Evaluating of Food and Beverage Courses in Higher Private Tourism and Hotels Institutes in Alexandria: The Students' Perspective

Youssef Agwa[1]   Waeal Aziz[2]   Gamal Khalifa[3]
[1]PhD Researcher, Faculty of Tourism and Hotels, Fayoum University
[2]Faculty of Tourism and Hotels, Mansoura University
[3]Faculty of Tourism and Hotels, Fayoum University

Abstract

Aim: This study aimed to assess the students' perception on the food and beverage (F&B) courses in the higher private tourism and hotels institutes in Alexandria.

Methodology: This quantitative study was specifically, applied into four high institutes of tourism and hotels located in Alexandria, where 484 questionnaire forms were distributed among the second year students. Data obtained were statistically analysed using SPSS. A one-way ANOVA between subjects was used to compare the effect of the institutes on the different aspects of the evaluation of F&B courses.

Findings: There is a significant effect of the institutes policy on the aspects of F&B evaluation process at the $p < .05$ level for the three main issues of F&B courses. The first effect was on the students' criteria concern F&B $[F(3, 470) = 31.09, p = 0.000]$, the second $[F(3, 470) = 24.63, p = 0.000]$; and finally in the case of F&B curriculum $[F(3, 470) = 25.805, p = 0.000]$. The implications, limitations, and recommendations for academia and industry were considered.

Keywords: Hospitality and tourism education, food and beverage, methods of teaching, evaluation, students.

Introduction

Food and beverage (F&B) management education is essential to hospitality, and arguably tourism and event, management students. Higher educators are challenged in resourcing various approaches. As many students have experiences as F&B workers and/or consumers, reflective assessment leveraging these experiences may be an effective learning tool (Hec, 2016). Since the provision of food and beverage is a defining feature of tourism industry and all tourists need safe and healthy food and beverage, the industry needs highly equipped food service and management of human resources (Melia, 2011).) Therefore, food and beverage courses in the hotel studies curriculum are of particular importance and must be adequately tailored and based on scientific principles to provide graduates with the industry required knowledge, skills and competences (Ko, 2010).

In the industry context, Food and Beverage Department (F&B) is responsible for maintaining high quality of food and service, food costing, managing restaurants, bars, etc. Food and Beverage Service is the service of Food made in the Kitchen and Drinks prepared in the Bar to the Customers (Guest) at the Food & Beverage premises, which can be: Restaurants, Bars, Hotels, Airlines, Cruise Ships, Trains, Companies, Schools, Colleges, Hospitals, Prisons, Takeaway, etc (Robinson, et al., 2014).

Furthermore, hospitality education requires: staff, students, buildings, library, resources and laboratories, or kitchens, restaurants and other specialist accommodation facilities. Problems encountered by universities include a lack of sufficient finance, shortage of trained staff and the heterogeneity of the student population (Abdel Hamid, 2010). Inevitably different students show varying abilities to adapt to the subject matter and academic content.

As well as, Using student reflective journals from an Australian institution's undergraduate F&B management cohort, this article reports the process, effectiveness, and challenges associated with reflective learning.: students demonstrated comprehension for a theoretical topic by effectively interpreting a past experience; they applied this greater level of

theoretical comprehension to further evaluate that past experience and challenge assumptions; and they leveraged increased theoretical comprehension and the application and evaluative processes of past experiences to effect reflective thinking. Findings suggest students from Confucian heritage backgrounds require additional tutelage in attempting reflective tasks. Implications for educators are discussed (Hewedi et al., 1998).

One of the major challenges faced by the industry at present is of staff turnover. The need is for a team of people who can dedicate their talent in the industry and to enjoy their work (Robinson, et al., 2014). Food and beverage servers are employed in restaurants, coffee shops, bars, clubs, hotels and other retail eating and drinking establishments. There are more part-time positions in this occupation than there are in most occupations, and most food and beverage servers are young. Experienced food and beverage servers can move to better paying jobs in larger and more formal food establishments (Horng et al., 2009).

Food and beverage servers' duties vary considerably from one type of establishment to another. In fast food outlets, they often work behind counters and use computerized systems to take orders and tabulate bills. In coffee shops and cocktail lounges, they provide quick and efficient service for customers seated at tables. In formal dining establishments, they carefully observe established rules of service and etiquette, and pace the meal according to customer preference.

In general, however, food and beverage servers (Robinson, et al., 2014):

- prepare tables or counters for meals
- stock the service area with supplies (for example, coffee, glassware)
- greet customers, present menus and help customers select menu items
- inform customers about daily specials
- record orders and place them with the kitchen and bar
- pick up and serve orders
- check that customers are enjoying their meals and correct any problems
- suggest and serve desserts and beverages
- clean and reset tables
- tabulate and present bills for payment.

Attributes of a professional food and beverage server:

Food and beverage servers need the following characteristics:

- the ability to serve customers cheerfully, courteously and efficiently
- good organization and multi-tasking skills
- good health
- good grooming
- the ability to work as part of a team
- the ability to work with little supervision
- good verbal communication skills and sensitivity to customer needs
- the ability to work calmly under pressure.

Other requirements depend on the environment in which the server works. For example, serving in a coffee shop or cocktail lounge requires the ability to remember many orders and move very quickly.

Food and beverage servers should enjoy having clear rules and organized methods, working with people, and working with tools and equipment.

Food and beverage servers who serve liquor must be at least 18 years of age. In formal dining rooms, food and beverage servers also must (Hjalager, 2003; Roney and Oztin, 2007):

- know proper food service etiquette

- use the correct terminology and be able to answer questions about wines and other beverages be able to prepare tableside dishes (for example, flambe) at the customer's table if required.

Currently, students enrolled in higher education hospitality courses must participate in a curriculum that over emphasizes theoretical discussions, but in the quest not only for knowledge of the what, but for an understanding of the why, an appreciation of theory should be gleaned through applied learning resulting in the development of students' abilities to resolve real-world problems (Horng et al., 2009). Thus this study is here to assess the students' perspective on F&B courses.

Methodology
The purpose of this study is to address how high private tourism and hotels institutes in Alexandria in Egypt assess and evaluate the food and beverage related courses based on the main elements of the educational process. To that end, this study is a quantitative in its design and nature. Thus, the self-administrative questionnaire was used to evaluate the students' perspective with regarding the evaluation of the different aspects of two F&B courses: culinary art and food service. The data collected between May 2016 and July 2016. It is important to be mentioned that questionnaire was closed in its questions type. Thus the questionnaire forms were distributed then recollected after a month.

The study targeted four institutes in Alexandria, namely: Higher Institute for Tourism and Hotels (EGOTH), Higher Institute for Tourism and Hotels and Computer Seyouf, Higher Institute for Tourism and Hotels King Mariot, and Higher Institute for Tourism and Hotels and Restoration of Monuments of Abu Qir. The total number of students in the chosen four institutes was: 1416 students during the scholar year (2015-2016). This total was directly obtained via contacting with students' affair departments. By applying the Stephen Thampson's previous formula the total targeted sample of students is 242 students per each course. This sample is described as quota sample, where each quota of the population is presented by its percent in the total population. In the case of the sample of food and beverages related courses: although hotel studies curricula have many F&B based or related courses (e.g. menu planning, food production, food safety, public health, and etc.), this study purposively chose two F&B main courses: culinary art and food service. These two courses were purposively chosen as they have practical sessions and they are considering the main course of F&B related courses in all hotel studies departments. Obtained data was then analysed utilizing procedures of the SPSS (Statistical Package for Social Science) version 20.0 for windows. Frequencies, means, standard deviation, percentages and cross-tabulation were calculated. The statistical significance level was set at $p < 0.05$ which corresponds to the significance levels adopted in similar studies.

Results and discussion
Response rate
The targeted respondents were 242 per each course within the four different tourism and hotels institutes, with a very high general response rate (97.7% in the case of culinary art course and, 98.3% in the case of foodservice course/restaurants' service). Within the response rate from the four institutes and the two F&B courses, it can be noted that the relatively lowest response rate was 88.8% in the case of the culinary art from the Higher Institute for Tourism and Hotels King Mariot. However, this rate seems to very high and reasonable (97.7%) comparing to the rates of similar studies particularly, within hotels and tourism education. This response rate support and lead to analysis they obtained data statistically. This high response rate can be justified as the researcher got high support from all the four institutes and staff members who teaching F&B courses.

Demographic profiles of institutes and students

Table (1) summaries the demographics data of the students and the four high institutes participated in this study according to each category of hotels. The analysis revealed that all respondents are Egyptian students who currently enrolled in one of the four high institutes of hotels and tourism in Alexandria. Since the sample of the study is quota sample, it can be noted that the majority of the respondents were from Higher Institute for Tourism and Hotels (EGOTH) (n= 171; 36%) followed by Higher Institute for Tourism and Hotels and Restoration of Monuments of Abu Qir (n=30.7; 30.7). With regard to the gender of respondents, more than three quarters (75.7%) of them were males and females were about the quarter (24.3%). The distribution of gender against to the institutes and F&B courses are notable from Table (1).

Table 1: Demographic characteristics of students within the different institutes

Demograph characteristi	Subcategory	Descriptive statistics					
		Culinary art		Food service		Entire sample	
		F	%	F	%	F	%
1.Gender	Male	178	75.4	181	76.1	359	75.7
	Female	58	24.6	57	23.9	115	24.3
	Total	236	100	238	100	474	100
2 Institute	1.Higher Institute for Tourism and Hotels (EGOTH)	85	36.0	86	36.1	171	36.1
	2. Higher Institute for Tourism and Hotels and Computer Seyouf	38	16.1	38	16.0	76	16.0
	3. Higher Institute for Tourism and Hotels King Mariot	41	17.4	41	17.2	82	17.2
	4.Higher Institute for Tourism and Hotels and Restoration of Monuments of Abu Qir	72	30.5	73	30.7	145	30.7
	Total	236	100	238	100	474	100

4.3The descriptive and inferential statistics

This section of the questionnaire analysis was considering the descriptive and inferential statistics of the three main parts of the educational process: the students, the teaching staff and F&B curriculum. The first part of the students' questionnaire addressed four items related to the students' enrolment in the hotel studies department and some issues relating to F& B courses within this specialization in the high tourism and hotel institutes (see Table 2).

Table 2: The descriptive and inferential statistics of students' related criteria

The student related criteria	Course	Descriptive statistics														
		SD		DA		N		A		SA		M	S.D	T	df	Sgn.*
		F	%	F	%	F	%	F	%	F	%					
1. There are clear and fair criteria	Culinary Art	8	3.4	19	8.1	47	19.9	86	36.4	76	32	3.8	1.0	-.86	472	.38
	F&B service	14	5.9	17	7.1	48	20.2	89	37.4	70	29	3.77	1.12			
2. Students	Culinary Art	10	4.2	19	8.1	51	21.6	92	39	64	27	3.7	1.0	-.14	2	.88

of Hotels department are	F&B service	13	5.5	17	7.1	56	23.5	82	34.5	70	29	3.75	1.11			
3.Students of Hotels departme nt are	Culinary Art	9	3.8	7	3.0	45	19	95	40.3	80	33	3.9	.99	-.58	472	.56
	F&B service	8	3.4	14	5.9	48	20.2	87	36.6	81	34	3.92	1.03			
4.Students of Hotels departme nt wear appropri	Culinar y Art	6	2.5	8	3.4	29	12.3	81	34.3	112	47.5	4.2	.96	-.38	472	.71
	F&B Strong ly service	9	3.8	10	4.2	28	11.8	75	31.5	116	48	4.17	1.04			

Note: SD= Disagree; DA=Disagree; N= Neutral; SA= Strongly Agree

The results revealed that students in the case of the culinary art were   generally agreed (GM=3.9) on the four- listed items. The agreement level ranged from 'agree' (M= 3.7) 'students of Hotels Department are obliged to attend all the theoretical lectures related to F& B courses.' to 'agree' (M=4.2) on 'Students of Hotels department wear appropriate dress (uniform) during the practical and training sections of F& B.'

Similarly with small difference, in the case of F&B service course, the students generally agreed (GM=3.9) on the four- listed items. The levels of agreement ranged from (agree: M=3.75): 'Students of Hotels department are obliged to attend all the theoretical lectures related to F& B courses.' to 'agree: M=4.17': 'Students of Hotels department wear appropriate dress (uniform) during the practical and training sections of F& B.'.

  In addition, and inferentially, an independent T test was run to determine if a difference existed between the mean the perception of the students to the issues related to them with regard to both courses: Culinary art and restaurants' service. There was no statistically significant difference between the mean f overall students related criteria (t=1.56, P>0.05). As well as when comparing means within the components of the students' criteria (n=4), there was no statistically significant differences (See Table 2).

Table 3: The inferential statistics of gender regarding students' criteria

The student related criteria	Gender	N	Mean	Std. D	T	df	Sgn.**
1. There are clear and fair criteria for enrolling in hotels department.	Male	359	3.79	1.086	-1.087	472	.277
	Female	115	3.91	1.121			
2. Students of Hotels department are obliged to attend all the theoretical lectures related to F& B courses.	Male	359	3.64	1.109	-4.483	220.3	.00**
	Female	115	4.12	.956			
3.Students of Hotels department are obliged to attend all the practical and training sections of F& B.	Male	359	3.90	1.020	.823	472	.07
	Female	115	4.10	1.000			

4.Students of Hotels department wear appropriate dress (uniform) during the practical and training sections of F& B.	Male	359	4.09	1.040	- 4.487	2487	.00**
	Female	115	4.50	.799			

Furthermore, the independent T test analysis revealed that there were statistically significant differences between males and female concern the students' criteria concern both F&B related courses. Specifically, Females students (n=115,) were significantly different from males (n=359, M=3.64) on the obligation of 'Students of Hotels department are obliged to attend all the theoretical lectures related to F& B courses' (M= 4.12, t=-4.483, P< 0.01); 'Students of Hotels department wear appropriate dress (uniform) during the practical and training sections of F& B.' (M= 4.5, t=-4.487, P< 0.01), table (3). In sum, while there was no significant difference between the two courses of F&B (Culinary art and Restaurant's service), the comparing of means using the independent T test revealed there were some differences between female and males with regard to some F&B courses.

The teaching staff related criteria
The second part of the students' questionnaire addressed seven items related to the role of teaching staff (academic and professionals or academic and practical) in the hotel studies department concerning F& B courses (Culinary art and Restaurant's service) within this specialization in the high tourism and hotel institutes. The results revealed that students in the case of the culinary art were generally agreed (GM=3.78) on the seven listed variables concern the role of the teaching staff in culinary art course. The agreement level ranged from 'agree' (M= 3.56) 'The members of the teaching staff of F&B need to develop their skills in respect of decisions of the food and drinks.' to 'agree' (M=3.94) on 'the members of the teaching staff of F&B are high qualified in the practical and technical aspects of food and beverages.'
When it comes to the case of F&B service or restaurants' service course, the students generally agreed (GM=3.79) on the seven listed variables concern the role of the teaching staff in F&B service or restaurants' service course. The levels of agreement ranged from (agree: M=3.75): 'Students of Hotels department are obliged to attend all the theoretical lectures related to F& B courses.' to 'agree: M=4.17': 'Students of Hotels department wear appropriate dress (uniform) during the practical and training sections of F& B'.
In addition and inferentially, an independent t test was run to determine if a difference existed between the mean the perception of the students to the issues related to teaching staff with regard to both courses: Culinary art and restaurants' service. There was no statistically significant difference between the mean f overall students related criteria (t=1.56, P>0.05). As well as when comparing means within the components of the construct (n=7), there was no statistically significant differences (See Table 4).

Table 4: The descriptive and inferential statistics of teaching staff related criteria

Teaching staff related criteria	Course	Descriptive statistics										M	S.D	T	df	Sgn.
		SD		DA		N		A		SA						
		F	%	F	%	F	%	F	%	F	%					
1.The members of the teaching staff of F&B are high qualified in the theoretical and academic aspects of food and beverages.	Culinary Art	16	6.8	13	5.5	47	19.9	77	32.6	83	35.2	3.84	1.1	-.217	472	.82
	F&B service	20	8.4	14	5.9	41	17.2	78	32.8	85	35.7	3.82	1.22			
2. The members of the teaching staff of F&B are high qualified in the practical and technical aspects of food and beverages.	Culinary Art	9	3.8	15	6.4	45	19.1	80	33.9	87	36.9	3.94	1.07	1.09	472	.276
	F&B service	5	2.1	15	6.3	46	19.3	71	29.8	101	42.4	4.04	1.03			
3. The members of the teaching staff of F&B are specialized in food and beverages.	Culinary Art	11	4.7	12	5.1	47	19.9	88	37.3	78	33.1	3.89	1.07	.389	472	.69
	F&B service	12	5.0	10	4.2	38	16.0	101	42.4	77	32.4	3.93	1.05			
4. The members of the teaching staff of F&B are familiar with the latest research in the field of F&B and have the research in this area.	Culinary Art	17	7.2	13	5.5	51	21.6	85	36.0	70	29.7	3.75	1.15	-.66	472	.50
	F&B service	16	6.7	17	7.1	55	23.1	88	37.0	62	26.1	3.68	1.13			
5. The members of the teaching staff of F&B need to develop their skills in respect of decisions of the food and drinks.	Culinary Art	22	9.3	27	11.4	44	18.6	84	35.6	59	25.0	3.56	1.24	.287	472	.774
	F&B service	25	10.5	22	9.2	44	18.5	82	34.5	65	27.3	3.59	1.26			
6. The members of the teaching staff of F&B are treated all of the students on the same footing and with the same method without discrimination.	Culinary Art	15	6.4	24	10.2	45	19.1	75	31.8	77	32.6	3.74	1.19	.134	472	.893
	F&B service	12	5.0	30	12.6	45	18.9	68	28.6	83	34.9	3.76	1.2			
7.The members of the teaching staff of F&B meet the students according to schedules of specific dates.	Culinary Art	16	6.8	14	5.9	54	22.9	85	36.0	67	28.4	3.73	1.13	.181	472	.856
	F&B service	14	5.9	18	7.6	56	23.5	75	31.5	75	31.5	3.75	1.2			

Note: SD=Strongly Disagree; DA=Disagree; N= Neutral; SA= Strongly Agree

Furthermore, the independent T test analysis revealed that there were statistically significant differences between males and female concern the teaching staff criteria concern both F&B related courses. Specifically, Females students (n=115,) were significantly different from males (n=359, M=3.64) on the obligation of 'the members of the teaching staff of F&B are treated all of the students on the same footing and with the same method without discrimination.' (M= 4.10, t=-3.704, P< 0.001) and 'The members of the teaching staff of F&B meet the students according to schedules of specific dates.' (M= 4.05, t=-3.37 P< 0.001).

Table 5: The inferential and statistics of gender regarding the teaching staff criteria

The teaching staff related criteria	Gender	N	Mean	Std. D	T	df	Sgn.**
1. The members of the teaching staff of F&B are high qualified in the theoretical and academic aspects of food and beverages.	Male	359	3.81	1.177	-.708	472	.479
	Female	115	3.90	1.245			
2. The members of the teaching staff of F&B are high qualified in the practical and technical aspects of food and beverages.	Male	359	3.95	1.011	-1.345	472	.179
	Female	115	4.10	1.173			
3. The members of the teaching staff of F&B are specialized in food and beverages.	Male	359	3.86	1.042	.-1.767	472	.07
	Female	115	4.06	1.103			
4. The members of the teaching staff of F&B are familiar with the latest research in the field of food and drinks and have the research in this area.	Male	359	3.66	1.129	-1.90	472	.06
	Female	115	3.90	1.173			
5. The members of the teaching staff of F&B need to develop their skills in respect of decisions of the food and drinks.	Male	359	3.50	1.216	-2.166	472	.031
	Female	115	3.79	1.347			
6. The members of the teaching staff of F&B are treated all of the students on the same footing and with the same method without discrimination.	Male	359	3.64	1.202	-3.704	472	.000**
	Female	115	4.10	1.119			
7.The members of the teaching staff of F&B meet the students according to schedules of specific dates	Male	359	3.64	1.132	-3.37	472	.001**
	Female	115	4.05	1.130			

In sum, while there was no significant difference between the two courses of F&B (Culinary art and Restaurant's service), the comparing of means using the independent T test revealed there were some differences between female and males' students with regard to some F&B teaching staff.

F&B Curriculum related criteria

The final part of the students' questionnaire addressed six items related to the F&B Curriculum itself (Culinary art and Restaurant's service: theoretical and practical) with focus on its evaluation by the hotel studies department concerning (within this specialization in the high tourism and hotel institutes. The results in table 6 revealed that students in the case of the culinary art were   generally agreed (GM=3.89) on the six listed variables concern the criteria of culinary art course. The agreement level ranged from 'agree' (M= 3.75) 'The members of the teaching staff of F&B need to develop their skills in respect of decisions of the food and drinks.' to 'agree' (M=3.94) on 'the members of the teaching staff of F&B are high qualified in the practical and technical aspects of food and beverages.'

When it comes to the case of F&B service or restaurants' service course, the students generally agreed (GM=3.17) on the seven listed variables concern the role of the teaching staff in F&B service course. The levels of agreement ranged from (agree: M=3.62): 'Consistent with the decisions of the food and beverage with the changes and recent' to 'agree: M=3.96': 'F&B courses should develop and improve the technical and sentimental skills of the students rather than the memorizing and recalls of the facts.'

Table 6: The descriptive and inferential statistics of F&B Curriculum related criteria

F&B Curriculum related criteria	Course	M	S.D	T	df		Sgn.*
1. At the beginning of each semester. The members of the teaching staff of the displays the contents of the	Culinary Art	30.9	3.80	1.17	1.56	472	.119
	F&B	35.3	3.9	1.01			
2. Consistent with the decisions of the food and beverage with the changes and recent developments in the hotel.	Culinary Art	28.8	3.75	1.12	-1.215	472	.225
	F&B service	27.7	3.62	1.2			
3.The curricula of food and beverages must be adapted or modified M permanently according to the needs of	Culinary Art	33.5	3.86	1.11	-1.25	472	.212
	F&B	26.5	3.7	1.2			
4. The curricula of food and beverages must be taught in English to raise the efficiency of graduate and improve	Culinary Art	37.3	3.95	1.07	-1.25	472	.212
	F&B	37.4	3.8	1.2			
5.F&B courses should develop and improve the technical and sentimental skills of the students rather than the	Culinary Art	42.4	4.01	1.04	-1.11	472	.265
	F&B	40.3	3.9	1.2			
6. F&B courses play an essential role in the further refinement of the skills required in the labour market.	Culinary Art	40.3	3.97	1.1	-.56	472	.576
	F&B service	37.8	3.93	1.17			

In addition and inferentially, an independent t test was run to determine if a difference existed between the mean the perception of the students to the issues related to F&B Curriculum related criteria with regard to both courses: Culinary art and restaurants' service. There was no statistically significant difference between the mean f overall students related criteria (t=3.85, P>0.05). As well as when comparing means within the components of the construct (n=6), there was no statistically significant differences (See Table 8).

Furthermore, the independent T test analysis revealed that there were statistically significant differences between males and female concern the teaching staff criteria concern both F&B related courses. Specifically, Females students (n=115,) were significantly different from males (n=359, M=3.79) on the 'At the beginning of each semester. The members of the teaching staff of the displays the contents of the described the headquarters of the F&B.' (M= 4.17, t=-3.17, P< 0.01); 'Consistent with the decisions of the food and beverage with the changes and recent developments in the hotel.' (M= 3.99, t= -3.18 P< 0.01); 'the curricula of food and beverages must be adapted or modified M permanently according to the needs of the labor market' (M= 3.97, t= .209 P< 0.01); and finally, there were significant differences on 'F&B courses play an essential role in the further refinement of the skills required in the labor market.' (M= 4.23, t=. -3.61 P< 0.01).

Table (8): The inferential and statistics of gender regarding the teaching staff criteria

F&B curricula related criteria	Gender	N	Mean	Std. D	T	df	Sgn.**
1. At the beginning of each semester. The members of the teaching staff of the displays the contents of the described the headquarters of the F&B.	Male	359	3.79	1.132	-3.17	472	.002**
	Female	115	4.17	1.067			
2. Consistent with the decisions of the food and beverage with the changes and recent developments in the hotel.	Male	359	3.59	1.171	-3.18	472	002**
	Female	115	3.99	1.188			
3. The curricula of food and beverages must be adapted or modified M permanently according to the needs of the labor market.	Male	359	3.73	1.104	.209	472	.045**
	Female	115	3.97	1.173			
4.The curricula of food and beverages must be taught in English to raise the efficiency of graduate and improve their skills	Male	359	3.85	1.162	-1.27	472	.202
	Female	115	4.01	1.080			
5. F&B courses should Develop and improve the technical and sentimental skills of the students rather than the memorizing and recalls of the facts.	Male	359	3.93	1.065	-1.88	472	.06
	Female	115	4.15	1.045			
6. F&B courses play an essential role in the further refinement of the skills required in the labor market.	Male	359	3.85	1.197	-3.61	250	.000**
	Female	115	4.23	.911			

In sum, while there were no significant difference between the two courses of F&B (Culinary art and Restaurant's service), the comparing of means using the independent T test   revealed there were some differences between female and males students with regard to some F&B teaching staff.

ANOVA of different hotels institutes and F&B courses

The one-way analysis of variance (ANOVA) is used to determine whether there are any statistically significant differences between the means of two or more independent (unrelated) groups. In this phase of the study, the one-way analysis of variance (ANOVA) was used to determine whether there are any statistically significant differences between the means of more than two independent groups. These groups are the three main variables of the questionnaire against the 4 institutes' participated in the study. The results are presented in the following sub-sections based on institutes.

A one-way between subjects ANOVA was conducted to compare the effect of the institutes on the different aspects as in table 8 of the evaluation of F&B courses construction sector in Libya. There was a significant effect of the institutes policy on the aspects of F&B evaluation process at the p<.05 level for the three main issues of F&B

Courses. The first effect was on the student's criteria concern F&F [F (3, 470) = 31.09, p = 0.000], the second [F (3, 470) = 24.63, p = 0.000]; and finally in the case of F&B curriculum [F (3, 470) = 25.805, p = 0.000].

Table 9: ANOVA of aspects of educational process of F&B against the institutes

ANOVA		Sum of Squares	df	Mean Square	F	Sig.	
Students	Between Groups	52.110	3	17.370			
	Within Groups	262.592	470	.559	31.090	.000**	
	Total	314.703	473				
Lecturers	Between Groups	45.731	3	15.244			
	Within Groups	290.887	470	.619	24.630	.000**	
	Total	336.618	473				
F&B courses	Between Groups	45.808	3	15.269			
	Within Groups	278.116	470	.592	25.805	.000**	
	Total	323.924	473				

Taken together, these results suggest that the type of the four institutes participated in the study really do have an effect on the aspects of educational process of F&B evaluation.

Conclusions, implications and limitations
There are remaining urgent and important unmet demands from the employers for skilled graduates for working in the different aspects of food and beverage outlets in hospitality. All stakeholders agreed that it was imperative to expand hospitality course offerings and departments in response to growing social demands, ensuring hospitality departments could adequately provide a steady source of human resources for the hospitality service industry, while improving hospitality service quality as a result of a better educated workforce How to learn reflects a multidimensional holistic learning concept involving effective learning tactics, as well as learning strategies, including cognitive, metacognitive and resource management learning strategies (Wu et al., 2014).

In addition, as culinary educators move into the 21st Century, they will need to continually attempt to create learning environments for their students that will raise students' level of competence, and prepare them for future success in their field of expertise. Hospitality education is designed to prepare students with the professional knowledge and skills to successfully enter the industry (Sintayehu, Kassegn, &Sewent, 2016). A university education is not merely concerned with the transmission of knowledge, but also with imparting a mature appreciation of how to learn, instilling higher order cognitive abilities and ultimately ensuring successful practical application of the acquired learning strategies (Gürkan, Tükeltürk, &Küçükaltan, 2015).

Hospitality businesses were discussed because of the scope of the research and it is a major problem that the employee turnover rates are high in the hospitality businesses. The fit between employees and their organizations may positively affect also their intention to stay at the work just as it affects their job satisfaction. Thus, the subsequent positive outcomes can be oiled the wheels when the compatibility of potential candidates with the organizational values is regarded in the recruitment stage at the first(Sieh, & Hsieh,2015). The limitation of this study was the use of self-evaluation by students and a sample of students only from private institutes in Alexandria. Therefore, the generalisations of this study will be restricted. Future research could expand the population to include other general universities and students to compare the differences between food and beverage students.

References

Abdel Hamid, G., Saad, R., Gomma, H., Khalifa, A., & Gadallah, Y. (2010). Higher Education in Egypt: Country Review Report: Strategic Planning Unit, Ministry of Higher Education, Egypt.

Gürkan, G. Ç., Tükeltürk, Ş. A., &Küçükaltan, D. (2015).The Mediating Role of Supervisor Support in the Effect of Person-Organization Fit on Job Satisfaction in Hospitality Enterprises1. *Journal of Tourism and Hospitality Management*, *3*(2), 15-37.

Hec, D. (2016).The importance of Food & Beverage Department in Hospitality Industry

Hewedi, M., Doma, N., & AL-Hamamsy, S. (1998). Hospitality Education in Egypt: an Overview. Paper presented at the 2nd International Conference on Culinary Arts and Sciences, University of Bournemouth, UK

Hjalager, A. M. (2003). Global tourism careers?Opportunities and dilemmas facing higher education in tourism. *Journal of Hospitality, Leisure, Sport and Tourism Education*, *2*(2), 26-37.

Horng, J. S; .Hu, M. L. M., ,& Sun, Y. H. C. (2009). Hospitality teams: Knowledge sharing and service innovation performance. *Tourism Management*, *30*(1), 41-50.

Ko, W. H. (2010). Evaluating effective culinary learning of food and beverage department students at technology universities. *Journal on World Transactions on Engineering and Technology Education,* 8(4).

Melia, D. (2011). Trends in the Food and Bevarage Sector of the Hospitality industry. Dublin Institute of Technology, School of Hospitality Management and Tourism, a Conference paper, available at: http://arrow.dit.ie/tfschmtcon/44/ (Accessed: 25 March 2015).

Robinson, R. N., Kralj, A., Brenner, M. L., & Lee, A. H. (2014).Reflective Practice in food and beverage education. *Journal of Hospitality & Tourism Education*, *26*(4), 166-177.

Roney, S. A., &Oztin, P. (2007). Career perceptions of undergraduate tourism students: A case study in Turkey. *Journal of Hospitality, Leisure, Sport and Tourism Education*, *6*(1), 4-17.

Sieh, B. H. L., & Hsieh, C. J. (2015). Integrating Multicultural Literacy into Curriculum of Tourism Industry. Journal of Tourism and Hospitality Management, 3(2), 77-87.

Sintayehu, A., Kassegn, B., &Sewent, T. (2016). Employment opportunities and challenges in tourism and hospitality sectors. *Journal of Tourism and Hospitality*, *5*(6).

Wu, B., Morrison, A. M., Yang, J. K., Zhou, J. L., & Cong, L. L. (2014). Cracks in the ivory tower? A survey-based analysis of undergraduate tourism education and educators in China. *Journal of Hospitality, Leisure, Sport & Tourism Education*, *14*, 26-38.