

## Investigating Factors Affecting Learning Styles Preferences of Hospitality Management Program (HMP) Students”

**Hazem Ahmed Khairy**

**Lecturer – Hotel Studies Department  
Faculty of Tourism and Hotels, Sadat City**

### Abstract

This study aims to explore learning styles (LS) preferences and identifying different factors affecting learning among students enrolled in Hospitality Management Program (HMP) in the Egyptian context. The study investigates four learning styles namely; activist, reflector, theorist, and pragmatist, in addition to another four affecting factors namely; physical, environmental, personal, and teacher and learning. Data were collected from 354 undergraduate students studying at three governmental universities. Findings revealed that the reflector LS was the most preferred among HMP students, whereas the activist LS was the lowest preferred one.

Furthermore, the study reported agreement of students on the effect of the four factors on their learning. The results may help in developing HMP through designing the curriculums that well match with students preferred learning styles. Results could enable the educators to focus on reflector LS, and this can generate student satisfaction and their quality learning outcomes, which will positively affect their performance at work later. The results may also help to better understand the needs of hospitality management education and, therefore, correctly direct its future.

**Keywords:** Learning, Learning Style Preferences, Hospitality Management Program (HMP).

### 1. Introduction

As we live in the knowledge age, learning becomes the cornerstone of our successful life. Learning is something of which we all have an understanding and in which we have all participated. It is the individual's process of gaining knowledge through studying or experiencing results in behavior change reshape or controlled (Pritchard, 2009).

Learning is the key factor for survival, sustainability and competitive advantage at the level of the individual, the organization and the nation (Gold and Smith, 2003). During the learning process, individuals are more inclined to prefer different methods of dealing with, processing, and interacting with information (Aljaberi, 2015). These methods or preferences are called learning styles (Şirin and GÜzel, 2006).

Learning style is the method by which the individual gets, keeps up and encourage the comprehension of acquired data (Ariffin *et al.*, 2014). As individuals vary in their habit and views in certain conditions, so do their learning styles (Duff *et al.*, 2004). It is realized that learning processes vary from person to person (Wang and Moore, 2007).

Individuals do not learn in the same way. Each individual will adopt an approach to learning, with which they are most comfortable and in doing so leave behind the approaches which they are less comfortable (Pritchard, 2009). Some like the chance to learn by observing, listening, reacting, giving a logical reason, recollecting and learning by utilizing design (Cassidy and Eachus, 2000).

Sopian *et al.* (2013) expressed that problems confronted by students of higher learning organizations were generally identified with students that did not know effective learning and could not give a good attention during learning. If each learning style of students were confronted with the proper (or inclination) learning circumstance, it was simple for every student to learn and to accomplish (Damrongpanit and Reuntragul, 2013). In contrast, the learning outcome always appeared negative if learning styles of students were irrelevant with learning situation (Visser *et al.*, 2006) and made students express numerous undesirable behaviors in the future related studies later on. It is generally accepted that the way in which individuals choose to or are inclined to approach a learning situation, has an impact on performance and achievement of learning outcomes (Cassidy, 2004).

The logic of long-lasting learning recommends that students will turn out to be more motivated to learn by knowing more about their own strengths and weaknesses as learners (Penger and Dimovski, 2008). Consequently, if educators can react to individuals' learning style preferences, then the achievement rate is likely to rise and —learning to learn skills and competencies of students may provide the foundation for the lifelong learning concept (Penger and Dimovski, 2008). It is believed that when educators are able to analyze the differences and needs of their students, the

educational process is probably going to wind up upgraded for both students and educators (Fairhurst and Fairhurst 1995). Knowing the right learning style to apply can specifically help students to arrange effective strategies in their learning process. It is therefore primarily concerned with informing educators to better focus on the immediate learning needs of students and to assist in the development of students who accomplish the 'qualities of graduateness' (Higher Education Funding Council for England, 2001).

However, Wang and Moore (2007) argued that most educators educate the way they have already learned. These might have brought on frustration of a decent number of learners as they witness that their learning preferences are not accounted for by many educators. Although learning styles have been heavily researched (Armstrong and Mahmud, 2008; Demirbas and Demirkan, 2007; Garcia *et al.*, 2007; Li *et al.*, 2008), there is a lack of studies in the field of hospitality and tourism management education in the Egyptian context. Consequently, the current study aims to achieve two main objectives; to explore learning styles preferences of students enrolled in hospitality management program at faculties of tourism and hotels in Egyptian governmental universities, and to identify the factors that could affect students learning. And thus, this will offer a better insight into the learning environment for such programs in order to develop appropriate teaching and pedagogical strategies for improving hospitality education in Egypt.

## 2. Review of Literature

### 2.1 Learning Style

Individuals differ dramatically in how quickly and easily they learn new material. One theory regularly elevated to enhance learning

proficiency is learning style, which places that individuals learn best when their specific learning styles are coordinated to correspondingly appropriate learning environments (Coffield *et al.*, 2004; Pfeiffer *et al.*, 2005). Learning styles are distinguishing cognitive, effective and psychological behaviors that serve as relatively stable indicators of how learners perceive, communicate with and react to the learning environment (Keefe, 1979). At the end of the day, educationalists presented the concept of learning style as a description of the attitudes and behaviors that determine our favored method for learning (Honey and Mumford, 2000). Therefore, it is important for the educator to be aware of different ways to communicate the same content (Oh *et al.*, 2013).

In the last two decades, several models and measurement instruments have been developed to classify individual learning styles preferences. In 1984, Kolb, while educating management students, noticed that some students preferred learning through experiences whereas others preferred the conventional classroom lecture. His subsequent theory of experiential learning, known as 'Learning Styles Inventory', proposed that while learning, people resolved conflicts between active experimentation and reflective observation along one axis, and between concrete experience and abstract conceptualization along another axis. Kolb also considers individuals' approaches using the 'Learning Styles Inventory', in which four stages of learning requiring particular learning abilities are identified. After spending four years experimenting with different approaches to assessing individual differences in learning preferences and after reviewing Kolb's model, Honey and Mumford (1986) developed the Learning Styles Questionnaire (LSQ) and

suggest four basic learning styles; namely, activist, reflector, theorist, and pragmatist. These researchers aimed to discover why and when two subjects share a similar learning setting, one learns while the other does not, or why one learns more than the other. They concluded that this was because there are four styles which react to the four phases of a cyclic learning process: action, reflection, theory, and pragmatism (López *et al.*, 2013).

## 2.2 Honey and Mumford Learning Styles Model

There are mainly four learning styles according to Honey and Mumford (1986), illustrated in the following section.

**Reflectors** (who review) like to observe and describe processes, attempt to anticipate results and try to understand the meaning (Kappe *et al.*, 2009). They gather information, both direct and indirect from others, and want to consider it completely before arriving at any conclusion. The thorough collection and analysis of data about experiences and events is what counts so they have a tendency to delay achieving complete conclusions for whatever length of time that conceivable. Their philosophy is to be cautious. They are thoughtful people who get a kick out of the chance to consider every single conceivable edge and suggestions before making a move. Students with reflector learning style are careful, good listener, holds back from participation, methodical, does not jump to conclusions, slow to decide, thorough and thoughtful (Coffield *et al.*, 2004; Honey and Mumford, 1992; Penger and Tekavcic, 2009).

**Theorists** (who conclude) focus on ideas and systemic logic and are distrustful of intuition and emotional involvement (Kappe *et al.*, 2009). They think issues through in vertical, well-ordered consistent way. They assimilate dissimilar facts into coherent theories. They

have a tendency to be perfectionists, who won't rest easy until things are tidy and fit into a rational blueprint. They like to analyze and synthesize. They are enthused about fundamental presumptions, standards, hypotheses models, and frameworks considering. Their philosophy poses rationality and logic. "If it's logical it's good".

Questions they habitually ask are: "Does it bode well?" "How does this fit with that?" "What are the fundamental assumptions?" (Penger and Tekavcic, 2009). They have a tendency to be separated, analytical and dedicated to rational objectivity rather than anything subjective or uncertain. Students with theorists learning style are disciplined, intolerant of subjective, intuitive ideas, low resistance of vulnerability, vagueness, objective, parental in approach, probing when questioning, rational and restricted in lateral thought (Coffield *et al.*, 2004; Honey and Mumford, 1992; Penger and Tekavcic, 2009).

**Activists** (who do) are individuals who appreciate new experiences, tend to settle on choices intuitively, yet who hate structured procedures (Kappe *et al.*, 2009). They enjoy every moment and are cheerful to be ruled by immediate experiences. They are open-minded, not suspicious, and this tends to make them eager about anything new. Their philosophy is "I'll have a go at anything once". They tend to act first and consider the consequences a short time later. Their days are loaded with movement. They handle problems by brainstorming. When the energy from one movement has faded away they are busy looking for the next.

They have a tendency to thrive on the challenge of new experiences but are bored with implementation and longer-term consolidation. Students with activists learning style are flexible, gets bored with

consolidation, upbeat to try things out, optimistic about change, hurries enthusiastically without planning, makes prompt evident moves, takes unnecessary risks, unlikely to oppose change (Coffield *et al.*, 2004; Honey and Mumford, 1992; Penger and Tekavcic, 2009).

**Pragmatists** (who plan) like practical, rational approaches and debate, yet have a tendency to stay away from reflection and deep levels of understanding (Kappe *et al.*, 2009). They positively seek out new thoughts and accept the principal open door to try different things with applications. They are the kind of individuals who come back from management courses overflowing with new thoughts that they need to try out in practice. They like to get on with things and act rapidly and certainly on thoughts that pull in them. They have a tendency to be eager with ruminating and open-ended dialogs. They are basically practical, sensible individuals who like settling on down to earth choices and solving problems (Penger and Tekavcic, 2009). Students with pragmatists learning style are business-like – comes to the heart of the matter, dislikes hypothesis, eager with waffle, quick to test things out in practice, realistic, rejects ideas without clear application, seizes in the first place, frequently most obvious solution, task and technique centered (Coffield *et al.*, 2004; Honey and Mumford, 1992; Penger and Tekavcic, 2009).

While everyone has a blend of learning styles, some people have an overwhelming style of learning, with far less use of the alternate styles. Others may find that they utilize distinctive styles in various circumstances. Fundamentally, there is no right blend (Huang and Busby, 2007). Each gives a set of strengths and set of weaknesses. There is no one most ideal way, however, teaching strategies that are not sensitive to students'

learning style preferences can present learners with difficulties (Lashley and Barron, 2006).

Honey and Mumford's intentions are that learners should become proficient in all four stages of the learning cycle (Penger and Tekavcic, 2009).

### 2.3 Learning Style Preferences of Hospitality Management Students

Research has been recently attempted to identify the learning preferences of tourism and hospitality management students. Lashley's study (1999) suggests that the vast majority of students who are attracted to hospitality management programs in the UK have learning styles which favor practical activity and that these students are less comfortable with theorizing and reflection. Barron and Arcodia (2002) additionally found that Australian hospitality and tourism students were also mostly activist learners. The dominance of the activist style of learning on hospitality and tourism programs has been explained by the nature of the vocational and people-centered nature of the program (Lashley, 1999). In other words, people who like working with other people are likely to display extrovert personality characteristics and thereby define the activist learning style (Lashley and Barron, 2006).

However, Wong *et al.* (2000) reported that domestic students studying hospitality management at higher diploma level and above in various schools and universities in Hong Kong, Singapore, and Taiwan as of now show preferences for reflector learning styles. It was found that all of the students questioned displayed a strong preference for the reflector learning style. As such, these students prefer to learn through observation and benefit from the opportunity to think before acting.

Barron and Arcodia (2002) found that Chinese students seemed to change their learning style preference as they had studied in the Australian context. Students in the later stages of the degree were closer to Australian students and registered stronger preferences for activist learning styles.

Eventually, learning styles may differ according to the circumstances from context to another. Studies on learning styles preferences of tourism and hospitality management students and factors affecting learning seem to be absent in the Egyptian higher education context.

### 2.4. Factors Affecting Learning Style

Studies investigated the role of students' gender and age in shaping their learning style preferences have resulted in controversy outcomes. Some indicated that the evidence of the link between learning style and age exists (Barun *et al.*, 2010; Charlesworth, 2008; De Vita, 2010; Dobson, 2009; Lincoln and Rademacher, 2006; Raddon, 2007; Song and Oh, 2011) as students' gender and age play a big role in how they prefer to receive and give out information. However, other studies argued that this link is lacking for evidence (Li *et al.*, 2010; Negari and Barghi, 2014; Seiler, 2011; Urval *et al.*, 2014). In addition, during learning, students may face a difficulty due to a variety of factors as proposed by Abucay (2009).

First, physical factors, for instance, health, physical defects, and nutrition. Second, environmental factors such as classrooms, textbooks, and equipment. Third, emotional and social factors for example kind of relationships between students and their teachers in the classroom, students' attitudes towards teachers and teacher's personality to lead and to inspire students. Lastly, learning factors, for instance, the limited background of

topics or issues being taught, lack of mastery of what has been taught, and improper methods of study.

### 2.5. Research Questions

The study attempts to answer the following two main questions:

1. What is the learning style preference of hospitality management program students?
2. What factors may affect the learning style preference of hospitality management program students?

### 3. Methodology

Data were collected from second, third, and fourth-year undergraduate students studying in hospitality management program (HMP). The first year in most faculties of tourism and hotels is general year; students are going to specialize from the second year. Among the eight governmental universities delivering hospitality management programs, three governmental universities located in three different geographical locations were chosen for investigation; Delta Region (Univ.

A), Upper Egypt (Univ. B), and North Egypt (Univ. C). This is to ensure the fair distribution among geographical areas.

In order to achieve a maximum correct response, the questionnaire was administered in the controlled environment during the formal class time. This captive group survey approach is expeditious and less problematic than in less controlled situations (Ticehurst and Veal, 1999). For University A, the questionnaire was managed under the supervision of the researcher, whereas for University B and C, it was administered under the supervision of two faculty staff colleagues of the researcher due to the distance and accessibility factors. Students were given the option to participate and were not penalized for nonparticipation. Surveys were deployed

during the third week of the 2016-2017 academic year. A total of 354 questionnaires were deployed (110, 126, and 118 in University A, B, and C, respectively). As students selected to participate in this study upon their own desire and the questionnaire was administered in a controlled environment, the response rate was 100%.

The questionnaire consists of two parts; the first part consists of the 80 items using Honey and Mumford's Learning Style Questionnaire (LSQ) scale to measure the four learning styles preferences: activist, reflector, theorist, and pragmatist. Activist LS was measured based on twenty items; for example, "*I often act without considering the possible consequences*", "*I believe that formal procedures and policies restrict people*", and "*I often find that actions based on feelings are as sound as those based on careful thought and analysis*". Reflector LS was measured based on twenty items; for instance, "*I like the sort of work where I have time for thorough preparation and implementation*", "*I take pride in doing a thorough job*", and "*I take care over the interpretation of data available to me and avoid jumping to conclusions*". Theorist LS was measured based on twenty items; such as, "*I have strong beliefs about what is right and wrong, good and bad*", "*I tend to solve problems using a step-by-step approach*", and "*I regularly question people about their basic assumptions*". Pragmatist LS was measured based on twenty items; for example, "*I have a reputation for saying what I think, simply and directly*", "*what matters most is whether something works in practice*", and "*when I hear about a new idea or approach I immediately start working out how to apply it in practice*". It was noted that Honey and Mumford's LSQ has been widely used as an instrument of detecting students' learning style in higher education (Coffield *et*

*al.*, 2004; Cassidy, 2004). It is true that the literature provides some critical references on its psychometric properties (Cassidy 2004; Coffield *et al.*, 2004), but it is also certain that there are studies which have found good internal reliability–consistency and validity data (Pickworth and Schoeman 2000; López *et al.*, 2013). The second part of the questionnaire is composed of 15 items adapted from Abante *et al.* (2014) and Donkoh *et al.* (2015) to determine the factors which may affect student's learning; physical, environmental, personal, and teacher and learning. Different 5 items were used to assess each factor; for example, "I cannot concentrate during lectures when I am hungry", " the university provides facilities that are conducive for learning", " I am patient when it comes to understanding my Lessons", and "my lecturers' method of teaching fits my way of learning".

All scale items were originally prepared in English and then translated into Arabic using the back-translation method. After that, the first draft of the questionnaire was reviewed by two academic experts. They were asked to provide the researcher with their feedback based on the wording, clarity, and to what extent the questionnaire is measuring what it is supposed to measure. Their comments indicated the ambiguity of some statements.

Appropriate modifications have been carried out. The second draft was piloted to 15 students in order to identify any deficiencies with the layout and to investigate the level of comprehension of the questionnaire. The final

questionnaire was deployed to collect data for the final analysis. All responses were collected on a five-point Likert scale, ranging from strongly disagree (1) to strongly agree (5).

Data analysis was performed using the Statistical Package for the Social Sciences (SPSS v. 20). The Cronbach Alpha reliability was computed, showing that all scales were reliable (above 0.70). To describe and summarize the data, descriptive statistics (i.e., means and standard deviations) were applied.

## 4. Results

### 4.1. Respondents Profile and Descriptive Statistics

Data in the table (1) indicated that out of the 354 respondents, 245 (69.2 %) were males and 109 (30.8 %) were females. A number of students studying in each year were 108 (30.5 %), 90 (25.4 %), and 156 (44.1 %) for categories; second year, third year, and fourth year, respectively. The data also indicate that 110 (31.1 %), 126 (35.6 %), and 118 (33.3 %) were belong to university A, B, and C, respectively.

Table (1) Students' profile and descriptive statistics (N=354).

Learning Style Preferences										
	Freq.	%	Activist LS		Reflector LS		Theorist LS		Pragmatist LS	
			Mean	SD	Mean	SD	Mean	SD	Mean	SD
Male	245	69.2	3.41	.39	3.80	.44	3.69	.35	3.64	.41
Female	109	30.8	3.57	.46	4.05	.53	3.84	.54	3.72	.56
2 <sup>nd</sup> Year	108	30.5	3.54	.44	4.00	.44	3.86	.45	3.80	.47

3 <sup>rd</sup> Year	90	25.4	3.40	.33	3.83	.41	3.64	.31	3.61	.39
4 <sup>th</sup> Year	156	44.1	3.43	.44	3.86	.53	3.70	.43	3.61	.48
University (A)	110	31.1	3.40	.45	3.67	.49	3.54	.41	3.48	.49
University (B)	126	35.6	3.51	.38	4.10	.37	3.91	.35	3.83	.37
University (C)	118	33.3	3.46	.42	3.89	.48	3.73	.42	3.67	.46
Overall Scores	354	100	3.46	.42	3.90	.48	3.74	.42	3.67	.46
<b>Factors Affecting Learning</b>										
	Freq.	%	Physical		Environmental		Personal		Teacher and Learning	
			Mean	SD	Mean	SD	Mean	SD	Mean	SD
Male	245	69.2	4.07	.62	3.01	.59	3.65	.50	3.38	.36
Female	109	30.8	4.17	.59	3.22	.47	3.60	.52	3.33	.48
2 <sup>nd</sup> Year	108	30.5	3.88	.58	3.06	.74	3.69	.48	3.36	.40
3 <sup>rd</sup> Year	90	25.4	4.35	.49	3.00	.50	3.46	.45	3.40	.32
4 <sup>th</sup> Year	156	44.1	4.12	.64	3.14	.43	3.70	.53	3.36	.45
University (A)	110	31.1	4.10	.60	3.07	.57	3.60	.52	3.39	.40
University (B)	126	35.6	4.09	.64	3.08	.55	3.67	.50	3.35	.41
University (C)	118	33.3	4.11	.60	3.08	.56	3.63	.51	3.37	.41
Overall Scores	354	100	<b>4.10</b>	.61	3.08	.56	3.64	.51	3.37	.41

Legend: 1.00-1.79 (Strongly Disagree), 1.80-2.59 (Disagree), 2.60-3.39 (Neutral), 3.40-4.19 (Agree), 4.20-5.00 (Strongly Agree)

The descriptive statistics showed that mean scores for activist, reflector, theorist, and pragmatist learning styles among male students were 3.41, 3.83, 3.69, and 3.64 respectively. And were 3.57, 4.05, 3.84, and 3.72 respectively among female students. In addition, mean scores for physical, environmental, personal, and teacher and learning factors among male students were 4.07, 3.01, 3.65, and 3.38, respectively. And were 4.17, 3.22, 3.60, and 3.33, respectively among female students. It can be also noted that the reflector LS was the most preferred among students, where the mean score was 4.00, 3.83, and 3.86 respectively for 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> year, also, was 3.67, 4.10, and 3.89 respectively for universities A, B, and C. Moreover, the highest effect on learning was related to physical factor either among different students' year of studying or among different universities.

There were also slight differences in the mean scores of the other three LSs. Activists mean scores were 3.55, 3.40, and 3.43 respectively for 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> year students; and were 3.40, 3.51, and 3.46 respectively for universities A, B, and C. Theorists mean scores was 3.86, 3.64, and 3.70 respectively for 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> year students; and were 3.54, 3.91, and 3.73 respectively for universities A, B, and C. Pragmatists mean scores were 3.80, 3.61, and 3.61 respectively for 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> year students; and were 3.48, 3.83, and 3.67 respectively for universities A, B, and C.

Overall, the reflector LS was the most preferred among all HMP students (mean=3.896, SD=.4796), then was the theorist LS (mean = 3.74 and SD= .42). Pragmatist LS comes after that (mean=3.67 and SD=.46), and finally the activists was the lowest preferred LS style among HMP students (mean=3.459 and SD=.4188).

For ranking the factors affecting student learning, physical factors stand at the top with a mean score of 4.10 and SD of .61, then personal factors come in with mean score of 3.64 and SD of .51, after that teacher and learning factors come with mean score of 3.37 and SD of .41, and lastly, environmental factors with mean score of 3.08 and SD of .56. This means that most of the students agree that the four factors proposed by the study affect their learning.

### 4.2 Differences in Study Variables among Students

Differences among students with regard to study variables according to the Mann-Whitney test are displayed in (Table.2).

Table (2) Differences among students according to the Mann-Whitney test. (N=354).

Learning Style	Gender	N	Mean Rank	Sig.	Factors affecting learning	Gender	N	Mean Rank	Sig.
Activist LS	Male	245	163.41	.000	Physical	Male	245	172.21	.134
	Female	109	209.18			Female	109	189.40	
Reflector LS	Male	245	159.81	.000	Environmental	Male	245	163.27	.000
	Female	109	217.26			Female	109	209.50	
Theorist LS	Male	245	166.32	.002	Personal	Male	245	179.99	.488
	Female	109	202.63			Female	109	171.90	
Pragmatist LS	Male	245	172.00	.129	Teacher and Learning	Male	245	182.87	.134
	Female	109	189.87			Female	109	165.43	

As illustrated in table (2), learning styles ratings were significantly affected by student’ gender, where the *p*-value was less than .05 for activist, reflector, and theorist learning styles (.000, .000, and .002 respectively). In other words, the gender does make a difference to the learning styles. Mean rank values indicated that the female group had the highest overall ranking that corresponds to the highest score on the three learning styles. However, the pragmatist learning style was not significantly affected by student’ gender, where the *p*-value was (.129).

This means that student gender does not make a difference to the pragmatist learning style. For factors affecting students learning, gender was not significantly affected students point of views regarding the different factors except for the environmental factor (*p*-value=.000). Female students had the high rating toward the environmental factor than male students.

In addition, differences among students with regard to study variables according to Kruskal-Wallis Test are displayed in (Table 3).

Table (3) Differences among students according to the Kruskal-Wallis Test. (N=354).

	Learning Style/ Factors	Variable	Year of Studying				University				
			N	Mean Rank	Chi-Square	Sig.	Variable	N	Mean Rank	Chi-Square	Sig.
Learning Style	Activist LS	2 <sup>nd</sup> Year	108	196.62	6.210	.045	Univ.(A)	110	162.89	4.254	.119
		3 <sup>rd</sup> Year	90	161.57			Univ.(B)	126	190.40		
		4 <sup>th</sup> Year	156	173.45			Univ.(C)	118	177.34		
	Reflector LS	2 <sup>nd</sup> Year	108	193.32	6.060	.048	Univ.(A)	110	130.40	44.156	.000
		3 <sup>rd</sup> Year	90	157.44			Univ.(B)	126	219.01		
		4 <sup>th</sup> Year	156	178.12			Univ.(C)	118	177.08		
	Theorist LS	2 <sup>nd</sup> Year	108	201.38	11.124	.004	Univ.(A)	110	128.42	47.860	.000
		3 <sup>rd</sup> Year	90	153.10			Univ.(B)	126	220.66		
		4 <sup>th</sup> Year	156	175.04			Univ.(C)	118	177.17		
	Pragmatist LS	2 <sup>nd</sup> Year	108	198.03	6.370	.041	Univ.(A)	110	138.54	29.966	.000
		3 <sup>rd</sup> Year	90	165.77			Univ.(B)	126	211.54		
		4 <sup>th</sup> Year	156	170.05			Univ.(C)	118	177.47		
Factors	Physical	2 <sup>nd</sup> Year	108	141.56	31.137	.000	Univ.(A)	110	177.95	.085	.958
		3 <sup>rd</sup> Year	90	220.93			Univ.(B)	126	175.53		
		4 <sup>th</sup> Year	156	177.32			Univ.(C)	118	179.19		
	Environmental	2 <sup>nd</sup> Year	108	163.32	8.873	.012	Univ.(A)	110	176.35	.029	.986
		3 <sup>rd</sup> Year	90	164.45			Univ.(B)	126	178.50		

	Personal	4 <sup>th</sup> Year	156	194.85	12.776	.002	Univ.(C)	118	177.50	.957	.620
		2 <sup>nd</sup> Year	108	187.25			Univ.(A)	110	170.87		
		3 <sup>rd</sup> Year	90	144.63			Univ.(B)	126	183.75		
	Teacher and Learning	4 <sup>th</sup> Year	156	189.71	1.770	.413	Univ.(C)	118	177.00	.581	.748
		2 <sup>nd</sup> Year	108	171.62			Univ.(A)	110	182.67		
		3 <sup>rd</sup> Year	90	189.55			Univ.(B)	126	172.63		
		4 <sup>th</sup> Year	156	174.62			Univ.(C)	118	177.88		

As illustrated in table (3), learning styles ratings were significantly affected by student' year of study, where the  $p$ -value was less than .05 for activist, reflector, theorist, and pragmatist learning styles (.045, .048, .004, and .041 respectively). In other words, the student' year of studying does make a difference to the learning styles. Mean rank values indicated that students studying the second year "which is the first year in their HMP major" had the highest overall ranking that corresponds to the highest score on the four learning styles. For factors affecting students learning, the university was not significantly affected students' point of views regarding the different factors. However, students' year of studying does make a difference in students ratings toward all factors proposed except for teacher and learning factor.

Furthermore, learning styles ratings were also significantly affected by the university, where the  $p$ -value was less than .05 for the reflector, theorist, and pragmatist learning styles (.000, .000, and .000 respectively). Mean rank values indicated that students studying at university (B) had the highest overall ranking that corresponds to the highest score on the three learning styles. However, activist learning style was not significantly affected by the university name, where the  $p$ -value was (.119).

## 5. Discussion

This study was conducted at three Egyptian governmental universities. The findings have revealed the prevailing learning styles and the differences between them among hospitality

management program students. In addition, it shed a light on a number of factors that affect students learning.

Students displayed high preferences for reflector learning style, this agreed with the findings of Wong *et al.* (2000). These students prefer to learn through observation and benefit from the opportunity to think before acting. They appreciate the opportunity to undertake research before an activity and think about what they have learned. Reflectors find it more difficult to learn from activities where they are forced into the limelight, for example through peer presentations or role-playing. Similarly, methods of learning such as case studies may prove problematic for these students as they are not keen on undertaking a task without prior notice or sufficient information (Honey and Mumford, 2000). Students also displayed low preferences for activist learning style, this contradicts the findings of Lashley (1999), and Barron and Arcodia (2002), as they reported that the vast majority of students who are attracted to hospitality management programs have learning styles which favor practical activity and that these students are less comfortable with reflection.

Different preferences in students learning styles with the differences in their gender, year of study, and the university assert that learning styles are not necessarily fixed, but can change over time and develop through experience. Andrew *et al.* (2002, p. 6) suggest 'The role of identifying learning styles is to act as a catalyst for development rather than to accept an identified style'. Dunn and Griggs (2000) note that explaining learning styles to students and

providing suggestions for the improvement of learning empowers students in a way that they take active ownership of their personal learning and development. Better knowledge of learning styles makes students better able to adapt to different situations (Penger and Tekavcic, 2009). Each student is unique in her/his approach to learning; therefore learning style should be more connected with learner's potential and their educational skills. Learning strategies are also important as the students respond to various types of educational processes that are different from each university and faculty. Thus, educators need to understand the learning style preferences of their students and adopt learning and teaching strategies that develop different approaches to learning, but which are compatible with students' initial learning style preferences. Beside, classroom instruction needs to take into account learning styles differences of the HMP students to maximize learning.

Hospitality educators have to understand when it will be most easy/difficult for reflectors to learn, and, relying on proper activities, to deliver the educational materials. Giving students the opportunity to be enrolled in such activities as take a back seat in group activity, watch a film or a video; give them time to prepare, chance to read background information in advance; enrolling them in investigating or gathering tasks; asking them to produce a carefully considered analysis and reports but without pressure and tight deadlines could improve their learning achievement. However, enrolling reflectors in activities that require them to act as a leader or playing a role in front of onlookers; needs action without planning; not give them a sufficient time to do a task; giving them insufficient information on which to base conclusion may hinder their learning achievement. In addition, due to the people-

centered nature of the HMP, educators have also to understand how to push students toward adopting activist LS. For instance, focusing on excitement, drama, and crisis instead of listening to lectures, monologues, explanations, statements of how things should be done, reading, and writing could take with students hand to taste the activist LS.

The findings of this study may help in developing a hospitality management program, by designing the curriculum that will match with the students preferred learning styles. This could enable the educators to focus on reflector learning style that is most preferred by students. HMP can generate student satisfaction and their quality learning outcomes which will positively affect their performance at work later.

The findings of this study regarding the factors affecting students learning were lined up with Maslow's pyramid of human needs. The study reported a strong agreement of students on the effect of physical factors such as being hungry or do not have adequate sleep on their learning, these are examples of the lowest and first level on Maslow's hierarchy namely "physiological needs". If this basic human need is not met, students will not be able to focus on learning or even may not to begin. The study also reported agreement of students on the role of personal, emotional and social factors play on their learning, for instance, the feel of being valued, loved, and appreciated, this is similar to the up level in the hierarchy namely "love and belongingness needs". Hence, students' inspiration to learn may be improved. Moreover, a slight agreement was also reported on the role of environmental factors in student learning.

Providing students with systematic rules and procedures during their learning, for instance, how to behave in the classrooms or library and

how to use equipment, may get students to feel they have control over their learning environment. This is subsequently moving students' needs up to a different stage in the hierarchy namely "safety needs". Importantly, the more educational institutions understand the basic needs for the effective learning environment, the more likely to remove obstacles that stand against learning, and then learning can be improved.

## 6. Recommendations

The study proposes a number of activities or recommendations which may help the hospitality education organization to maximize their students learning. Professors have to participate in seminars that talking about how important to be aware of the learning style of a class and to be able to assess each student's learning style, this, in turn, will help professors to review their teaching strategies and make them best suit with the learning style most preferred by their students. As the students' emotional and social state is among the important factors which affect learning, providing counseling for students would be a good strategy to diagnose their state and recommend a remedy to their issues. Furthermore, social activities should be organized as a way to build and boost the relationship between students and teachers. All the necessary equipment needed to deliver learning to students must be available.

Moreover, as different practical activities will be relied on such equipment as for "kitchen, restaurant, housekeeping, etc", students tend to be satisfied with learning. Lastly, as students need learning in university to be more conducive; prohibiting all dispensable noises via strict rules may support classes/activities to be done.

## 7. Conclusion

This study utilized a captive group survey approach and therefore a well-controlled environment was ensured. In addition, improving knowledge about the learning styles and potential factors that affect learning could help the Egyptian educational authorities better understand the needs of hospitality management education and, therefore, correctly direct the future of hospitality management education. The future of the hospitality and tourism industry in Egypt relies on the people who work in the industry. Thus, hospitality management education could play an important role in preparing future industry professionals.

## 8. References

1. Abante, M.E.R., Almendral, B.C., Manansala, J. and Mañibo, J., 2014. Learning styles and factors affecting the learning of general engineering students. *International Journal of Academic Research in Progressive Education and Development*, 3(1), pp.16-27.
2. Abucay A.R., 2009. Factors that may affect the Learning Process. As cited in: Abante, M. E. R., Almendral, B. C., Manansala, J., & Mañibo, J., 2014. Learning styles and factors affecting the learning of general engineering students. *International Journal of Academic Research in Progressive Education and Development*, 3(1), pp. 16-27.
3. Aljaberi, N.M., 2015. University Students' Learning Styles and Their Ability to Solve Mathematical Problems. *International Journal of Business and Social Science*, 6(4).
4. Andrew, D., Pfeiffer, G., Green, M. and Holley, D., 2002, June. The uses of learning styles: Beyond the matching hypothesis. In *7th Annual ELSIN Conference: Learning Styles: Reliability and Validity* (pp. 26-28).
5. Ariffin, I., Solemon, B., Din, M.M. and Anwar, R.M., 2014. Learning style and course performance: an empirical study of Uniten IT students. *International Journal of Asian Social Science*, 4(2), pp.208-216.
6. Armstrong, S.J. and Mahmud, A., 2008. Experiential learning and the acquisition of

- managerial tacit knowledge. *Academy of Management Learning & Education*, 7(2), pp.189-208.
7. Barron, P.E. and Arcodia, C., 2002. Linking learning style preferences and ethnicity: International students studying hospitality and tourism management in Australia. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 1(2), pp.15-27.
  8. Borun, M., Schaller, D.T., Chambers, M.B. and Allison-Bunnell, S., 2010. Implications of learning style, age group, and gender for developing online learning activities. *Visitor Studies*, 13(2), pp.145-159.
  9. Cassidy, S., 2004. Learning styles: An overview of theories, models, and measures. *Educational Psychology*, 24(4), pp. 419-444.
  10. Cassidy, S., and Eachus, P., 2000. Learning style, academic belief systems, self-report student proficiency and academic achievement in higher education. *Educational Psychology*, 20(3), pp. 307-322.
  11. Charlesworth, Z., 2008. Learning styles across cultures: Suggestions for educators. *Education & Training*, 50(2), pp. 155-127.
  12. Coffield, F., Moseley, D., Hall, E. and Ecclestone, K., 2004. Learning styles and pedagogy in post-16 learning: A systematic and critical review.
  13. Damrongpanit, S. and Reungtragul, A., 2013. Matching of learning styles and teaching styles: Advantage and disadvantage on ninth-grade students' academic achievements. *Educational Research and Reviews*, 8(20), p.1937.
  14. Vita, G.D., 2001. Learning styles, culture and inclusive instruction in the multicultural classroom: A business and management perspective. *Innovations in Education and Teaching International*, 38(2), pp.165-174.
  15. Demirbas, O.O. and Demirkan, H., 2007. Learning styles of design students and the relationship of academic performance and gender in design education. *Learning and instruction*, 17(3), pp.345-359.
  16. Dobson, J.L., 2009. Learning style preferences and course performance in an undergraduate physiology class. *Advances in physiology education*, 33(4), pp.308-314.
  17. Donkoh, K. E., Eshun, E. S., & Acquaye, V. N. (2015). Learning Styles And Factors Affecting Learning: Perception Of 2013/2014 Final Year Post-Diploma Sandwich Students Of The Department Of Basic Education, University Of Education, Winneba (Uew), Ghana. *Advances in Social Sciences Research Journal*, 2(5).
  18. Duff, A., Boyle, E., Dunleavy, K. and Ferguson, J., 2004. The relationship between personality, approach to learning and academic performance. *Personality and individual differences*, 36(8), pp.1907-1920.
  19. Dunn, R.S. and Griggs, S.A. eds., 2000. *Practical approaches to using learning styles in higher education*. Greenwood Publishing Group.
  20. Fairhurst, A. M. and Fairhurst, L. L., 1995. *Effective teaching, effective learning*. California: Davies-Black Publishing.
  21. García, P., Amandi, A., Schiaffino, S. and Campo, M., 2007. Evaluating Bayesian networks' precision for detecting students' learning styles. *Computers & Education*, 49(3), pp.794-808.
  22. Gold, J. and Smith, V., 2003. Advances towards a learning movement: Translations at work. *Human Resource Development International*, 6(2), pp.139-152.
  23. Higher Education Funding Council for England, 2001. Getting ahead: graduate careers in hospitality management. In: Lashley, C., and Barron, P., 2006. The learning style preferences of hospitality and tourism students: Observations from an international and cross-cultural study. *International Journal of Hospitality Management*, 25(4), pp.552-569.
  24. Honey, P. and Mumford, A., 1992. *The manual of learning styles*. Maidenhead: Peter Honey Publications
  25. Honey, P. and Mumford, A., 2000. *The learning styles helper's guide*. Maidenhead: Peter Honey Publications Ltd.
  26. Honey, P. and Mumford, A., 1986. *Using Your Learning Styles*. Maidenhead: Peter Honey Publications.
  27. Huang, R. and Busby, G., 2007. Activist, pragmatist, reflector or theorist? In search of postgraduate learning styles in tourism and hospitality education. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 6(2), pp.92-99.
  28. Ingram Jr, H.J., 2009. *Organizational transparency, employee perceptions, and employee morale: A correlational study*. University of Phoenix.
  29. Kappe, F.R., Boekholt, L., Den Rooyen, C. and Van der Flier, H., 2009. A predictive validity study of the Learning Style Questionnaire (LSQ) using multiple, specific learning criteria. *Learning and Individual differences*, 19(4), pp.464-467.

30. Keefe, J., 1979. NASSP's Student Learning Styles: Diagnosing and Prescribing Programs, chapter Learning style: An overview. *National Association of Secondary School Principals*, Reston, VA, p.137.
31. Kolb, D. A., 1984. *Experiential Learning: Experience as the source of learning and development*. New Jersey: Prentice-Hall.
32. Lashley, C., 1999. On Making Silk Purses: developing reflective practitioners in hospitality management education. *International Journal of Contemporary Hospitality Management*, 11(4), pp. 180-185.
33. Lashley, C., and Barron, P., 2006. The learning style preferences of hospitality and tourism students: Observations from an international and cross-cultural study. *International Journal of Hospitality Management*, 25(4), pp. 552-569.
34. Li, Y.S., Chen, P.S. and Tsai, S.J., 2008. A comparison of the learning styles among different nursing programs in Taiwan: implications for nursing education. *Nurse education today*, 28(1), pp.70-76.
35. Li, Y.S., Chen, H.M., Yang, B.H. and Liu, C.F., 2011. An exploratory study of the relationship between age and learning styles among students in different nursing programs in Taiwan. *Nurse education today*, 31(1), pp.18-23.
36. Lincoln, F. and Rademacher, B., 2006. Learning styles of ESL students in community colleges. *Community College Journal of Research and Practice*, 30(5-6), pp.485-500.
37. López, B.G., Cerveró, G.A., Rodríguez, J.M.S., Félix, E.G. and Esteban, P.R.G., 2013. Learning styles and approaches to learning in excellent and average first-year university students. *European journal of psychology of education*, 28(4), pp.1361-1379.
38. Negari, G.M. and Barghi, E., 2014. An exploration of Iranian EFL learners' learning style preferences. *Modern Journal of Language Teaching Methods*, 4(2), pp.17-24.
39. Oh, Y., Ishizaki, S., Gross, M.D. and Do, E.Y.L., 2013. A theoretical framework of design critiquing in architecture studios. *Design Studies*, 34(3), pp.302-325.
40. Penger, S., and Dimovski, V., 2008. Comparison, validation and implications of learning style theories in higher education in Slovenia: An Experiential and Theoretical Case. *International Business & Economics Research Journal (IBER)*, 7(12).
41. Penger, S., and Tekavcic, M., 2009. Testing Dunn & Dunn's and Honey & Mumford's learning style theories: The case of the Slovenian higher education system. *Management: journal of contemporary management issues*, 14(2), pp.1-20.
42. Pheiffer, G., Holley, D. and Andrew, D., 2005. Developing thoughtful students: using learning styles in an HE context. *Education+ Training*, 47(6), pp.422-431.
43. Pickworth, G.E. and Schoeman, W.J., 2000. The psychometric properties of the Learning Style Inventory and the Learning Style Questionnaire: Two normative measures of learning styles. *South African Journal of Psychology*, 30(2), pp.44-52.
44. Pritchard, A., 2009. *Ways of Learning: Learning theories and learning styles in the classroom*. Second edition. Routledge. pp.1, 2.
45. Raddon, A., 2007. Distance learners juggling home, work, and study. In P, Cotterill., S, Jackson., and G, Letherby. (Eds.). *Challenges and Negotiations for women in higher education* (pp. 159-181). Dordrecht: The Netherlands: Springer.
46. Seiler, D. 2011. Age and learning styles of adult learners. *The Journal of Human Resource and Adult Learning*, 7, pp. 133-138.
47. ŞİrİN, A. and GÜzel, A., 2006. The Relationship between Learning Styles And Problem Solving Skills Among College Students. *Educational Sciences: Theory & Practice*, 6(1).
48. Song, D. and Oh, E., 2011. Learning styles based on the different cultural background of KFL learners in online learning. *language Learning*, 14(3), pp.133-154.
49. Sopian, A., Ahmad, S., Abu Bakar, K.A., Jamsari, E.A. and Zin, H.M., 2013. Study on learning styles among Arabic language students at Universiti Teknologi Mara, Malacca Campus. *IOSR Journal of Humanities and Social Science*, 15(4), pp.38-40.
50. Ticehurst, G.W. and Veal, A.J., 1999. *Business Research Methods: A Managerial Approach*. Longman, Australia.
51. Urval, R.P., Kamath, A., Ullal, S., Shenoy, A.K., Shenoy, N. and Udupa, L.A., 2014. Assessment of learning styles of undergraduate medical students using the VARK questionnaire and the influence of sex and academic performance. *Advances in physiology education*, 38(3), pp.216-220.
52. Visser, S., McChlery, S. and Vreken, N., 2006. Teaching styles versus learning styles in the accounting sciences in the United Kingdom and South Africa: a comparative analysis. *Meditari accountancy research*, 14(2), pp.97-112.
53. Wang, T. and Moore, L., 2007. Exploring learning style preferences of Chinese postgraduate students in Australian transnational programs. *International*

*Journal of Pedagogies and Learning*, 3(2), pp.31-41.

54. Wong, K.K., Pine, R.J. and Tsang, N., 2000. Learning style preferences and implications for training programs in the hospitality and tourism industry. *Journal of Hospitality & Tourism Education*, 12(2), pp.32-40.