which reads: (I am concerned about the dumping of toxic industrial waste in the seas) came in first place, with a mean of 4.45 and a very high degree of agreement, while paragraph (23), which reads: ("Birth control is needed to prevent population growth that leads to issues with the environment" came last, with a mean of 3.35 and a moderate degree of agreement. With regard to the negative paragraphs, paragraph (16), which reads: (To clean the environment, the use of chemical pesticides to control insects should be increased) came first, with a mean of (2.19) and a high degree of agreement. Paragraph (14), which reads: (I like taxidermied wild animals) and (12), which reads: (Hunting wild animals is a hobby that humans have the right to practise), and (21) which reads: (I encourage the elimination of wolves and hyenas because they are predators). This indicates a low environmental attitude towards the importance of wild animals in the natural balance,

and indicates a high negative attitude towards the love of hunting and the acquisition of stuffed animals, which is an unhealthy motive that must be modified through many means, most importantly developing the environmental education curriculum and holding forums to raise awareness of the danger of the extinction of wild animals as a result of poaching and unjustified hunting of animals that are not eaten.
In the last place, paragraph No. (25), which reads: (It is not my duty to clean my sitting place after leaving the park, but the responsibility of the cleaner) with an arithmetic mean of (3.80) and a low degree of agreement. This may indicate that the students are positive about the value of the cleanliness of public parks. We note that the statement (for the cleanliness of the environment, the use of chemical pesticides to control insects) received a high degree of approval, and this may be due to the fact that students do not have sufficient understanding of the harms of pesticides and how to use them safely, and this was not sufficiently clarified through the environmental education course , and this is consistent with the results of the study of Fahid and Hussein (2007) and the study of Evans et al. (2012).
It is clear from the above that students' attitudes towards the environment were highly positive, perhaps due to the environmental awareness programmes provided by various community institutions, and students' study of an environmental course may have an impact on the formation of these attitudes towards the environment, which is consistent with the results of Hodgkinson and Innes (Hodgkinson & Innes, 2001) and Hodgkinson and Innes (Hodgkinson & Innes, 2001). Innes (2001), Esa (2010), Telksoz et al. (2010), Al-Harbi (2017), and Awad (2019), and differs with the results of Fahid and Hussein (2007) and Evans et al. (2012), whose results showed a decrease in environmental attitudes among the study sample.
RQ2 - Are there statistically significant differences at the significance level (0.05) between the mean scores of the respondents' answers to the questionnaire according to the variable (environmental course).
To answer this question, the arithmetic means and standard deviations were extracted and a t-test was used for independent samples to test the significance of the differences between the means, and the results were as shown in Table 7.

Table (6) Results of the t-test for the difference between the mean scores of the sample members on the questionnaire according to the variable of studying an environmental course

Domain	Studying an environmental course	N	M	S D	t-value	Degree of freedom	Probability value	Decision
Students' attitudes towards the environment.	**Yes**	130	3.70	.423	.917	321	.360	Not significant
	No	193	3.65	.451				
		193	1.90	.519				

It is clear from the previous table that the t-value for the second domain was statistically significant as the probability value was smaller than the default significance level (0.05).
It is also clear from the previous table that the value of (t) was not statistically significant as the probability value was greater than the hypothetical significance level (0.05), hence it is clear that there is no statistically significant difference at the significance level (0.05) between the mean scores of the answers of the sample members on the domain (students' attitudes towards the environment) of the questionnaire according to the variable of studying an environmental course.
It is clear from the above that there is no statistically significant difference between the mean scores of the students' responses on the field related to students' attitudes towards the environment depending on the variable of studying an environmental course, and this is consistent with the results of Hodgkinson & Innes (2001) and Hassan (2008), and differs from the study of Al-Siddiq (2014), whose results showed that there are no statistically significant differences between the attitudes of students who studied an environmental course and students who did not study an environmental course towards the environment.

Recommendations:

1- Develop programmes and competitions concerned with the environment, and include them in the student activity of the college.

2- Holding environmental courses for students and employees of Najran University to raise environmental awareness.

3- Holding meetings with local community organisations and inviting those interested in the environment to present environmental issues and proposed solutions.

4- Raising students' awareness of the negative environmental trends that students indicated with approval.

5- Activating the role of the Academic Counselling Unit and the Student Support Unit to develop environmental awareness among students.

6- Attempting to attract students with the lowest GPA and those who did not study an environmental course to participate in environmental activities and events.

Suggestions:

1- Conducting a general study to clarify the attitudes of Saudi university students towards the environment.

2- Conducting a study on the role required from universities and other community organisations to develop environmental awareness in light of contemporary environmental issues and problems.

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