Mansoura University
Faculty of Tourism and Hotels

THE REALITY OF HOTEL EDUCATION IN LIGHT OF THE DIMENSIONS OF SUSTAINABLE DEVELOPMENT (APPLIED TO THE FACULTY OF TOURISM AND HOTELS, MANSOURA UNIVERSITY)

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واقع التعليم الفندقى فى ضوء أبعاد التنمية المستدامة (بالتطبيق على كلية السياحة والفنادق- جامعة المنصورة)

إعداد

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المستخلص

يهدف هذا البحث إلى دراسة واقع التعليم الفندقى وذلك فى ضوء أبعاد التنمية المستدامة من خلال التعرف على تصورات طلاب قسم الدراسات الفندقية حول التعليم الفندقي من أجل التنمية المستدامة وتقييم مدى استعداد القسم لتحقيق ذلك. حددت منظمة اليونيسكو سبعة عشر هدفاً للتنمية المستدامة ، وقد تبنت هذه الدراسة ثمانية أهداف فقط وهى الأقرب والأكثر ارتباطا بموضوع الدراسة الحاليه وهى الأهداف (17/12/8/7/6/5/4/2). كانت عينة هى طلاب المستوى الرابع بالقسم وذلك خلال العام الدراسي 2021/2020 ، الفترة من نوفمبر 2020 إلى فبراير 2021. تم توزيع 120 استمارة ، وبلغ عدد الاستبيانات المعادة 119 استمارة (99.2٪) ؛ فقط 116 نموذجًا (97.1٪) من النماذج التي تم إرجاعها كانت صالحة للتحليل الإحصائي. تتكون من 85 ذكر و 31 أنثى. وتألف الاستبيان من

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ثلاثة أجزاء. : الأول حول البيانات الديموغرافية والبيانات الموضوعية ، والثاني مقسم إلى خمسة أبعاد ، والثالث يشمل نقاط القوة والضعف ومقترحات التحسين.تمت معالجة بيانات الاستبيان من خلال SPSS V.26. خلصت النتائج الى أن هناك تصور محايد تجاه مفهوم التعليم الفندقى من أجل التنمية المستدامة .هذا يدعو الى استغلال نقاط القوة والتغلب على نقاط الضعف وذلك من خلال عمل تحليل البيئة الداخلية والخارجية بقسم الدراسات الفندقية ووضع خطه استراتيجية مناسبة سعيا لتحقيق الأبعاد الثلاثة للتنمية المستدامة (اقتصاديا وبيئيا واجتماعيا). ومن أهم توصيات الدراسة: تبني رؤية مصر 2030 في رؤية ورسالة وأهداف الكلية وتحديث المناهج، والتعاون مع المنظمات الداعمة للتنمية المستدامة مثل اليونسكو كبعد ثقافى اجتماعى واقتصادى، تفعيل الطاقة الشمسية وزراعة الأسطح لتحقيق البعد الاقتصادى والبيئى.

الكلمات المفتاحية: التعليم الفندقى – أهداف التنمية المستدامة – تصور الطلاب – قسم الدراسات الفندقية –كلية السياحة والفنادق– جامعة المنصورة

The globalization movement and its increasing changes in the various aspects of life in contemporary societies have caused many negative repercussions on the environment and its contents in many areas of life. The world has suffered from environmental, health, and social problems that have negatively affected human rights and the land on which it lives. These changes have affected the rights of generations and the environment. The contemporary world countries have developed or developed an unprecedented interest in the concept of sustainable

development to preserve the rights of the environment at present to preserve the rights of future generations to live in peace on the planet (Barth, M. 2015).

Education is a top priority for contemporary countries to promote the concept of sustainable development for individuals and groups through the introduction of the principle of education for sustainable development to achieve sustainable human development that plays a major role in shaping their strategies in achieving the goals of sustainable development. (UNESCO. 2016).

The main purpose of undergraduate hospitality and tourism programs is to prepare future hospitality and tourism professionals for the workforce. It may be argued that since the profession is moving towards sustainability, the curriculum should move towards sustainability as well (Deale et al. ,2009).

Research's Problem

The research's problem is that necessary to pay attention to Sustainable development at higher education level which plays an important role in achieving the Sustainable Development Goals (SDGs). Higher education holds a great responsibility to increase the awareness and knowledge of students who will manage and develop resources. For the purpose of the sustainability of resources, awareness and knowledge of sustainable development are needed. This knowledge can be conveyed through Education for Sustainable Development (ESD) to achieve high education quality and equal access to education for women and men. Perception of ESD must be studied to gather information about the facts, problems and challenges

faced by Faculty of Tourism and Hotel. Mansoura University to achieve SDGs, especially SDG 4 (Quality Education) and other related goals as mentioned.

However, while sustainability has long been heavily promoted with a triple bottom line approach, researchers not too long ago found that hospitality students, in particular, received little attention to sustainability in their educational programs (Deale, C.S., & Barber, N., (2012). Yet, over the long-run on into the future, what is needed and arguably, what graduates perhaps need to learn and take to the heart through their educational experiences and internships, is that sustainability requires a balance, and creating that balance is an ongoing challenge and opportunity.

Aim and Objectives of the research

The present study aims to know the reality of hotel education in light of the dimensions of sustainable development by identifying perceptions of students at the Hotel Studies Department hold about Education for Sustainable Development (ESD) through: Analyzing the concept of education for sustainable development ، Evaluating the readiness of the hotel studies department, to implement sustainable development through the students' questionnaires.

Limitations of the Study

There will be a set of study parameters, including the time and spatial determinants as well as the human and the following objectivity :

- **Human limits:** The study population is the students of the Hotel Studies Department at the Faculty of Tourism and Hotels. The fourth-year' students were taken as a representative sample of the population because they had finished studying the majority of the department's courses.
- **Place limits:** The study was conducted at the Faculty of Tourism and Hotels, Mansoura University, it is located in Mansoura City, Dakahlia Governorate.
- **Time Limits:** The field study for this research was conducted during the academic year 2020/2021 during the period from November 2020 to February 2021.
- **Objective Limits:** The study is about the subject of studying the perceptions of students of the Hotel Studies Department towards the concept of education for sustainable development as a case study of Faculty of Tourism and Hotels, Mansoura University. UNESCO has identified seventeen goals for sustainable development, and this study has adopted only eight goals, which are the closest and most closely related to the subject of the current study, which are the goals (2/4/5/6/7/8/12/17), which were addressed in the questionnaire form of the research.

Importance of The Research

1. The study is an initial step to identify the reality and possibility of sustainable development in the hotel

studies department, Faculty of Tourism and Hotels Mansoura University.

2. This study will help decision-makers in the sample of the study in the application of some dimensions of the concept of sustainable development, Vision, Strategic Objectives and Mission
3. This study will contribute to serving the hospitality industry in Egypt by reducing the costs of training and increasing the awareness of the graduates of faculties of tourism and hotels.

Research Gap Analysis

Table 1: Research Gap Analysis

Research Gap	Research Aim	Sample/ Population	Results/ Recommendation
Sustainability in Hospitality and Tourism Education: Towards an Integrated Curriculum BY: B. Bynum Boley University of Georgia (2011)	The purpose of this study was to go beyond looking at the necessity of teaching sustainability or whether stakeholders think it is important, according to the document, to discuss how to do this. Sustainability education in hospitality and	• 72% of the hospitality educators at Warnell School of Forestry and Natural Resources University of Georgia	• Samples believe that it is important for students to be taught about sustainable topics, but show that only 12% actually teach sustainability in the classroom • This paper recommends the integration of sustainability into the hospitality and tourism industries

	tourism education curricula.		Education is the goal
Integrating Sustainability into Education: At Egyptian Tourism and Hotel Faculties By: Neveen Mohamed Mansour and Jermien Hussein Abd El-Kafy, (2018)	The aim of this paper is to: a) provide an overview of Education for sustainability (EfS) provide a framework for understanding Education for sustainability (EfS) in Tourism	• The research relied on graduates who had completed tourism studies, tourism guidance and hotel management programs (November/ 2018: January/ 2019).	• Cooperation between Ministries of Education, Higher Education and the Ministry of Environment in the field of sustainable education. • Cooperation between Egyptian universities and international organizations such as UNESCO in the field of education for sustainability • Evaluating the curricula and syllabus of tourism and hotels management faculties and developing them by integrating with the concepts of sustainability.
Perceptions and Attitudes towards Sustainable Development	The research reports the perceptions and attitudes towards	•The study was carried out involving 154 undergraduat es from five	• The output of the analyses showed that the respondents have positive

among Malaysian Undergraduates By: (Balamuralithara Balakrishnan, Fumihiko Tochinai & Hidekazu Kanemitsu ,2019)	sustainable development among Malaysian undergraduate.	universities in Malaysia • This research was conducted based on a survey whereby the respondents were given a questionnaire to gauge their perception and attitude towards sustainable development	perceptions and attitudes towards all sustainability dimensions—environmental, economic, and social—except for economic and social bound issues • These findings suggest that the educators who are involved in sustainable development education needs to focus on economic and social bound aspects. • a holistic approach and action are required to be implemented across all higher education institutions to develop undergraduates who will maintain a strong sense of responsibility towards

			sustainability issues in Malaysia and other countries as well

The studies shown in the previous table included two studies that drew attention to sustainable development in education in general, while one study emphasized the importance of integrating sustainable development into the curricula of the three faculties of tourism and hotels in its three departments without discussing any of sustainable development goals , Where the current study focused on the following:

- In-depth study of the Department of Hotel Studies, Faculty of Tourism and Hotels - Mansoura University
- Analyzing the current situation from the students' point of view and integrating eight sustainable development goals into the study
- Measuring strengths and weaknesses and presenting opportunities for improvement and development from the students' point of view and within the framework of the sustainable development goals to pave the way for researchers to complete a study and propose strategic and operational action plans in light of the study results

Review of Literature

Sustainable Development

Sustainable development is defined as' Rationalization of the use of renewable resources in a way that does not diminish future benefit for future generations and includes the wisdom to use resources that are not renewed so as not to deprive future generations of benefit. Sustainable development also requires the consumption of non-renewable energy sources at a slow rate to ensure a smooth and gradual transition to renewable energy sources (Barth, M. 2015).

According to (Lozano R., Ceulemans K., Alonso-Almeida M., Huisingh D., Lozano F.J., Waas T., Lambrechts W., Lukman R., Hugé J., 2014). The main factor in the interest of sustainable development is that it is the main objective of the next stage in Egypt and the various countries of the world. This goal should begin with attention to education in all its stages and pillars Especially students, teachers, staff, learning tools, and others, to raise the level of awareness of the university student and instill interest and loyalty to Egypt and its future and encourage it to preserve the natural and economic resources and become an element within the community for the benefit of it and the surrounding society as well as the sector in which it works and thus benefit the national economy level this is the purpose of implementing sustainable development in higher education

Education for Sustainable Development

UNESCO (2016) defined education for sustainable development as 'an education aimed at helping people to have the attitudes, skills, perspectives, and knowledge

necessary to make informed decisions and to act accordingly to achieve what they and others are now and in the future to benefit from, Sustainable development is helping the citizens of the world to learn for a sustainable future.

Education for sustainable development must adopt clear policies and plans to contribute positively to sustainable development, foremost of which is sustainable human development. This development is primarily concerned with the environment of human potential, which can overcome various obstacles at present in a way that serves the objectives of individuals and communities at the time. The present and at the same time create a decent way of life for future generations (Clip, 2016).

The biggest burden is on the university in sustainable human development as the educational stage that deals with human inputs (students) at the level of maturity: human and cognitive qualify them to carry out their social responsibilities after graduation from different institutions of higher education and their involvement in different fields of work and in the society to which they belong Field of specialization. ' In recent years there has been an increasing and significant interest in higher education, especially in terms of the laws related to this education. Many countries feel that their economic and cultural future is related to the quality of higher education that is available to the larger segments of society, not just the elite of this society '(Qureen, 2015).

Importance of Teaching Sustainability in the Hotel Sector

Teaching sustainability to undergraduates is important for hospitality and tourism educators for three

main reasons. First, sustainability and green initiatives are becoming more important to employers in the hospitality and tourism industries. Bader, E. (2005) states that the growing importance of sustainable practices is due to changing perceptions of responsibility among managers, rising operating costs, and increasing consumer demand for sustainable products. Baker, Davis and Weaver (2010) also wrote about hotels due to factors such as "consumer demand, environmental regulations, ethical management concerns, consumer satisfaction, and maintenance issues related to physical buildings." We acknowledged that sustainability is gaining in popularity. In addition to attracting "green consumers," the Green Hotel Initiative can also save a lot of money on hotels (Bohdanowicz, 2005). This gave rise to the belief that green initiatives are essential to the success of hotels in the current market environment (Baker et al., 2010).

The main purpose of the undergraduate hospitality and tourism program is to prepare the workforce for future hospitality and tourism professionals. As the profession is moving towards sustainability, it can be argued that the curriculum should also move towards sustainability. I think it should be, but Deale et al. (2009) It turns out that a small percentage of hotel professionals were unable to teach the class all aspects of sustainability. For programs that do not currently offer sustainability courses or are seeking to incorporate sustainability into the curriculum, faculty members are best and most relevant by removing sustainability from the hospitality and tourism curriculum. You need to ask if you are offering a high education. As the industry transitions to sustainable initiatives, hospitality and tourism schools need to embrace sustainability and

recognize that their education is paramount to student success. This point is Stubbs, W., & Cocklin, C. Repeated by (2008) in the following quote. "As one of the largest industries in the world, the hospitality and tourism industries act positively." Contribute to the implementation of the ecological and socio-cultural principles of sustainable development. "

The second reason to teach sustainability as part of an undergraduate hospitality and tourism program is that the program is responsible for producing graduates who are three times more profitable. This need for "hospitality and tourism ethics" derives from one of the world's largest industries, the hospitality and tourism industry, and as a result, has a lot of impact on where it takes place. In Archer, Cooper, and Ruhanen (2005) on the potential positive and negative impacts of hospitality and tourism, they addressed the fact that the impacts are unavoidable, but with effective planning and education, the negative impacts. You can focus positively on how to encourage them while minimizing. Examples of positive impacts include job creation, peace promotion, cultural and natural resource conservation, and the significant economic impact of bringing external funding into the community (Archer et al., 2005).

Teaching students about sustainability from different perspectives is certainly important to reduce the negative impacts of hospitality and tourism and maximize the general positive effects, but the natural and cultural nature of the vast strategy. Teaching sustainability for resources is especially important for travel destinations. According to Ritchie and Crouch (2003), natural and cultural resources are the basis of the attraction of a

destination and have a significant impact on the quality of life of the resident and the competitiveness of the destination. If students are not educated about sustainable hospitality and tourism practices, these competitive resources will attract tourists to their businesses / destinations and provide a quality life for their inhabitants, these strategic resources. It can be compromised by mismanagement and lead to inferior product deterioration.

To teach sustainability, students go beyond just knowing and understanding materials to learning levels where they need to apply information to complex problems and ultimately assess the sustainability of decision making. Must be (Posch & Steiner, 2006). In essence, students are not users of knowledge, but creators of knowledge. This concept of sustainability, which requires a higher level of learning, is a powerful support for teaching sustainability within the hospitality and tourism curriculum, combined with aspects of corporate responsibility and sustainability competitiveness.

Research Methodology

As mentioned previously, this research originated from a need to know the reality of hotel education in light of the dimensions of sustainable development. To achieve this objective, a self-administrated questionnaire was developed and distributed on a sample of students of the 4th level in the Hotel Studies Department during the academic year 2020/2021, from November 2020 to February 2021.

The questionnaire form consisted of three parts: the first part on demographic data for students and objective data, the second part is divided into five dimensions (The first one was about Good Hotel Education and Ensuring the

Sustainability of the Educational Process, while the 2nd Dimension was about Hotel Education, Good Health for all and the Eradication of Hunger and Poverty, the 3rd Dimension discussed the Hotel Education, Water Supply and Sustainable Clean Energy, meanwhile the 4th Dimension was about the Hotel Education and it's relation with Sustainable Economic Growth, Productive Employment, Good Employment, Training and Gender Equality. The last dimension was about Hotel Education, Responsible Consumption and Production. The third part includes strengths, weaknesses and proposals for improvement.

The instrument utilized a five-point likert-type scale (strongly agree - agree - neutral - disagree - strongly disagree) to determine the levels of agreement with statements investigated as shown in table (2).

Table2: Likert Scale

Level	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Grade	5	4	3	2	1

-The range of each level of agreement was calculated as shown in table (3).

5 – 1 /5 = 0.80

Table 3: The range of each level of agreement

Level	Range
Strongly disagree	from 1.00 to 1.80
Disagree	from 1.81 to 2.60
Neutral	from 2.61 to 3.40
Agree	from 3.41 to 4.20
Strongly agree	from 4.21 to 5.00

A sum of 120 forms was distributed among them. The number of the returned questionnaires was 119 forms (99.2%); only 116 forms (97.1 %) of the returned forms were valid for statistical analyzing.

Results and Discussions

The Students' Demographic Data

This question aims to illustrate the students' demographic data with regard to (Gender).

Table 4: The Students' Gender

Gender	Frequency	Percent
Male	85	73.3 %
Female	31	26.7 %
Total	116	100.0 %

As seen in table (4) that represented the students' demographic data. It could be noticed that, (73.3 %) of the investigated students were males while (26.7 %) were females.

Objective Data:

1. **Hearing about Term 'Sustainability''**

This question aims to identify if the investigated students heard about **term 'Sustainability''.**

Table 5: Hearing about Term 'Sustainability''

Attribute	Frequency	Percentage %
Yes	97	83.6
No	19	16.4
Total	116	100.0

From the tabulated data, it could be concluded that more than three quarters of the investigated respondents (83.6%) heard about sustainability before.

2. **Sources of Information about "Sustainability"**

The purpose of this question is to reveal the sources of information through which students know the concept of sustainability.

Table (6) Sources of Information about "Sustainability"

Attribute	Frequency	Percentage%	Rank
Faculty Members	77	66.4	2
Newspapers	12	10.3	6
Internet	78	67.2	1
Television	22	19.0	4
Work	20	17.2	5
Training and Workshops	33	28.4	3
Another Source	2	1.7	7

The data in Table No. (6) showed that the majority of students learned about the term sustainability through the Internet, which came in the first order by (67.2%), while the faculty members came in the second rank as a source for knowledge of sustainability by (66.6%), while the Training and workshops represented as a source of information by (28.4%). About (19%) also relied on television as a source of information about sustainability. On the other hand, work and newspapers were also considered as a source for some students with rates (17.2%) and (10.3%), respectively. While only (1.7%) of students relied on other sources to know about sustainability as family members

3. **Participating in Special Courses Related to the Term 'Sustainability'**

The aim of this question was to find out if the students participated in courses related to sustainability.

Table (7) Participating in Special Courses Related to the Term 'Sustainability'

Attribute	Frequency	Percentage %
Yes	9	7.8
No	107	92.2
Total	**116**	**100.0**

It is evident from the previous tabulated data that the largest percentage of students, about (92.2%), did not participate in courses related to sustainable development before, while only about (7.8%) had previously participated in courses and workshops on sustainable development.

4. Most Attractive Topics

This question aims to find out which of the topics attract the attention or interest of the student and these topics were quoted from the UNESCO Handbook, 2016 (Education for the achievement of the Sustainable Development Goals: Learning Objectives), where the results of the survey were as follows:

Table 8: Most Attractive Topics

Attribute	Frequency	%	Rank
Ending Hunger, Providing Sustainable Food and Promoting Sustainable Agriculture	80	69	1
Clean, Renewable and Sustainable Energy	68	58.6	3
Quality Education and Enhanced Learning Opportunities for all	78	67.2	2
Suitable jobs and Sustainable Economic Growth	54	46.6	5
Gender Equality in Education and	47	40.5	6

Employment			
Responsible Consumption and Production, Recycling and use	38	32.8	7
Clean Water and Personal Hygiene	60	51.7	4
Revitalizing Global Partnerships for Sustainable Development	28	24.1	8

From the previously tabulated data and according to the topics of the UNESCO Guide 2016 which are related to the education sector, the following becomes clear:

- 69% of the study sample stressed the need to pay attention to teaching and popularizing the topic of "providing sustainable food and promoting sustainable agriculture", as it is considered one of the world's priorities during the current period, which calls for the adoption of sustainable agriculture and the strengthening of cooperation with the Faculty of Agriculture, Mansoura University to activate this.
- In the second rank came the topic of "Quality Education and Enhancing Learning Opportunities for All", with a rate of 67.2%.
- With a rate of 58.6%, the students' opinions came to the publication and dissemination of clean, renewable and sustainable energy topics
- As for the issue of clean water and maintaining personal hygiene, 51.7% were unanimously agreed to generalize it.
- 46.6% of the students showed their interest in the issue of decent work and sustainable economic growth, followed by the issue of gender equality in work and education at 40.5%.

- As for the last rank from the students' point of view, the issues of responsible consumption and production, as well as the revitalization of the global partnership for sustainable development, were with rates of 32.8% and 24.1%, respectively.

Second Part: Perceptions of the Investigated Students Towards Dimensions of Education for Sustainable Development

UNESCO, as the United Nations specialized agency for education, is entrusted with leading and coordinating the Education 2030 Agenda. It also aims to achieve 17 sustainable development goals by 2030. None of the 17 Sustainable Development Goals can be achieved without education. These include an education goal, Goal 4, which aims to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. The Education 2030 Framework for Action provides the guidance needed to achieve this lofty goal and honor the ambitious commitments it entails. (UNESCO, 2016).

Therefore, the dimensions of the study targeted a set of sustainable development goals approved by UNESCO, which are closely related to the subject of the study which could be clarified in the figure (1)

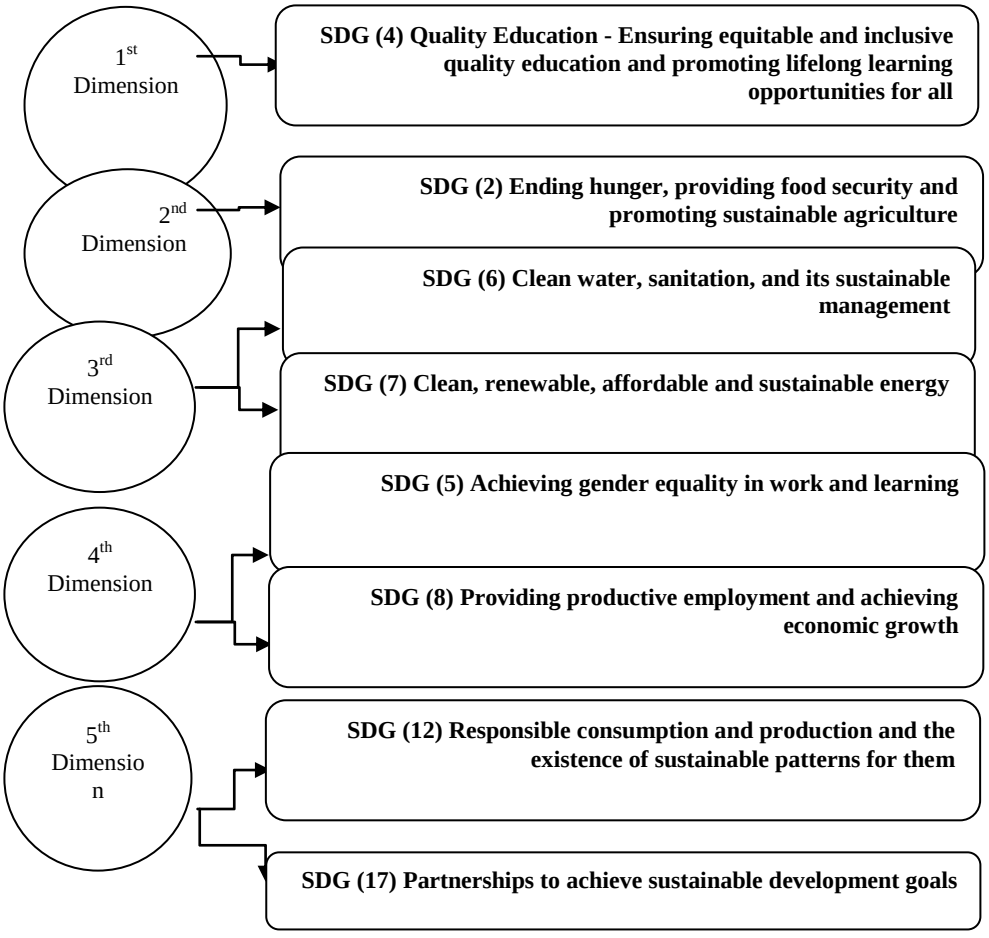
Table 9 : Cronbach's Alpha of Students' Questionnaire Dimensions

Dimension	No of Statements	Cronbach's Alpha	Internal Consistency
1st Dimension	6	.708	Acceptable
2nd Dimension	6	.700	Acceptable
3rd	6	.700	Acceptable

Dimension			
4th Dimension	6	.810	Good
5th Dimension	6	.820	Good
Total	**30**	**0.747**	**Acceptable**

A general accepted rule is that α of 0.6-0.7 indicates an acceptable level of reliability, and 0.8 or greater a very good level. However, values higher than 0.95 are not necessarily good, since they might be an indication of redundancy, (Creswell, 2013).

It is evident from the data showed in Table No. (9) that the alpha coefficient of the five dimensions of the questionnaire is more than 0.70, which is a very good indicator of the reliability of the statements of dimensions and the possibility of using these statements, as the Alpha Cronbach coefficient for the dimensions reached 0.747, which is an acceptable rate.



Data collected was presented in the following tables:

Table 10: Perceptions of the Investigated Respondents Towards the 1st Dimension (Good Hotel Education and Ensuring the Sustainability of the Educational Process)

No	Variables	Mean	St.D	Agreement Range
1	The student understands the importance of the role that lifelong teaching and learning opportunities play in improving people's lives and achieving sustainable development.	3.7414	.95207	Agree
2	The student can use participatory methods to motivate others to learn in the surrounding community.	2.7241	1.09216	Neutral
3	The student is aware of the intrinsic value of education for his personal development and is able to identify and analyze his needs and the purposes he seeks from the educational process.	3.8362	1.07091	Agree
4	The student understands the role of his personal skills in improving his life,	4.1552	1.09229	Agree

	especially in finding jobs and starting different businesses			
5	Visits to surrounding schools are organized to inform them of the importance of sustainable development	2.0517	.80049	Disagree
6	Faculty members use non-traditional learning patterns (collaborative learning - self-learning - distance learning	3.8448	1.11592	Agree
	Total Mean	**3.39**		**Neutral**

Through the data shown in Table No. (10), which contains the statements of the first dimension, which is good hotel education and ensuring the sustainability of the educational process, it becomes clear that there is a neutral perception towards the statements of that dimension with a total mean (3.39).

Where students said that through studying courses in the Hotel Studies Department, they understand to a large extent the role of their personal skills in improving their life and finding a good job opportunity with a mean (4.15).

The students also agreed on the diversity of teaching methods between self-learning, cooperative learning, and distance learning with a mean (3.84). The results also showed that the students agreed that, the student is aware of the intrinsic value of education for his personal

development and is able to identify and analyze his needs and the purposes he seeks from the educational process with a mean (3.83)

They also agreed that, through the curricula, they are aware of the role that learning opportunities play in improving the lives of individuals and achieving sustainable development with a mean (3.74).

While, they were neutral with using participatory methods to stimulate participation with the surrounding community with a mean (2.72).

On the other side, they disagreed that there were visits to the surrounding schools to inform them of the importance of sustainable development with a mean (2.05)

These results agreed with (Jurowski and Liburd ,2000) who supported the importance of teaching sustainability and its' role in the quality of education.

Table11: Perceptions of the Investigated Respondents Towards the 2nd Dimension (Hotel Education, Good Health for all and the Eradication of Hunger and Poverty)

No	Variables	Mean	St.D	Agreement Range
7	The student is aware of the need for sustainable agriculture to fight hunger, malnutrition and understanding of diets that lack basic nutrients	2.4397	.79442	Disagree
8	The courses in the	3.3362	1.02103	Neutral

	department help develop student awareness to think about how to cope with malnutrition and hunger			
9	The student learned about the diseases of malnutrition and hunger locally and globally and their main physical and psychological effects on human life and the knowledge of special groups	4.1724	.87750	Agree
10	The student can change his eating habits and food consumption pattern to contribute to the fight against hunger and promote sustainable agriculture	3.0690	.93808	Neutral
11	Trips and field trips are organized to places where sustainable agriculture is applied	2.0776	.85619	Disagree

12	Students are educated and encouraged to contribute to the service of the community and the development of the surrounding environment	2.6466	1.24589	Neutral
	Total Mean	**2.95**		**Neutral**

It is clear from the data of Table No. (11) that by studying courses of hotel studies department, students acquire some information and skills, as the students were neutral with the statements of the second dimension, which is concerned with hotel education and its role in providing good health and eliminating poverty and hunger, as the total mean of agreement with the statements (2.95) It is also clear that the students agreed that by studying the courses the following benefits and skills would be done:

Students knew diseases of malnutrition and its effects on the physical and psychological health of a person, and also learned about the nutrition of groups and special groups that need specialized nutritional care, with a mean (4.17).

Meanwhile, students were neutral with statement that the curriculum provides them with information and skills related to developing awareness and thinking in solving the problem of hunger and malnutrition, with an average of (3.33)

One of the skills students acquired was changing the wrong eating habits they had and knowing the importance

of sustainable agriculture and its role in covering the needs of individuals with a mean (3.06).

Through scientific courses, students educated about the importance of community service and the surrounding environment through the practical part of some courses such as food and beverage quality control, where the quality of food and beverages is assessed in some restaurants and hospitals by working groups of students, with a mean (2.64).

On the other hand, in terms of the students ’awareness of the necessity of sustainable agriculture to combat hunger, as well as the understanding of food systems that lack nutrients, the students disagreed that they acquire this skill by studying the courses in the department with a mean (2.43).

Also, the students' opinion was disagreeing regarding organizing trips and tours to places where sustainable agriculture is being applied, with a mean (2.07), which increases the need to organize visits to factories and farms that apply the principle of sustainability.

These results agreed with Al-Naqbi and Alshannag (2018) who stated relevant skills and knowledge which cover economic social, and environmental dimensions of SD are the basis for students to acquire the fundamental concepts of SD.

Table 12: Perceptions of the Investigated Respondents Towards the 3rd Dimension (Hotel Education, Water Supply and Sustainable Clean Energy)

No	Variables	Mean	St.D	Agreement Range
13	The student	2.8879	1.05312	Neutral

	understands the danger of water pollution and the consequences of this			
14	The student is aware of the importance and methods of recycling sewage in the hotel sector and its use in the irrigation of fruit less crops	3.1638	1.27138	Neutral
15	The educational kitchen has guidelines of how to rationalize the consumption of water and electricity and the need to keep and maintain it	2.9655	1.03782	Neutral
16	The student learns about the most important green environmental practices used in the hotel sector	3.8190	.93808	Agree
17	Solar energy is used in the educational kitchen and educational restaurant in the department	1.8017	.80455	Strongly Disagree
18	The student is	2.8017	.79367	Neutral

	aware of the impact of the hotel sector on the environment and how to reduce the risks of the sector			
	Total Mean	**2.90**		**Neutral**

By reviewing the statistical data shown in Table No. (12), we can see a neutral perception towards the statements of the third dimension, which relates to hotel education and its relation and role in providing sustainable water and clean energy with a total mean (2.90).

We also could find that students agreed that through studying the academic curricula, students learned about the most important green environmental practices used in the hotel sector with a mean (3.81).

The results also showed that the students 'opinions were neutral towards students' awareness of the importance and methods of recycling wastewater in the hotel sector and using it in irrigating fruitless crops in restaurants, hotels, and in the faculty, where the mean was (3.16).

Among the neutral points of work in the department is the availability of instructional panels on how to rationalize consumption of water and electricity and the need to maintain them, as well as personal hygiene, with a mean (2.96).

Regarding students' understanding of the seriousness of water pollution and its effects, and the impact of the hotel sector on the environment and the means to reduce environmental risks resulting from hotel work, the students were also neutral that they became aware

of this through the department's curriculum with means (2.88) and (2.80), respectively.

As for the use of solar energy in the educational kitchen and the educational restaurant, the students did not agree on this through the survey, with a mean (1.80), which calls for activating the use of solar energy in order to rationalize consumption and reduce the negative impact on the environment.

These results agreed with (Jeronen, et al., 2017) who asserted that Biodiversity, solar energy, recycling, sustainable use of resources, health and personal hygiene, are essential elements to be considered for sustainable society

Table 13: Perceptions of the Investigated Respondents Towards the 4th Dimension (Hotel Education, Sustainable Economic Growth, Productive Employment, Good Employment, Training and Gender Equality)

No	Variables	Mean	St.D	Agreement Range
19	The student understands the concepts of economic growth and unemployment and its rates and its damage to society	3.6552	1.15045	Agree
20	Training opportunities are provided with material return for	3.8879	1.22134	Agree

	students during the various educational years			
21	Workshops and seminars are held for the hotel sector and work on it during the various educational years	3.3362	1.18647	Neutral
22	Both boys and girls enjoy the same attention and training opportunities during the different educational years	3.1638	1.35739	Neutral
23	The department holds a day or forum for employment and hosts a number of industrialists	2.8707	1.27539	Neutral
24	Various community parties contribute to providing training and employment opportunities for students	3.2672	1.26049	Neutral
	Total Mean	**3.36**		**Neutral**

It is evident from the statistical data in Table No. (13) that the students 'perceptions are neutral towards the statements of the fourth dimension, which relates to hotel education and its relationship to productive employment,

providing good job and training opportunities, as well as gender equality, where the results were as follows:

The students agreed that training opportunities are provided for them with a financial return during the different academic years in the different hotel sectors according to the study regulations, where students receive training during the summer semester of the first three years in hotels, restaurants, and resorts, the students receive a training certificate which is added to the CV after graduation, which increases their skills and qualifications to enter the labor market, this came with a mean(3.88)

The academic courses in the department explain and clarify the concepts of economic growth and unemployment and their damages to society and the role of the hotel sector in the national economy of countries and the provision of job opportunities, with a mean (3.65)

Concerning holding workshops and seminars for the hotel sector, the students 'opinion was neutral with a mean (3.33). Some seminars and workshops related to the hotel sector, as well as green environmental practices in hotels and restaurants, were held.

The opinion was also neutral regarding the contribution of different community parties in providing training and job opportunities for students with a mean (3.26), which needs to increase communication with the local community such as restaurants and hotels to increase job opportunities for students after graduation.

It is also clear that the opinion is neutral regarding male and female students enjoying equal opportunities for training during academic years with a mean (3.16).this results disagreed with the study of (Mansour,Neveen and Abd El-Kafy, Jermien, 2018) which noted that (5.7%) of

students considered gender equality as important sustainable topics.

Finally, with regard to holding an employment forum or an employment day and hosting a number of industrialists to provide job opportunities for students and graduates, the opinion was neutral with a mean (2.87), which calls for holding that forum annually to provide job opportunities for all graduates as well as communication during the academic year with the labor market through the graduate follow-up unit in the faculty and gathering a database of the available jobs, as well as the capabilities of graduates and continuous communication with them, which contributes to providing job opportunities.

Table 14: Perceptions of the Investigated Respondents Towards the 5th Dimension (Hotel Education, Responsible Consumption and Production)

No	Variables	Mean	St.D	Agreement Range
25	Courses include ways to produce food and beverages in sustainable ways and with the techniques used	2.4310	.83639	Disagree
26	The student knows the sustainable practices in food consumption from rationalizing consumption as well	2.7414	.72377	Neutral

	as recycling food residues			
27	Enabling the student to feel responsible towards the environment and society through consumer and productive behaviors	3.4483	.96319	Agree
28	The student understands the methods of producing and managing waste by reducing the production of waste and recycling and reusing waste	2.2500	.78988	Disagree
29	There is a special unit for the production and selling of various food products	2.5517	1.30780	Disagree
30	Agriculture is relied upon within the faculty building to provide the educational kitchen with some materials for practical courses	2.1121	1.18521	Disagree
	Total Mean	**2.58**		**Disagree**

The result of the statistical data in Table No. (14) related to the last dimension, which is related to hotel education and responsible consumption and production were as follows:

The students agreed that the academic courses increase the sense of responsibility towards the local community through consumer and productive behaviors, with a mean (3.44).

Meanwhile, the students were neutral with the statement that they were able to know the sustainable practices in food consumption from the rationalization of consumption as well as recycling of food leftovers in hotels and restaurants with a mean (2.74)

On the other hand, the students did not agree on the existence of a special unit for the production and sale of various food products with a mean (2.55), knowing the existence of this unit, but it has not been activated, which requires the administration and the hotel studies department to activate its role in order to act as a source to improve the financial capabilities and provide products that produced by students of the department.

They also disagreed that the courses included methods of producing food and beverages in sustainable and modern ways with a mean (2.43)

Regarding the understanding of the methods of waste recycling and reusing, they disagreed with that statement with a mean (2.25)

They did not agree with the faculty's reliance on agriculture inside the building to supply the educational kitchen with some of the food supplies needed for practical studies with a mean (2.11). This calls for working on exploiting the faculty's garden to produce some food items

needed for the practical side in the department, which reduces costs and improves the quality of products. It also increases students' skills in sustainable agriculture.

This finding agreed with the results of Zainordin et al.'s (2017) study, which noted that the awareness of SD among Malaysian students was not promising due to lack of exposure and emphasis on SD.

On the other side, disagreed with the study of (Balamuralithara Balakrishnan, Fumihiko Tochinai & Hidekazu Kanemitsu ,2019) which founded that the output of the respondents had positive perceptions and attitudes towards all sustainability dimensions-environmental, economic, and social.

Third Part: Strength, Weakness Points and Improvement Suggestions

Strength and Weakness Points

A. Strength Point

- The competence of the faculty members and their assistants in the department and their experiences in the hotel field
- Summer training has a role in enabling students to know what the hospitality sector is and raise their capabilities
- Many students are members of the Egyptian Chefs Association who are certified as professional chefs

B. Weak Points

- The number of students exceeds the space of the classes

- There is no chef and restaurant manager to teach the student the practical side of the study courses
- There is no regular follow-up to the summer training process
- There are not enough materials for the practical side of the courses
- The courses are outdated compared to the requirements of the labor market
- Educational trips to hotels are not organized during the semester and are limited to summer training only
- The study is limited to the Arabic language for the specialized courses of the department
- There are no cultivated areas to produce raw materials for practical courses in the department, and there are few green spaces in the faculty
- The lack of sufficient new technological capabilities for all students to keep pace with e-learning
- Decreased numbers of faculty members and their assistants compared to the number of students

C. Improvement Suggestions

- Concluding a cooperation protocol with hotels to provide continuous training and work opportunities for students and graduates
- Using a variety of teaching methods more than traditional ones in line with the information revolution
- Activating the exchange education system with the institutions of the hospitality industry

- Make the first year a general preparation in which students study all disciplines, and from the second year, they specialize in one field only (Kitchen/Restaurant/Reception /Housekeeping).
- Conducting monthly meetings with the students of the department to present their ideas
- Offer a discounted membership for students interested in the Hotel Studies Department of the Egyptian Chefs Association
- Organizing a forum that brings together academics and professionals in the hotel sector to exchange experiences
- Organizing trips to exhibitions specialized in the field of hospitality

Conclusion

As a final conclusion, there is a neutral perception towards the concept of hotel education for sustainable development. The results concluded that the fourth goal of sustainable development, which is related to the educational process itself, came in the first rank, and in the second rank came the goals (5.8), which are related to the aspect and the economic role, as well as providing job opportunities for both genders through hotel education, while the second dimension came in the third rank, which is It is related to hotel education and its role in providing a high nutritional health condition and eliminating hunger. As for the fourth rank, the dimensions (6.7) came and it relates to the role of hotel education and its relationship to clean sustainable energy as well as water , On the other hand, opinions were negative towards achieving the goals (12,17) for sustainable

development, and they are related to responsible consumption and production. This calls for exploiting strengths and overcoming weaknesses through the work of analyzing the internal and external environment in the Department of Hotel Studies and developing an appropriate strategic plan in pursuit of the three dimensions of sustainable development (economically, environmentally, and socially) this is clarified in the following figure (2).

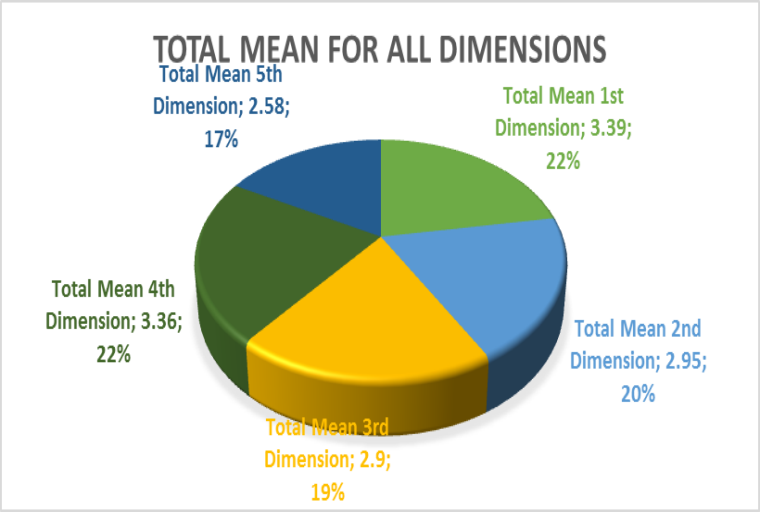


Figure 2: Total Mean of All Research Dimensions

Recommendations

Upon the previously mentioned results, findings and discussions of the research, the following recommendations were developed:

1. Linking the vision, mission, and goals of the faculty and its counterparts to the

university, so that the college adopts the vision of 2030 for sustainable development

2. Benefiting from the grants offered by Arab and foreign countries and organizations like UNESCO for the exchange of students and faculty members to increase efficiency and activate the exchange of cultures in order to achieve the social and cultural dimension of sustainable development in hotel education.
3. Attempting to link the department and the community parties in introductory meetings and a periodic employment forum, which ensures the sustainability of training and employment for all graduates and students.
4. Updating academic curricula to meet the needs of the labor market in light of the sustainable development goals, Vision 2030, and the standards of the National Authority for Quality Assurance and Accreditation in Egypt.
5. Using solar energy in the educational kitchen and educational restaurant as a sustainable environmental aspect as clean, renewable energy, with long-term economic feasibility.
6. Activating the cultivation of roofs to provide raw materials for the practical side of the department's decisions and to achieve an economic return through selling the department's products in the hotel products sale unit in the college.
7. Attempting to establish a special unit for hotel education for sustainable development, which

monitors all problems, analyzes proposals and presents solutions to them.

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