

## **Determining the Level of Health Awareness among Hospitality Students: A Case Study of the Faculty of Tourism and Hotels at Minia University in Egypt**

Mohamed T. A. Abdelmawgoud

Faculty of Tourism and Hotels- Minia University

### **Abstract**

This research aims to determine the level of health awareness and the level of health locus of control among hospitality students. The simple random sample of the study consisted of 95 first-stage students of the hotel management department at the faculty of tourism and hotels in Minia university during the first semester of the academic year 2019/2020. The study results revealed that the degree of the health awareness level and the health locus of control level are high. In addition, they are significant differed according to the gender in favor of males. Moreover, there is a direct correlation between the level of health awareness and the level of health locus of control ( $r = 0.444$ ,  $Sig = 000$ ). Finally, the regression model of the level of health awareness (Y) with the level of health locus of control (X) is  $Y = 1.955 + 0.513X$ .

**Keywords:** Health Awareness, Health Locus of Control, Hospitality Students.

### **Introduction:**

In general, health refers to the absence of disease, physical, mental, and social well-being (ICPD, 1994). It is a basic human need for the successful functioning of individuals and societies (Wittayapun *et al.*, 2010). Thus, health means freedom of any kind of diseases and the harmony between all organs and parts of the body (Researchomatic, 2012). The health literacy strategy is useful in reducing disparities in health related to education. Thus, health literacy has an essential effect on the relationship between low educational level and poor health (Heide *et al.*, 2013). Consequently, health hazardous behaviors contribute very clearly to the destruction of the human health (Refaat, 2014). Accordingly, attention must be paid to the level of health awareness. In this context, health awareness refers to the ability of the individual himself, his family and his community to access, understand and benefit from information in ways that promote and maintain good health, and therefore it is considered an essential factor in ensuring good health outcomes (WHO, 2016). The level of health control refers to individual beliefs based on experiences in health issues and external or internal control, can affect health and plays an important role in health behaviors (Pourhoseinzadeh *et al.*, 2017). The results of the researches that measured the level of health awareness have varied, it is a high level (Alonazi *et al.*, 2016), a medium level (Abdalhaqq *et al.*, 2012; Al-Sharaa, 2019), or a low level (Al-Ali, 2001; Gelany & Moussa, 2012; Ashraah *et al.*, 2013; Maaki, 2017; Iqbal *et al.*, 2020) among students.

Education is a fundamental social determinant of health, which it is an upstream cause of health (Truman & Hahn, 2015). Consequently, poor health, not only results from lower educational attainment, it can also cause educational setbacks and interfere with schooling (VCU, 2015). The recent decades have witnessed a radical change in the diseases' types and their outbreak in the community, from infecting diseases to chronic ones, particularly the diseases which are called the living style illnesses such as heart diseases, blood pressure diseases, and diabetes besides (Senthilkumar & Ulaganathan, 2017). Today, human beings are provided with lots of facilities, but they have also suffered with severe health issues. Therefore, the health awareness may save humans from different health problems at earliest as it reaches to severity (Iqbal *et al.*, 2020). Globally, there has been increasing concern about university students reporting mental health conditions, yet their mental health needs remain mostly unaddressed (Bardi, 2020). Thus, mental health awareness is an important issue for all educators. Consequently, they realize that there is a great deal that can be done to help students with mental health issues (Barile, 2020). A good

quality education is the foundation of health and well-being, as people to lead healthy and productive lives, they need knowledge to prevent sickness and disease (UNESCO, 2020). Consequently, the problem of this study measures the level of health awareness and the level of health locus of control among students of the hotel management department at the faculty of tourism and hotels at Minia university.

### **Literature Review**

There were many concepts that dealt with the health awareness, as it was defined as the translation of health knowledge and experiences into behavioral patterns among individuals (O'liewa, 1999). In addition, it is the introduction of facts, data, and health information related to health and disease to the members of society in an attempt to arrive at the situation when everyone is ready to respond to health instructions and guidelines (Mursi, 2005). Moreover, a health-conscious person is the ideal individual who enjoys high standards of health, social, mental, and physical integration (Ahmad, 2012). Finally, health awareness is a comprehensive understanding of health, and it is the basic concept of living a healthy life that makes sure that you do not get sick and are able to live an optimal lifestyle (Senthilkumar & Ulaganathan, 2017). Several studies have dealt with measuring the level of health awareness among students in different educational stages. The level of health awareness was low among primary school students in government schools in Palestine (Al-Ali, 2001), Egyptian university students (Gelany & Moussa, 2012), and students of the Hashemite University in Jordan (Ashraah et al., 2013), and secondary school students (Iqbal et al., 2020). There is also a decrease in the level of health awareness among the rural population in Egypt (Maaki, 2017). On the other hand, the level of health awareness was a high level among students at the colleges of applied medical sciences in the kingdom of Saudi Arabia (Alonazi et al., 2016). Finally, the level of health awareness was an average level among students of An-Najah national universities and Jerusalem in Palestine (Abdalhaqq et al., 2012), and Ajloun college students at the Balqa applied university (Al-Sharaa, 2019).

Factors that significantly affect the level of health awareness have varied, they include gender, place of living, mother academic level, father academic level, and the students' achievement in science among primary school students in government schools in Palestine (Al-Ali, 2001). Besides, the level of health awareness differed according to the place of living, where urban girls have better knowledge of health awareness compared to rural girls in India (Mahajan & Sharma, 2005). In addition, this level differed according to the type of university, the type of faculty, and the total of the grades (Abdalhaqq et al., 2012). In particular, the level of reproductive health awareness among female students in Egyptian universities has decreased, which is attributed to age, social and cultural factors such as the level of education (Gelany & Moussa, 2012). Moreover, the level of health awareness differed according to age, gender in favor of females and the educational level in favor of fourth year students (Al-Arjan et al., 2013). There are significant differences in the level of health awareness among students at the Hashemite University in Jordan, according to the factors of gender, specialization, academic level, and GPA (Ashraah et al., 2013). Regarding the level of health locus of control, it differs according to the factors of scientific specialization and marital status. Besides, there is a correlation between the level of health awareness and the level of health locus of control (Khalafy, 2013). Moreover, the level of health control does not differ between males and females (Azzouz & Jabali, 2014).

Regarding the Egyptian rural population, the level of health awareness varied according to the factors of gender, age, educational, economic, and social levels (Maaki, 2017). There was no statistically significant difference between males and females in performing, the majority of roles related to implementing health education activities in their schools (Almohaithef & Elsayed,

2019). There are statistically significant differences in health behavior levels among Ajloun college students at the Balqa Applied University according to gender in favor of females. In addition, there is a positive correlation between healthy behavior and fitness level (Al-Sharaa, 2019). There is a significant difference of health awareness between public and private institutes in favor of the private school students. Moreover, it is recommended that there may be inclusion of knowledge about health awareness in the syllabus (Iqbal et al., 2020). Finally, lifestyle behaviors differ among high school students in urban and semi-urban areas. Consequently, health education targeted at secondary schools must be improved to improve the students' lifestyle behaviors (Cai et al., 2020).

The behavior of tobacco, alcohol, drug, and risky sexual behavior correlated positively with the level of risky health behavior in Egypt. Moreover, the main determinants of risky behavior included male students, elderly students, students with high financial allowances, and the lack of concern for risk (Refaat, 2014). College students are at high risk of developing smoking habits as they are exposed to a greater availability of cigarettes and close connections with their smokers' peers. The prevalence of smoking among students at Kafr El-Sheikh University in Egypt was 11% (Amin et al., 2016). Moreover, there was a positive correlation between the health-related performance and the nutritional literacy ( $r = 0.32$ ) (El-Wakeel & El-Ahmady, 2017). Moreover, training improves the safety competencies of hospitality students, which it is crucial to include safety competencies in the curriculum to increase students' safety awareness (Bossema, 2017). Finally, the level of work motivation accounts for about 34-50% of mental health problems among employees (Kotera et al., 2018).

Adolescent food choices do not conform to dietary guidelines (Story et al., 2002). Besides, food safety perceptions influence adolescents' food choices. Therefore, it needs to examine the behavioral and environmental factors that influence healthy eating behavior (Verstraeten et al., 2014). In particular, teens face high nutritional risks, overweight, obesity and anemia during their growth period (Banna et al., 2016). As a result, 12 and 19 years of age are obese and more than a third of them are overweight (Azar et al., 2020). Finally, a study of Pinto et al., (2020) recommended that legislation restricting food and drink advertising should be in place to protect young people from unhealthy food advertisements in Canada.

### **Methodology**

This research aims to determine the level of health awareness and the level of health locus of control among hospitality students. Therefore, the method depends on the quantitative approach. The study population consisted of 290 first-stage students. Consequently, the simple random sample of the study consisted of 165 (32.8 %) first-stage students of the hotel management department at the faculty of tourism and hotels in Minia university during the first semester of the academic year 2019/2020 (Surveysystem, 2020). In addition, this study used the scale of health awareness that is designed by Abdelhaq et al., (2012), to measure the level of health awareness, and the scale of the health locus of control, which is designed by Wallston et al., (1978) to assess a person's beliefs regarding whether his health description is determined by the actions of individuals, unlike chance. Consequently, the data collection tool is a questionnaire for hospitality students. The results of scales are interpreted according to the following percentages; 80 % and above is a very high level of health awareness, 70-79.9 % a high level, 60-69.9 % an average level, 50-59.9 % a lower level, and less than 50 % a deficient level. This research tests the following hypotheses:

1. There is a significant difference among students in the level of health awareness according to the gender.

2. There is a significant difference among students in the level of health awareness, according to the economic level.
3. There is a significant difference among students in the level of health awareness, according to the place of living.
4. There is a significant difference among students in the health locus of control level according to gender.
5. There is no significant difference among students in the health locus of control level according to the economic level.
6. There is a significant difference among students in the health locus of control level according to the place of living.
7. There is a significant correlation between the level of health awareness and the health locus of control level.

### Data Analysis and Results Discussion

About 165 questionnaires were distributed to the first-stage students, 100 of them returned, and 95 questionnaires are valid for the statistical analysis. By analyzing the study data, the results of the study came as the following:

Table 1: The Demographic Data of Respondents

N.	Factors	Items	Frequency	Percent
1	Gender	Male	48	50.5
		Female	47	49.5
2	Place of Living	City	50	52.6
		Village	45	47.4
3	Economic Level	Poor	14	14.7
		Average	67	70.5
		High	14	14.7

Table (1) reflects that the numbers of males and females are almost equal. 52,6% are coming from a city. Concerning the economic level, about 70.5% of students have an average economic level, 14.7% a high level and 14.7% a low economic level.

Table 2: The Level of Health Awareness between Hospitality Students

No	Items	Mean	Std.	%	Level
1	I care that the daily food is integrated and comprehensive.	4.26	0.948	85.2	Very high
2	I cannot eat breakfast due to the limited time.	3.69	1.082	73.8	High
3	Drink more cold or hot drinks between main meals.	3.62	1.169	72.4	High
4	Drinking coffee and tea helps me focus.	3.42	1.373	68.4	Average
5	I am interested in knowing the nutrients that give me an energy.	3.83	1.252	76.6	High
6	I keep my weight properly.	3.80	1.078	76	High
7	Eating more fresh vegetables and fruits.	3.83	1.108	76.6	High
8	I try to stay away from fried foods and prefer cooked foods.	3.44	1.191	68.8	Average
<b>Nutrition Domain</b>		3.74	1.15	74.7	High
9	I care about sleep and rest for enough hours.	3.89	1.276	77.8	High
10	I care about showering, especially after sports and exercise.	4.19	1.014	83.8	Very High
11	When choosing my clothes, take into account the appropriate air temperature.	3.83	1.078	76.6	High
12	I am interested in housing in a clean and healthy house in terms of ventilation and sun.	4.07	1.034	81.4	Very High

No	Items	Mean	Std.	%	Level
13	I care about trimming my hands and the feet-nails whenever needed.	4.01	1.144	80.2	Very High
<b>Personal Health Domain</b>		4.00	1.1092	80	Very High
14	I walk long distances to stimulate blood circulation.	4.03	1.153	80.6	Very High
15	I like to participate in sports and recreational activities.	3.66	1.234	73.2	High
16	I am interested in making time for some exercise.	3.53	1.219	70.6	High
17	I stop exercising that leads to my injury.	3.65	1.099	73	High
18	Avoid exercises, if you feel tired.	3.57	1.098	71.4	High
19	Participate in sports activities with the goal of feeling happy and satisfied.	3.71	1.138	74.2	High
20	I am interested in making a medical examination after recovering from an injury.	3.43	1.217	68.6	Average
21	I am interested in making a medical examination before joining the sports team.	3.42	1.243	68.4	Average
22	Health care must be present for every student whose health condition is registered.	3.76	1.108	75.2	High
<b>Sporting Activities</b>		3.64	1.168	72.8	High
23	I am interested in knowing the health conditions for the sitting position when studying.	3.91	1.230	78.2	High
24	I am interested in knowing the conditions for correct walking in the street.	3.87	1.113	77.4	High
25	I cannot overstate my ability to carry things.	3.80	1.097	76	High
26	I am interested in knowing how to carry the correct books.	3.67	1.086	73.4	High
27	I know the effect of exercise on moderate strength.	3.72	1.108	74.4	High
28	I am interested in knowing how to pick things up and carry them from the ground.	3.79	1.081	75.8	High
29	I am interested in knowing how to protect and maintain the body.	3.98	1.031	79.6	High
30	I am interested in knowing the functioning of the vital systems in my body.	3.80	1.068	76	High
31	I avoid physical fatigue and stress.	3.67	1.198	73.4	High
32	Doing sports activities to help the body perform its functions.	3.93	1.196	78.6	High
<b>Body Domain</b>		3.81	1.12	76.28	High
<b>Total</b>		<b>3.8</b>	<b>0.71</b>	<b>75.96</b>	<b>High</b>

According to table (2), the average of nutrition domain equals 3.74 out of 5 (74.73%), this indicates a high level. More in detail, hospitality students should reduce the drinking of coffee and tea, stay away from fried foods, and move towards fully cooked foods. The level of personal health is a very high level (4 out of 5) by 80%. In addition, the domain of sporting activities is 3.64 out of 5 (72.8%), which indicates a high level. Moreover, the level of body domain is 3.81 out of 5 (76.31%), which it indicates that this level is high. Finally, hospitality students have a very high level of the personal health, and a high level of body, nutrition, and sportive activities, respectively. The level of health awareness equals 3.8 out of 5 (76%), which is a high level.

Table 3: Descriptive Statistics of the Health Awareness Level.

No	Tests	Health Awareness Level	
		Statistic	Value
1	Mean	Statistic	3.775

No	Tests	Health Awareness Level	
		Value	
		Std. Error	0.0577
2	95% Confidence Interval for Mean	Lower Bound	3.66
		Upper Bound	3.89
3	Median	3.78	
4	Maximum	5	
5	Minimum	1.81	
6	Variance	0.316	
7	Standard Deviation	0.563	
8	Normal Distribution	K-S	0.745
		Sig	0.635

It is clear from the table (3) that the average of health awareness level among hospitality students is 3.8 out of 5 (76%), which it indicates to a high level. In addition, the standard deviation is estimated at 0.56. This result is consistent with the study of Alonazi et al., (2016), while it differs with the studies of (Al-Ali, 2001; Gelany & Moussa, 2012; Abdalhaqq et al., 2012; Ashraah et al., 2013; Alarjan et al., 2013; Maaki, 2017; Iqbal et al., 2020). Moreover, the distribution of the health awareness level follows the normal distribution. Therefore, parametric measures are used to calculate the differences between the study groups.

Table 4: The T-Test of the health awareness level according to the gender

Domain	Males		Females		t-value	Sig.
	Mean	Std.	Mean	Std.		
Nutrition	3.9505	0.65270	3.5213	0.63914	3.238	0.002
Personal Health	4.0333	0.76779	3.9660	0.79599	0.420	0.676
Sporting Activities	3.7708	0.70325	3.5059	0.61725	1.953	0.054
Body	3.8917	0.67314	3.7340	0.73374	1.091	0.278
Health Awareness Level	3.8945	0.55419	3.6529	0.55011	2.132	0.036

It is evident from the table (4) that there are significant differences in the domain of nutrition according to gender in favor of males, while there are no differences in the domains of personal health, sporting activities and body. In addition, there is a significant difference in the level of health awareness between males and females in favor of males. This result agrees with the studies that have determined the existence of significant differences between males and females in the level of health awareness (Al-Arjan et al., 2013; Ashraah et al., 2013; Maaki, 2017). On the contrary, this result differed with the results of the study (Al-Arjan et al., 2013), which determined that the differences are in favor of females.

Table 5: T-Test of the Health Awareness Level according to the Place of Living.

Domain	City		Village		t-value	Sig.
	Mean	Std.	Mean	Std.		
Nutrition	3.6575	0.72396	3.8278	0.61831	-1.226-	0.223
Personal Health	4.0520	0.75139	3.9422	0.81198	0.684	0.495
Sporting Activities	3.7022	0.68730	3.5704	0.65503	0.955	0.342
Body	3.7740	0.80883	3.8578	0.57267	-0.587-	0.559
Health Awareness Level	3.7681	0.62831	3.7826	0.48600	-0.125	0.901

It is evident from the table (5) that there is no difference according to the place of living, in the levels of health awareness, nutrition, personal health, sporting activities, and body. This result

differs with the studies of Al-Ali (2001), and Mahajan & Sharma (2005) which they recognized the existence of a significant difference between city and village residents in the level of health awareness. Moreover, the study of Mahajan & Sharma (2005) stated that urban girls have a better knowledge of health awareness compared to rural girls.

Table (6): One-Way ANOVA of Health Awareness according to the Economic Level

Domain	Source of Variance	Sum of Squares	Degrees of Freedom	Mean of Squares	F-Value	Sig.
Nutrition	Between groups	2.066	2	1.033	2.311	0.105
	Inside groups	41.124	92	0.447		
	Total	43.190	94			
Personal Health	Between groups	1.537	2	0.768	1.276	0.284
	Inside groups	55.423	92	0.602		
	Total	56.960	94			
Sporting Activities	Between groups	0.285	2	0.142	0.310	0.734
	Inside groups	42.153	92	0.458		
	Total	42.437	94			
Body	Between groups	0.081	2	0.040	0.080	0.923
	Inside groups	46.572	92	.506		
	Total	46.652	94			
Health Awareness Level	Between groups	.451	2	0.226	0.708	0.495
	Inside groups	29.290	92	.318		
	Total	29.741	94			

It is evident from the table (6) that there is no difference according to the economic level of hospitality students in the levels of health awareness, nutrition, personal health, sporting activities, and body. This result differs with the study of Maaki (2017).

Table (7): The Level of The Health Locus of Control.

No	Items	Mean	Std.	%	Level
1	If I get sick, it is my own behavior, which determines how soon I get well again.	4.16	0.982	83.16	Very High
2	No matter what I do, if I am going to get sick, I will get sick.	3.54	1.128	70.74	High
3	Having regular contact with my physician is the best way for me to avoid illness.	3.59	1.125	71.79	High
4	Most things that affect my health happen to me by accident.	3.34	1.217	66.74	Average
5	Whenever I do not feel well, I should consult a medically trained professional.	3.63	1.167	72.63	High
6	I am in control of my health.	3.47	1.228	69.47	Average
7	My family has a lot to do with my becoming sick or staying healthy.	3.55	1.192	70.95	High
8	When I get sick, I am to blame.	3.31	1.212	66.11	Average
9	Luck plays a big part in determining how soon I will recover from an illness.	3.03	1.267	60.63	Average
10	Health professionals control my health.	3.49	1.166	69.9	Average
11	My good health is largely a matter of good fortune.	3.22	1.159	64.42	Average
12	The main thing that affects my health is what I myself do.	3.54	1.040	70.74	High
13	If I take care of myself, I can avoid illness.	3.63	1.305	72.63	High
14	Whenever I recover from an illness, it is usually because other people (for example, doctors, nurses,	3.43	1.108	68.63	Average

No	Items	Mean	Std.	%	Level
	family, and friends) have been taking good care of me.				
15	No matter what I do, I am likely to get sick.	3.67	1.106	73.47	High
16	If it is meant to be, I will stay healthy.	3.65	1.019	73.05	High
17	If I take the right actions, I can stay healthy.	3.82	1.031	76.42	High
18	Regarding my health, I can only do what my doctor tells me to do.	3.75	1.010	74.95	High
<b>Mean</b>		3.55	1.13	70.91	High

Table (7) shows that the level of health locus of control equals 3.6 out of 5 (70.91%), which is a high level. In addition, hospitality students have a very high level of awareness that their behavior determines the date of recovery upon exposure to disease. Students realize that most of the things that are on health happen by chance, and the ability to control health, Self-blame when exposed to illness. Luck plays a big role in determining the timing of recovery from illness, health professionals control health, good health is like great luck, and when recovering from illness, it is usually because other people (doctors, nurses, family, and friends) took good care of us.

Table 8: Descriptive Statistics of the Health Locus of Control Level

No	Tests		Health Locus of Control
			Value
1	Mean	Statistic	3.5456
		Std. Error	0.04995
2	95% Confidence Interval for Mean	Lower Bound	3.4464
		Upper Bound	3.6448
3	Median		3.5000
4	Maximum		4.56
5	Minimum		2.61
6	Variance		0.237
7	Standard Deviation		0.48682
8	Normal Distribution	K-S	0.0991
		Sig	0.280

It is clear from the table (8) that the average of the health locus of control level is 3.6 out of 5 (72%), which it refers to the high level. In addition, the standard deviation is 0.49. By comparison, there is a strong convergence between the level of health awareness and the level of health locus of control among hospitality students. Moreover, the distribution of the health locus of control level follows the normal distribution. Therefore, parametric measures are used to calculate the differences between the study groups.

Table 9: T-Test of The Health Locus of Control Level according to Gender and The Place of Living

	Factors			
	Gender		The Place of Living	
	Males	Females	City	Village
Mean	3.662	3.4267	3.6100	3.4741
Standard Deviation	0.5033	0.4437	0.52435	0.4361
T-value	2.415		0.365	
Significance	0.018		0.176	

According to table (9), there is a significant difference in the health locus of control level, according to the gender in favor of males. This result disagrees with the study of Azzouz &

Jabali (2014) which stated that the level of health locus of control does not differ between males and females.

Table 10: One-Way ANOVA of the Health Locus of Control Level, according to the Economic Level.

Domain	Source of Variance	Sum of Squares	Degrees of Freedom	Mean of Squares	F-Value	Sig.
The Health Locus of Control	Between groups	0.515	2	0.258	1.089	0.341
	Inside groups	21.762	92	.237		
	Total	22.278	94			

It is evident from the table (10) that there is no difference in the level of health locus of control, according to the economic level.

Table 11: The Relationships among Research Variables

No	Variable X	Variable Y	R	Sig
1	Nutrition Domain	Health Awareness Level	.750**	0.000
2	Personal Health Domain		.688**	0.000
3	Sporting Activities Domain		.823**	0.000
4	Body Domain		0.891**	0.000
5	Health Locus of Control Level		.444**	0.000
6	Nutrition Domain	Health Locus of Control Level	.266**	0.009
7	Personal Health Domain		.442**	0.000
8	Sporting Activities Domain		.427**	0.000
10	Body Domain		.320**	0.002

\*\*Correlation is significant at the 0.01 level (2-tailed)

Table (11) shows the relationships between the level of health awareness and the level of health locus of control. Results revealed that there was a direct correlation between the level of health awareness, and the factors of the body ( $r = 0.891$ ), sporting activities ( $r = 0.823$ ), nutrition ( $r = 0.750$ ), and personal health ( $r = 0.688$ ). In addition, there is a direct correlation between the level of health awareness and the level of health locus of control. Therefore, this result agrees with the study of Khalafy ( $r = 2013$ ). Moreover, there is a direct correlation between the level of health locus of control with personal health ( $r = 0.442$ ), sporting activities ( $r = 0.427$ ), body ( $r = 0.320$ ), and nutrition ( $r = 0.266$ ) respectively.

Table 12: T Regression Model between the level of Health Awareness and Research Variables

Variables		R	Adjusted R	Model Constant	Unstandardized coefficients		Standardized coefficients Beta	t	Sig.
Independent X	Dependent Y				Beta	Std. error			
Health locus of control level	Health awareness	0.444	0.189	Constant	1.955	0.384	0.444	5.090	0.000
				Health locus of control level	0.513	0.107		4.782	0.000
Nutrition domain	Health awareness	0.750*	0.558	Constant	0.623	0.216	0.750	6.699	0.000
				Nutrition domain	1.787	0.057		10.949	0.000
Personal health domain	Health awareness	0.688*	0.467	Constant	1.787	0.222	0.688	8.064	0.000
				Personal health domain	0.497	0.054		9.136	0.000
Sporting activities	Health awareness	0.823*	0.673	Constant	1.269	0.183	0.823	6.944	0.000

Variables		R	Adjusted R	Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
Independent X	Dependent Y			Constant	Beta	Std. error	Beta		
				Sporting activities domain	0.689	0.049		13.950	0.000
Body domain		0.891*	0.792	Constant	1.061	0.146	0.891	7.289	0.000
				Body domain	0.712	0.038		18.962	0.000

Table (12) shows the regression coefficients between the level of health awareness and the study variables. It turns out that there is a significant slope between the level of health awareness (Y) and the level of health locus of control (X) as in the following equation ( $Y = 1.955 + 0.513X$ ). In addition, there is a significant slope between the level of health awareness and the nutrition domain ( $Y = 1.447 + 0.623X$ ), and there is a significant slope between the level of health awareness and the domain of personal health ( $Y = 1.787 + 0.497X$ ). Moreover, there is a slope between the level of health awareness and the domain of sporting activities ( $Y = 1.269 + 0.689X$ ). There is a slope between the level of health locus of control and the body domain ( $Y = 1.061 + 0.712X$ ). Finally, this research stated the following hypotheses:

1. There is a significant difference between hospitality students in the level of health awareness, according to the gender ( $t = 2.132$ ;  $Sig = 0.036$ ).
2. There is no a significant difference between hospitality students in the level of health awareness, according to the economic level ( $F = 0.708$ ;  $Sig = 0.495$ ).
3. There is no a significant difference between hospitality students in the level of health awareness, according to the place of living ( $t = -0.127$ ;  $Sig = 0.900$ ).
4. There is a significant difference between hospitality students in the health locus of control level according to gender ( $t = 2.419$ ;  $Sig = 0.018$ ).
5. There is no a significant difference between hospitality students in the health locus of control level according to the economic level ( $F = 0.708$ ;  $Sig = 0.495$ ).
6. There is no a significant difference between hospitality students in the health locus of control level according to the place of living ( $t = 1.378$ ;  $Sig = 0.171$ ).
7. There is a direct significant correlation between the level of health awareness and the health locus of control level for hospitality students ( $R = 0.444$ ;  $Sig = 0.000$ ).

### Conclusion

Health is the most important aspect of a person’s life. In addition, education is one of the basic social determinants of health and a guarantee of its existence. Thus, the issue of health is an important for educational institutions and students. Whereas poor health leads to decreased educational attainment and educational setbacks at the level of students and educational institutions. Hence, measuring and improving health awareness is one of the basic objectives of education. In this context, several studies have dealt with measuring the level of health awareness among students in various educational institutions in different countries. The level of health awareness in a continuation between high, medium and low. Therefore, the problem of this study was to measure the level of health awareness among first-stage students in the hotel management department at the faculty of tourism and hotels at Minia university in Egypt during the first semester of the academic year 2019/2020.

By analyzing the results of the questionnaire that was distributed to the students, it was found that the level of health awareness and the level of health control among students are high. In

addition, they differed significantly among students, according to the gender in favor of males. There is a direct correlation between the level of health awareness and the level of health locus of control. Consequently, this calls on educational institutions to promote health awareness among students, especially female students. Tourism and hotels faculties should have an integrated scientific content of the health awareness in the curricula, increasing lectures or research activities in this regard so that students are motivated to follow sound health practices to preserve health and prevent disease. Finally, educational institutions must take into account the level of health locus of control when improving the level of health awareness. Whereas the ability of students to control and perceive healthy behaviors have a clear impact on the level of health awareness.

### **Recommendations**

The study suggests the following recommendations to the faculties of tourism and hotels:

1. Focusing on curricula that are concerned with improving the level of health awareness and the level of health control to the highest levels among students.
2. Interest in student research in hotel management departments that promote health awareness and the ability to control health among hospitality students.
3. Improving the domains of sporting activities, nutrition, body, and personal health among hospitality students.
4. Gender should be taken into consideration when improving the level of health awareness and the level of health locus of control among the hospitality students.
5. Attention must be paid to the health awareness level when improving the level of health control for hospitality students and vice versa.
6. Hospitality students are advised to avoid believing that things that happen negatively to health happen by chance.
7. Hospitality students are advised to cut down on tea and coffee.
8. Hospitality students need to stay away from fried food and prefer cooked food.
9. Hospitality students are advised to take medical examinations after recovering from injuries.
10. Hospitality students are advised to take care of medical tests before joining sports teams.
11. Hospitality students are advised to no blame themselves for the disease.

### **Limitations and Future Researches**

This study was applied to first-stag students at the Faculty of Tourism and Hotels, Minia University, and due to the small size of the sample, the results cannot be generalized. Therefore, this research recommends conducting further studies in the faculties of tourism and hotels. In addition, the studies must include all stages and focus on increasing the sample size. Moreover, this study recommends researchers to measure the level of health awareness in light of the demographic variables of students at all levels from the first year to the fourth year.

### **Reference**

- Abdalhaqq, E., Shana'eh, M., Nu'erat, Q., & Al-Ahmad, S., (2012). The Health Awareness Level for the students of Al-Najah National University & Jerusalem University. *The Journal of Al-Najah University for Researches (Humanitarian Sciences)*, 26 (4), 939-958.
- Ahmad, N., (2012). The Effectiveness of Health Education Methods in Instilling & Disseminating Health Information for Building the Sudanese Health Community of Practice. The National Centre for Researches, *The Centre of Documentation & Information*, 1762-1781.
- Al-Ali, S., (2001). The Level of Health Education among the Upper Basic Stage Students in the Public Schools of Jenin. MA Dissertation, Al-Najah National University, Nablus, Jerusalem.

- Almohaithef, M., & Elsayed, E., (2019). Health education in schools: An analysis of health educator role in public schools of Riyadh, Saudi Arabia. *Saudi Journal for Health Sciences*, 8 (1), 31-37.
- Alonazi, W., Albaiz, A., Albejaidi, F., & Alenazi, F., (2016), Health Awareness among Female, Undergraduate Medical Students in Saudi Arabia, *The Southeast Asian journal of tropical medicine and public health*, 47 (1), 121-130.
- Al-Sharaa, A., (2019). Health Behaviour and its Relationship with the Physical Fitness Level of the Students of Ajloun College at Balqa Applied University. *International Journal of Innovation, Creativity and Change*, 8 (4), 177- 198.
- Amin, S., Shaheen, H., & Omran, H., (2016). Smoking among university students in Kafr El-Sheikh University. *Menoufia Medical Journal*, 29 (4), 1092-1099.
- Ashraah, M., Mahasneh, A., Al-Sawalmeh, A., & Abusheikh, A., (2013). Health Awareness among University Students in Jordan. *Review of European Studies*, 5 (5), 197-204.
- Azar, J., Halley, M., Lv, N., Wulfovich, S., Gillespie, K., Liang, L., & Rosas, G., (2020). Differing views regarding diet and physical activity: adolescents versus parents' perspectives. *Int J Environ Res Public Health*, 20 (137), 1-10.
- Banna, C., Buchthal, V., Delormier, T., Creed-Kanashiro, M., and Penny, E., (2016). Influences on eating: a qualitative study of adolescents in a periurban area in Lima, Peru. *BMC Public Health*, 15, 16-40.
- Bardi, J., (2020). Raising Awareness of Mental Health in Higher Education: Research Activity for Educators. *Nurse Educator*, 45 (2), 65.
- Barile, N., (2020), The Importance of Mental Health Awareness in Schools, <https://www.wgu.edu/heyteach/article/importance-mental-health-awareness-schools1810.html>, accessed 25/3/2020/
- Bossema, J., (2017), Increasing students' safety awareness in a teaching hotel, *Research in Hospitality Management*, 4 (1-2), 85-90.
- Cai, Z., Zhang, Z., Zeng, M., Xian, J., Lei, X., Zhao, Y., (2020). Differences in Lifestyle Behaviors of Students between Inner Urban and Peri-urban High Schools: A Cross-Sectional Study in Chongqing, China. *Int J Environ Res Public Health*, 17 (7), 2282.
- El-Wakeel, L., & El-Ahmady, S., (2017). The Effects of Nutrition Awareness and Knowledge on Health Habits and Performance Among Pharmacy Students in Egypt. *Journal of Community Health*, 42 (2), 213-220.
- Gelany, S., & Moussa, O., (2012). Reproductive health awareness among educated young women in Egypt. *International Journal of Gynecology and Obstetrics*, 120 (1), 23-26.
- Heide, I., Wang, J., Droomers, M., Spreeuwenberg, P., Rademakers, J., & Uiters, E., (2013). The Relationship Between Health, Education, and Health Literacy: Results From the Dutch Adult Literacy and Life Skills Survey. *Journal of Health Communication*, 18 (1), 172-184.
- ICPD (1994), Proposed domains and indicators linked to the definition of RH adopted at the International Conference on Population and Development (ICPD) in 1994, retrieved from [http://www.who.int/topics/reproductive\\_health/en/](http://www.who.int/topics/reproductive_health/en/) access 15/2/2020.
- Iqbal, J., Ali, A., & Ahmad, M. (2020). Comparison of Health Awareness among Public and Private Secondary School Students in District Bahawalpur. *Pakistan Social Sciences Review*, 4 (2), 638-646.
- Kotera, Y., Adhikari, P., and Gordon, W. (2018). Motivation Types and Mental Health of UK Hospitality Workers. *International Journal of Mental Health and Addiction*, 16 (2), 751-763.
- Mahajan, P., & Sharma, N., (2005). Awareness level of adolescent girls regarding HIV/AIDS: a comparative study of rural and urban areas of Jammu. *J Hum Ecol*, 17 (4), 313- 314.

- Mursi, A., (2005). General Health & Health Education, Al-Khrejji Dar for publishing & distribution, Riyadh.
- O'liewa, A., (1999). Health in the Sporting Domain, Al-Ma'aref Association, Alexandria, Egypt.
- Pinto, A., Pauzé, E., Mutata, R., Gagnon, R., Kent, P., (2020). Food and Beverage Advertising to Children and Adolescents on Television: A Baseline Study. *Int J Environ Res Public Health*, 17(6), 1999.
- Pourhoseinzadeh, M., Gheibzadeh, M., Moradikalboland, M., & Cheraghian, B., (2017). The Relationship between Health Locus of Control and Health Behaviors in Emergency Medicine Personnel. *Int. J. Community Based Nurs Midwifery*, 5(4), 397–407,
- Refaat, A., (2014). Practice and awareness of health risk behaviour among Egyptian university students. *East Mediterr Health J*, 10(1-2), 72-81.
- Researchomatic, (2012), Health Awareness.
- Senthilkumar, R., & Ulaganathan, G., (2017). Health Information Awareness among the Teaching Professionals of Higher Education: An Analysis. *J Adv Res Lib Inform Sci*, 4(1&2), 8-11.
- Story, M., Sztainer, N., & French, S., (2002). Individual and environmental influences on adolescent eating behaviors. *J Am Diet Assoc*, 102(3), 40-51.
- Surveysystem (2020), Sample Size Calculator.
- Truman, B., & Hahn, R. (2015), Education Improves Public Health and Promotes Health Equity, *Int J Health Serv.*, 45(4), 657–678.
- UNESCO (2020), Education for health and well-being.
- VCU (2015), Why Education Matters to Health: Exploring the Causes.
- Verstraeten, R., Royen, K., Ochoa-Avilés, A., Penafiel, D., Holdsworth, M., Donoso, S., Maes, L., & Kolsteren, P., (2014). A conceptual framework for healthy eating behavior in Ecuadorian adolescents: a qualitative study. *PloS One*, 9(1), 1-7.
- Wallston, A., Wallston, S., & DeVellis, R., (1978). Development of the Multidimensional Health Locus of Control (MHLC) Scales. *Health Educ Monogr*, 6(2), 160-170,
- Wittayapun, Y., Tanasirirug, V., Butsriripoom, B., & Ekpanyaskul, C., (2010). Factors Affecting Health-promoting Behaviors in Nursing Students of the Faculty of Nursing Srinakharinwirot University. *Thailand. J Public Health*, 40(2), 15–25.
- العرجان، جعفر فارس؛ ذيب، ميرفت عاهد؛ الكيلاني، غازي محمد خير (٢٠١٣) "مستوى الوعي الصحي ومصادر الحصول على المعلومات الصحية لدى طلبة جامعة البلقاء التطبيقية في الاردن"، مجلة العلوم التربوية والنفسية، المجلد ١٤ العدد ١، خلفي، عبد الحليم (٢٠١٣) أثر الضبط الصحي على مستوى الوعي الصحي لدى طلبة المركز الجامعي بتامنغست، المركز الجامعي بتامنغست، الجزائر، مجلة العلوم الانسانية والاجتماعية، العدد ١٣ .
- عبد الحق، عماد؛ شناعة، مؤيد؛ نعيرات، قيس؛ والعمد، سليمان (٢٠١٢)، مستوى الوعي الصحي لدى طلبة جامعة النجاح الوطنية وجامعة القدس، مجلة جامعة النجاح للأبحاث (العلوم الانسانية)، مجلد ٢٦ (٤).
- عزوز، اسمهان وجبالي، نور الدين (٢٠١٤) مصدر الضبط الصحي وعلاقته باستراتيجيات المواجهة لدى مرضى القصور الكلوي المزمن"، مجلة الآداب والعلوم الاجتماعية، العدد ١٩ .
- مكي، عبد التواب جابر أحمد محمد (٢٠١٧)، المحددات الاجتماعية للوعي الصحي في الريف المصري دراسة ميدانية بإحدى قرى محافظة أسيوط، مجلة أسيوط للدراسات البيئية، العدد السادس والأربعون.
- منظمة الصحة العالمية (٢٠١٦)، الصحة في أهداف التنمية المستدامة