

**The Need for More Professional Training Programs in Tourism, Arts & Culture,
Sports, and Healthcare Management in the UAE:
A Survey of Prospective and Current College Students**

Odekhiren Amaize, Ph.D.*
Associate Professor of Marketing Communications
College of Communications and Media Sciences
Zayed University
P.O. Box 4783
Abu Dhabi, United Arab Emirates

Tarek Mady, Ph.D.
Associate Professor of Marketing
School of Business Administration
American University in Dubai
P.O. Box 28282
Dubai, United Arab Emirates

Eric Benson, Ph.D.
Associate Professor of Decision Sciences
School of Business Administration
American University in Dubai
P.O. Box 28282
Dubai, United Arab Emirates

*Please send all correspondences to the first author.

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Abstract

For several years, the UAE government has embarked upon diversifying its oil- and gas-based economy. As a result, the service industry, particularly the tourism, healthcare, arts and culture, and sports and recreation service sectors have witnessed much growth. Unfortunately, as revealed in this study, the country lacks the professional human resources needed to keep pace with the tremendous growth. We make the case for the need for more professional and higher education training programs in tourism, arts and culture, sports, and healthcare by highlighting the paucity of such training programs and by reporting on the mostly favorable attitude of prospective and current college students toward studying these disciplines. Several constructs and variables, including awareness of the discipline as a choice of academic major, gender, educational background and interest relate to students' overall attitude and preference for any of the four disciplines. These findings, we recommend, could inform the marketing and promotion strategies of existing and future institutions considering offering these programs.

Keywords: UAE, Degree Programs, Tourism, Arts, Sports, Healthcare

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1. INTRODUCTION

Despite the effects of the recent global economic crisis, the United Arab Emirates (UAE) exhibits evidence of a healthy and sustainable economy. With \$38,900, the UAE is ranked 23rd among 227 countries in terms of GDP per capita (purchasing power parity 2009 estimates). While the clear majority of economic growth in the country has been fueled by the oil/energy and manufacturing sectors, serious initiatives have been made by the central government to somewhat diversify the economy throughout the seven emirates making up the country. Specifically, there has been a growing emphasis on the services and the development of the service sector (Figure 1).

**Figure1
UAE Real Gross Domestic Product by Sector (%)**

Sector	2003	2004	2005	2006	2007
Agriculture	3.0	3.0	2.9	2.8	2.6
Industry	53.3	52.1	50.6	51.0	49.4
Services	43.8	44.9	46.5	46.2	47.9

Source: Economist Intelligence Unit

More recently, estimates in 2009 show the services sector to account for 50% of the country's GDP compared to 1.1% and 48.5% for agriculture and industry, respectively (CIA World Fact book, 2010). Given the labor-intensity of the service sector, it is no surprise that distribution of labor figures by occupation illustrate that as early as 2000, the service sector accounted for a disproportionately high 78% of the economy relative to agriculture (7%), and industry (15%). Among the more salient UAE service sectors considered priorities by the government and of interest in this study are the areas of *tourism, healthcare, the arts and culture, and sports and recreation*.

Despite the exponential growth of these sectors, however, little empirical research addresses the existence (or lack of) relevant academic and professional training/degree programs needed to keep up with the growth in these sectors. Our study hopes to shed light on this issue with a survey of prospective and current college students' attitudes towards and preference for degree programs in the areas of tourism, healthcare, the arts and culture, and sports and recreation.

We begin by highlighting the magnitude of growth and importance of these sectors to the UAE economy, to make the case for the need for more academic and professional training programs that would provide the much-needed professional talents to manage the various private and public organizations of these four service sectors. We then present the results of a survey of prospective and current students and conclude with recommendations with implications for marketing and promotion strategies for current and prospective institutions regarding recruitment of potential students.

2. SERVICES SECTORS IN THE UAE

2.1. Tourism

The tourism industry in the Middle East, of which the UAE is a major participant, has been only marginally affected by recent global economic crisis. In 2008, for example, worldwide international visitor at hotels was predicted at 3%-4% compared with 6%-10% growth rate for the Middle East (Ameinfo.com, 2008a). These growth rates have been fueled primarily by increases in air traffic availability and declining room rates as well as increasing business travel into the region. The UAE, with her year-round sunshine, luxury beach hotels and resorts, shopping malls, arts, film, sports festivals, and special events, continues to be a major world tourist destination. Dubai's growth in the Meeting, Incentive, Conference, and Exhibition (MICE) industry of more than 100 yearly exhibitions, for example, has also been a

contributing factor. In response, the country and several industry entities are embarking on several measures to meet these tourism-related challenges. Dubai, for example, is spending \$4.5bn to expand its international airport in anticipation of over 60 million passengers by 2010, and another \$10bn is being spent on building the world's largest airport: Al Maktoun International Airport. In addition, more hotels are being built to accommodate increased demand for travel to the region. As of 2008, InterContinental Hotel Group plans to build 11 hotels in the Middle East, and Hilton is said to double its 43 properties within five years:

“The number of hotel rooms in Dubai will increase by 50 per cent to 22,000 by the end of this year. Currently there are 40,000 rooms across 415 hotels. The Dubai Department of Tourism and Commerce Marketing said that this year 22 hotels are due to open with seven hotel apartments adding 10,000 rooms to the inventory. Hotel occupancy is running at 85 to 90 per cent. Following the growth trends in the region, the Abu Dhabi Tourism Authority has approved investment packages to build 4,000 hotel rooms in three years as part of its plan to add 17,000 hotel rooms by 2015” (Gulf News, 2008).

However, the country's goals and objectives of diversifying its economy with tourism cannot be achieved without a commensurable quantity and quality of tourism labor workforce. Industry officials predict, for example, that, with low retention and exodus of qualified manpower, the UAE needs a staff of about 500,000 new staff to meet its hotel human resource needs in the next five years (Ameinfo.com, 2008b). An increase in the number of academic and professionally trained graduates in tourism and hospitality would help ameliorate such pending manpower predicament. As revealed in Figure 2 below, there are currently five institutions offering such training. In addition, the \$2.8bn joint venture between the Investment and Development Office of the Government of Ras Al Khaimah and International Hospitality Trade and Training Zone (Ihottz) is a major step in this direction. This audacious enterprise will house about 16 educational institutions on a college city campus that would train as many as 15,000 students, offering a two-year Hospitality MBA

program, a culinary school with international recognition and a College of Hotel Administration (ameinfo.com, 2008b).

2.2. Healthcare

As in many countries, the healthcare industry in the UAE is thriving. The government continues to invest in healthcare infrastructure, services, and education that not only meet the needs of its growing population, but competes with countries like India, Singapore, and Thailand in becoming a major destination in the growing global health tourism industry which is estimated to be \$100bn by 2012. (Ameinfo.com, 2008c).

Recently published findings of the report, "Expand, Consolidate & Support: Meeting the GCC Healthcare Challenge 2050" (Ameinfo.com, 2009a) and produced in partnership with Dow Jones Private Equity, concludes that the GCC would need 138,965 hospital beds; 140,334 physicians and 227,079 nurses by 2050 to maintain current healthcare levels. It is reported, "UAE alone will need 15,698 new beds and physicians along with 31,396 additional nurses" (Dow Jones and Company, 2009). In yet another report, Sustainable and Profitable Healthcare Investment in the Middle East', it is predicted that "the U.A.E. healthcare market will grow over 14 percent annually between 2005 and 2015, from \$3.2bn to \$11.9bn" (Ameinfo.com, 2009b).

Several healthcare industry initiatives in the UAE have immense impact on the need for more academic and professional healthcare management training. The world's first healthcare free zone, The Dubai Healthcare City (DHCC), with its Medical Community of 4.1 million square feet, and a Wellness Communities of 19 million square feet, in tandem, provide clinical services as well as luxury outpatient resorts. In addition, besides the \$1.9bn construction of the Cleveland Clinic in Abu Dhabi, there is the Saudi German Hospital –

Dubai, at a cost of \$200m, which anticipates employment of approximately 1,500, including healthcare managers (Ameinfo.com, 2008d).

Clearly, these figures call for a healthy number of healthcare management professionals. A partial summary of the GCC Healthcare Challenge 2050 germane to the need for academic and professional healthcare management training is provided by Faisal Bin Juma Belhouli, Founder & Managing Partner, Ithmar Capital:

“Intellectual fragmentation is also an issue, with GCC healthcare remaining reliant on imported expertise, whilst government projects to develop native talent are strictly long-term”.

Nevertheless, to achieve its healthcare goals and objectives, the UAE government and other private entities continue to team up with several major academic and professional healthcare institutions such as Johns Hopkins and Harvard Medical schools in the US; The Royal College of Surgeons in Ireland (RCSI)’s Institute of Leadership and Healthcare Management (ILHM); and the German-based UKE Consult and Management GmbH (UCM), the international arm of the University Medical Center Hamburg -Eppendorf (UKE). The number of certified hospitals and clinics continue to grow.

2.3. Arts and Culture

The great number and quality of arts and culture activities being produced and promoted by such institutions as the Abu Dhabi Authority for Culture and Heritage (ADACH), Abu Dhabi Music and Arts Foundation (ADMAF), and the Dubai Cultural Council (DCC) is a testament to the fact that the government’s quest for a diversified and healthy economy is increasingly being nurtured with the development and promotion of arts and culture. The following three recent press excerpts provide credence and impetus to this endeavor:

“Abu Dhabi has recently announced the development of Saadiyat island as an 'island of art'. The new development includes Guggenheim and Louvre museums and a host of other cultural and artistic developments. In January 2007 four of the world's most renowned architects – Frank Gehry, Jean Nouvel, Tadao Ando and Zaha Hadid–presented designs commissioned by Abu Dhabi's Tourism Development & Investment Company (TDIC) for iconic museums and a performing arts centre which will position the UAE capital's Saadiyat Island, that lies just offshore the emirate, as a world-class cultural destination” (uaeinteract.com).

“Art Dubai 2009 has ended with record attendance figures and strong buying reported from both regional and international private collectors and museums. Held at the Madinat Jumeirah over five days, Art Dubai saw approximately 14,000 visitors including 4000 overseas participants. With widespread critical praise from the world's press, Art Dubai has confirmed its role as the premier contemporary art fair in the Middle East and a significant new platform for galleries and artists across Asia, Europe and North America” (Ameinfo.com, 2009c).

“Sharjah Museums Department (SMD) has highlighted its commitment to Emiratisation reporting 83% nationalisation of jobs across its museums in 2008. Sharjah's family of museums include art, archaeology, maritime, calligraphy, Islamic civilization, natural history, science and heritage among others” (Ameinfo.com, 2009d).

The UAE boasts over 60 museums and heritage villages, over 11 arts and culture festivals, and over 40 exhibitions and special events, including international book fairs, all of whose growth and sustenance could benefit from employing qualified graduates of academic and professional training programs in arts and culture management.

2.4. Sports & Recreation

More than most countries, the UAE boasts an increasing array of institutions and enterprises, which could employ the talents of sports and recreation management graduates. Football, cricket, camel and horse racing, marine sports, rugby, diving and snorkeling are some of the thriving sports. The UAE also hosts several major international sport tournaments for tennis (ATP Tour World Series), golf (The Dubai Desert Classic), Dubai X Games World Cup, and motor sports (Formula 1TM Etihad Airways Abu Dhabi Grand Prix).

The UAE also successfully participates in the Pan-Arab and Asian Games. The number of private and government initiatives supporting and promoting these various sport interests to thousands of tourists and spectators continues to grow. For example, there is the Dubai Sports City (DSC), the \$4bn, 50 million square feet, which contains among other establishments: Butch Harmon School of Golf, The Dubai International Cricket Stadium, The Golf Community Victory Heights, The Bradenton Preparatory Academy Dubai, World Hockey Academy, a Rugby Academy, International Cricket Council (ICC) Global Cricket Academy, a David Lloyd Tennis Academy, etc. There is also the Dubai Event Management Corporation established by His Highness Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice President, Prime Minister and Ruler of Dubai to organize and manage live events in sports, arts and culture, exhibitions, conferences and entertainment (Ameinfo.com, 2008e).

3. UAE-based Programs in Tourism, Healthcare, The Arts, and Sport Management

The tremendous growth in four UAE service sectors under consideration in this study undoubtedly warrants a commensurate quality and quantity of academic and professional training programs. We address this issue in the remainder of this paper: firstly, by reporting on the paucity of such programs within the context of a plethora of business and administrative studies currently available in UAE colleges and universities; and secondly, by reporting on a survey of prospective and current college students, regarding their awareness of these particular service sectors as possible fields of academic study, and their attitudes toward considering them as major discipline of academic pursuit.

As published in the portal of the Commission for Academic Accreditation (CAA), about 90% of the 90 or more UAE public and private universities and colleges list business and management discipline as one of their programs/majors. The British Council, among its Trans National Education (TNE) research findings in 2009 (Appendix 1), reveals sixteen

major categories being studied by UAE college students. It is no surprise that business and administrative studies are the most favored by the country's undergraduates (59%) and postgraduates (76%). However, academic and professional degree/certificate granting programs in marketing and management of Tourism, Healthcare, Arts & Culture, and Sports & Recreation are relatively new and few in most countries, including the UAE.

An extensive content analysis of the curricula of more than ninety academic and professional degree and certificate-granting universities and colleges in the UAE reveals that while over ninety percent of these institutions offer various degrees in the “traditional” business disciplines of marketing, accounting, finance, and management, only a handful (Figure 2 below) provide opportunities for career choices in Fiscal and Personnel Management, Board Relations, Planning and Development, Marketing and Public Relations, Labor Relations, and Government Relations in each of these specialized and fast-growing service sectors.

Figure 2
UAE based Degrees/Certificates in Tourism, Healthcare, Arts and Culture, Sports and Recreation

Sector	Degree/Program
Tourism/Hospitality	<ul style="list-style-type: none"> • The European International College of Hotel Management and Tourism • Middlesex University Dubai • Emirates Academy of Hospitality Management in Dubai • Skyline University College in Sharjah • Zayed University, Abu Dhabi/Dubai
HealthCare	<ul style="list-style-type: none"> • Hamdan Bin Mohammed e-University (HBMeU) in Dubai • Royal College of Surgeons in Ireland (RCSI) Dubai Campus • American University in Dubai (MBA with concentration in Healthcare Management)
Arts and Culture	<ul style="list-style-type: none"> • Paris Sorbonne University Abu Dhabi (Master's degree in Museum Studies in association with Louvre Paris, Louvre Abu Dhabi, École du Louvre Paris. Course to be taught in English and French, and subject areas to include museum management, art restoration, and history of art. Starting in 2010-2011 Academic Year)
Sports and Recreation	<ul style="list-style-type: none"> • None

Arguably, the preponderance of programs offering academic and professional training in tourism and hospitality management among these four special business disciplines in the UAE could be attributed to the sheer magnitude of the industry, as highlighted earlier in this

study. Apparently, awareness and demand among students is relatively high, and this, undoubtedly, proves to be most profitable investment for interested educational institutions willing and able to deliver the necessary curricula.

4. The Study

In order to gauge the need for formal business management and administrative studies in the UAE with regards to the four services sectors of interest, a survey of prospective college students (high school students) and current college students (undergraduates and graduates) was administered. Specifically, questionnaire items were developed and designed to determine awareness of existing programs as well as general attitudes towards the need for academic and professional training programs in the four areas. While not specifically, hypothesized, an underlying theme of the analysis is that student awareness of such programs and are willingness to invest time and financial resources in pursuit of their possible career choices is positively related to demand for these programs. As such, such a relationship implies that educational institutions should invest more resources to promote programs they offer.

4.1. Methodology

A simple questionnaire of several demographic, awareness, and attitudinal questions was administered to a convenience sample of 114 students (55 females and 59 males) in Dubai. The sample was comprised of 34 high school students, 58 undergrads, and 22 graduate students of mixed nationalities. Demographic questions regarding gender, education level, major in college, anticipated major (in case of high school students) were solicited as well. With regards to awareness and attitudes, questions addressed: (1) general awareness of the fact that academic degrees are offered in these four fields; (2) the degree to which

respondents believe these disciplines should be offered by schools of business in the UAE; (3) general student consideration of these majors; and (4) the degree to which students believed these disciplines would benefit the country's economy. We formulated the overall favorable evaluation of the four disciplines by aggregating these last three attitudinal questions. These questions formed the basis for the following specific research questions:

4.2. Research Questions and Findings

4.2.1. Research Question 1

Could students' awareness of academic degrees in Arts, Sports, Healthcare, and Tourism Management, influence their consideration of these disciplines as majors?

The assumption underlying this research question is that students do not consider these special disciplines as majors partly due to ignorance. Studies in psychology and consumer behavior have often shed light on the measures of awareness, prior exposure and knowledge as correlates and predictors of attitude and behavior toward a phenomenon. For example, Nedungadi (1990) as well as Percy and Rossiter (1992) and Kardes (2002) note the critical factors that determine consumer choice from a consideration set and conclude that brand awareness is a more salient factor in brand choice than simply brand attitude, because without brand awareness, the brand will not even be considered. Website awareness, for example, has been shown to influence online purchase intention, Sung-Joon Yoon (2002). Similarly, among awareness-group subjects in a controlled experiment on brand choice process, Hoyer and Brown (1990) discovered brand awareness was a "dominant choice heuristic". Awareness, even at subliminal levels, favorably influences attitudes (Bornstein, Leone, and Galley, 1987). Therefore, initial awareness or exposure to a phenomenon, such as a particular discipline, could serve as antecedent to choice of major in college and possibly career choice considerations. Hoffman et al. (1992) noted that parental influence is a primary

determiner on their offspring's career choices. Accordingly, we predict that awareness of the fact that academic degrees are offered in these four disciplines would correlate with the favorability of attitude toward majoring in the disciplines.

Defined as a simple rudimentary knowledge of a fact, awareness was measured on a seven-point Likert scale: not at all aware/very much aware of academic degrees being offered in each of these fields. A similar attitudinal scale (would definitely not consider/would definitely consider a discipline as a major) was employed in assessing the degree to which students would consider majoring in any of these fields.

As evident in Figure 3 below, except for Tourism, a good percentage of the students are, indeed, not at all aware that college academic degrees are offered in the special fields under investigation in this study. The average unawareness level across other three disciplines among all the three groups of students is roughly 30%. Graduate students (35.2%) are more unaware than high school students (16.9%), and undergraduate students (19.4%). By assuming the values of the first lower three levels of the scale as composite index of "unawareness", we find that the level of awareness is extremely low. As such, high school students reveal "unawareness" levels of 41%, 67%, and 58%, in arts, sports, and healthcare disciplines, respectively; for the same set of disciplines among the undergrads, it is 48.3%, 58.6%, and 48.3%, while for the graduates, the survey reveals 59% unawareness for the arts, 81.7% for sports, and 72.8% for healthcare.

Awareness levels across all three groups of students in the offering of tourism as a college degree is clearly superior to the awareness of other three fields in both "basic" and "composite" percentages. The composite percentage of Tourism degree awareness for the high school is 76.5% compared to 50% for arts, 23.5% for sports, and 23.5% for healthcare. For the undergrads it is 81.0% relative to 39.6% for the arts, 32.8% for sports, and 34.5% for

healthcare, whereas for graduates, it is Tourism 54.5%, Arts 39.6%, Sports 32.8%, and Healthcare 34.5%.

Regarding students' consideration of majoring in any of these disciplines as major, two fields appear prominently in each of the three groups of students, namely, arts and tourism. Again, reviewing the "composite" percentage results in Figure 3, high school students favorably consider majoring in Arts management 52.9%, Sports 26.5%, Healthcare 32.4%, and Tourism 61.8%; undergraduates' favorability of major considerations were Arts 46.5%, Sports 36.2%, Healthcare 20.7%, and Tourism 62.0%; and almost similar results are observed among the graduate students: Arts 36.3%, Sports 36.3%, Healthcare 13.3%, and Tourism 45.4%.

Figure 3
Percentage of Students' Awareness of Academic Degrees in Arts,
Sports, Healthcare, and Tourism Management, and Consideration of
Disciplines as Major

		1	2	3	4	5	6	7							
		Not at all Aware	Never Consider Major									Very Much Aware	Seriously Consider Major		
High School students (N=34)	Arts (%)	20.6	20.6	14.7	14.7	5.9	8.8	8.8	2.9	14.7	14.7	11.8	8.8	23.5	29.4
	Sports (%)	29.4	23.5	17.6	29.4	20.6	8.8	8.8	11.8	8.8	8.8	8.8	5.9	5.9	11.8
	Health (%)	17.6	20.6	17.6	11.8	23.5	11.8	17.6	23.5	5.9	14.7	8.8	5.9	8.8	11.8
	Tourism (%)	0.0	5.9	11.8	11.8	0.0	8.8	11.8	11.8	20.6	26.5	20.6	14.7	35.3	20.6
Undergraduate Students (N=58)	Arts (%)	19.0	20.7	12.1	8.6	17.2	12.1	12.1	12.1	13.8	10.3	17.2	6.9	8.6	29.3
	Sports (%)	29.3	25.9	19.0	10.3	10.3	12.1	8.6	15.5	12.1	20.7	12.1	8.6	8.6	6.9
	Health (%)	22.4	29.3	12.1	15.3	13.8	17.2	17.2	17.2	15.5	12.1	6.9	3.4	12.1	5.2
	Tourism (%)	6.9	8.6	1.7	6.9	1.7	6.9	8.6	15.5	12.1	17.2	8.6	13.8	60.3	31.2
Graduate Students (N=22)	Arts (%)	31.8	36.4	22.7	13.6	4.5	4.5	4.5	4.5	9.1	9.1	9.1	22.7	18.2	4.5
	Sports (%)	54.5	45.5	22.7	22.7	4.5	4.5	9.1	0.0	0.0	9.1	0.0	0.0	9.1	13.6
	Health (%)	36.4	31.8	27.3	18.2	9.1	18.2	9.1	13.6	4.5	4.5	13.6	4.5	0.0	4.5
	Tourism (%)	18.2	27.3	13.6	13.6	13.6	13.6	0.0	0.0	13.6	18.2	13.6	4.5	27.3	22.7

"Composite" percentages (lo= sum of levels 1-3) (hi= sum of levels 5-7)

These results clearly indicate varying levels of students' awareness and consideration of the four disciplines under investigation as majors. However, it is assumed students express less interest in majoring in any of these fields partly because they are unaware of such a possibility. It is believed that as students become more aware of this fact, they will be more

likely to include these majors in their academic major consideration sets. To the extent that awareness does influence and possibly predict attitude and choice, a closer examination is warranted. A relationship between these two variables should better inform relevant institutions about initiating and/or promoting such academic programs.

Figure 4 below shows positive correlation results of awareness and consideration of majors across all disciplines and in the three groups of students. This relationship was mostly significant in the Arts, Sports, and Tourism among the high school students; Arts, Sports, and to a lesser extent, Healthcare among undergraduates; and among the graduate students, Arts Management.

Figure 4
Correlations of “Awareness of degrees being offered in the particular field”
and “Consideration of Field as Major”

Sample	Major	Correlation
High School students (N=34)	Arts	.543**
	Sports	.364**
	Health	0.121
	Tourism	.358*
Undergraduate Students (N=58)	Arts	.367**
	Sports	.469**
	Health	.276*
	Tourism	0.075
Graduate Students (N=22)	Arts	.646**
	Sports	0.414
	Health	0.042
	Tourism	0.324

*significant at 0.05 level (2-tailed)

** significant at 0.01 level (2-tailed)

4.2.2. Research Question 2

Would students’ overall attitude be more favorable toward offering some academic degrees such as in Tourism over Arts, Sports, and Healthcare Management?

As discussed earlier, tourism has become a major industry in the UAE, with its myriad of over 400 hotels and holiday resorts, as host to several major international sport tournaments (tennis, golf, and motor sports), shopping malls, arts and film festivals, exhibitions, and as hub of regional healthcare tourism. As such tourism provides employment

for thousands of UAE residents, and in some instances, internships for college students. We expect the omnipresence of this industry in the lives of students to influence their favorability of offering tourism studies over the arts, healthcare and sports management disciplines. Offering academic degree in Arts and Culture discipline will be less favored, partly due to low involvement in the arts among the youth, in general. A recent report by the US National Endowment for the Arts (NEA), reveal that among all U.S. adults, besides the older citizens, 18-24-year-olds were the least involved in all categories of visual, performing arts, and cultural activities as measured by attendance and participation. Given the increasing similarities in global youth lifestyle and consumption patterns, it is reasonable to expect similar results among the UAE youth. Moreover, they may be more prone to valuing the immediate economic benefits of salient industries of Sports and Tourism over Healthcare, and particularly underestimating the social and cultural contributions of the Arts in the development of the country. Lastly, almost none of UAE's universities or colleges offer performing arts (music, theater, and dance) as major disciplines, which would minimize college students' awareness and interest in favoring the offering of Arts and Culture management as major discipline. Thus while the majority of students will favor the offering of all four disciplines, Arts & Culture should be the least favored to be offered, and tourism the most favored.

As expected, majority of students (an average of about 60% across all three categories) strongly agree that schools should definitely offer these disciplines. As revealed in the composite percentages (scale levels 5-7 combined) in Figure 5 below, Tourism was most favored among each group of students, as high as 85.3% for high school students, 86.2% for undergraduates, and 63.5% for graduates.

Figure 5
Percentage of Students Responding to “Schools Should Definitely Offer Academic Degrees in . . .”

		1	2	3	4	5	6	7
		Strongly disagree						Strongly agree
High School students (N=34)	Arts	5.9	5.9	8.8	14.7	29.4	8.8	26.5
	Sports	5.9	5.9	11.8	14.7	14.7	26.5	20.6
	Health	2.9	11.8	8.8	11.8	23.5	14.7	26.5
	Tourism	2.9	5.9	2.9	2.9	20.6	26.5	38.2
Undergraduate Students (N=58)	Arts	1.7	8.6	6.9	13.8	13.8	13.8	41.4
	Sports	6.9	10.3	5.2	19	17.2	19	22.4
	Health	8.6	5.2	12.1	17.2	20.7	19	17.2
	Tourism	5.2	0	0	8.6	12.1	15.5	58.6
Graduate Students (N=22)	Arts	31.6	18.2	18.2	9.1	4.5	18.2	18.2
	Sports	9.1	27.3	18.2	27.3	4.5	9.1	4.5
	Health	9.1	9.1	13.6	27.3	18.2	4.5	18.2
	Tourism	4.5	0	9.1	22.7	4.5	4.5	54.5

As an example of evaluating their preference for particular disciplines to be offered by schools, we compared the proportion of students who strongly favored Tourism with those who strongly favored Arts and Culture Management. Among the high school students (n=34), 64.7% of them strongly favored offering arts and culture vs. 85.3% in favor of Tourism; for undergraduates (n=58), 69.0% were in favor of arts and culture vs. 86.2% in favor of Tourism; and for graduates (n=22), the results were 40.9% in favor of Arts and Culture and 63.5% for Tourism. A closer examination of these proportions using a Z test of two population proportions revealed the following significant p-values: .024 for high school students, .012 for undergraduates and an insignificant p-value of .065 among the graduate students.

4.2.3. Research Question 3

Could an overall favorable evaluation of the disciplines depend on gender?

The impetus for this research question stems from the ubiquitous and lingering gender –based stereotypical views and attitudes towards various academic majors and occupations. Nevertheless, a panoply of environmental and demographic factors including gender have

been identified as contributing factors to students' interest, preference, and choice of a college major (Weinburgh and Englehard Jr., 1996,1994; Crisp, et al., 2009; Turner and Bowen, 1999). An underlying motivational gender difference is reflected in the finding that choice of major for women was more influenced by their aptitude for the subject while men were more influenced by "the major's potential for career advancement and job opportunities and the level of compensation in the field" (Malgwi, et al., 2005).

That gender would influence attitude towards particular discipline, for example, sports management, is also informed by the marked differences in gender regarding public participation in the arts and leisure activities. As reported in the NEA's Survey of Public Participation in the Arts (SPPA) cited earlier, more females than males either attended or participated in every category of visual, performing arts, and cultural activities including reading books and literature, whereas men's participation in leisure activities such as sports events (54.9% vs. 45.1%), playing sports (60.8% vs. 39.2%), and outdoor activities (53.3% vs. 46.7%) quite surpasses women's (SPPA, 2008, p.63). Furthermore, although, there has been growing evidence in the United States of increasing numbers of females serving as sports managers and administrators, (Deacon, & Danylo, 1997; Delpy, 1998), the industry can still be safely characterized as mostly male-dominated. This is probably the case in most countries, including the UAE. Hence we predict that: Of the four disciplines, females will more favorably evaluate the study of Arts and Culture Management, while males will tend to favor Sports Management.

Overall favorable evaluation of these disciplines by students was measured by the aggregate means of students' responses in three seven-point Likert scale attitudinal questions in the study, namely: the degree to which they agree to whether or not schools should offer academic/professional degrees in the discipline; whether or not they would definitely consider the discipline as a major; and the degree to which they believe that offering

academic/professional degrees in these disciplines would ultimately be beneficial to the country's overall growth in the next ten to twenty years. Tabulated statistical means across each of the three samples of students are shown in Figure 6 below. Within each academic level, females, more than males, reveal (with an average mean score difference of 17.7%) more favorable evaluation of Arts and Culture management than males. Similarly, except for the graduates, males' preference for Sports Management over females' is quite obvious (5.13 male vs. 3.63 female) among high school students and (4.78 male vs. 3.94 female) among the undergraduates.

Figure 6
Mean Statistics of Overall Favorability by Gender
in each Academic Level towards the Four Disciplines

		Female (%)	(s.d)	Male (%)	(s.d)
High School students (N=female 15 male 19)	Arts	5.33	2.02	4.47	1.93
	Sports	3.63	1.82	5.13	1.65
	Health	4.55	1.84	4.78	1.75
	Tourism	5.08	1.82	5.64	1.52
Undergraduate Students (N=female 30 male 28)	Arts	5.48	1.51	4.46	1.77
	Sports	3.94	2.00	4.78	1.75
	Health	4.42	1.81	4.23	1.67
	Tourism	5.84	1.53	5.8	1.58
Graduate Students (N=female 10 male 12)	Arts	4.02	1.96	3.61	2.47
	Sports	3.51	1.86	3.16	1.98
	Health	4.04	1.82	4.13	1.83
	Tourism	5.33	2.18	4.66	1.97

For a closer examination for the effect of gender on the overall favorability of the two selected disciplines of Arts and Sports, a two-sample T-Test for statistical significance in each of the three education levels reveal the following.

For high school students, female favorability of Arts management is not significantly more than males' (p-value=.108); however, male favorability of Sports management is quite significantly more than females' (p-value=.008). Among the undergraduates, females' favorability of Arts Management is significantly more than males' (p-value=.011); whereas male favorability of Sports management is not significantly more than females' (p-

value=.047); The least degree of significance across both gender groups is evident in the graduate level, with a p-value =.33 for female overall favorability of Arts Management over males', a p-value=.66 for male overall favorability of Sports over females'.

4.2.4. Research Questions 4

Could an overall favorable evaluation of the disciplines depend on educational background or interest?

Several studies besides the NEA's support the notion that attendance and participation of arts and cultural activities correlate positively with demographic variables of gender, age, education, income, and even race. (DiMaggio, 1990; Cook, 1995). And others have shown that audience lifestyle and attitudes (Andersen, Belk, 1982), early childhood and family arts experiences (Bamossy, 1982) appropriately predict patronage of the arts. In considering education as a mediating factor for attendance and participation, focus has invariably been on audiences' level and "quantity" of years of education attained as opposed to the "quality" of education. We expect the quality and nature of one's education to partially inform opinion and choice of one's consumption. In this study, we probe the degree to which students' educational background or interest relate to their overall favorable evaluations of the four disciplines. Specifically, we asked high school students the following question: "Knowing you could change your mind, but for now, what general area of study (science, humanities, or business) might you major in, in college?" To the extent that the nature and quality of one's past and present experiences, including "quality" of one's education influence future intentions and behavior, we predict, in this study, for example, that:

High school students with humanities/arts educational interest will, overall, more favorably evaluate the study of Arts and Culture Management, while those whose educational interest is business will, overall, more favorably evaluate Sports/Tourism Management.

As in the influence of gender, overall favorable evaluation of these disciplines by high school students was measured by the degree to which they agree to whether or not schools should offer academic/professional degrees in the discipline; whether or not they would definitely consider the discipline as a major; and the degree to which they believe that offering academic/professional degrees in these disciplines would ultimately be beneficial to the country's overall growth in the next ten to twenty years. As expected (Figure 7 below), a plurality (17.6%) of students in favor of the study of Arts/Cultural Management was of humanities educational interest, while those with business educational interest were mostly in favor of Sports (37.2%) and Tourism (45.0%).

Figure 7:
***Percent of High School Students Overall Favorability of Disciplines by Educational Background or Interest (N=34)**

	Anticipated Major in College		
	Science	Humanities	Business
Arts	15.60	17.6	31.3
Sports	17.50	8.7	37.2
Health	13.60	6.8	35.2
Tourism	18.50	11.7	45

*The column totals are less than a hundred percent because only responses of the top three favorable/agreeable levels (5-7) of the scale are reflected.

5. Conclusion

In recent years, a handful of institutions of higher education in the UAE have established academic programs to meet the increasing managerial manpower needs of the growing service industry, particularly in tourism, sports, healthcare, and arts and culture (Figure 2 above). We contend that opportunities abound for old and new program development, marketing and promotion, considering the growth of these four service sectors, as discussed earlier, and the overall favorable attitude of prospective and current college students toward such programs. This is consistent with some conclusions in the British Council Education UAE Partnership Report (2009), which counsels UK institutions entering

the UAE market, to seek “niche markets, as compared to generic programs offerings...”. And so, the key findings of our study can serve as great marketing and promotion platform for existing and prospective institutions contemplating these niche markets:

First, the issue of students’ awareness and consideration of academic degrees in Arts, Sports, Healthcare, and Tourism Management as majors. As the results indicate in Figure 3 above, while awareness is generally low, students are very much aware of the possibility of obtaining degrees in the two “niche” business management programs, of Arts & Culture and Tourism. Moreover, they consider these two choices more favorably as fields in which to major. As there is only a handful of UAE schools offering these degree programs, we can only conjecture that their response to this question of awareness may have been gravely influenced by the prevalence of arts and cultural activities and especially tourism to which they have been long exposed. Nevertheless, the positive relationship of awareness and consideration of disciplines as major revealed in this study, is reason for schools to develop sound awareness campaigns to promote their programs to students, parents, and career counselors as possible choices of majors.

Second, schools should embark on market research to identify the particular “niche” programs offerings (considering their faculty and other resources) appropriate to their current and prospective students’ interests. A finding in our limited study, for example, suggests that while all students are in favor of institutions offering all four disciplines, tourism predominates. Third, preliminary findings in this study, for example reveal some evidence of gender preference for choice of major discipline, whereby females seem to gravitate toward the study of arts and culture management, and men, sports management. As such, institutions of higher education should consider targeting the “right” gender with the “right” message for the “right” niche programs. Finally, in their promotion and recruitment efforts, institutions should account for the educational background and interest of prospective students, as there

is some evidence in this study, for example, that “business” students lean towards sports and tourism management disciplines while the “humanities” students more toward arts and culture management.

As an exploratory study, this research has shed light on four rapidly growing service industries in the UAE, namely Arts & Culture, Sports, Healthcare, and Tourism, as well as the need for more management training programs to meet their manpower needs. Results from our awareness and attitudinal survey of relatively small, but representative sample of UAE current and prospective college students reveal favorable support for schools to offer management training programs in these disciplines and their willingness to include them in their consideration sets of academic majors.

This study should benefit current and future institutions in planning and promoting these “niche” business programs and in adhering to another recommendation of the British Council to “gear their product offering and market strategy in line with the nation’s development goals and introduce ‘unique’, futuristic programs geared to serving the needs of the ‘new’ UAE”.

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**Appendix 1:
Disciplines Studied by Undergraduate and Graduate Students in the UAE**

Subject	UG students		PG students		All Students	
	Count	Percentage	Count	Percentage	Count	Percentage
Medicine & dentistry	17	0%	15	0%	32	0%
Subjects allied to medicine	140	1%	20	0%	160	1%
Biological sciences	79	0%	39	0%	117	0%
Physical sciences	236	1%	39	0%	274	1%
Mathematical sciences	157	1%	77	1%	234	1%
Computer science	1,022	6%	578	6%	1,600	6%
Engineering & technology	2,123	13%	694	7%	2,816	11%
Architecture, building & planning	393	2%	154	2%	547	2%
Social studies	393	2%	154	2%	547	2%
Law	79	0%	39	0%	117	0%
Business & administrative studies	9,434	59%	7,209	76%	16,643	65%
Mass communications & documentation	1,179	7%	39	0%	1,218	5%
Languages	314	2%	154	2%	469	2%
Historical & philosophical studies	79	0%	39	0%	117	0%
Creative arts & design	314	2%	116	1%	430	2%
Education	79	0%	116	1%	194	1%
Total	16,038	63%	9,479	37%	25,517	100%

(Source: British Council TNE Report 2009)