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## Faculty Members' Opinions on the Requirements for Najran University to Become a Green University

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### Abstract

*The purpose of this research work was to find out what the faculty thought about the conditions for making Najran University a green university. 186 faculty members completed a questionnaire that was created for the study, which employed a descriptive methodology. The study also produced a number of outcomes, the most significant of which are the faculty members' replies in the study sample. The instruction on the prerequisites for making Najran University a green university received a score of (3.34), indicating agreement. On all axes of the questionnaire, there are statistically significant differences between the faculty members' responses according to the academic rank variable (professor, associate professor, assistant professor). However, there are no statistically significant differences between the faculty members' responses according to the gender variable (male and female). The responses of faculty members differ statistically significantly based on the years of experience variable (less than 5 years - out of 5). On every questionnaire axis (apart from the third axis, which goes from less than 10 years to more than 10 years).*

**Keywords:** Green University, Requirements, Faculty Members

## INTRODUCTION

The development process is a process of social and economic change in a positive way, which follows the plans of medium and long-term goals undertaken by humans with the aim of moving society to a better situation in all economic, social, humanitarian and environmental fields, including in a way that is consistent with its basics without harming the environment. The development process is considered Comprehensive and specific about its success. It is done by humans, but sustainability is in the pursuit of achieving more and multiplying for other generations for the reason that generations leave the current stock sufficient of tourism and natural resources for future generations so that they can achieve success in developing what they cannot, hold on to of performance, behaviours, skills, values and ideals, Which a person obtains through education, which is reflected in his productivity. Therefore, universities represent the most important educational institutions in society because of the knowledge base they provide to learners and the experiences and skills they provide that meet society's requirements for development in all its cultural, economic and social aspects (Abu Eyada, 2021, p. 308 - 309)

There are many studies that addressed faculty members and their opinions about transforming their universities into green universities, and these studies include the following:

Investigation (Al-Khawaldeh, 2016) The purpose of this study was to determine the barriers to higher education sustainability from the perspective of Jordanian university faculty members, as well as how these barriers relate to other characteristics such rank, university, college, and gender. Using a stratified technique of selection, 830 faculty members made up the study sample. In order to assess the level of impediments, the researcher employed a questionnaire with four topics at random. The most significant finding was that there were many barriers to higher education's sustainability. Additionally, the results showed that the gender variable was associated with statistically significant changes that were favorable to men. For the benefit of women in the domains of curriculum and instructional techniques, for the university variable, and for the scientific

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research fields of public universities, in the fields of university administration and scientific research. The study came to a number of recommendations in light of these findings, the most significant of which is that university administrators should be interested in creating a clear strategic goal with several points to lower barriers.

Study (Mohsen, 2017) The research aimed to ensure continuous improvement of the university institution's performance by employing an environmental sustainability strategy towards achieving continuous review of the university institution's performance. In order to accomplish the study's objective, a sample of academics from public and private universities in the Basra Governorate was included in the questionnaire that was created. The study produced a number of recommendations and results, the most significant of which is that university institutions lack a clear vision for carrying out the environmental sustainability strategy. The researcher also used the deductive and inductive approaches.

Research (Jamil, 2020) The purpose of this study is to investigate the relationship between e-learning and green human resources at Anbar University's College of Administration and Economics. The research problem was analyzed using the descriptive analytical approach. The study was implemented on a faculty member sample of fifty, and it was approved. a primary survey used to gather information and produce findings. The study discovered that there is a statistically significant relationship and impact between e-learning and green HRM. The study made a number of recommendations, one of which was to try to make more use of the efficient and readily available green human resources, since this will lead to more advancements in the support for e-learning in the future.

Study (Ismail, 2020) This study aimed to identify the reality of human resources management practices in Egyptian public universities in supporting sustainable development. The study was conducted on a sample of 376 faculty members in Egyptian public universities and a questionnaire was presented. The results showed that the reality of resource management practices Green human resources were low at the overall level, and the researcher came up with a set of recommendations to support sustainable development by increasing green human resource management practices in Egyptian public universities, including directing scientific research in a way that enhances its role in sustainable development, and conducting applied scientific research related to the needs of society for development. Sustainable.

### **The Study Problem**

The current study will benefit from their assistance in developing the questionnaire, analyzing the data, and producing findings that are helpful in developing a proposed vision that helps to transform Najran University into a green university, as is evident from earlier studies that focused on faculty members' opinions about the themes of the green university.

From the above, the problem of the study becomes clear to us in the following main question:

#### **What are the opinions of the study sample of faculty members about the requirements for Najran University to become a green university?**

The following sub-questions branch out from it:

- What are the faculty members' perspectives on the requirements for Najran University to become a green university according to the study sample?
- Do the factors (gender, years of experience, and academic degree) among the study sample members differ statistically significantly?
- What are the key findings from the investigation into what Najran University needs to become a green university?

### **The Importance of Studying**

The importance of the study stems from the following:

A-Theoretical importance: Through this study, the most important opinions of the study sample of faculty members are identified about the requirements for Najran University to transform into a green university, as well as studying the most important obstacles to Najran University transforming into a green university.

B- Practical importance: Through this study, a set of recommendations and proposals are reached that help develop a proposed vision for transforming Najran University into a green university.

### **Objectives Of the Study**

-This study aims to achieve the following:

-To know the opinions of the study sample of faculty members about the requirements for Najran University to transform into a green university.

- Coming up with a set of results that are useful in developing a proposed vision for transforming Najran University into a green university.

### **STUDY METHODOLOGY**

The study employs a descriptive technique that is appropriate for the subject matter given its goals. A survey instrument was developed to gather information regarding the viewpoints of the faculty members in the study sample regarding the necessary steps for Najran University to become a green university.

### **The Limits of the Study**

**Objective limits:** The study addressed the opinions of the study sample of faculty members about the requirements for Najran University to become a green university.

**Human Limits:** A sample of male and female faculty members from Najran University were subjected to the study tool.

**Time constraints:** In the first semester of the year 1445 AH, the field study was conducted.

**Boundaries in space:** Najran University faculty members were the subject of the field investigation.

### **Field Study**

-Aim of the study: The field study aims to reveal:

- Getting to know the opinions of faculty members about the requirements for Najran University to become a green university.

- Through the results, Najran University will transform into a green university.

### **The Study Sample**

The study instrument, a questionnaire, was administered to a representative, randomized sample of Najran University faculty members. The sample's initial population consisted of 744 faculty members. During the first semester of the academic year 1445 AH, the questionnaire link was distributed online and made available for application for a period of thirty days. Of the 186 faculty members who responded, 25% were from the original community. The distribution of faculty members' characteristics within the study sample with respect to the different study variables is displayed in the following tables.

**Table (1) Distribution of the study sample according to the gender variable (male - female)**

Percentage	the sample	Study population	Variable
% 20	114	549	Males
% 36	72	195	Females
% 25	186	744	Total

Table (2) clearly shows how the study sample was distributed based on the academic rank variable (professor, associate professor, assistant professor). Of the 56 faculty members with the rank of professor, the study sample

consisted of 40, or 71% of the total. In contrast, the study sample consisted of 98, or 45% of There were 218 associate professors among the 470 faculty members with the rank of assistant professor; the 48 faculty members in the study sample represented 10.2% of the total number of associate professors.

**Table (2) The study sample was distributed based on the academic rank variable (assistant professor, associate professor, and professor).**

Percentage	the sample	Study population	variable
% 71	40	56	professor
% 45	98	218	associate professor
% 10.2	48	470	assistant professor
% 25	186	744	Total

Table (2) clearly shows how the study sample was distributed based on the academic rank variable (professor, associate professor, assistant professor). Of the 56 faculty members with the rank of professor, the study sample consisted of 40, or 71% of the total. In contrast, the study sample consisted of 98, or 45% of There were 218 associate professors among the 470 faculty members with the rank of assistant professor; the 48 faculty members in the study sample represented 10.2% of the total number of associate professors.

**Table (3) Distribution of the study sample according to the variable years of experience (less than 5 years - 5 - 10 years - more than 10 years)**

Percentage	the sample	variable
% 10	18	less than 5 years
% 9	16	5 - 10 years
% .81	152	more than 10 years
%100	186	Total

Table (3) clearly shows how the research sample was distributed based on the variable years of experience (less than 5 years, 5 - 10 years, and more than 10 years). Of the faculty members with less than 5 years of experience, 10% had a study sample of 18, which was 16 faculty members, or 9% of those with 5–10 years of experience, made up the study sample; 152 faculty members, or 81% of those with more than 10 years of experience, made up the study sample.

By displaying the distribution tables for the study sample variables, it becomes clear to us that the proportions of the variables represent the original community of faculty members, which contributes to achieving the desired goals of applying the questionnaire and contributes to the results being produced in a way that expresses the study community.

### Study Tool

The study tool was a questionnaire addressed to faculty members at Najran University, and it contained (45) statements. The statements were distributed into six axes as shown in the following table:

**Table 4: Distribution of questionnaire statements**

Phrase numbers	Number of phrases	Study topics	No
1- 16	16	Infrastructure requirements	1
23 – 17	7	Educational requirements	2
31 – 24	8	Research and societal requirements	3
37 -32	6	Energy saving requirements	4
45 -38	8	Obstacles to implementing the green university	5
	45		

It is clear from Table (4) that there is no balance between the number of statements in each axis, as imposed by the questionnaire axes.

### Honesty of Arbitrators

The researcher presented the study questionnaire to a group of education professors as arbitrators, in order to express an opinion about the suitability of the questionnaire for faculty members, and the extent to which the

expressions represent each of the axes. The percentage of agreement of the judges on the extent of the representation of those expressions was calculated, so that the expressions that obtained were retained. The agreement rate was 89% or more, and some statements were modified according to what was suggested by the arbitrators. In its final form, the questionnaire reached (45) statements.

### Calculate The Stability Factor

Reliability was calculated using Cronbach's alpha equation and is shown in the following table:

**Table (5) Reliability value with Cronbach's alpha reliability coefficient for the questionnaire and its axes**

Stability value	Study topics	No
0.908	Infrastructure requirements	1
0.883	Educational requirements	2
0.934	Research and societal requirements	3
0.933	Energy saving requirements	4
0.770	Obstacles to implementing the green university	5
0.961		

It is clear from Table (5) that the reliability value is based on the Cronbach's alpha reliability coefficient for the questionnaire as a whole (0.961), which is a high reliability coefficient that can be relied upon in applying the study tool.

**Table no ( 6 ) Divide into Likert scale categories Pentagram (limits of average responses)**

Category boundaries		Category	No
To	from		
1.80	1.00	Very disagree	1
2.60	1.81	not agree	2
3.40	2.61	Neutral	3
4.20	3.41	Agree	4
5.00	4.21	Very agree	5

The length of the range was used to obtain an objective judgment on the average responses of the study sample items, after processing them statistically.

### Field Study Results and Their Interpretation

**First: To Answer the First Question of The Field Study, Which Is:** What are the opinions of the study sample of faculty members about the requirements for Najran University to become a green university? This is shown by the following:

#### 1 -The First Axis

Table (7) shows the responses of the study sample of faculty members regarding the first axis

**Table (7): Responses of the study sample regarding the first axis**

No	Ferries	Responses					Relative weight	Approval level	Ranking
		Very agree	agree	neutral	not agree	Very disagree			
1	You go to university in a private car	124	40	14	4	4	4.48	Agree	1
2	The university administration applies environmental rules and laws to ensure environmental sustainability and green Transformation.	26	76	48	18	18	3.39	Neutral	3
3	The university provides training programs on environmental	12	42	68	50	14	2.93	Neutral	11

	sustainability and green transformation.								
4	All university facilities provide the environment and support green transformation	22	66	44	40	14	3.22	Neutral	4
5	The university provides energy-efficient mass transportation.	22	30	16	78	40	2.54	not agree	13
6	The distances between the university facilities are close and support movement without transportation	4	12	42	84	44	2.18	not agree	14
7	The university provides energy-efficient buses	26	22	12	68	58	2.40	not agree	16
8	All university transactions do not need to be relocated to the university administration.	22	62	30	58	14	3.10	Neutral	10
9	The university provides large green spaces	16	76	18	68	8	3.12	Neutral	6
10	There are garbage sorting bins in all university facilities (jugs - glass -.....)	44	62	32	36	12	3.48	agree	2
11	There are tools in the restrooms that support water saving.	28	34	72	32	20	3.09	Neutral	7
12	When constructing buildings, the university takes into account compliance with environmental sustainability and green transformation standards.	12	62	64	36	12	3.13	Neutral	5
13	The university is keen to transfer successful global experiences and expertise in the field of environmental sustainability and green transformation.	12	48	72	46	8	3.05	Neutral	8
14	The university implements training programs for faculty members on environmental sustainability and the green university	4	34	22	118	8	2.50	not agree	15
15	The university holds introductory meetings in the field of environmental sustainability and green transformation.	0	42	54	78	12	2.67	Neutral	12
16	University buildings take into account people with special needs.	26	80	32	40	8	3.40	Neutral	9
							3.04	Neutral	

It is clear from Table (7) that the average responses of the study sample on the first axis came with a score of (3.04) (Neutral), and the phrase (you go to university in a private car) came as the highest response with a score of (4.48) (agree). This indicates that most of the faculty members They go to the university in private cars, not shared cars, and the phrase (the university implements training programs for faculty members on environmental sustainability and the green university) was the lowest response with a score of (2.50) (not agree), which indicates the necessity of implementing various programs on environmental sustainability, which supports the culture of transformation into a green university.

**2-The second axis:** Table (8) shows the following:

It is clear from Table (8) the responses of the study sample of faculty members regarding the second axis

**Table (8): Responses of the study sample regarding the second axis**

No	Ferries	Responses					Relative weight	Approval level	Ranking
		Very agree	agree	neutral	not agree	Very disagree			
17	I offer courses related to environmental education and green transformation.	18	56	8	72	32	2.76	Neutral	6
18	The devices used in teaching activities are energy efficient	14	58	62	30	22	3.06	Neutral	1
19	The university is committed to periodically reviewing educational programs to ensure environmental sustainability and green transformation	14	34	94	36	8	3.05	Neutral	2
20	The university encourages the development of new compulsory courses that support environmental sustainability and green transformation.	0	52	86	36	12	2.95	Neutral	5
21	The university supports teaching activities to implement environmental sustainability and green transformation.	4	56	78	36	12	3.02	Neutral	4
22	The university supports extracurricular activities to implement environmental sustainability and green transformation.	4	74	46	50	12	3.04	Neutral	3
23	The university links students' graduation projects to environmental sustainability and green transformation.	0	44	38	78	26	2.53	not agree	7
							2.91	Neutral	

It is clear from Table (8) that the average responses of the study sample regarding the second axis came with a score of (2.91) (Neutral), and the phrase (the devices used in teaching activities are energy-saving) came as the highest response with a score of (3.06) (Neutral). The university's use of energy-saving bulbs and LED bulbs, as well as Sensors to turn on and off the lamps and air conditioners in the rooms, and the phrase (the university links students' graduation projects with environmental sustainability and green transformation) was the least responsive with a score of (2.53) (not agree), which indicates the necessity of linking students' graduation projects to environmental sustainability, as this approach is beneficial in transforming the university into a green university.

**3 -The Third Axis:** Table (9) shows the following:

Table 9 shows the responses of the study's faculty members regarding the third axis:

**Table (9): Responses of the study sample regarding the third axis**

No	ferries	Responses					Relative weight	Approval level	Ranking
		Very agree	agree	neutral	not agree	Very disagree			
24	The university funds research related to energy saving	4	78	70	22	12	3.21	Neutral	4
25	The university supports members' participation in conferences on environmental sustainability and green transformation.	18	70	82	8	8	3.44	Agree	1
26	The university provides scientific and technical consultations to various sectors of society in the field of environmental sustainability and green transformation.	18	70	50	36	12	3.24	Neutral	3
27	The university holds research partnerships with sectors of society in the field of environmental sustainability and green transformation.	12	72	54	36	12	3.19	Neutral	5
28	The university provides various cultural activities to raise community awareness about environmental sustainability and green transformation.	4	66	78	30	8	3.15	Neutral	6
29	The university is keen to link the objectives of the strategic plan with the development goals of environmental sustainability and green transformation.	8	80	64	22	12	3.26	Neutral	2
30	The university provides community service caravans to raise awareness of environmental sustainability and green transformation.	4	48	72	50	12	2.90	Neutral	8
31	The university supports faculty attendance at conferences on sustainable development and the green economy.	8	76	40	46	16	3.07	Neutral	7
							3.18	Neutral	

It is clear from Table (9) that the average responses of the study sample regarding the third axis came with a score of (3.18) (Neutral), and the phrase (the university supports members' participation in conferences on environmental sustainability and green transformation) came as the highest response with a score of (3.44) (agree) indicating a deficiency Significant in the direction of research projects, as the future calls for attention to research that supports environmental sustainability and green transformation, and the phrase (the university provides various cultural activities to raise awareness of society about environmental sustainability and green



transformation) was the least responsive with a score of (3.15) (Neutral), and this indicates a major deficiency in planning training programs. Which is useful in supporting the culture of environmental sustainability and green transformation.

**4 -Fourth axis:** Table (10) shows the following:

Table (10) shows the responses of the study sample of faculty members regarding the fourth axis:

**Table (10): Responses of the study sample regarding the fourth axis**

No	ferries	Responses					Relative weight	Approval level	Ranking
		Very agree	agree	neutral	not agree	Very disagree			
32	The university administration supports rational energy consumption systems.	32	130	16	4	4	3.97	Agree	2
33	My office has outside windows	40	40	8	40	58	2.80	Neutral	6
34	Classrooms have external windows	28	96	36	18	8	3.63	Agree	4
35	The lighting systems used in university facilities are energy efficient.	46	114	22	4	0	4.08	Agree	1
36	The university plans to rationalize energy consumption.	32	124	18	8	4	3.92	Agree	3
37	There are regulations governing the use of clean energy.	26	72	50	34	4	3.44	Agree	5
							3.64	Agree	

It is clear from Table (10) that the average responses of the study sample regarding the fourth axis came with a score of (3.64) (Agree), and the phrase (lighting systems used in university facilities are energy efficient) came as the highest response with a score of (4.08) (Agree). This indicates that the university adopts the latest Energy-saving lighting systems, as well as the presence of sensors that support this energy saving, and the phrase (my office has external windows) as the least responsive with a score of (2.80) (Neutral), which indicates a major error in the design of offices, as many offices and study rooms are internal without windows, which We lose a source of natural lighting and ventilation and increase our dependence on expensive sources of lighting and ventilation.

**5-Fifth axis:** Table (11) shows the following:

Table (11) shows the responses of the study sample of faculty members regarding the fifth axis:

**Table (11): Responses of the study sample regarding the fifth axis**

No	Ferries	Responses					Relative weight	Approval level	Ranking
		Very agree	agree	neutral	not agree	Very disagree			
38	Lack of projects included in the strategic plan based on the principles of sustainability and green transformation.	22	102	58	0	4	3.74	Agree	5
39	Lack of faculty member participation in decision-making related to environmental sustainability	54	102	22	4	4	4,06	Agree	3

40	The difficulty of transforming university buildings to achieve the requirements of environmental sustainability and green transformation.	22	98	62	0	4	3,72	Agree	6
41	Lack of budget allocated to support research projects that include environmental sustainability and green transformation.	36	80	62	4	4	3,75	Agree	4
42	Wide distances between university facilities	84	82	4	8	8	4,21	Very agree	2
43	The distance of the university city from the city of Najran and the main roads	80	86	8	4	8	4,21	Very agree	2
44	Using devices that consume high energy, which is difficult to replace.	26	76	76	0	8	3,60	Agree	7
45	Weak culture of relying on public transportation to reach university	84	86	8	0	8	4,27	Very agree	1
							3,94	Agree	

It is clear from Table (11) that the average responses of the study sample on the fifth axis came with a score of (3.94) (Agree), and the phrase (weak culture of reliance on public transportation to reach university) came as the highest response with a score of (4.27) (Very agree). This indicates that Most faculty members do not prefer to arrive by mass transportation due to the absence of this culture in the Najran region due to its unavailability, as well as the distance between the university and populated residential areas. The phrase (using devices with high energy consumption, which is difficult to replace) was found as the least responsive with a score of (3.60) (agree). This indicates the absence of planning to use energy-saving devices such as display devices, air conditioners, copiers, computers...

By presenting the results of the study on the responses of the study sample of faculty members regarding the opinions of the study sample of faculty members regarding the requirements for transforming Najran University into a green university, the score was (3.34) (Agree), and this indicates a large agreement of the study sample of faculty members regarding Questionnaire statements.

**Second:** To answer the second question of the field study, which is: Are there statistically significant differences in the responses of the study sample of faculty members regarding the opinions of the study sample of faculty members regarding the requirements for transforming Najran University into a green university? According to the following variables:

- Gender (male - female)
- Years of experience (less than five years - from five to ten - from ten or more)
- Academic rank (Professor - Assistant Professor - Instructor)

This is demonstrated by conducting an analysis of variance of the study sample's responses on the following study variables:

1- Are there statistically significant differences in the responses of the study sample of faculty members regarding the opinions of the study sample of faculty members regarding the requirements for transforming Najran University into a green university according to gender (male - female)? This is evident by conducting a t-test for the responses of the study sample, as stated in Table (12).

**Table (12) The gender variable's (male - female) arithmetic mean, standard deviation, "t" value, and their relevance for the questionnaire axes**

Study topics	Males		Females		T value	Significance level
	Average	standard deviation	Average	standard deviation		
Infrastructure requirements	49.456	11.66	47.722	10.99	1.009	Non-functional
Educational requirements	21.000	5.41	19.555	5.62	1.746	Non-functional
Research and societal requirements	13.131	3.39	13.041	3.89	0.166	Non-functional
Energy saving requirements	9.578	2.33	8.916	2.92	1.708	Non-functional
Obstacles to implementing the green university	28.464	4.91	29.041	4.92	779.-	Non-functional
The questionnaire as a whole	121.631	25.26	118.277	25.18	0.883	Non-functional

Table (12) makes it evident that there are no statistically significant variations between faculty members' replies on any of the questionnaire's axes based on the gender variable (male or female). This shows that the male and female faculty members in the study sample agree on what is needed for Najran University to become a green university.

2. Do the responses of the study sample of faculty members differ statistically significantly in terms of what they think the requirements are to turn Najran University into a green university based on the academic rank variable (professor, associate professor, assistant professor)? Table (13), which presents the results of a one-way analysis of variance (ANOVA) to show the differences between groups, makes this clear.

**Table (13) The significance of differences between groups of a sample of faculty members based on the academic rank variable (professor, associate professor, assistant professor) was determined using one-way analysis of variance (ANOVA).**

Significance level	"F" value	Mean squares	Degrees of freedom	Sum of squares	Source of variance	Study topics
0.001	9.873	1173.212	2	2346.423	Between groups	Infrastructure requirements
		118.825	183	21744.975	Within groups	
			185	24091.398	Total contrast	
0.001	13.804	370.300	2	740.599	Between groups	Educational requirements
		26.827	183	4909.250	Within groups	
			185	5649.849	Total contrast	
0.001	2.854	36.001	2	72.002	Between groups	Research and societal requirements
		12.613	183	2308.256	Within groups	
			185	2380.258	Total contrast	
0.001	3.886	25.274	2	50.548	Between groups	Energy saving requirements
		6.503	183	1190.097	Within groups	
			185	1240.645	Total contrast	
0.001	16.328	338.273	2	676.545	Between groups	Obstacles to implementing the green university
		20.718	183	3791.369	Within groups	
			185	4467.914	Total contrast	
0.001	6.547	3928.157	2	7856.315	Between groups	The questionnaire as a whole
		599.962	183	109793.018	Within groups	
			185	117649.333	Total contrast	

Table (13) makes it evident that faculty members' responses to the academic rank variable (professor, associate professor, assistant professor) differ statistically significantly on all axes of the questionnaire. This suggests that there is disagreement among the study sample of faculty members regarding what is required for Najran University to become a university. Green in accordance with the scientific rank variable, and the (Schiffé) equation is used to ascertain the direction of the importance of the differences.

**Table (14) Using the Schiff equation, determine the direction of the differences between groups of a sample of faculty members based on their academic status (professor, associate professor, assistant professor).**

Direction of comparisons			Averages	academic rank	Study topics
assistant professor	associate professor	professor			
			53.4500	professor	Infrastructure requirements
		*7.98	45.4694	associate professor	
	*6.19	1.78	51.6667	assistant professor	
			23.0000	professor	Educational requirements
		*4.42	18.5714	associate professor	
	*3.55	0.87	22.1250	assistant professor	
			13.8500	professor	Research and societal requirements
		1.33	12.5102	associate professor	
	1.15	0.18	13.6667	assistant professor	
			10.2500	professor	Energy saving requirements
		*1.33	8.9184	associate professor	
	0.45	0.87	9.3750	assistant professor	
			25.6000	professor	Obstacles to implementing the green university
		*3.13	28.7347	associate professor	
	*2.43	*5.56	31.1667	assistant professor	
			126.1500	professor	The questionnaire as a whole
		*11.94	114.2041	associate professor	
	*13.79	1.85	128.0000	assistant professor	

According to the academic rank variable, Table (14) displays the direction of significant differences between research sample members: between professor and assistant professor, in favor of professor, and between professor and associate professor, in favor of professor.

3. Regarding the years of experience (less than 5 years - from 5 to less than 10 years - more From 10 years), are there statistically significant differences in the responses of the study sample of faculty members about their opinions about the requirements for transforming Najran University into a green university? As shown in Table:(15), this is clear via a one-way analysis of variance (ANOVA) to show the differences between groups.

**Table (15) One-way analysis of variance (ANOVA) to determine the significance of variations in years of experience (less than 5 years, from 5 to less than 10 years, and more than 10 years) between groups of the faculty sample**

Significance level	F" " value	Mean squares	Degrees of freedom	Sum of squares	Source of variance	Study topics
0.001	43.846	3902.240	2	7804.480	Between groups	Infrastructure requirements
		89.000	183	16286.918	Within groups	
			185	24091.398	Total contrast	
0.001	37.080	814.648	2	1629.297	Between groups	Educational requirements
		21.970	183	4020.553	Within groups	
			185	5649.849	Total contrast	

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Significance level	F" " value	Mean squares	Degrees of freedom	Sum of squares	Source of variance	Study topics
Not a sign	6.704	81.247	2	162.495	Between groups	Research and societal requirements
		12.119	183	2217.763	Within groups	
			185	2380.258	Total contrast	
0.05	18.803	105.745	2	211.490	Between groups	Energy saving requirements
		5.624	183	1029.155	Within groups	
			185	1240.645	Total contrast	
0.001	30.476	558.160	2	1116.320	Between groups	Obstacles to implementing the green university
		18.315	183	3351.594	Within groups	
			185	4467.914	Total contrast	
0.001	39.243	17656.594	2	35313.187	Between groups	The questionnaire as a whole
		449.924	183	82336.146	Within groups	
			185	117649.333	Total contrast	

Table (15) makes it evident that, with the exception of the third axis, which shows that there are statistically significant differences between faculty members' responses based on the years of experience variable (less than 5 years, from 5 to less than 10 years, and more than 10 years), there are differences in years of experience. With the exception of the third axis, the study sample of faculty members did not agree on any of the questionnaire's axes. The direction of the differences can be seen by applying the Schiffé equation.

**Table (16) Using the Schäffé equation, there was a significant trend of differences across groups of a sample of faculty members based on years of experience (less than 5 years, from 5 to less than 10 years, and more than 10 years)**

Direction of comparisons			Averages	Years of Experience	Study topics
أكثر من 10	from 5 to less than 10 years	less than 5 years			
			68.5556	less than 5 years	Infrastructure requirements
		*22.80	45.7500	from 5 to less than 10 years	
	1.01	*21.79	46.7632	- more than 10 years	
			29.3333	less than 5 years	Educational requirements
		11.58*	17.7500	from 5 to less than 10 years	
	1.92	9.66	19.6711	- more than 10 years	
			12.4444	less than 5 years	Energy saving requirements
		*4.44	8.0000	from 5 to less than 10 years	
	1.09	*3.35	9.0921	- more than 10 years	
			35.8889	less than 5 years	Obstacles to implementing the green university
		*10.13	25.7500	from 5 to less than 10 years	
	2.39	*7.74	28.1447	- more than 10 years	
			161.8889	less than 5 years	

		*53.13	108.7500	from 5 to less than 10 years	The questionnaire as a whole
	7.88	*45.25	116.6316	- more than 10 years	

According to the years of experience variable, Table (16) displays the direction of the significant differences between study sample members: fewer than 5 years and 5-10 years, favoring less than 5 years, and less than 5 years and more than 10 years, favoring less than 5 years.

## RESULTS OF THE FIELD STUDY

The results of the field study were as follows:

- The study's findings demonstrated that faculty members' viewpoints on the conditions necessary to make Najran University a green university received an average score of (3.34), indicating agreement.
- The replies of faculty members on the gender variable (male and female) do not differ statistically significantly.
- On all survey axes, there are statistically significant differences in faculty members' replies based on the academic rank variable (professor, associate professor, assistant professor).
- With the exception of the third axis, there are statistically significant variations in the responses provided by faculty members regarding the years of experience variable (less than 5 years, from 5 to less than 10 years, and more than 10 years).

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