Strategies and Public Policy Models of Effective Human Capital, Talents and Workforce Development: An Investigation into the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE

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Abstract

Human resource development, specifically workforce training and talent development in the United Arab Emirates (UAE) and its outcomes are the main goals of this study. This research investigation has focused on selected aspects of public policy strategies for workforce and human capital development in the UAE. More specifically, this investigation is aiming to investigate the effectiveness of various UAE Scholarship Programmes on workforce development. The research addresses how human capital development strategies for UAE Nationals, with specific and primary reference to university scholarship programmes, have had positive impacts on the development of those Nationals who successfully completed their programme within the last decade. Additionally this study asks what correlations there might be between the scholarships' specific skills enhancement and the nature of the work in which alumni are presently engaged; and in what ways UAE Nationals believe their careers have developed as a result of the successful completion of their university scholarship programme; also to what extent UAE Nationals believe they have been able to impact positively on the institutions and organisations they work for. And indeed how do those participants who took part in this study feel about improvement of such programme for scholarship winners in the future?

A mixed method design approach which integrated both quantitative and qualitative data was used. The quantitative data were collected through a survey, and qualitative data were collected from both the survey and through more in-depth individual interviews and focus group discussions with both alumni and public sector managers. The sample of the present study comprises a total of 206 alumni of both genders with (a 78% response rate) who participated in this study; and additional sample of 33 alumni also included, as well as three public sector mangers who had in=depth interviews.

Using Kirkpatrick's four level criteria of evaluation of alumni learning experience abroad. That is reactions and satisfaction, learning of the intended knowledge and skills, creation of behaviour change among participants and resulting in tangible impact on organisation as well employing other indicators which compared responses before 2006 and after 2006, the present research work indicated majority of participant's alumni were very positive about their study experience aboard; participants claimed they have gained a wide range of skills and experience. Their future influence could include areas of high priority for development and leadership, including education, health and governance. Further results also showed that over 90% of alumni respondents have successfully completed their programmes of study; hence returned home and currently are working in the UAE. Majority of the participants also claimed that their programme contributed to international collaboration and partnerships.

Overall evaluation and main outcomes of this study did not offer tangible evidence that scholarships are having a significant impact on institutional performance. There was also no noticeable difference between those institutions which had received relatively larger numbers of scholarships (Management, Biology, Engineering and Computer Sciences), and those who had received few. However, further in-depth assessment of individual institutions might be necessary in future to elicit such evidence and/or relationship links.

Some results suggested that the scholarships offered by different ministries and departments will enable the transfer of skills and knowledge not only to individual award holders, but also to employers and relevant institutions.

Finally, the main findings of the study lead to a number of recommendations to better support not only the integration of scholars in their workplaces but also the achievement of effective workforce plan to achieve the objective of Emiratisation Scheme and strategic vision on this important field of study which has been acknowledged at all UAE governmental levels.

H. H. Sheikh Mohammed Bin Zayed Al Nahyan – Crown Prince of Abu Dhabi, in the last 2015 Government summit in Dubai.

'*Our priorities of education, health, security, innovation and economic diversification and the right investment in human capital through education and training, a safe alternative to the depletion of oil.*'

Chapter 1

Introduction and Background

'The prosperity that we have witnessed has taught us to build our country with education and knowledge and nurture generations of educated men and women.'[1]

'Education is the priority of any nation that hopes to occupy a distinguished position among the countries of the world. It is the means by which it can build a strong generation, cautious of adhering to its customs and traditions and able to adjust to the ever-changing needs of our times and to the ever-developing technologies of the modern world.'[2] *Also Abu Dhabi Crown Prince details UAE leaders' vision of future without oil in the last 2015 Government summit in Dubai when it was reemphasised the importance* of education in shaping the future; and underlined the challenges in the education sector that need to be addressed through a clear vision for the next 25 years and a strategy for building future capabilities.

1.1 Introduction

Contemporary human resource development (HRD) is often considered conducive to the development of a country's most valuable asset – its human resources. HRD, specifically workforce training and development in the United Arab Emirates (UAE), is the main focus of

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[1] First president and founder of the United Arab Emirates, Sheikh Zayed Bin Sultan Al Nahyan, www.pso.ae/quotes.htm (retrieved 27 April 2014).

[2] H. H. Sheikh Mohammed Bin Zayed Al Nahyan – Crown Prince of Abu Dhabi, www.pso.ae/quotes.htm (retrieved 27 April 2014).

this study. This research will mainly address selected aspects of public policy strategies for workforce and human capital development in the UAE. More specifically, this investigation targets and examines the effectiveness of various UAE Scholarship Programmes and their contribution to the model of workforce and talent development as it has evolved in the UAE to date. One of the objectives of our research is to provide in-depth information to all scholarship sponsors as to how their programmes contribute both to the scholarship winners' professional careers, as well as the way those winners believe they are now contributing to the knowledge economy through the organisations that employ them. Further, previous scholarship winners, who are now fully engaged in employment, were asked to consider whether and how the programmes might be improved to enhance future generations' success while studying abroad.

1.2 Research objectives: primary questions

This research aims to investigate and address the following questions:

(1) To what extent have UAE human capital development strategies for Nationals, with specific reference to university scholarship programmes, had positive impacts on the development of those Nationals who successfully completed their programme within the last decade?

(2) What correlations might   be there between the scholarships' specific skills enhancement and the nature of the work in which alumni are presently engaged?

(3) In what ways do UAE Nationals believe their careers have developed as a result of the successful completion of their university scholarship programme?

(4) To what extent do UAE Nationals believe they have been able to impact positively on the institutions and organisations they work for within the UAE, upon successful completion of their university scholarship programme?

(5) How do those who successfully completed a scholarship programme believe it could be improved for scholarship winners in the future?

The following secondary question will also be addressed:

Are there any association between educational inputs and more general, wider human capital development strategies in the UAE?

1.3 Rationale

This investigation took place from 2011 to 2014. However, because the UAE is a unique and very fast-developing environment, it is also necessary to paint a detailed background canvas to place the educational programmes, particularly scholarships, into a wider context. This will achieve greater depth to understanding the reasons for instituting the scholarships by both government departments as well as industry, with outcomes that focus primarily on the vocational, but also on the social and economic developments.

The researcher wishes to point out that for the sake of simplifying a complex political and legal situation in the UAE Federation, there are significant differences in the gathering and availability of statistics from within the Emirates. Whilst Abu Dhabi and Dubai are large and sophisticated urban centres, such Emirates as Ajman and Um Al Quain are small and with no administrative means to gather fully up-to-date statistics. Since there is no direct taxation, there is thought to be insufficient need to enhance the public sector there. This means that the reporting in this investigation is as accurate as possible, based on available data at the time of writing and may be Emirate-specific. In such cases, the particular Emirate will be cited. The researcher will then consider whether the findings are of greatest relevance to the case in question. A further complicating factor is that the UAE is part of the Gulf Cooperation Council (GCC), an amorphous economic and political union, which as a wide-ranging regional backdrop has an effect on educational and economic policies in the UAE. From time to time, these countries are also mentioned as players in the dramas being played out in the Middle East.

1.4 The geographic and demographic context

The UAE is located at the southern tip of the Arabian Gulf and has three neighbouring countries, namely: the Kingdom of Saudi Arabia, the State of Qatar and the Sultanate of Oman.

The total area of the UAE is 83,600 km^2 and it has a tropical desert climate with very little annual rainfall. It is governed by a federal system founded on 2 December 1971. The union comprises seven emirates: Abu Dhabi, Dubai, Sharjah, Ajman, Umm al Quwain, Ras al Khaimah and Fujairah, with Abu Dhabi city as its capital (Camerapix, 1998). The UAE inhabitants are of diverse cultural groups and backgrounds. In addition to Emirati or UAE Nationals, there are various Arab and Asian populations including Iranians, Filipinos, Indians, Pakistanis, Sri Lankans, Nepalese, various European ethnicities, Australasians and North Americans. These are collectively known as expatriates, often abbreviated as expats (Gaad, 2006).

The UAE's rapid development may be attributed to political stability and continuity, as well as oil revenues that have resulted in robust economic growth, infrastructure development and the expansion of public and private industrial sectors. In order to support and sustain such growth, and in the wake of a shortage of supply of indigenous labour, the country had to rely, and indeed continues to rely, on foreign workers primarily from the Indian subcontinent to fill a huge gap in workforce availability for the private and public sectors alike, in both white and blue collar employment (Halliday, 1977). As a result and over time, the UAE became heavily dependent on qualified expatriate labour. In addition, some expatriates generally work longer hours, accept lower wages, and tolerate poorer working conditions and more physically demanding jobs compared with UAE Nationals (McMurray, 1999). It is worth noting that, in most GCC countries, over 60% of the labour force is foreign (Maloney, 1998; Ruppert, 1998). Furthermore, rapid growth in the country and the need to diversify the economy beyond income generation through mere oil-based revenue has led to an influx of expatriate workers in the service and construction industries in particular. Data from UAE census statistics by Al Bayan (2008) have indicated the high proportion of expatriates residing in the UAE as compared to the national Emirati population. Furthermore, an analysis of the demographic nature of the city of Dubai alone suggests a similar trend in terms of the need for investment in the development of local human capital that the country requires for enhancing development.

The demographic data of Dubai indicate the unique nature of representation in this city, even when applying a global context. For example the Madar Research Group (2004), indicates

that expats represented 82% of the population while population growth per annum is only 7%, with the population under 65 years of age has been calculated to be 99.35%. An analysis reported by Tanmia (2006), is shown in Figure 1.1. The stark reality is that even by 2006, over 52% of the workforce was employed in the private sector with UAE Nationals constituting less than 2% of that total.

Figure 1.1

Percentage of working population proportion
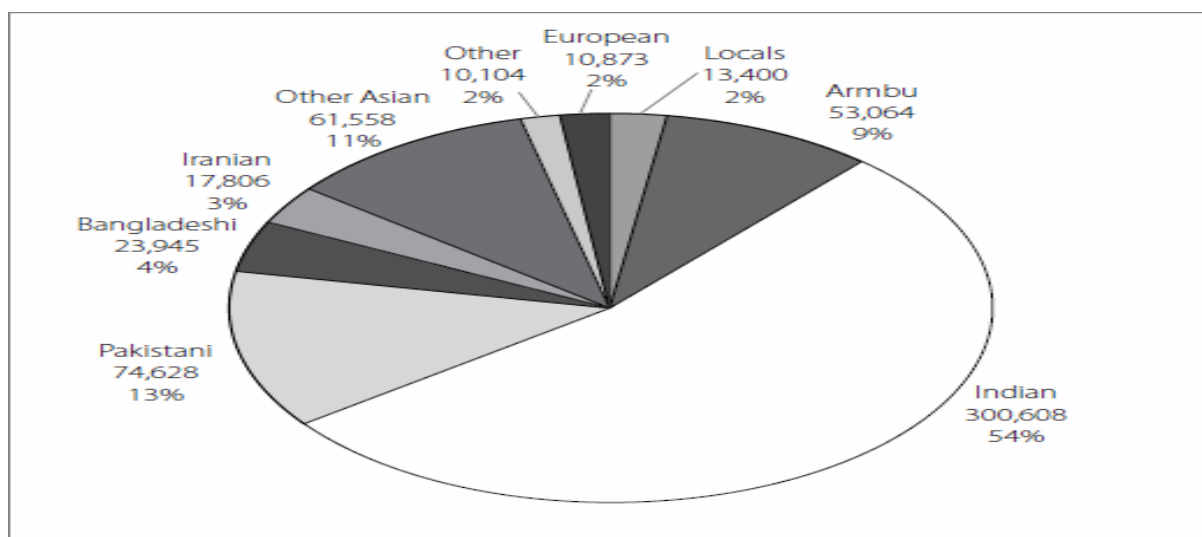
Source: Reported in Randeree (2009)

Expats make up 88.5% of the country's total population. The Emiratis were estimated at 947,997, nearly 11.5% of the total, giving the UAE, among the Gulf countries, the lowest proportion of Nationals to the overall population. The UAE had 7.2 million people at the end of 2011 and the figure was expected to grow by around 5.6% to 7.6 million at the end of 2012. The country's net migration rate stands at 21.71, the world's highest. By 2020, Emiratis are projected to form only 10% of the population.[3]

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[3] http://www.slideshare.net/jaleelshahid/expatriates-in-the-united-arab-emirates.

The population of the United Arab Emirates grew 65% to 8.26 million people in the first half of 2010 compared with the same period in 2006. Emirati Nationals accounted for 11.5% of the population at the end of June 2010, or about 948,000 people, the data showed. The country's expatriate population rose 75% from 2006 to the end of June 2010, to 7.3 million people. In 2010 there were 5.8 million non-National males and 1.6 million non-National females.[4]

The proportionately large workforce coupled with a reliance on expatriate employees has led to high levels of indigenous unemployment and challenges in terms of capacity-building. As the knowledge-based economy experiences continued growth, the nation has recognised that long-term development should be placed in the hands of a growing resident workforce that is qualified to assume greater local responsibility for economic growth and leadership. To overcome the lack of home-grown managerial and professional competence, governments in the GCC have now provided tools for the development of human capital through valuable scholarship programmes for selected candidates from the indigenous workforce.

Studies conducted by a number of researchers (Halliday, 1977; Maloney, 1998; Randeree, 2006a) have indicated that there are a number of challenges facing the UAE that need to be addressed if advancement and growth are to continue. Some of these investigations went further adding that for the Arabian Gulf region to succeed, training and development of the local population human resource base must take place first, followed by work placement according to their potential and abilities (Randeree, 2006b).

The UAE's considerable economic growth over the past two decades was initially due to its discovery of oil, but that growth posed its own challenges. A number of problems within the management of human resources have been identified, some of which point to the multi-cultural nature of the UAE workforce. Employees in the private sector in Dubai alone, for example, comprise 2.4% UAE locals, mostly employed in banks and insurance companies, 1.9%

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[4] http://emirateseconomist.blogspot.ae/2011/04/emiratis-are-115-of-population.html.

Europeans, 9.4% Arabs, 84.5% Asians and 1.8% 'others'. Fifty-eight per cent of all companies in Dubai are officially owned by UAE Nationals, but a high proportion of them are silent partners and the expatriates are part-owners and often the operators.[5]

1.5 Main contribution of current research work

As mentioned above, human resource management theories suggest that there is a close correlation between availability of development opportunities and performance of people in a country. Development involves the increase of skill, through training, that is necessary for job performance (Flippo, 1984). However, generating human capacity is one thing; using it to create and sustain economic growth and improve national welfare is another. Therefore, the main objective of the present study is to understand the management, functioning, institutional arrangement, potential impact and constraints related to government scholarship schemes in the UAE. In this context, the study also uncovers some issues and information on the impact/effectiveness, concept and intention of scholarships and what practices the government of the UAE is pursuing to develop their human capital to prepare them to work in a changing environment. An attempt, therefore, has been made to study the human resource development strategies in the UAE with a due focus on scholarship opportunities provided to employees and local graduates, measuring the investment made in them, and examining the effectiveness of such opportunities in the UAE. In addition, concepts of employee benefits and future challenges to such incentive schemes have also been assessed. Given the level of investments by the regional Governments to develop human capital through scholarship initiatives and other training programmes, it is surprising that hardly any systematic research has been carried out to determine the effectiveness of this approach.

It is hoped that this study will contribute to our knowledge of the determinants of successful human development strategies by investigating the extent to which UAE strategies

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[5] www.emirateshospital.ae/all-about.uae (retrieved 20 April 2014).

and specifically scholarship programmes have had positive impacts in the last ten years through:

(1) Increasing the proportion of indigenous Nnationals in key sectors of the economy;

(2) Improving individual economic success and achievement;

(3) Increasing job security and status;

(4) Improved innovation, including the introduction of new processes;

(5) Increases in labour productivity;

(6) Accelerated economic growth (World Bank, 1993; Van Den Berg, 2001; Smith, 1976; Garba, 2002);

(7) Contributing to the development of the body of knowledge that would guide decision-makers and governments to plan, design and implement evidence-based effective programmes.

This research will therefore have not merely academic interest, but will also assist the UAE and other countries in improving their scholarship management processes.

1.6 Public policy strategy and education in the UAE

The UAE is evolving as a competitive and knowledge-based economy as its educational enrolment and attainments are increasing over time. Vision 2021 of the UAE envisages productivity and competitiveness through investment in science, technology, research and development (STEM) and can only be increased by prioritising these disciplines and funding greater financial investments in graduate programmes and research, increasing enrolment rates in STEM and building better relationships between academia and industry.[6]

The policymakers in the UAE have devised public strategies and visions to achieve high levels of competitiveness in innovation and technology. These policy documents include Abu Dhabi's Economic Vision 2030 (Government of Abu Dhabi, 2008) and the UAE Vision 2021 (2009) mainly addressing the questions of competitiveness and the knowledge economy. In

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[6] http://www.vision2021.ae/en.

Vision 2021, there are basically four main elements of the knowledge economy focusing on collective responsibility, destiny, knowledge and prosperity.

The first element, 'United in Prosperity' addresses four objectives to improve education in order to build a 'First Rate Education' – a focus on national identity and cultural values; curricular reforms and an emphasis on international standards; increasing higher education enrolment and expansion of vocational education; and finally equal opportunity for students of all needs and abilities.[7]

Abu Dhabi's Economic Vision 2030 lays stress on 'establishing a premier education system' through education and training to enhance human capital development in the country. The vision is to increase employability of Nationals (Emiratisation) in particular and productivity of the labour force in general.

The Ministry of Higher Education and Abu Dhabi Education Council (ADEC) also introduced curricular reforms, participation in international assessments and expansion of enrolment. The Ministry of Education devised a policy strategy 2010–2020 to improve the quality of teaching and learning in UAE's public schools. The main objective of the strategy is to improve student outcomes, school life and equality to meet world-class standards' (UAE, Ministry of Education Strategy, 2010, p. 15).

According to the Master Plan of the UAE Higher Education System, 'The Office of Higher Education Policy and Planning has projected that the number of students that could demand a place in the higher education system will increase dramatically beginning in 2016. While the UAE birth rate has declined over the last two decades, the total number of women of childbearing age has increased dramatically; meaning that pattern of fewer births per family has been offset by an increase in the number of families with children. This "wave" of children is now moving through the UAE primary and secondary education system and will begin to reach college age around 2019, few years from now. After 2015, the number of college

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[7] Ibid.

students will begin to rise dramatically, with a projected 50,000 students able to enrol. This will place substantial stress on the nation's higher education system.'[8]

The Master Plan also includes the objective of increasing the number of Emiratis who will be seeking access to a quality higher education, a number expected to grow steadily over the next decade and then begin to rise dramatically beginning about 2016. When adult learners who wish to continue their education as a part of 'lifelong learning' begin to demand access to higher education, they will add to the pressure on our nation's colleges and universities.

1.7 The main characteristics of the UAE job market

The 2010 annual survey of the Dubai Statistics Centre revealed that 80% of Dubai's working-age population were males, and Emiratis comprised just 6.8% of the total working-age population.[9] Differences between Emiratis and expatriates demonstrated that the low overall unemployment rate of 0.8% in the case of expatriates, contrasted with a disconcerting 8.7% unemployment figure for Emiratis, who made up only 3% of Dubai's total workforce. However, more alarming to the UAE Government was the percentage of the population aged 15 and over who were categorised as not 'economically active', which was much higher for Emiratis than expatriates. Approximately 56% of Emiratis were not in the workforce, compared with 9.9% of expatriates. The same report commented that Emirati women were scarce in the labour force, with just 23.9% of the total national-born women in active employment. Another difference between Emiratis and expatriates was demonstrated in an analysis of jobs according to industry. More than 58% of working Emiratis had jobs in public administration and defence, while 42.9% of expatriates worked in the construction industry. This was also reflected in the differences between incomes, with almost 69% of expatriates making less than AED3,000 (ie,

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[8]
http://planipolis.iiep.unesco.org/upload/United%20Arab%20Emirates/United%20Arab%20Emirates_Higher_Education_plan.pdf.
[9] www.thenational.ae/business/travel-tourism (retrieved 20 April 2014).

less than $900) a month, while 67.7% of working Emiratis earned in excess of AED14,000 (or around $4000) a month.

A report prepared by the Mohammed Bin Rashid Al Maktoum Foundation in association with PricewaterhouseCoopers stated, 'The Arab World faces a dilemma with regard to its human capital development. On the one hand, there is a heightened pressure from a growing labour force that largely comprises people under the age of 29. On the other hand, it appears that the skills available do not coincide with market requirements. There is a mismatch between the supply of and demand for local human resources. Arab CEOs blame this on the weak links between education, training, skills development and labour market.'[10]

In summary, Emiratis currently occupy less than 2% of the 2.2 million jobs in the UAE's private sector. The public sector, traditionally the largest employer of Emiratis, employs 495,000 Emiratis (UAE National Bureau of Statistics, Labour Force Survey, 2009). According to the same survey, the unemployment rate among the Emiratis stands high and unless immediate policy interventions are made, the severity of the issue is anticipated to further increase with over 200,000 young Emiratis expected to be eligible to join the workforce by 2019 according to age, but they may not have the skills to successfully attain a job and hold it.

The private sector job market is smaller than it appears and social prestige, cultural tradition and religious beliefs create substantial barriers to certain types of jobs among Emiratis. TCO's analysis reflects that the nominal size of the job market in the private sector is an estimated 2.2 million. Of this, 56% of jobs lie in industries that are not favoured by Emiratis because they believe them to be too menial or burdensome. These industries include hospitality, construction, manufacturing and a number of service industries. As a result, the real

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[10] www.emirates247.com/eb247/economy (retrieved 28 April 2014).

number of opportunities that Emiratis consider open to them is closer to 1.2 million, as a theoretical maximum.

The lack of integration of the Emirati workforce into the private sector is an issue because it has created a dependency by Emiratis on the public sector. But the public sector is close to saturation and to redress the balance a nationalisation programme called 'Emiratisation' was instituted by the UAE Government in stages starting in 2005. Emiratisation was created 'to secure jobs and training & development programmes for the UAE Nationals in order to increase their qualifications and experiences, and to reduce the unemployment rate to make them competitive employees [through] introducing better educational systems and providing training and seminars that focus on the skills, abilities and competencies needed in the workforce.'[11]

Despite various Emiratisation initiatives, the bridge linking the Emirati workforce with private sector businesses remains narrow. On the one hand, Emiratis generally favour a career in the stable and comfortable public sector. On the other, the private sector overwhelmingly perceives higher economic value from foreign resources but a wide variety of professional skills are required to succeed in this sector. This is one of the reasons why the UAE government has encouraged the scholarship sponsorship programmes for Nationals' study abroad.

Generous compensation packages and better working hours in the public sector have contributed to creating an expectation gap between the Emiratis exploring opportunities in the private sector. This is especially true at the entry-level positions, with undergraduates expecting Dh17,000 to Dh20,000 monthly pay, compared to the Dh4,000 to Dh10,000 most private sector entities are prepared to offer, according to a UAE National Bureau of Statistics, Labour Force

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[11] http://hmdmtr.hubpages.com/hub/Emiratisation (retrieved 20 April 2014).

Survey. In addition, the weekly average number of hours actually worked in the private sector is up to 30% more than those required in the public sector.

There has been a constant push by the country's leadership towards a knowledge-based economy. However according to the Ministry of Higher Education and Research, only 24.6% of Emirati students are consistently enrolling in science and technology majors. These disciplines are vital for leveraging the opportunities available in a knowledge-based economy. This mismatch between the type of jobs that will be created and the type of skills Emirati students are pursuing today could increase the Emirati unemployment levels further. It is obvious that a multitude of policy interventions and initiatives need to be undertaken to increase the participation of Emiratis in the main economic stream of activities.

It is important for policymakers to define and communicate the fundamentals of Emiratisation to stakeholders at all levels. This should serve to provide a uniform interpretation of what Emiratisation really means and what it is really supposed to achieve. Again, this requires an education drive.

Government incentives and other interventions have attempted to nudge the private sector to revamp their talent strategies to include Emiratis and focus on the development of Emiratis, rather than merely their token placement. A recent initiative by the Sheikh Khalifa Fund offers to finance the costs related to the initial development and induction of Emirati employees in any private sector organisation. The National Human Resource Development and Employment Authority (Tanmia) has also been successfully contributing to Emiratisation through their training initiatives and facilitating job placements. These are steps in the right direction and should act as an incentive for both large businesses, and small and medium sized enterprises (SMEs) to hire and cultivate Emiratis.[12]

The real job market size can be significantly expanded by creating awareness about specific jobs. This will make them socially acceptable for Emiratis without overstepping cultural,

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[12] http://gulfnews.com/business/opinion/harnessing-the-potential-of-emirati-human-capital-1.968641.

religious and perceptual sensitivities. Also, career orientation programmes need be adopted at schools to make students aware of the opportunities presented by a progressively knowledge-based economy.

In Ayesha Al Khoori's article, 'Sheikh Mohammed to double Emiratisation targets for UAE private sector (*The National*, 15 January 2014), Sheikh Mohammed, Vice-President of the UAE and Ruler of Dubai is quoted as saying, 'Our number one National Agenda includes moving education towards smart learning', and he announced that he wished to double the target for the number of Emiratis employed in the private sector to provide jobs for the nation's youth. 'I say to my brothers in the private sector, your efforts are appreciated but they are not enough. And the Government will impose new measures to increase the Emiratisation numbers,' and quoted further, he announced, 'Our goal is for the UAE to be the capital of economy, tourism, and trade for more than two billion people.' In so saying, he included the entire Middle East region's market population which comprises the Gulf Cooperation Council (GCC) nations of Saudi Arabia, Qatar, Bahrain and Kuwait. He made these comments in pursuit of development projects aiming to provide a 'decent life' for the UAE's people which included aiming 'for an increase of 65 per cent in GDP per capita'. Sheikh Mohammed concluded, 'I am optimistic in you [citizens of the UAE] and your team work, and optimistic in the UAE [all seven Emirates]. Even the number seven is a reason to be optimistic because it represents goodness and a blessing. Seven days each week we will work non-stop and seven Emirates will work together in their "one house" [*bait mtwahd* in Arabic] and seven years will be filled with accomplishment leading to our Golden Jubilee.'

The GCC countries have benefited enormously from oil and gas reserves and assets that have generated significant financial liquidity in the six years between 2001 and 2007. The present wealth poses an interesting question for those interested in the future of the GCC countries, and one which these scenarios seek to address: How can this wealth be put to use to ensure that the GCC countries expand in affluence, while overcoming the internal and external pressures that could shift them from the path of sustainable prosperity?

Two key themes consistently emerge as being crucial to the future of the GCC countries, and they are discussed below.

1.8 Education and innovation

The GCC countries face the challenge that their collective oil reserves, while vast, will not last forever. Nor are oil and gas always a reliable source of wealth; there have been many times where GCC budgets were in deficit and public debt rose as a result of falling energy prices. However, in attempting to diversify from oil, the GCC countries face a major problem in that their existing skill base for workers is low by world standards and relatively little research, development and innovation are occurring in the region. This creates an impediment to development and exacerbates other problems associated with importing both foreign workers and technologies. As a result, the way in which education policies are handled by GCC governments will be a significant determinant of the region's ability to develop as innovation-based economies that do not wholly rely on natural resources.

1.9 Leadership and governance

The GCC countries are ruled by traditionally-organised royalties, with varying underlying executive, legislative and judicial models. Leadership and governance will therefore be instrumental in determining the path that the GCC countries will take over the next 20 years. Although much is being undertaken today in terms of reform to improve the efficiency and openness of these systems, the strategies chosen and the rates of change vary between the different Emirates as well as the GCC countries. In managing both internal stability and reforms, leadership plays a critical role at all levels of GCC government as well as in the private sector. Figures 1.2 and 1.3 demonstrate crude oil price trends and GCC economic growth as two important and related factors in connection with the regional economies. Whilst they demonstrate economic growth, social services such as education still lack parallel levels of growth.

Figure 1.2 Crude oil price

Crude Oil Price
USD per Barrel

Source: Dow Jones & Company
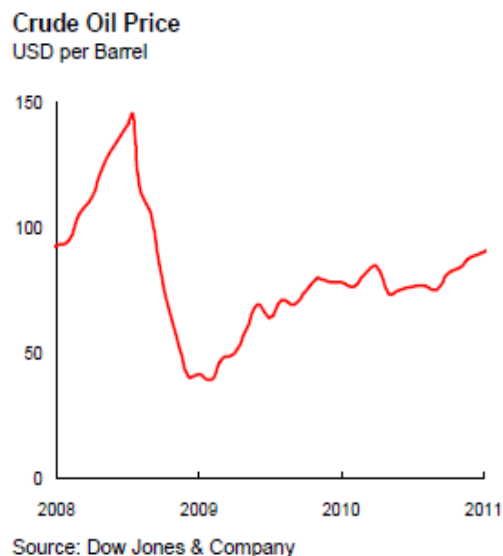
Figure 1.3 GCC economic growth

GCC Economic Growth

Source: Economist Intelligence Unit
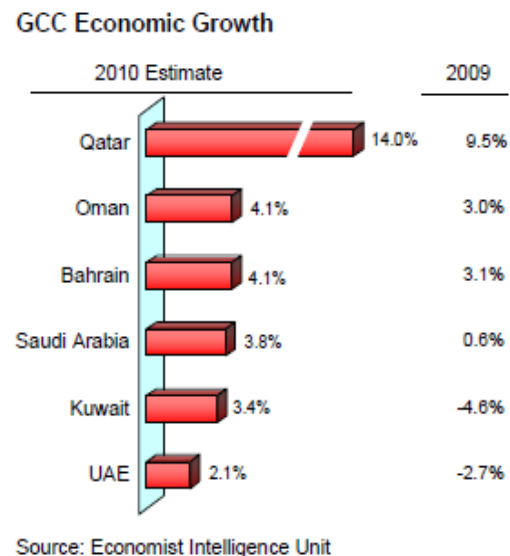
1.10 Salaries and cost of living

Based on the *Gulftalent.com* 2011 survey of professionals working in the GCC, salaries in the region increased at an average rate of 6.1% during 2010, compared with 6.2% in 2009 and 11.4% in 2008. Qatar and Saudi Arabia enjoyed above-average increases, given their more buoyant job markets. The UAE and Bahrain had the lowest rises. Among sectors, retail led the increase, with 6.4%, while education had the lowest increase at just 3.8%. Among job categories, human resource professionals enjoyed by far the highest increases at 7.1% – with the HR function rising in prominence as companies shift their focus from job cuts to driving performance. Lawyers had the lowest average increase at 4.3%.

Among nationalities, Asian and Arab expatriates enjoyed higher pay rises during the past years – mainly driven by economic growth and large salary increases in their own domestic markets. Western professionals received much lower raises, given sluggish growth and high unemployment in their home countries.

In absolute terms, Western salaries still remain well above those of other expatriates, but the gap is narrowing. Inflation was modest or negative across most of the GCC, particularly

in Dubai and Doha, the capital of Qatar, which have seen rents plummet from their 2008 peaks, but which have since risen again. As a result, for the second year running, salary increases actually exceeded the increase in cost of living, allowing many professionals to improve their standard of living. Meanwhile, with fast growing populations and rising consumption, GCC governments are looking for ways to reduce their spiralling burden of subsidies on food and utilities. The UAE and Qatar have increased fuel prices, while Saudi Arabia is phasing out its heavily subsidised domestic wheat production.

Figure 1.4 Employment by sector   **Figure 1.5 Employment by country**
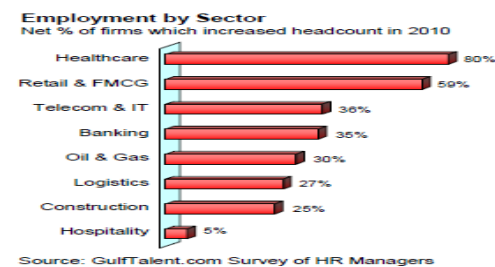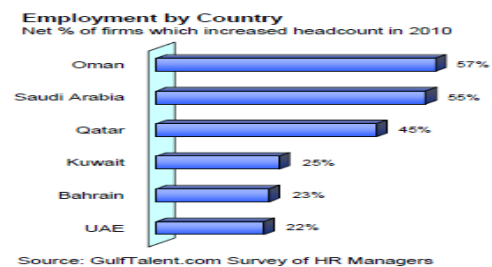
Figures 1.4 and 1.5 above show the percentages from 2010 concerning employment by sector and employment by country, both of which are indicative of considerable growth following the 2008 Recession.

1.11 Employment legislation

Legislative changes in 2010 continued to follow two broad objectives – increasing the share of employment opportunities dedicated to Gulf citizens, and improving the rights and protections of expatriate employees. All states continued to raise the bar on nationalisation. In a new initiative, the UAE announced a tier-based system of targets, with financial incentives and penalties designed to encourage firms to achieve higher levels of workforce nationalisation. GCC governments are also stepping up efforts to diversify the demographics of their expatriate workforce, largely to address concerns over national identity. This is further putting pressure on employers, who now face a cap on the maximum proportion of their staff that can be sourced from any one nationality. It is also limiting the career options of expatriates from countries with

the largest representation in the GCC, as they find some employers unable to hire them due to having reached their caps.

Gulf States are also taking measures to increase protection for expatriate employees. The UAE now requires companies to pay employee wages through a central authority, radically reducing the common practice of late payment or non-payment of wages. Meanwhile, Kuwait has started implementation of a new labour law that offers expatriates greater entitlement to leave and other benefits. Also, labour-source countries such as India and the Philippines have been stepping up their own measures to protect the rights of their citizens who come to work in the Gulf, particularly trying to enforce a minimum wage.

Overall, the population growth rates in GCC countries have been very high, with these states accounting for the fastest-growing populations in the world over the last few decades. Of course, the population grew faster in the first decades of development, and slowed down somewhat when major labour-intensive construction projects were completed. In the United Arab Emirates (UAE), in less than half a century the population increased almost 40 times. Therefore, one of the questions that need to be answered is whether the size of the scholarship programmes has kept pace with this expansion.

Figure 1.6 Attraction of expatriates   **Figure 1.7 Retention rate of expatriates**
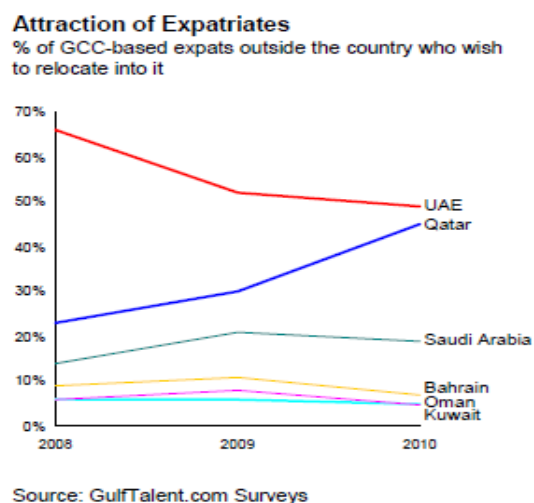
Attraction of Expatriates
% of GCC-based expats outside the country who wish to relocate into it

Source: GulfTalent.com Surveys

Retention of Expatriates
% of expats within the country who wish to remain there 2010

Source: GulfTalent.com Surveys
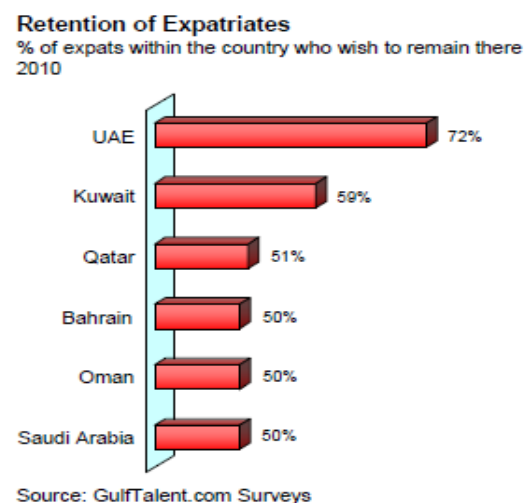
In terms of numbers, the average annual growth rate for GCC countries in the decade 1950–60 was 2.6%; in 1960–70, 4.1%; in 1970–80, 5.6%; in 1980–90, 5.1%, and in the 1990s it has been 3.4%. In the late 1990s that high population growth has continued in all GCC states, ranging from 3% to 7% annually. These rates have been the highest in the Middle East and rank at the top world-wide (the annual average growth rate for all countries in the world was 1.5% in 1995; 0.2% for the 'more developed' countries and 1.9% for those 'less developed').[13]

The population is expected to continue to grow rapidly. Most GCC countries are likely to have doubled their populations within the span of a single generation. Taking the average growth rate of over 4% as seen in the 1990s as a base, the total GCC population would reach 230 million in the year 2050. Although it is very unlikely, even impossible, that such an increase will occur, these projections stress the seriousness of the demographic problems for the future of the GCC states.

1.12 The UAE as a multi-cultural and melting-pot

In the past, the indigenous Arab populations of the Gulf countries were very small in number and local Arabs were in a clear majority among them. This population structure quickly changed after the discovery of oil because of the massive influx of foreigners necessary for its exploitation and the follow-up development.

In 1997, out of 27.7 million people living in the GCC states, about 17.1 million were Nationals – that is 61.5% of the total population, and about 10.7 million were foreigners, constituting 38.5%. In Qatar and the UAE, Nationals represented a small minority – around one-quarter of the population. In Saudi Arabia, Oman and Bahrain they constituted a larger proportion of the total population, but foreigners still made up a substantial part of the total numbers (30%–40% of indigenous population).

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[13] www.scad.ae (retrieved 1 September 2014).

The average annual growth rate of national populations from 1985 to 1995 was 3.8%, much lower than the previous decade when it stood at 5.8%. The decline is mainly because of the lower number of naturalised persons in the later decade, as well as a lower birth rate, a phenomenon very typical of more developed countries.

The overall average annual growth rate of expatriate populations from 1985 to 1995 was 5.9%, which although lower than in the previous decade (6.6%), is still much higher than the comparable growth rates of the national populations.

As was the case for the total population, some projections can be also made for the future size of the national communities. Taking into account the most probable scenario − that is, an average annual growth rate for Nationals of 3.5% during the first decade after 1995 and declining by 0.5% each subsequent decade − the GCC national population would pass the 60 million mark in the year 2050. Projections for the expatriate community are, of course, much more uncertain, as their numbers can be decreased or increased rather quickly at short notice, in response to economic development and/or immigration and labour policies. Nevertheless, if the expatriate populations continue to grow at an average annual rate of 5%, their size in the year 2050 would pass 130 million. The size of the expatriate community would be considerably lower if, as can be predicted, the growth rate continues to decline in the years to come. If Nationals are to sustain governance in the public sector and have a significantly greater representation in the private sector, they must increase their educational achievements.

1.13 Nationals and expatriates workforce in the UAE workforce

The dominance of foreigners is even more pronounced in the labour market than it is in the total population. In the GCC states, in 1997 there were some 7.5 million working expatriates as opposed to 3.2 million Nationals. Expatriates constitute a majority of the labour force in each country with an overall average of 69%, reaching as high as 80–90% in Kuwait, Qatar and the UAE. The lowest rate is that for Bahrain and Saudi Arabia, but even their expatriates still constitute over 60% of the workforce.

The demand for foreign labour has continued in line with the GCC countries' development. Moreover, the expatriate inflow has been a self-feeding process. The employment of foreign workers increases the need for housing, services and consumer goods, for example, creating an additional demand for manpower that can be met only by more immigration.

The situation within labour markets has, of course, always depended on the state of the economy. Nevertheless, even when oil prices have declined, or when regional wars have required large, unplanned expenses, GCC countries have had to adjust their development policies only to some extent. As a result of their huge capital reserves, it has usually been enough for them to temporarily cut some expenditure and limit certain projects. Only Bahrain has been the exception to this rule, often facing serious economic and social problems because of the lack of oil and due to Shi'ite-related unrest within the country. This situation, however, may change overall in the future as oil wealth continues to decline, at least in relative terms. Oil revenues in the 1990s constituted only about 30–50% of the per capita level GCC countries experienced during the peak in the 1970s. Coupled with further population growth, this diminishing trend is likely to continue. Therefore development of human resources will remain particularly crucial to the overall development process.

The supremacy of foreigners in the populations and labour markets of the GCC states has very serious security, political, economic, social and cultural implications. First of all, government authorities are afraid that their dependency on expatriate labour could lead to vulnerability in their governing systems. As many expatriates originate from the most politicised countries in the Middle East or from not necessarily friendly neighbouring states, the authorities have been worried about them working as a 'fifth column' for foreign powers and spreading radical foreign ideologies, which have often propagated the overthrow of governments. Secondly, the expatriates' huge hard currency remittances have a negative impact on the GCC economies. Thirdly, the negative impact of Westernisation on national cultures, on identities and values as well as on social structures, remains a big concern. In

particular, authorities are worried about the influence on local children from their Asian nannies or from the expatriate teachers who form the majority of the staff in local schools. They are also unhappy at the growing influence of foreign media and of foreign women married to Nationals. Jamil al-Hujailan, Secretary General of the GCC, stated in October 1998 that 'the problem of expatriate workers is starting to represent a danger for GCC nations'. According to him, 'they pose grave social, economic and political problems that could grow more complicated in the future' and the only solution to those problems 'is to replace expatriate workers with nationals'.

The regimes' response to this situation has been to maintain as tight a control over the immigrant population as possible and maintain their separation from the rest of the society. The authorities have also been trying to limit the negative impact of foreign cultures by promoting the education of Nationals, and by stressing the importance of maintaining Islamic values and Arab identity at the same time.

GCC governments have to find jobs for all of them. This will only be partly possible through the creation of new workplaces. To a large extent, it can be accomplished by the replacement of expatriates employed in the private sector. The authorities thus have to devise a system of teaching, recruiting, selecting, placing and training Nationals, to suit the requirements of this highly competitive sector, while at the same time reducing the dependency on expatriate labour in such a way as not to affect the countries' development.

In an attempt to localise the workforce successfully, GCC governments have introduced various policy instruments affecting the quantity of the National labour (quotas and employment targets), prices (wage subsidies to the private sector, government wage restraint and fees, and charges on foreign labour), as well as its quality (education and training of Nationals). The earliest measures applied were ones to guarantee the employment of large numbers of Nationals. Laws were enacted giving Nationals a priority in the labour market: an expatriate cannot be employed if a National with the required qualifications can be found. In

the public sector, this law, of course, has been easy to execute. Employment in this sector was also met with great interest among Nationals because of the prestige associated with the job, a non-competitive environment, and the fact that it has usually offered better salaries and less demanding work than the private sector. Therefore, the degree of localisation of the public sector has been high, ranging now from 40% in the UAE and Qatar to 60–70% in Oman and Kuwait and 90% in Bahrain and Saudi Arabia. Additional to quantity, thanks to the specific policies of the authorities, Nationals have been put in top positions in the government, especially in ministries, the military and security services, as well as in the economy, especially in oil firms and banks because of their strategic importance. In reality, Nationals are chief executive officers in almost all state-owned companies as well as heads of companies' branches and departments.

The process of localisation of the public sector, though much advanced, has not yet been fully completed. Even the armies in several GCC states continued to employ foreign mercenaries in the 1990s.[14] In turn, in the private sector, the law giving Nationals priority over expatriates has very rarely, if ever, been practised. Different obstacles created by private employers and lack of interest among Nationals to look for jobs in this sector have caused its localisation to become very low in most GCC states, with only Bahrain and Oman crossing the 30% level. In Saudi Arabia and the UAE only 7–8% of Nationals work in the private sector.

A forceful approach to localisation, like the quota system, has been criticised as potentially harmful to the economy, at least in the short run. It may, after all, negatively affect the productivity and profitability of local firms, making them less competitive. The UN's Economic and Social Commission for Western Asia even warned GCC governments that forcing the private sector to employ Nationals could adversely affect economic performance. Similarly, according to International Monetary Fund economists, the imposition of quotas and administrative regulations could ultimately be counterproductive[15]. Many private businessmen

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[14] Population, Labour And Education Dilemmas Facing GCC States At The Turn Of The Century,
   http://crm.hct.ac.ae/events/archive/tend/AndKP.html.
[15] http://crm.hct.ac.ae/events/archive/tend/AndKP.html.

share such opinions, claiming that they should not be forced to employ Nationals above their market value, as otherwise they would incur unjustifiable losses.

To help Nationals find proper employment, special attention has been devoted to the issue of education and training. All GCC countries have achieved substantial progress in education in the last few decades. In particular, Nationals' illiteracy rates have substantially decreased (although they are still high by international standards, ranging from 15% in Bahrain to 37% in Saudi Arabia). New schools, colleges and universities have been opened, many scholarships have been offered, and women have started to be admitted to all of them. At the same time, however, the educational system has not yet adapted well to the needs of modern economic development. As interaction between planners of education and planners of the economic and labour markets have usually been limited, educational systems have particularly failed to provide an adequate number of accountants, business managers, engineers, computer specialists, doctors, nurses or teachers. For example, in the early 1990s, 37.5% of graduates of GCC schools completed work related to social and Islamic studies, 34% in education, and only 18% in technical fields and 10.5% in business administration. While general secondary education, perceived as relatively easy and appropriate, has always secured Nationals a good government job, vocational education has been held in low esteem and science studies have been regarded as excessively demanding. Moreover, as Ali M. Al Towagry, Director General of the Riyadh-based Arab Bureau of Education for the Gulf States, stated, most of the schools in GCC states have not been up to standard to say the least, with the programmes offered being 'predominantly theoretical and book-oriented'.[16] Abdallah Mograby from the Emirates Centre for the Strategic Studies and Research in Abu Dhabi added to this evaluation, pointing out that 'too many educators are still using obsolete approaches, such as a heavy emphasis on memorization instead of techniques designed to develop innovative thoughts […] with students lacking access to computers and technology'.[17] What has made the situation at schools even worse is the typically weak management of them, the employment of 'second category'

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[16] http://crm.hct.ac.ae/events/archive/tend/AndKP.html.
[17] Ibid.

teachers, large classes and a lack of cooperation by parents who at times do not understand the demands made by an education system which they themselves did not experience. As a result, there has been a high dropout rate of National students and graduation standards have been recognised as rather low.

There has also been an important problem of how to combine a need to produce a modern, mainly Western-type of highly trained and motivated industrial workforce with the obligation of maintaining in this process traditional Muslim values. As Munira A. Fakhro described, the educational systems in the West win popular approval by avoiding indoctrination, and the students who learn to reason, win praise and climb to power in a technological society.[18] In the Gulf States, however, where Islamic teaching often dominates the educational systems, well-educated people are believed to be those who have learned the word of God. Students who prove their ability to memorise revealed truth correctly, and who can quote it in appropriate contexts, win acclamation and respect. Science must accommodate this. As a result, schools often have problems in preparing students adequately for the requirements of modern economies.

The other category of means adopted by the authorities to increase the localisation of the workforce consists of various financial incentives. In the UAE, and some GCC countries, governments started to give grants to private companies for each National they employed, usually designed to cover the costs of their training and sometimes to increase their earnings closer to public sector rates. Not having their own financial resources, young Nationals are provided with preferential loans to set up their own businesses. Pension schemes for Nationals employed in the private sector have been introduced. The employment of Nationals has also been promoted by giving priority to well-localised companies during state-contracting by tender, or in dealings with ministries of labour. Finally, proposals to subsidise salaries of Nationals undertaking jobs in the private sector have also been formulated (including taxing foreign workers to obtain additional funds for that purpose).

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[18] en.wikipedia.org/wiki/Munira_Fakhro (retrieved March 2014).

1.14 Education systems

Since 1990 onwards, GCC countries in general and the United Arab Emirates in particular started introducing meaningful changes in their educational systems. More modern curricula have been implemented, in particular stressing the importance of computer literacy and emphasising the English language as the basic means of communication in the contemporary world. Nationwide, standardised exams have also been introduced. Moreover, many new technical and vocational schools have been opened and job-orientated programmes promoted. At the same time, interest in vocational training among Nationals has increased, as they begin to see the link between the growing number of unemployed people and their lack of adequate skills to meet labour market demands.

A step in this direction has been made during the decade of the 1990s. Localisation has become a very important national issue and has figured prominently in the strategic objectives of forthcoming development plans. Governments in several GCC countries have established high-ranking bodies − such as the Vocational and Training Authorities, or the Manpower Councils − to integrate and make more efficient all the efforts undertaken by different ministries and agencies to localise the workforce. Special state-run offices for the employment of Nationals were also opened. Moreover, GCC leaders have started to discuss this issue in their summits. The original GCC Statement on Objectives and Policies of Development provided a number of goals for national manpower development, such as enhanced educational opportunities, better health standards and improved work conditions. However, the educational system has not yet adapted well to the needs of modern economic development. As interaction between planners of education and planners of the economic and labour markets have usually been limited, educational systems have particularly failed to provide an adequate number of accountants, business managers, engineers, computer specialists, doctors,

nurses or teachers. One means adopted by the authorities to increase the localisation of the workforce consists of various financial incentives.[19]

1.15 Conclusion

In light of the above discussion on those factors that possibly augment the placement and retention of UAE Nationals in UAE workplaces, the requirement is to propose a feasible strategy for greater job opportunities for those Nationals and achieve increased workforce participation. The policymakers devised different strategies as laid out in Vision 2030 in terms of focusing on different aspects of Human Capital Theory, such as education, skills, and experience; social capital, such as gender inequality, nepotism and trust; and organisational capital such as culture, English fluency and human resource management (HRM). In this context of Human Capital Theory and both the background and the rationale of the proposed research, the main objective of this study is to evaluate the contribution, potential impact and constraints related to government scholarship schemes for human resources development in the UAE. An attempt, therefore, has been made to assess the human resource development strategies in the UAE with a due focus on scholarship opportunities provided to employees and local graduates. The main aim is to explore an interaction (association) between the human capital development strategies and educational inputs in the UAE and how such an interaction might affect human capital development in the state. In a broader sense, the objective is to evaluate the foreign scholarship programme as one of the main strategic plans which contributed to such workforce development in the UAE. The study also highlights the institutional arrangements and conditions under which these scholarships and incentives are offered (provided) to public sector employees.

Chapter 2 will look more closely at the relevant theoretical elements: human capital development, the characteristics of higher education in the UAE, and the university scholarship schemes made available for study abroad. An investigation of all of these may lead this

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[19] *Structural Barriers to Emiratisation: Analysis and Policy Recommendations* Jasim Al-Ali, Himanshu Kumar Shee and Patrick Foley: http://vuir.vu.edu.au/15483/.

researcher to uncover elements which could contribute to educational enhancements in the UAE's future.

Chapter 2

Literature Review

Human Capital Development, the Characteristics of Higher Education in the UAE and the University Scholarship Schemes for UAE Nationals

2.1 Introduction

This chapter examines some important literature concerning three interrelated fields which will comprise the core of this investigation. Firstly, it will summarise some of the literature that is relevant to human capital development in the context of the UAE's workforce situation. It will be shown that one complication concerns the two most populous and influential Emirates – Abu Dhabi and Dubai. At times they do not act in unison; this is a complication from a research point of view because political and economic forces are occasionally tempered by both individual governments as well as a federal government. Secondly, an investigation of the most salient points about higher education in the UAE will be provided; and finally, the chapter will present a survey of the ways in which the various scholarship programmes have been instituted and how they are implemented in the UAE, designed to further its economic goals.

2.2 The present research and knowledge-base economy of the Middle East

The commentary in this review on higher education in the UAE is based on secondary sources which at times may be considered to lack 'academic rigour'. It is founded on reported speeches, newspaper accounts, as well as academic, business and education journal articles which do not have the same academic credentials as published articles in scholarly journals and edited publications. This is because in a country that is only 40 years old, such sources are still in the process of being researched and published without a large collection of antecedents as may be expected in Europe and North America. This highlights the vital function of research such as this

thesis. It will eventually become part of a wider knowledge-base focused on Middle East learnedness, which at the time of writing in 2015 is still somewhat meagre.

The research may demonstrate that these scholarships be deemed as essential instruments to enhance specialist skills, because the educational infrastructure in the UAE lacks the depth of those in the UK and the USA. These scholarships are an aspect of UAE education for the future and they have to be managed, possibly even expanded, by Emirati leaders and professionals, highly educated and trained in their respective fields as they take over the reins of this country's development. The outcome of this research will be based on the responses of the scholarships' successful alumni.

2.3 Human capital development

Moussly (2012) reports that the unemployment rate among Emiratis reached almost 13%; also Dajani (2012) reports suggested about 73% of Emiratis in Abu Dhabi are below the age of 30, and that a large proportion of those are close to their graduation from secondary school and university.[20] In an attempt to manage this situation, Sheikh Khalifa Bin Zayed Al Nahyan, President of the UAE established the Khalifa Fund which allocated AED 440 million ($118 million) to help attract and employ Nationals to work in the private sector. The Fund offers a package of initiatives to private sector employers to attract and retain Nationals, with payments of financial privileges to reduce the salary-scale gap between the private and public sectors. This is only one aspect of Government's attempts to alleviate the Nationals' unemployment situation. The other main policy plank is education, training and development.

As Edward E. Lawler claims in 'What Makes People Effective?' in Gallos (2006), people become effective contributors to their organisations and therefore their economy, if employers know what motivates and determines how well they can perform: 'A virtuous spiral can exist only if people are willing and able to take responsibility for providing upward momentum.' (p. 634). The result is Lawler's 'Expectancy Theory', 1973, in which he promotes the idea that

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[20] http://hmdmtr.hubpages.com/hub/Emiratisation.

people generally deal with the world as they see it and understand it, and that they direct their behaviour in productive ways. Therefore, Lawler's theory sees people as 'proactive, future-oriented and motivated to behave in ways that they believe will lead to valued rewards [and] the attractiveness of that reward depends on at least two major factors, firstly, how much of it is being offered and secondly, how much the individual values the particular type of reward being offered. The more an individual values the type of reward and the more of it that is offered, the more motivational potential there is' (p. 636). But sometimes, peoples' desire to develop and achieve has to be stimulated. Lawler also recognised that 'organizations can have a significant impact on the knowledge and skills of their employees [and hence their motivation], particularly through on-the-job training and formal training programmes that that help to acquire a variety of skills (motor, intellectual, and conceptual)' (pp. 652–3). Hence, are UAE scholarships a satisfactory motivation for students to spend years continuing their education in a foreign country?

Kessels and Poell, cited in Mankin (2009), maintain that work organisations are increasingly considered to be key sources of social capital, and they focused on the 'importance of social networks, partnerships, collaboration and interaction, and knowledge sharing they provide.' (p. 314).

According to Olaniyan and Okemakinde (2008), Argyris (2006), Mincer (1974), and Becker (1962), human resource development and management are key elements not only of an individual's satisfaction, but also of a country's wealth and future prosperity. In this context, education plays a vital role in human capital formation. Mankin (2009: 303), believes that 'A seminal definition of social capital is: "the sum of actual and potential resources, derived from the network of relationships, possessed by an individual or social unit. Social capital thus comprises both the network and the assets that may be mobilized through that network".' Indeed, the quality of education, skill and competency tend to increase work efficiency as well as productivity. Furthermore, education also produces an efficient and skilled labour force. Accordingly, the goals and objectives of a nation's economic growth and sustainable

development are achieved by educated and trained manpower. Economists consider education as both a capital resource and consumer good, because it provides satisfaction to the household and it is also used as an input into the production process. The pioneer workers of the Human Capital Theory (Mincer, 1974; Becker, 1962) postulated that the main sources of human capital development are education and training. In addition, the level of education and training positively and directly influences work quality and lifetime incomes of those involved. Heery and Noon (2008) explain Human Capital Theory as follows: 'Human capital theory is based on the assumption that individuals can affect their value in the labour market by choosing whether or not to take advantage of educational opportunities and training. If they do so, they increase their human capital and consequently will increase their value to employers. Human capital theory suggests employees should be treated as individuals with specific sets of skills and abilities, so it emphasises competence-based pay as an effective remuneration system. Proponents argue this leads to a very meritocratic system and helps to achieve equal opportunities based on talent and ability, and regulated by a market economy.' [21]

Empirical evidence related to the human capital model suggests that investment in education has a positive correlation with economic growth and development (Olaniyan and Okemakinde, 2008). Human Capital Theory postulates that the economic development and economic prosperity of any country depends on its physical and human capital stock. Traditionally, the physical capital stock as a determinant of economic growth has been the focus of economic research for several decades. Human capital represents the investment that people make in themselves which ultimately results in increases in the economic productivity of the nation of which they are a part. Furthermore, Schultz (1971), Sakamota and Powers (1995) and Psacharopoulos and Woodhall (1997), have theorised that Human Capital Theory rests on the notion that formal education is highly instrumental and even necessary to improve the production capacity of a population. In short, the human capital theorists argue that an educated population is a productive population and so is instrumental in national development.

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[21] *A Dictionary of Human Resource Management*, pp. 159–60.

This theory is principally based on the notion of economic return of investment in education, both at the macro and micro levels. For the sustained growth of a society, investment in human capital and education is seen as a necessary effort as such investment is also seen as essential to provide returns in the form of individual economic success and achievement (Fagerlind and Saha, 1997). In certain circumstances, Human Capital Theory provides a basic justification for large-scale public expenditure on education, both in developing and developed nations. Babalola (2003) highlights the rationale behind investment in human capital development as follows:

- A new generation must be given the appropriate parts of the knowledge which have already been accumulated by previous generations;
- A new generation should be taught how existing knowledge is be used to develop new products, to introduce new processes and production methods, and provide social services;
- People must be encouraged to develop entirely new ideas, products, processes and methods through creative approaches.

Thus, this research will highlight the applications of Human Capital Theory, its associated problems and implications for its development within the UAE workforce. This investigation is intended to provide an examination of the association between workforce training (education) and the national development focusing on the UAE as its case example.

Many contemporary economists and policy makers agree now that neither capital nor material resources of a country, but the human resources of a nation, determine the character and pace of nations' economic and social development. Within this context, Psacharopoulos and Woodhall (1997) argue in short that human resources constitute the ultimate source of a nation's wealth. Capital and natural resources are passive factors of production, human beings are the active agencies who accumulate capital, develop natural resources, build social, economic and political organisations, and create national development. Moreover, Robert

(1991) developed a human capital model to show that education and the creation of human capital create the differences in labour productivity and the differences in overall levels of technology that are actually observed in the world. Indeed, some Far East Asian countries have successfully adopted this model and created skilled human capital through educational development, and these include countries such as Hong Kong, Korea, Singapore and Taiwan which have (until recently) achieved unprecedented rates of economic growth while making large investments in education. Additionally, Garba (2002); Ayeni (2003) and other sources of World Bank reports found that improvement in education is a very significant explanatory variable for Far East Asian economic growth. Economists have also presented positive association generated from more investment in an educated labour force (Van den Berg, 2001; Smith, 1976). Smith (1976) argues that human capital is viewed as a critical input for innovation, research and development varieties. Education is further seen as an intentional input to increase the resources needed for creating new ideas and consequently accelerate technological progress and national development. Similarly, Garba (2002) shows positive correlations between educational attainment and economic growth and development. Odekunle (2001) stated that investment in human capital has positive effects on the supply of entrepreneurial activity and technological innovation. Ayeni (2003) also claims that education is an investment, the main benefits of which are creation of status, job security, generation of cash and sustainable development.

On the other hand, in a case stemming from Africa, Ayara (2002) reports that education has not had the expected positive impact on economic growth in Nigeria. It was proposed that three possibilities that could account for such results, as follows:

(1) Educational capital has gone into privately remunerative, but socially unproductive activities;
(2) There has been slow growth in the demand for educated labour;
(3) The education system has failed, such that schooling provides few (or no) skills.

The question is whether the UAE falls into the same category since it has only made the transition from a 'Frontier' economy to an 'Emerging' economy within the last three years. Expanding on this, Babalola (2003) and Psacharopoulos and Woodhall (1997) pointed out that there is a need to properly evaluate educational investment projects and take into account certain criteria which are:

- The geographical and social distribution of educational opportunities;
- The distribution of financial benefits and burdens of education;
- Direct economic returns to investment, in terms of the balance between the opportunity costs of resources and the expected future benefits;
- Indirect economic returns, in terms of external benefits affecting other members of society;
- The private demand for education and other factors determining individual demand for education.

Generally, educational attainments increase individuals' chances of employment opportunities and allow them to reap pecuniary and non-pecuniary returns and give them opportunities for job mobility. Bronchi (2003) considers education as a source of growth and economic development only if it is anti-traditional to the extent that it liberates, stimulates and informs the individuals; and teaches them how and why to make demands upon themselves. Thus, a proper and adequate educational strategy can generate four major development-producing capacities, including the development of a general trend favourable to economic progress through social mobility and an increase in literacy necessary for improved communication. The second capacity emphasises that educated people would be more adaptable to varying production needs. The third capacity is based on the argument that education has greater durability than most forms of non-human reproductive capital, which implies that a given investment in education tends to be more productive than expenses incurred on non-human

capital. Finally, education is an alternative to consumption, implying that resources not used for education would be wasted in some other form of consumption.

Gallos (2006) argues that organisations are there to serve people's needs, that people and organisations are mutually dependent and that when the fit between individual and organisations is good, both stand to benefit (p. 347). Therefore, she mandates organisations to 'Tailor [it] to meet individual needs, train the individual in relevant skills to meet organizational needs' (p. 346).

The knowledge-economy has been mentioned previously. Peter Drucker concluded in 'Knowledge-Worker Productivity – the Biggest Challenge' that knowledge workers' responsibility is to generate their own contribution, and that they should decide what they should be held accountable for in terms of quality and quantity because they 'have to have autonomy and that entails responsibility [meaning that] continuous innovation has to be built into the knowledge worker's job [and] continuous learning and continuous teaching have to be built into the job' (cited in Gallos, 2006, p. 923).

The adversaries of Human Capital Theory have raised some objections in terms of their belief that though education is good for economic growth, it is difficult to maintain an equilibrial position. Babalola (2003) indicated that a shortage of educated people might limit growth, while an excess supply of it might create unemployment and thus limit economic growth and development. This is quite possible when there is a surplus of more-educated people in one field, and limited skill and academic ability apparent in other fields, ultimately skewing the growth and development of an economy. At the individual level, it is not clear whether, or to what extent, education or other forms of human investments are directly or indirectly related to improvement in occupation and income. Bronchi (2003) noted that raising the level of education in a society can increase the inequalities in income distribution under certain circumstances. Furthermore, inequalities in income and grades of promotion in the same department are also the result of skill enhancement and educational attainment. However, these arguments are based on weak bases as an investment in education and training must give its returns to those who make these investments, even by means of government

funding. Fagerlind and Saha (1997) went further, adding that while governments may adopt educational plans consistent with specific developmental goals and strategies, they can only be partially certain that the outcomes of these will correspond to original intentions; the more political the goals of education, the more problematic the outcomes. In light of this, to view educational investment as a complete solution for the attainment of developmental objectives is risky. This is especially applicable when huge investments are made without identifying the actual needs, requirements and demands consistent with the supply outcomes of an educated and skilled labour force. Thus, education in general and schooling in particular cannot achieve the desired societal goals without structural reforms and a clear plan. The UAE, considering the formation of the Union under the leadership of Sheikh Zayed bin Sultan Al Nahyan of the Emirate of Abu Dhabi, was already contemplating such a plan in its imminent future as a state.

It should be also indicated that Human Capital Theory is also difficult to apply when there appears to be a growing gap between people's learning efforts and knowledge-base, and the decreasing number of relevant jobs in which to apply their increasing knowledge investments, especially in developing nations. In fact, Bronchi (2003), Castronova (2002) and Crepaz and Moser (2004) argue that an increase in learning efforts has not led to desired economic gains because of the declining quality of education due to political interference, nepotism and other forms of corruption.

Overall, the basic implication of the human capital model is that allocation of resources on education should be expanded to the point where the present value of returns on investment is equal to or greater than the costs of these investments. Many countries have realised that the principle mechanism for developing human knowledge is the education system, and investment in education to enhance knowledge and skills of individuals; in addition these impart values, ideas, attitudes and aspirations which are necessary for nations' best development interests. However, careful attention is needed when huge investment in education is made; as ill-planned educational expansion can impede economic, social and political development. For example, sometimes the accelerated costs of expansion in an educational system can compete with other sectors of the respective societies for finite

resources. These pressures ultimately create dilemmas for governments which must then realistically assess and determine spending priorities for scarce economic resources. The UAE government has made clear that scholarship spending, in moderation, is such a priority.

Fagerlind and Saha (1997) argue that in developing countries at least, educational demand must be tempered in order to bring costs and benefits to more realistic levels. Arguably, twenty years prior to publication of their book, the UAE existed in such a state. Among the suggestions they offer are included the following:

- The costs of education should be borne by the beneficiary or recipients by means of family assistance or self-help schemes rather than solely the state;
- The income differential between the traditional and modern sectors should be reduced, which in effect lowers the benefits according to the educational attainments;
- The educational requirements for particular jobs should not be exaggerated;
- The wage structure should be tied to occupational requirements rather than educational attainments.

Overall, the causal relationship between education and earnings has important implications for public policy; if education is the primary cause of higher earnings, then it makes sense to provide more education to low-income or disadvantaged groups, to reduce income inequality.

Public policies that promote economic development require two sets of actions. Firstly, activities that generate income, improve access, increase welfare and decrease inequities. These may include improved technology training, removing barriers to learning opportunities and increasing health facilities. A second set of activities required to support and sustain the first set could be, for example, road building, training of staff, and the construction of educational facilities. All of these examples point in the same direction. Successful development is the result of making feasible policy choices that are supported by appropriate organisational and institutional changes and this applies to education.

2.4 The human capital context: the UAE's workforce situation

Higher education institutions in the UAE need to make better use of labour market information in their planning for future programmes. In the UAE it is acknowledged that there is a relatively modest amount of labour market information available that is of an unimpeachable nature. Efforts have been initiated to expand the range of information available; however, these attempts have not always been brought to fruition because of both a lack of sufficient funding and changing priorities within the Ministry of Labour. However, data do exist which could be used, but at present, collection, coordination and analysis of available data have not occurred in a systematic way (Abdelkarim and Haan, 2002), and therefore there is still not enough documentation available. The creation of the Abu Dhabi Statistics Centre is a welcome addition to Nationals' understanding of their own country, albeit still limited.[22]. Overall, the labour market in the Gulf countries remains unusual in that 'it has the highest levels of labour force growth, the lowest levels of female participation, and, except for Sub-Saharan Africa, the youngest labor force'.

However, unlike labour force growth in developing Asian countries in the same state of rapid development as the UAE, this growth in GCC countries is not in industry/manufacturing, agriculture or even in education and technology domains. It is instead growing in services that promote the trends of consumption and luxurious life thanks to high oil and gas revenues. Thus, it is unique to notice in the GCC countries that the number of maids and personal drivers is more than the number of educators, medical doctors, engineers and professionals in general. Furthermore, human capital development in GCC countries is mainly the concern of the governments while in Singapore, for example, the policy infrastructure for human capital development is characterised by two distinct features: a tripartite approach based on cooperation among employers, unions and government; and a multi-departmental approach

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[22] www.scad.ae.

involving all relevant government agencies. In the UAE, unions and any union activity are illegal if engaged in by expatriates, and no Emirati unions exist, although professional associations are common. Therefore, consultations between grass-roots labour contingents and government are rare to non-existent, except to a very limited extent in the partially democratically elected Federal National Council – but not all Emirates are eligible for membership. Consequently, there is little coherence between the strategies of these countries, including the UAE, yet all of them aim to be developed/manufacturing countries, and have unbalanced educational systems which produce more graduates in humanities and religious studies. Any serious reform in these countries should commence by developing the family structurally and functionally, and by developing elementary and vocational education instead of starting educational reform at the university level.

In a recently-released Arab world competitiveness report in 2011, by the World Economic Forum (WEF), the importance of quality education in the Arab world in order to sustain economic growth independent of energy prices was highlighted. According to the report, seven of the thirteen Arab countries maintained that an 'inadequately educated workforce' was the most serious obstacle to their development.[23] To become a developed country, the UAE government prepared a long-term 'vision' for developing its economy and human resources up to 2020 in Dubai and 2030 in Abu Dhabi.[24] The strategies of the UAE government's 'vision' were organised along five distinct themes:

(1) Economic diversification;

(2) Development of human resources;

(3) Expansion of public services needed to support these objectives;

(4) Promoting the expansion of the private sector as a key partner in the implementation of Vision 2020;

(5) Streamlining and modernising the governance structures of the public sector to meet the challenges of implementation.

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[23] http://www.weforum.org/reports/arab-world-competitiveness-report-2011-2012.
[24] https://www.ecouncil.ae/PublicationsEn/economic-vision-2030-full-versionEn.pdf.

The government's 'vision' stressed that economic progress and human capital development are two sides of the same coin, as is indicated by the experience of most developed countries. The 'vision' stressed that the accumulation of human capital meant raising the technical, managerial and innovative competencies of the labour force through various learning processes, along the following guidelines:

- Raise standards of technical and scientific education in different educational institutions;
- Enhance managerial abilities and skills and innovative competencies of existing companies through industrial learning, accelerated by producing for competitive markets since the country had joined the World Trade Organization (WTO);
- Encourage the expansion and the development of technology-based SMEs;
- Support innovation, exchange of technological experience between research and development (R&D) centres and private companies for producing quality goods and services;
- Support and encourage all companies to upgrade their technology through alliances, licensing and franchising with international technology leaders, collaboration with domestic technology centres, and the use of domestic and foreign consulting services.

2.5 Challenges facing the UAE economy

It is recognised by the UAE government that the list of challenges facing the economy is not short. There is a wide consensus among well informed scholars of the field (several of whom noted above) that the following are the brief of most important problem areas to be overcome for achieving the country's 'vision':

(1) Employment generation (a federal governmental priority);

(2) Poverty reduction, especially in the case of expatriate construction workers, and general labourers in the development of infrastructure such as roads;

(3) Improvement in quality of life;

(4) Achievement of sustainable development by:

   (a) Diversification of the economy;

   (b) Rationalisation of water usage;

   (c) Promotion of balanced regional development;

   (d) Improving management of public finances;

(5) Improvement in implementation and execution of public policies.

Again, one may notice that even though the 'vision' stressed the importance of HRD and emphasised the importance of raising standards of technical and scientific education in schools and colleges, the policy makers did not develop, at the time, a comprehensive educational strategy for achieving this ambition. However, the UAE government is devising an agenda for reforming and improving higher education programmes and institutions, which to some extent are considered still by some Emiratis as having 'rough edges '. See below subsections.

2.6 Higher education in the Emirates

The development of formal education in the Emirate of Abu Dhabi goes back to the 1960s, but rapid progress in this sector started in 1971, following the declaration of the UAE Federation and the creation of the Ministry of Education and Youth.[25] The ministry assumed responsibility for all the stages of public education and, within a short span of time, government schools spread across the nation and the education sector underwent substantial improvements, bringing about an impressive shift in the society's educational profile. Over the past decades, the Government of Abu Dhabi has paid particular attention to education and has adopted plans and strategies designed to develop it to match international standards and support the government's policies and future objectives. Through implementation of its educational strategy of establishing schools and universities, and providing them with teaching and administrative staff and advanced teaching aids, the Government achieved its goal of building

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[25] http://www.cyberessays.com/Term-Paper-on-Education-In-Uae/94256/.

the nation's future generations. Thanks to the attention paid to this sector, education flourished and illiteracy rates retreated from 23.4% in 1995 to 20.7% in 2001, 12.6% in 2007 and 8.3% in 2011 (see Table 2.1).

Table 2.1
Illiteracy rate in UAE

Nationality & Gender	2005	2006	2007	2010	2011
Total for the Emirate	12.6	11.9	10.7	9.5	8.3
Male	14.2	13.4	12.0	10.6	9.2
Female	9.1	8.7	8.0	7.3	6.6
Nationals	8.3	7.9	7.4	6.8	6.3
Male	5.0	4.8	4.4	4.0	3.7
Female	11.5	11.0	10.4	9.7	9.0
Non-Nationals	13.9	13.0	11.6	10.2	8.9
Male	16.0	15.0	13.4	11.8	10.2
Female	7.9	7.4	6.8	6.1	5.4

Source: Statistics Centre – Abu Dhabi

The UAE has a population of just under 5.07 million (UAE Interact, 2009) and in excess of eighty universities and colleges of higher education (National Media Council, 2009). It has been suggested in the local media that the supply of places in higher education in the UAE already exceeds demand (Moussly, 2010). However, it is not the ratio of number of colleges or college places to population alone that indicates a potential problem for the institutions already operating in the UAE. The urban area of Boston, Massachusetts, with a population of just over four million, supports over one hundred colleges and universities. Boston can be considered an education hub, attracting students not only from all over the United States but also from all over the world. The UAE aims to do likewise on a regional basis. However, the UAE is not alone in such ambitions. During the last decade, new higher education hubs have sprung up in a number of countries, including Qatar, a neighbouring country to the UAE on the Arabian Gulf, and Singapore and Malaysia in the Far East.

The new hubs have grown rapidly, largely by attracting universities from countries with

established higher education sectors to set up branch campuses. At least 49 international campuses have been established in the last three years. American, Australian and British universities have particularly benefited from the process of globalisation that has occurred, as the countries in which they are based have generally well-regarded systems of higher education and because English has become the lingua franca in international academic circles. A survey of students taking a British qualification at two institutions in the UAE and Sultanate of Oman found that 62% of the sample believed that the UK offered the best higher education worldwide (Wilkins, 2010). There are a number of ways in which universities can gain a presence in foreign countries, including the operation of study centres, the franchising of programmes to local providers, the delivery of distance learning programmes and the establishment of international branch campuses.

The term international branch campus implies a bricks and mortar approach, whereby an institution has a physical presence in a foreign country. Students receive their education in premises owned or leased by the foreign institution, either solely or jointly with a local partner, and, in addition to rooms for teaching a branch campus might typically also have a library, a refectory, recreational facilities and student accommodation. A branch campus always uses the name of the foreign institution and offers complete undergraduate and/or postgraduate programmes, usually in a number of different subjects. Students are recruited from the local or surrounding regions. They follow the same, or at least usually very similar, programmes to those delivered at the home campuses, and, on completion of their studies, students are awarded a degree from the foreign university.

International branch campuses are staffed in a number of ways, including transferring faculty from the home campus on a permanent or fixed-term basis, having faculty from the home campus fly out for short periods at a time, and the recruitment of new faculty specifically for the branch campus, either on a full-time permanent or fixed-term basis, or part-time basis. Each of these methods has advantages and disadvantages, which shall be discussed later. The international branch campus is easily confused with other types of overseas higher education provision, such as satellite campuses, study centres and franchised courses provided solely by

local institutions, but there is not yet global consensus on a concise definition for the term. Altbach et al. (2010) argues that most international branch campuses are not really campuses at all, because they are small, specialised and offer limited academic programmes.[26]

Host countries, and universities from countries such as the United States (US), Australia, the United Kingdom (UK) and Canada have eagerly embraced the international branch campus model. Al-Lamki (2002) observed the rapid mushrooming of private two-year colleges in the Sultanate of Oman after the issuing of a Royal Decree in 1996 that permitted the establishment of private colleges. Private sector providers have been relied upon heavily to increase higher

education capacity in several of the Gulf States. In 2006, three of the four universities in the Sultanate of Oman were privately owned (Mazawi, 2008). The UAE, however, is by far the largest host of international branch campuses globally, with over forty providers in 2009, though it has been growing to over eighty by 2014, with most sited in Dubai.

The problem which the UAE government has recognised is that it cannot be certain that the quality of 'branch' campuses is the same as the parent campus. The impact of branches has not been in existence long enough for it to have undergone adequate evaluation within the community. Therefore, the government believed that scholarship for study abroad would be a good measurement of educational growth.

The Emirate of Abu Dhabi is home to nine universities (two government and seven private) and sixteen other institutions of higher education (three government and thirteen private). In the academic year 2010/2011, the total enrolled student cohort in local institutions was 34,955 consisting of 77.8% Nationals and 22.2% non-Nationals. Some 4,850 students graduated from higher education institutions in that year. Students on scholarships abroad in the academic year 2007/2008 totalled 823, of whom 173 students graduated during the same academic year (see Tables 2.2, 2.3 and 2.4).

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[26] https://openknowledge.worldbank.org/bitstream/handle/10986/2357/646680PUB0acad00Box361543B00PUBLIC0.pdf?sequence=1.

Table 2.2

Higher education institution by type and sector, 2010–11

Type/Sector	Government	Private	Total
Emirate`s Total	5	20	25
Universities	2	7	9
Colleges	2	10	12
Institute	1	3	4

Source: Statistics Centre – Abu Dhabi

Table 2.3

Higher education students by nationality, sector and gender, 2010–11

Nationality & Sector/ Gender	Males	Females	Total	%
Nationals	8973	18239	27212	100
Government	4950	15766	20716	76.1
Private	4023	2473	6496	23.9
Non-Nationals	3487	4256	7743	100.0
Government	800	1421	2221	28.7
Private	2687	2835	5522	71.3

Source: Statistics Centre – Abu Dhabi

Table 2.4

Higher education graduates by nationality, sector and gender, 2010–11

Nationality & Sector/ Gender	Males	Females	Total	%
Nationals	1445	2783	4228	100.0
Government	1224	2650	3874	91.6
Private	221	133	354	8.4

Non-Nationals	217	405	622	100.0
Government	106	240	346	55.6
Private	111	165	276	44.4

Source: Statistics Centre – Abu Dhabi

2.7 Development and structure of higher education in the UAE

The UAE University, established in 1977 in Al Ain, was the first institution of higher education to be created in the UAE. Then, in 1988, the Higher Colleges of Technology (HCT) were set up to offer mainly vocational and technical programmes, although they now offer a wide range of courses including undergraduate and postgraduate degrees. The HCT currently has a network of 16 campuses across the country, with separate colleges for males and females as befitting Abu Dhabi's conservative Islamic culture. Zayed University, established in 1998 with campuses in Abu Dhabi and Dubai, was the third and final institution to be established by the federal government. The three higher education institutions (HEIs) controlled by the federal state are known as the 'public' or 'federal' institutions; all of the others are referred to as 'private' institutions.[27]

Article 23 of the UAE Constitution recognises the role of education in national development, and the federal government has pledged that education shall be provided free of charge to UAE Nationals at all levels. As a result, all UAE National school leavers are entitled to attend one of the three federal HEIs if they meet the entry requirements. The government's commitment to education was reiterated in 2001 when the largest single allocation of federal funds was for the provision of education for UAE Nationals (Godwin, 2006). However, the grants given to the three federal HEIs have remained static in many of the years since.

The private universities fall into one of two categories: they are either owned or controlled locally by individual emirates or local organisations, or from abroad, by foreign institutions of higher education that have established branch campuses. Examples of private locally owned universities include the American University of Sharjah, established by the ruler

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[27] http://www.encyclopedia.com/topic/United_Arab_Emirates.aspx.

of Sharjah in 1997; the University of Dubai, established as Dubai Polytechnic by the Dubai Chamber of Commerce and Industry in 1997; Paris-Sorbonne University Abu Dhabi, established by the Abu Dhabi Education Council in 2006; and Al Ghurair University, owned by the Al Ghurair Group, a company with diverse interests, which include banking, retailing and cement manufacture.

The first international branch campus was established in Dubai in 1993 by the University of Wollongong, a well-regarded university from Australia.[28] Many others have since opened, including Middlesex University and Heriot-Watt University from the UK, and the University of Pune, one of India's top-ranked state universities, which established a campus in the free trade zone of the emirate of Ras Al Khaimah in 2009. More recently, New York University and the government of Abu Dhabi have formed a partnership to create New York University Abu Dhabi, which enrolled its first students in August 2010. The government of Abu Dhabi will fund the UAE institution, so financial resources will not be diverted from the university's campus in New York.

2.8 Supply and demand for higher education in the UAE

Of the UAE's 5.07 million population, less than 20% are UAE Nationals; the remainder are expatriates (UAE Interact, 2009). The largest source countries of expatriates are India (1.75m) and Pakistan (1.25m). Approximately 500,000 residents are regarded as 'Western' expatriates, from Australia and New Zealand as well as countries in Europe and North America. The UAE's population was estimated to have increased by 6.3% in 2009 (UAE Interact, 2009). In fact, the number of expatriates increased by more than UAE Nationals as the latter grew by less than 4%. Cultural and religious influences keep the UAE birth rate relatively high, although it is now far lower than the 10–15% annual growth rates seen in the 1970s and early 1980s. The high birth rate of UAE Nationals in that period, combined with an increased recognition of the value of higher education, has resulted in a substantial increase in demand since the early 1990s. The UAE University enrolled 400 students in 1977 when it was established (Hijazi et al., 2008); it now has over 12,000 students.

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[28] http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1210&context=dubaipapers

The UAE government's pledge that every UAE National school leaver who satisfies the entry requirements of the three federal HEIs will be guaranteed a place, has put tremendous pressure on these institutions to expand capacity. Between 2003 and 2008, for example, the number of students enrolled at Zayed University increased by 52%, but during the same period the funding received from the federal government was broadly constant each year . The public higher education (HE) sector has not expanded quickly enough, and as a result it is believed that thousands of UAE Nationals have been denied places at the federal universities in recent years (Bardsley, 2009). Though, only a relatively small number of expatriates are admitted into the public HEIs.

The leading universities in the UAE have shown a greater determination during the last few years to produce high quality, world-class research and students through higher quality instruction. The UAE University, for example, aims to achieve a significant improvement in its placements in regional research and in the world university ranking tables over the next five years. It is, however, unable to invest more into research projects and developing new PhD and particularly Doctor of Business Administration (DBA) programmes, as well as increasing capacity of undergraduate programmes, without increased government funding. The vice chancellor of UAE University recently threatened to reduce the university's workforce by 7% (200 positions) as a solution to its funding dilemma (Bardsley, 2010b). The job cuts, if they went ahead, would involve both academic and support roles. Zayed University has also recently suspended the launch of a new research centre. International branch campuses operating in the new education hubs across the Middle and Far East are facing increasing pressure from their partners and local governments to expand their research activities. For example, the Chinese partners of the University of Liverpool recently requested that their campus in China become more research-focused because the University of Liverpool is a research-led university in the UK (Altbach et al., 2010).

It is clear that the demand for places at public/federal institutions significantly outstrips supply. Edwards (2008) observed the negative social impacts that can result when supply of HE places lags behind demand. For example, his study revealed that young people from lower

socio-economic groups became increasingly disadvantaged. If UAE Nationals from poorer backgrounds, or those living in rural areas, such as the Emirates of Um Al Quain and Fujairah, are unable to participate in higher education, then it is also possible that they will be less likely to participate in the labour market. Eventually, the situation could result in social dissatisfaction, if not unrest. Given that the UAE still relies heavily on expatriate labour, it has been a key government objective for many years to increase the participation of Nationals in the labour market.

The UAE achieves very high rates of participation in higher education. Some 95% of all females and 80% of all males who complete their final year of secondary school apply for admission to higher education (National Media Council, 2009). In 2008–9, the UAE University admitted 3,355 new students; the Higher Colleges of Technology, 7,902 students; and Zayed University 1,558 students (National Media Council, 2009). Of the National students who graduated in 2006, 66.8% were female (Hijazi et al., 2008). Many males prefer to join the armed forces or to take up employment in family businesses or relatively well-paid administrative positions in the public sector. Even though there are shortages of places in the public HEIs, each year many male school leavers who are offered places in them don't turn up for enrolment at the start of the academic year.

The level of federal funding per student in public HEIs has now fallen below international standards . It is clear that significant increases in funding are required from the federal government so that they can increase the number of places on their undergraduate programmes. Further funding is also needed in order to develop and expand postgraduate provision, including doctoral programmes, and to support the development of more research activity. The individual emirates have introduced various incentives, such as the establishment of free trade and education zones, to attract foreign institutions to set up in the UAE. Given that at least eighty-plus private institutions are now operating in the country, it would seem that the local governments have been successful in adopting this strategy as a means to increase the supply of places in higher education. In 2001, the percentage of degrees awarded from private institutions was 26.9%; in 2006, this figure had increased to 54.6% (Hijazi et al., 2008).

Most of the new private institutions have set up in Dubai and Abu Dhabi, the two emirates with the largest populations. Ras al Khaimah and Sharjah are two other emirates that have enjoyed some success in attracting foreign institutions. The private education system is open to the entire UAE population, but both UAE Nationals and expatriates are expected to pay full tuition fees, which are relatively high and unaffordable to many families. Only a limited number of scholarships have been made available for study at the private institutions, offered either by the government or the institutions themselves. Approximately one-third of UAE National undergraduates are currently studying at a private institution rather than at one of the three federal institutions, and a question arises over the perceived quality of educational standards. For some students, it was a forced choice because they did not achieve the entrance requirements of the federal institutions. In this case, foreign private institutions typically require the student to take some sort of foundation or language programme before enrolling onto an undergraduate degree. For example, of the 3,565 students enrolled at the University of Wollongong's Dubai campus at the end of 2009, 753 were studying in its Centre for Language and Culture on courses below undergraduate level. For most such institutions, the entry requirement under the International English Language Testing System (IELTS) is 5.5, and that is the most difficult requirement to meet for many Emirati students.

UAE Nationals may have a range of other motives for studying at a private institution, including the chance to study subjects not offered at the federal establishments, the possibility of gaining a more highly respected degree from overseas which may enhance their career prospects in the international labour market, or simply that their chosen institution is in a more convenient location. An increasing number of mature employed Nationals are choosing to study on a part-time basis. In 2001–2, approximately two-thirds of the UAE National students at Dubai Polytechnic (since renamed the University of Dubai) were studying on a part-time (evening) basis. At various institutions, such as the Abu Dhabi School of Management, a wholly-owned subsidiary of the Abu Dhabi Chamber of Commerce, weekend classes are popular with mature students in work. At Abu Dhabi University, DBA classes are solely conducted during weekends.

2.9 Quality of higher education in the UAE

It is possible that the large number of HE providers in the UAE has a positive effect on quality, as institutions are forced to compete by improving their programmes and the employability of their graduates. However, market forces alone cannot be relied upon to guarantee the quality of HE programmes delivered in the UAE. An examination of online forums such as *www.dubaifaqs.com/universities* and *www.desertspeak.com* reveals that many students are concerned about the quality of higher education. Some have expressed disquiet about the quality of faculty employed in universities, the high faculty turnover that exists in some institutions, the quality of learning resources and equipment, and the non-delivery of advertised optional modules.

The Ministry of Higher Education and Scientific Research (MHESR), through its various departments, is responsible for HE planning, policy development and implementation, quality management, data acquisition and analysis, the provision of admissions services for the federal institutions and the awarding of scholarships to UAE Nationals. The three federal institutions are subject to the quality assurance process of the Higher Education Council. In addition, all three federal institutions have sought to achieve international accreditation, mainly from US regional accrediting bodies.

The higher education hub concept, as recently established in several countries in the Middle and Far East, is still a work in progress. Whilst the University of Wollongong has successfully existed in the UAE for 21 years, it is yet to be seen how it will cope in the increasingly competitive marketplace that is resulting from the government's objective of establishing the UAE as a regional higher education hub. Nevertheless, international branch campuses have already made higher education available to thousands of students who may otherwise not have had access to it. It is probable that some institutions will prosper and grow while others fail. Foreign universities cannot continue opening branch campuses that only offer similar business/management and information technology programmes; there is already over-supply of these in several locations, and as a result many institutions are operating under

capacity. It has yet to be seen how foreign universities react when their international branch campuses fail to achieve enrolment and profit targets in the future. Some will probably give up the fight and close down, as did George Mason University in the emirate of Ras al Khaimah and the University of New South Wales in Singapore. Yet at the same time that George Mason announced its decision to withdraw from Ras al Khaimah two other institutions were in the process of moving in: the École Polytechnique Fédérale de Lausanne (EPFL), based in Switzerland, and the prestigious University of Pune from India.[29] Whilst the first programmes to be introduced by the University of Pune included Business Administration and Information Technology, EPFL specialises in the sciences and plans to offer programmes in subjects such as engineering and courses on energy supply.

The new higher education hubs of the Middle and Far East and the international branch campuses located in them are in the early stages of their evolution. The most prestigious international institutions, such as New York University and Paris-Sorbonne, both in Abu Dhabi, will probably survive, at least in the medium term, by using their strong brands to attract students and also by relying, if necessary, on guaranteed funding from the Abu Dhabi government. In the longer term, even these institutions face considerable challenges. Witte (2010) notes that New York University Abu Dhabi intends to enforce strict entrance requirements, and that Americans are expected to make up around 40–50% of the student body and UAE Nationals only a very small proportion. The absence of a foundation year programme will do nothing to help enrol more UAE Nationals in the future. Whether the Abu Dhabi government will be satisfied funding the university in the longer term if more UAE Nationals are not admitted is not known. Generous financial aid packages are currently offered to students enrolling at New York University Abu Dhabi, but if these were reduced or withdrawn then the very high tuition fees could prevent a lot of students from applying.[30]

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[29] http://www.academia.edu/1123649/Higher_education_in_the_United_Arab_Emirates_an_analysis_of_the_outcomes_of_significant_increases_in_supply_and_competition.
[30] Ibid.

2.10 Strategy for meeting labour market requirements and the role of higher education in the UAE

A key policy and strategic issue for the future is the ability to educate and train Emiratis for positions of leadership, ownership, and employment and staffing in the new economy of their own country.

The federal colleges and universities, the United Arab Emirates University, Zayed University, and the Higher Colleges of Technology, as part of the Ministry of Higher Education and Scientific Research, are the foundation for the enrolment of Emiratis and their preparation for employment. Over 34,000 Emirati students enrol at no cost in programmes from the diploma level to the baccalaureate degree, and graduate programmes are also available with tuition.[31] However, building and maintaining the capacity of these institutions to enrol all National students in quality programmes has become a challenge for the future. Key policy choices need to be made to increase the capacity of tertiary education and improve social and economic benefits for the country. Although oil revenues are high, national investment in public higher education has not kept pace with fiscal needs.

In the important area of education policy coordination, the Advisory Committee (MOHER,2010) found that there are no federal policies or practices requiring broad coordination of missions, degrees, organisations or programmes between or among federal institutions: 'While there is coordination of application processes, there is no coordination function or position at the Ministry for the Federal institutions' (MOHESR, 2010). It recommends the creation of federal policies, as decisions were campus-based and unrelated to each other.

These and other considerations led the Committee to recommend the creation of an Office of Higher Education Policy and Planning for Federal Institutions within the Ministry of Higher Education. The office was established in July 2010 and has been tasked with accomplishing the effective coordination of education policy and the development of long-

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[31] THE UNITED ARAB EMIRATES: Policy Choices Shaping the Future of Public Higher Education (August 2007), Warren H. Fox, PhD., Office of Higher Education Policy and Planning, Ministry of Higher Education and Scientific Research, Abu Dhabi, United Arab Emirates: http://files.eric.ed.gov/fulltext/ED502853.pdf.

range plans to improve the capacity of the Ministry of Higher Education and Scientific Research to implement effective policies that meet the changing needs of the UAE. The challenge, however, given the stratified nature of political leadership, and the traditions of the federal campuses, is to integrate a system-view of policy decisions. Traditional social relationships are strong and influential, data for decisions are often lacking, and collaboration is only now beginning. Responding to this need, the policy office created the strategic plan of the Ministry, 'Educating the Next Generation of Emiratis: A Master Plan for UAE Higher Education',[32] which was published in 2007 and clearly delineates national goals to:

(1) Provide access and educational opportunity for all Emiratis;

(2) Provide high quality education;

(3) Contribute to UAE economic development.

The latter goal states 'The academic programmes and research efforts of the UAE system of higher education shall better link to national needs of the economy, prepare Emirates for participation in the private sector, and expand leadership in energy production and economic development research' (MOHESR, 2012). The achievement of this goal is critical to raise the number of Emiratis employed in the private sector, and in the support and expansion of their impact on economic growth.

2.11 Key issues for UAE higher education

As outlined in the strategic plan, four key historic decisions were made in the 1970s in the UAE that shaped the character and structure of higher education in the country.[33] These policies honour the values and practises of an Arab nation but also recognise modern demands of international education. They also have a major impact on the fiscal needs of public higher education that exist to this day. There are four original pillars of policy for the UAE:

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[32] http://planipolis.iiep.unesco.org/format_liste1_en.php?Chp2=United+Arab+Emirates.

[33] THE UNITED ARAB EMIRATES: Policy Choices Shaping the Future of Public Higher Education (August 2007), Warren H. Fox, PhD., Office of Higher Education Policy and Planning, Ministry of Higher Education and Scientific Research, Abu Dhabi, United Arab Emirates: http://files.eric.ed.gov/fulltext/ED502853.pdf.

The UAE would build and operate its own universities, separated by gender.

  (i)   A qualified mostly international faculty would be employed;

  (ii) Instruction would be in English to enhance potential for economic diversification and integration with the rest of the global world;

  (iii) Education was to be free for all qualified Emiratis in federal universities;

  (iv) Education would include women (MOHESR, 2007).

These key decisions were the pillars upon which federal higher education was established, and they continue to serve the nation. In this respect, the UAE is similar to higher education in Germany where 'tuition fees are [also] regarded as per se a deterrent to participation and their imposition would signal the sudden end to participation' (Ziegele, 2006, p. 265). These policies contribute to higher education costs than found in other countries for several reasons – importing faculty has an associated requirement of housing provision and transport home each year, and separating campus facilities by gender increases the number of faculty required. Both fixed and capital costs are greater. However, they are policy choices based on cultural values and social expectations, and are legitimate for a country with the fiscal resources to support such options if it chooses to do so, as they also contribute to broad access and quality instruction (Abu Dhabi Strategic Plan, 2030).

2.12 Funding and access for UAE citizens

The number of Emiratis is increasing and more UAE citizens have recognised the importance of education; this has led to a steady increase in the number of applicants for admission to federal higher education institutions in the UAE. Enrolment is expected to increase by approximately 10,000 students over the next 10 years, and 20,000 by 2020 (MOHESR, 2012). The consequences of this trend were noted by the Advisory Committee for Planning of Higher Education in the United Arab Emirates a decade ago. Established by His Excellency Sheikh Nahayan Mabarak Al Nahayan in 1996, the Committee observed that there was a crisis in

higher education because of chronic under-funding and the projected increases in student enrolment. These concerns now appear to be well-founded. Data developed by the Ministry of Higher Education's Office of Higher Education Policy and Planning suggest that the capacity of the higher education system to provide access to all qualified students has not only been reached, but exceeded. This was published in a report, 'Funding Students First: Access to Quality Higher Education Programmes in the United Arab Emirates' (MOHESR, 2010). However, the accuracy of this is debatable.

As is the case in any country, the adequacy of support for higher education depends upon two key factors; enrolment and inflation. As enrolment increases, without commensurate increases in financial support, the revenue per student declines. Similarly, the 'real' value of static revenue – even with unchanging enrolment – would usually drop over time as the actual purchasing power of revenue declines. Enrolment from 2000–01 to 2005–06 grew by approximately 16% across the UAE. By comparison, the real revenue declined by an estimated 14%. Together, enrolment and inflation conspired to decrease the real value of federal support per student, as it declined by over a quarter (26%) between 2001 and 2006.

The funding situation is leading to less than desirable outcomes for access and quality education for UAE students. Per student expenditures as a percentage of GDP are low compared to other countries. This lack of funding shows that students are being turned away or are being placed in institutions that do not have the funds to adequately meet their needs. In order to be competitive with other countries and to achieve international standards, an increase to a level of over 3.5% in GDP funding for higher education should occur in the UAE (MOHESR, 2010). Again, this highlights the need for scholarships for the UAE's best students to have opportunities in institutions abroad.

Economic and GDP growth have been substantial in the UAE over the last several years. Between 2000 and 2006, nominal GDP for the UAE has more than doubled. Over the same time period higher education funding has been comparatively flat. Clearly the capacity for higher levels of support exists, though policy decisions have not been made for fiscal increases. If allowed to continue, the present situation is likely to have significant consequences for UAE

society. Frustrated students, unable to meet their educational goals, may opt for other activities that will either misuse, underuse or redirect their capacities. Students that do not have the chance to achieve their potential in the higher educational system are likely to be marginalised in the increasingly global and sophisticated economy that is now characteristic of the UAE.

In addition to funding to adequately support approximately 20,000 new students that are anticipated by the year 2020, it will also be necessary to support the quality of education the students receive (MOHESR, 2012). In an important policy development, and in recognition of the funding issue for public higher education, in early 2007 the Ministry of Presidential Affairs commissioned a study of the financing of federal institutions. This is an indication of awareness by policy makers of fiscal shortfalls that affect primarily access of Emirati students and programme quality. The study explored enrolment trends and Ministry of Finance and Industry appropriations over time. Funding alternatives are being considered, including a possible funding formula based on the number of students, though final recommendations are not yet available. However, there are possibilities that improved funding levels could be achieved, most likely with increased accountability and reporting requirements on budgeting and student outcomes. The government is demonstrating interest in improved data on institutional performance, student information, accountability, and planning.

2.13 Participation of males in higher education

Of the many policy issues that are confronting the higher education system in the UAE, the low level (28%) of male student enrolment is one of the most troubling. There are numerous reasons for this, and correcting the problem will require policy initiatives demanding significant resources and requiring a cooperative effort among many institutions in the UAE.[34] Before initiating major policy changes, the dimensions of the problem and its causes must be carefully assessed.

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[34] THE UNITED ARAB EMIRATES: Policy Choices Shaping the Future of Public Higher Education (August 2007), Warren H. Fox, PhD., Office of Higher Education Policy and Planning, Ministry of Higher Education and Scientific Research, Abu Dhabi, United Arab Emirates: http://files.eric.ed.gov/fulltext/ED502853.pdf.

Data developed by the Institutional Planning Unit and the Admission and Registration Department of the United Arab Emirates University (UAEU) indicate that male enrolment has lagged behind female enrolment for the past twenty years. A 2010 survey by the National Admissions and Placement Office (NAPO) showed that 'Over half of the male students (current school leavers) who have been approved for admission at the UAEU and HCT for September 2003 did not show up for registration' (NAPO, 2010).[35]

Interviews conducted during the development of this research suggest that there are many reasons for this low rate of male enrolment; young males have more opportunities available to them, such as joining the military, the police, participating in a family or other business, or working in some capacity for the government. Other commentators expressed the view that young men perceive it takes a long time to complete a higher education programme, and in the UAE the social custom is that couples marry young and start a family soon after that, with concomitant expenses. The requirement to have demonstrated competency in English has also acted as a deterrent, because in many cases a year must be spent in achieving a standard that will allow college-level work. The academic progress requirements were also identified as a possible hindrance to male enrolment.

2.14 Revisiting human capital development in the UAE

Most of the developing countries are growing too slowly for human capacity to expand rapidly. In the process of economic growth and development, human capital needs to acquire and reinforce attitudes that sustain behaviour that encourages economic growth, and rapid economic growth rewards those who invest in boosting their capacity (through higher wages, productive employment and improved welfare), while stimulating further investment in human capacity (Sachs and Warner, 1997). As a matter of strategy, governments need to match their policies to available human capacities and as a matter of policy, governments need to be selective.

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[35] Ibid.

The strategy to generate human capacity begins with an assessment of the existing stock of human capital. This consists of the general population of a country with its store of knowledge, skills, talent and experience. Human capacities and human capital can increase through population growth and net immigration of healthy and educated expatriates. Time and resources are required to sustain and enhance human capital and to ensure that individuals remain motivated and engaged. Education and learning, both formal and informal, are critical to this effort (Askary, Kukunuru and Pech, 2014; Birdsall and Gupta, 2004). The performance and effectiveness of formal education depends heavily on the broader context from which its inputs are drawn and within which its graduates gain their livelihoods.

The use of human capacity is determined primarily by demand. Public sector ministries and departments have derived demands for human capacity and generally have relatively flexible resources as compared to the private sector for the enhancement of human capacity through human capital development. Accordingly, the use of human capacity by the public sector is at a minimum, to avoid activities that destroy value. Since there are many potentially profitable and value-enhancing activities, government departments have a considerable scope and flexibility in organising their use of human capacity.

The public sector in many developing countries has made extraordinary efforts to generate human capacity to boost their economic growth and development. However, this strategy of 'build the capacity and it will be used' has not worked for many countries and they have failed to create an environment to absorb the newly-created capacities mainly due to underutilisation, misuse or most often, not used, policy (McPherson and Zinnes, 1992; IRIS, 1996; Duesenberry, Goldsmith and McPherson, 1999; Gray and McPherson, 1999).

Private and public sector performance is typically measured against three benchmarks: Efficiency, equity and effectiveness. Efficiency is important in terms of effective allocation of resources to achieve given objectives at the lowest resource cost and resources are wasted without attention to efficiency. Equity is a crucial social objective with two dimensions; horizontal and vertical. Horizontal equity requires the same treatment for individuals and groups in similar circumstances. Vertical equity implies that better-off individuals and groups

bear a larger share of any burden, or receive a smaller share of any benefit than those who are less well off. Effectiveness measures the goals of public policy and the actual outcome of investment. Effectiveness of policy poses a special challenge as few managers and administrators are familiar with the potential (both positive and negative) of human capacities, need and supply. Progress can be made if policy makers are helped to recognise that potential and types of changes in the skill-mix required using effectively the human capacities.

Human capacities are also related to attitudes, and these are changing, even in a conservative environment like the Middle East, and the UAE specifically. In the 2014 Arab Youth Survey conducted by *Arabian Business*, the outcomes indicated some significant shifts amongst young Arabs aged 18–24 years of age. A number of these may be summarised as follows, written from the point of view of a typical Arab respondent as described on the journal cover:

> Traditional values are outdated and belong in the past. I am keen to embrace modern values and beliefs. I am confident my national government can deal with living standards, economic stability and unemployment. But I am not sure they can address wealth creation. The biggest obstacle to my future is civil unrest, which I worry about more than lack of democracy or the threat of terrorism. I feel that entrepreneurial spirit is high in the region, and I hope one day to start my own business. I am no longer reliant on the public sector. (*Arabian Business*, Vol. 15(15) April 13–19, 2014).

The rapidly growing economy of the UAE is continuously expanding in construction, tourism, ports and shipping as well as finance and energy. The importance of human resources was overlooked in the early phases of development in Gulf Countries as the region has depended, for the past several years, on highly skilled expatriate labour for economic development. However, technological advancement, information explosion, the changing mix of personal values of the workforce and increasing domestic as well as global competition have created an environment in which emphasis is being placed upon the development of human capacity in the UAE. Consequently, human capital expansion has gained increasing importance and

occupies a central position in the National strategy for sustainable improvements as human capacity is fundamental to economic growth and social development.

2.15 The success of scholarships programmes

Evidence from prior research on scholarships awarded in various nations indicates that they are conducive to successful academic outcomes, and that these lead to further success as knowledge and skills are propagated (Ziegele, 2006; Carter, Mandell and Maton, 2009; Ramsey and Gorgol, 2010; Bukhari and Denman, 2013; Masterton, Moss, Korin and Watters, 2014). For example, in Australia, Masterton et al (2014:110) reported that according to their evaluation, 'A survey was undertaken of 34 eligible [medical] scholars' and they concluded that, 'The programme [funded by scholarships for the 34] has resulted in potential and actual leaders returning to their home countries where they positively impacted on health and surgical services. This has resulted in a reduced burden of surgical disease in the scholars' countries as measured by less death, disability and deformity'.

Likewise, the Meyerhoff Scholarship Programme in the United States was evaluated by Carter et al (2009:442) and they concluded that it was 'considered a successful intervention program for increasing the number of under-represented minorities who earn PhDs or MD/PhDs and pursue research careers in science, technology, engineering and mathematics.

Similarly, and closer to the UAE, Bukhari and Denman (2013) investigated the scholarship programme in Saudi Arabia, and in 'Student Scholarships and Saudi Arabia: Implications and Opportunities for Overseas Engagement', they deduced that in their country, 'the focus has shifted from meeting the identified needs of the Kingdom to meeting the specific professional and personal needs of individual students' p. 151. Their final opinion was that whilst there were 120,000 Saudi students studying abroad, they could not as yet offer conclusions about the effectiveness of their programme: 'It remains to be seen whether returning Saudi scholarship recipients will win favour over the home educated'. Indeed, Bukhar and Denman reported that there was overseas scepticism about the integrity of the scheme,

with some authorities at universities abroad believing that there was a hidden Islamic agenda (Ibid., p. 158).

It was therefore considered useful to investigate the scholarship situation in the UAE, and the following material scrutinises some of the scholarships available to UAE applicants, as well as the entitlements that go with them.

2.16 The nature and framework of foreign scholarship programmes

For Abu Dhabi, the inevitable need of diversifying away from oil now builds momentum for change. Coordinating a strategy towards constructing a knowledge-based economy represents an opportunity, the capturing of which requires thorough two-way communication and engagement of the relevant stakeholders in an evolving inclusive process for policy change.

With an eye on developing an Emirati labour force that can meet the requirements of local employers, the Executive Council (EC) of Abu Dhabi recently announced two new programmes that will boost the provision of education and professional training to UAE Nationals. The government's plans include the expansion of a scholarship fund for university students, as well as the establishment of additional vocational schools at the secondary level.[36]

On 13 June 2013, the EC announced that it had approved the establishment of a new scholarship and academic delegations administration system to be run by the Abu Dhabi Education Council (ADEC), the primary regulator of the emirate's education system.[37] The EC also said that it would grant an additional Dh197m ($54m) over the next four years to expand the emirate's scholarship programmes for local students.

In the wake of the EC's decision, ADEC officials announced that its scholarship committee would be responsible for drafting new scholarship-related regulations, as well as

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[36] http://www.oxfordbusinessgroup.com/news/abu-dhabi-funding-scholarship.
[37] Ibid.

identifying the countries, institutions, disciplines and majors that will be covered by the expanded system.

ADEC has already offered scholarships to more than 5,000 students since 1990s, mostly for individuals enrolled in technical and professional areas of study, such as electronic, electrical, chemical and mechanical engineering; economics; accounting; and finance and medicine. Indeed, support for students in these disciplines will likely go toward helping the government realise its plans for an innovation-led economy, as laid out in Economic Vision 2030, the emirate's long-term economic development roadmap.[38]

According to Mugheer Khamis Al Khaili, the director-general of ADEC, the council's scholarships will also help to ensure that the skills of the Emirati workforce match the needs of employers, stating that the scholarship programme aimed to create a stronger alignment between the human capital resource and labour market requirements.[39]

Among the scholarship programmes already offered by ADEC is the Al Nokhba Elite Scholarship for Advanced Technology, which sponsors students throughout their undergraduate and graduate engineering studies at universities in the UAE and abroad. Students enrolled in this programme also have access to internships and employment opportunities at the semiconductor manufacturing company Global Foundries, or at other technology companies nominated by the Advanced Technology Investment Company, a government entity that sponsors the scholarship alongside ADEC.[40]

While programmes such as Al Nokhba are aimed at university students, the Emirate is also working towards the development of a skilled labour force by expanding vocational training at the secondary school level. According to the EC, five new secondary technical

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[38] http://www.alpencapital.com/downloads/GCC_Education_Industry_Report_July_2014.pdf.
[39] https://www.adec.ac.ae/en/AboutADEC/Pages/ExecutiveManagement.aspx.
[40] http://www.oxfordbusinessgroup.com/news/abu-dhabi-funding-scholarship.

schools will be set up in the near future, joining the four that the Abu Dhabi government has already established in Abu Dhabi, Al Ain, and the emirates of Ras Al Khaimah and Al Fujairah.[41]

To help ensure that its graduates are ready to meet the needs of the local labour market, the Abu Dhabi Vocational Education and Training Institute (ADVETI) has designed its programmes in consultation with local industry and businesses. The creation of a skilled labour force is an important part in helping the government realise its economic development plans. By supporting programmes such as those offered by ADVETI, as well as providing additional scholarship funds for students at universities, Abu Dhabi is taking steps towards ensuring the development and diversification of its economy in this way. A detailed description of the framework and nature of some of the major scholarships is given in one specific chapter of the study.[42]

The main objective of this research is to examine how human capital for professional positions in the UAE has been planned and developed; and how government in the UAE is investing in the policy reforms that are relevant to workforce development. In this context, the study aims to answer a number of questions concerning one important aspect of local human capital development: the functioning, effectiveness and contribution of scholarship programmes that have been created for UAE citizens, both in the public and the private sector.

As mentioned above, human resources management theories suggest that there is a close correlation between availability of development opportunities and performance of people in a country. Development relates to the increase of skill, through training, that is necessary for job performance (Sabetti, 1984). However, generating human capacity is one thing; using it to create and sustain economic growth and improve national welfare is another.

In the context of the above discussion related to Human Capital Theory and the background and rationale of the proposed research, it should be reemphasized here that the main objective of this study is to evaluate the contribution, potential impact and constraints

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[41] Ibid.
[42] Ibid.

related to government scholarship schemes for human resources development in the UAE, as well as its perceived contribution to the professional careers of the alumni.   Hence, to assess alumni's perceived investment made and potential outcomes and effectiveness of such opportunities provided to the UAE Nationals.

In the next chapter, we discuss the nature and framework of scholarship programmes with reference to workforce development strategy in the United Arab Emirates.

Chapter 3

Nature and Framework of the Foreign Scholarship Programme in Selected Organisations of the UAE, with Reference to Workforce Development Strategies

3.1 Introduction

Some countries, including many in the Gulf Cooperation Council, have recently turned their natural endowments into a source of strength and displayed high economic growth in recent decades.

The United Arab Emirates, in general, and the Emirate of Abu Dhabi, in particular, possess a distinctly different economy mainly dependent on oil and gas, one of the best-performing in the modern world. Huge reserves of hydrocarbons are continuously generating massive revenues and the Emirate keeps investing in infrastructure and real estate. Currently, however, Abu Dhabi has entered a reform phase with the primary emphasis placed on diversifying the economy away from the dependency on oil and gas through investment in people, innovation and the development of a knowledge-based economy (KBE).

For Abu Dhabi, the need to diversify the economy has already created a momentum for change and the strategy towards building a knowledge-based economy is showing its positive results. In this context of Public Policy Strategy, the Executive Council (EC) of Abu Dhabi devised programmes to boost the provision of education and professional training to UAE Nationals. The government's plans include the expansion of a scholarship fund for university students, as well as the establishment of additional vocational schools at the secondary level.[43] [44], [45].

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[43] 'The development goals of the United Arab Emirates and the Emirate of Abu Dhabi will be achieved only with the support of a sophisticated and entrepreneurial workforce. His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the United Arab Emirates and Ruler of Abu Dhabi, has defined education as a pillar that will enable

As per the decision of the EC indicated above, ADEC announced that its scholarship committee will be responsible for drafting new scholarship-related regulations, as well as identifying the countries, institutions, disciplines and majors that will be covered by the expanded system.[46],[47]

In many developing countries, higher education foreign scholarships are being considered as a means to improve the access, participation, enrolment and achievement of the talented students. Like many developed and developing countries, the UAE government introduced various forms of the scholarship programmes in the Public Sector Departments and Ministries under the direction of Ministry of Higher Education and Scientific Research. A brief description of the financial support, framework and nature of these scholarships shall below follows.

3.2 Scholarship funding, financial and other mean of support

The Department of Scholarships and Cultural Foreign Relations at the Ministry of Higher Education and Scientific Research, UAE, is the main office that manages the study abroad scholarship programme. It is responsible for the students pursuing studies in institutions located overseas. The department performs its duties through its employees at the ministry as well as cultural attachés in the UAE embassies abroad. The strategic plan and policy developed by the department aim at preparing human resources to meet the country's needs for comprehensive development. However, different departments have their own internal

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Abu Dhabi to meet standards of excellence achieved in the most highly educated countries of the world.'
https://gsec.abudhabi.ae/Sites/GSEC/Navigation/EN/PolicyAndStrategy/social-and-human-resources%2cdid%3d89950.html#id89942.

[44] http://www.oxfordbusinessgroup.com/news/abu-dhabi-funding-scholarship.

[45] http://www.adec.ac.ae/en/Students/Scholarships/Pages/Al-Nokhba-Scholarship.aspx.

[46] http://www.oxfordbusinessgroup.com/news/abu-dhabi-funding-scholarship.

[47] http://www.adec.ac.ae/en/Students/Scholarships/Pages/Al-Nokhba-Scholarship.aspx.

scholarship management offices and maintain different structures of financial and logistical support for the holders of foreign scholarships.

Generally each department provides financial support to scholarship awardees studying abroad and this varies in terms of the different requirements for undergraduate and graduate programmes. The financial support includes allowances (monthly scholarship stipend from the department and a yearly books, computer, clothing and travel allowance), medical coverage (full medical and dental coverage, as per each department`s standard policy), and reimbursements are provided for all standardised testing and preparation courses as per the scholarship rules and regulations. Scholarship holders receive a yearly round-trip ticket from their departments and some also arrange tickets during the summer vacations according to the Scholarship rules and regulations.

In most cases the departments make no change to a sponsored student's committed and assigned field of research, university, country and duration of study as per his/her letter of sponsorship. However, special provision is allowed in some cases by each department. If a student wants to change any aspect of their sponsorship terms it can be arranged, but only with departmental approval. There is no coordinated official setup to evaluate and monitor the funding and other requirements for scholarship awardees and there is a requirement for a joint office for identifying national research priorities, raising and allocating funding among scholarship programmes, and developing a model for accomplishing this objective which includes collaboration between each department and degree-level institutions abroad. Departments do not document their individual scholarship awards; however, the Ministry of Presidential Affairs managed to organise the data from 2001 onwards which are given in the tables below.

3.3 Ministry of Presidential Affairs scholarships

The Ministry of Presidential Affairs (MOPA) awards scholarships to distinguished students from across the United Arab Emirates. These students pursue academic studies in a myriad of majors including Engineering, Business Administration, Information Technology, Computer Sciences,

Media, Humanities, Law, etc. Initially, the scholarship was designed for the selected students to attend United Arab Emirates Universities only; however, there are students who have been sent to the United States, Great Britain, New Zealand and Canada.

The United States is among the common destinations for MOPA-sponsored students. While engaged in their academic studies, they follow certain scholarship regulations and failure to do so results in early termination of the scholarship. The main rules include: students can only change their major or university if written approval is received from the Ministry. In addition, they may not accept assistance, financial or otherwise, from any other agency while they are scholarship students. Finally, MOPA recipients are expected to complete employment within the UAE government for a period of not less than twice the time he/she spent studying and/or for whatever duration the ministry deems.

MOPA provides financial support for all its scholars in foreign countries as they pursue their studies in a range of undergraduate and graduate programmes. The number of scholarship awards by the MOPA is given in the tables below as MOPA Scholarship Management Office managed to maintain the data from 2001 onwards.

3.4 Abu Dhabi Education Council (ADEC) scholarships

As noted earlier and in an effort to encourage UAE Nationals to major in specialised subjects needed for Abu Dhabi's growth and sustainability, ADEC offers the 'Talented Scholarship Programme' to gifted and motivated students. Abu Dhabi Education Council currently offers a number of scholarship opportunities based on various criteria and is also developing a policy for scholarship programmes for undergraduate and postgraduate degrees with the aim of supporting human capital development that is aligned with the emirate's social and economic goals.[48]

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[48] http://www.uaecd.org/adec-scholarship-program-higher-education;
   http://www.studyandscholarships.com/2010/08/abu-dhabi-education-council-adec.html#.VNJRmzr9nmI.

ADEC's scholarship division runs all aspects of its scholarship programmes, encompassing development, criteria, and coordination with the Scholarship Committee on candidate decisions, follow-up with students on finances, academic progress, and any issues and concerns throughout the completion of their degrees.

The advanced developed countries in North America and Europe are the destinations for ADEC's scholars to meet the needs of the employment market for the future. As the UAE expands its range of industrial and commercial activity as part of the growing economy, a well-educated and qualified UAE National workforce is a key element in sustaining its success.

The goal of ADEC's Scholarship Programme in higher education is to lay the foundation for an innovation-based, knowledge-producing society by elevating the quality of higher education to international standards through partnerships with world-class universities; high licensing and accreditation standards; requirements and incentives for continuous improvement; promoting and incentivising innovation; scholarship and discovery through major research funding in areas of strategic importance to Abu Dhabi, thereby building a strong community of scientists and scholars; and carefully aligning Higher Education with labour market and socio-economic needs, guided by the Abu Dhabi Economic Vision 2030 and Abu Dhabi's Policy Agenda.[49]

With a keen interest in developing the young talent of UAE and offering them a chance to serve their community, the Abu Dhabi Emirati employs the Talented Scholarship Programme graduates in the Emirate's public sector, as well as government and private entities in the country[50][51]

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[49] https://www.adec.ac.ae/en/MediaCenter/News/Pages/High-performing-Emirati-students.aspx.
[50] http://www.uaecd.org/adec-scholarship-program-higher-education.
[51] http://www.uaecd.org/adec-scholarship-program-higher-education.

3.5 Presidential Scholarship Programme

The Presidential Scholarship Programme started in 1998 by a decree from the Late Sheikh Zayed Al Nahyan, specifically geared to distinguished United Arab Emirates students who graduate from their high schools and who meet specific academic criteria

A Presidential Scholarship Award is considered highly prestigious and most lucrative in terms of financial and other related support for studies. This award is very competitive and the most talented students achieve the scholarship through a competitive selection process. Generally, Presidential Scholarship undergraduate students receive US$3,000 monthly allowance. Graduate students receive US$3,500 monthly allowance. The student is allowed a one-time annual travel allowance for the academic year ($2,000) due each summer, provided he/she has completed a minimum of either two semesters or three quarters during that year. If he/she starts school after spring, no allowance is paid for that academic year.

3.6 Dubai Police higher education foreign scholarships

The 15,000-strong Dubai Police Force was established on 1 June 1956 in Naif Fort which is still operated as a police station.[52] The Dubai Police vision comprises excellent performance standards with highly defined descriptions of tasks, duties and jurisdictions. They have developed institutional performance criteria in the application of strategic planning, simplifying procedures and managing human and financial resources more proficiently. They take pride in their creative initiatives, appreciate personal excellence and work as one team.

Accordingly, the Dubai Police have established a Scholarship Department which is responsible for the administration of the scholarship programme that funds students who are approved for study abroad. Substantial amounts of federal funds are invested each year in

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[52] Naif Fort is a locality in the Deira side of Dubai, with the first police station being known as 'Naif Fort, with only 29 members. The size of the force increased gradually, to 105 in 1960 and to 430 by 1967 and now comprises almost 15,000 of the 'most progressive' police in the Arab World.

providing study opportunities in other countries. Competition for a limited number of scholarships is keen.[53]

In order to assist students in finding appropriate placements in higher education institutions abroad, to assist in the cultural and academic adjustment of the student and to monitor the student's performance, the Scholarship Department works through the Cultural Attaché's Offices (CAO) attached to the United Arab Emirates embassies in the various countries.

Dubai Police provides financial support for all its scholars in the US as they pursue their studies in a range of undergraduate and graduate programmes. The financial and other support for study abroad is almost as prestigious as are the rewards for recipients of the 'Presidential Scholarship Programme'.

3.7 Abu Dhabi Investment Authority (ADIA)

The Abu Dhabi Investment Authority (ADIA) sponsors a select number of students each year with the hope of grooming tomorrow's leaders. Students are selected through a series of stages inclusive of interview, aptitude testing, and academic achievement. Once a student is accepted, they begin a rigorous programme of academic study, personal development and extracurricular activities.

ADIA's people are as diverse and international as their business, with over 60 nationalities combining to create a highly collaborative work environment. ADIA attract, develop and retain world-class talent and provide the resources by investing significantly in employees' development, training and career progression, combined with highly competitive market-based compensation and benefits. ADIA offers a wide range of targeted employee development programmes at all levels. These include a curriculum of core financial training,

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[53] http://www.uae-embassy.org/uae-nationals/students/scholarship-programs/dubai-police

which aims to provide employees with the tools and knowledge to share ideas and contribute to internal debate, irrespective of their seniority.

For UAE National graduates, ADIA offers the Year One Graduate Programme, which provides an immersive introduction to ADIA and the key skills and financial knowledge needed to succeed. This includes guided study to develop financial skills, interactive simulations, as well as work experience within different investment departments, domestic and foreign, to build core analytical skills and familiarise trainees with all parts of the business. Upon completion of this initial year, graduates are assigned to a department where learning becomes more department-specific and aimed at developing advanced interpersonal skills. As a whole, this training provides UAE National graduates with a smooth entry into the work environment and a strong platform from which to build successful careers.[54] Students enrolled in the Scholarship Programme enjoy the most lucrative benefits as ADIA Scholarship is considered the best among talented National graduates of the UAE.

3.8 Abu Dhabi National Oil Company Scholarship Programme (ADNOC)[55]

The Abu Dhabi National Oil Company (ADNOC) started its Scholarship Programme in 1974, to assist UAE Nationals in achieving educational goals and to meet the needs of the oil industry, a vital sector of the national economy. The Scholarship Department's mission is to educate, train and prepare UAE Nationals to take up leading positions in the oil and gas industry, as part of its commitment towards the process of Emiratisation of jobs both for ADNOC Headquarters and the ADNOC Group of Companies.

The Scholarship Programme aims at providing both opportunity and assistance to UAE Nationals by introducing students to the majors most required by ADNOC. The most talented are offered the opportunity to follow undergraduate and postgraduate programmes in engineering and applied sciences at some of the most reputable academic institutions around

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[54] http://www.adia.ae/En/People/Training_development.aspx.
[55] http://www.adnocscholar.ae/index.asp?mid=61&adnet=1.

the world, mainly in the USA, UK, Australia, Japan, and in the UAE. The selection criteria for the award of Scholarships are similar to other departments in the UAE as the requirements include UAE National status. Admission is into a reputable institution which ranks among the best twenty universities. Generally the candidates' qualifications are relevant to the several core Petroleum Institute Abu Dhabi disciplines, namely: Mechanical Engineering; Electrical Engineering Instrumentation and Controls or Power; Chemical Engineering; Petroleum Engineering; Petroleum Geosciences and Management Information System.

3.9 Ministry of Higher Education & Scientific Research (MOHESR) Programme

The Ministry of Higher Education and Scientific Research provides opportunities for UAE Nationals to attend the most prestigious universities in the world through the scholarship programme. The main objective is to improve higher education performance levels in the UAE as per the public policy strategy and Vision 2030.

The Scholarship and Cultural Foreign Relations Department (SD) of the Ministry of Higher Education and Scientific Research plays an important role in managing the scholarship programme for studies abroad. Students are sent to institutions of higher learning in the United States of America, United Kingdom, Canada, Australia, New Zealand, European Union countries, and neighbouring Arab countries. Among the programmes sponsored abroad are health sciences, medicine, engineering, computer sciences, information and computer technology, business, management, economics, and environment studies.

Through Cultural Attaché Offices (CAO) within the embassies of the UAE abroad, the SD works to place UAE students into institutions of higher learning in that country. In Washington DC, the Cultural Division is responsible for the placement of MOHESR-sponsored students into higher education institutions within the United States and Canada. The Cultural Division also serves the students, who range from undergraduate through graduate levels, with other services such as scholarship disbursement, academic monitoring and advising, as well as ensuring the general welfare of the students while enrolled in their programmes of study. The Cultural Division is the

direct link between the students and the sponsoring agencies in the UAE. It strives to assist these students so they may accomplish their scholastic goals as well as achieve personal growth.

In addition to working with the MOHESR-sponsored students, the Cultural Division also serves as MOHESR's representative in the US and Canada. The Cultural Division regularly meets with faculty and staff from institutions of higher learning from around the US and Canada to further discuss matters aimed towards better partnerships for the benefit of the students as well as the United Arab Emirates.

3.10 Data analysis and evaluation: preliminary results

The focus of the evaluation here aims to provide a wide-ranging and detailed analysis to measure the impact award holders have with reference to the Emiratisation Programme and Vision 2030; to improve our understanding of how international scholarships can contribute to wider society, and to demonstrate the benefits of the scheme to government institutions that fund it . As noted, the main focus of our analysis is development impact, in line with the objectives of Vision 2030. This study presents data obtained from the Ministry of Presidential Affairs on scholarship recipients, covering the period 2002–12. This is consolidated data in that it represents a valid sum of a number of recipients in different categories and countries. The individual institution data is also available but only consolidated data is available from Ministry of Presidential Affairs. An analysis of available data over time is presented in the appendix. The table presented in the appendix show the number of scholarships awarded to alumni in different categories over the year from 2001-2012. The data is also presented in terms of number of scholarship awards to alumni in different countries of the world. The purpose of presenting this data is to show the trend of scholarship in terms of different field of studies, different levels of study and scholarship awards in different countries of the world.

Looking more closely at scholarship awards, the following tables and graphs highlight the percentage in each category from 2001 to 2012. The data show the percentage of scholarships in different fields.

Table 3.1 Percentage of scholarship in each category between 2001–2012

Year	Biology	Botany	Engineering	Accounts & Finance	Management	Computer
2001	31.43	1.71	8.57	0.00	21.71	8.00
2002	30.30	0.00	9.70	0.00	24.85	7.88
2003	23.76	0.35	10.64	0.00	31.21	9.22
2004	16.90	0.28	14.93	0.00	32.11	9.01
2005	13.76	0.41	18.28	0.62	34.29	10.27
2006	10.90	0.74	18.26	0.00	37.26	9.87
2007	8.61	0.40	23.18	0.26	40.66	6.75
2008	8.33	0.67	26.34	7.80	34.01	6.18
2009	7.49	0.35	26.92	8.97	32.75	4.79
2010	7.75	0.70	33.80	10.56	23.38	4.65
2011	14.10	0.00	34.62	8.33	16.67	4.81
2012	7.59	1.12	41.07	10.49	18.97	2.68

Table 3.2 Percentage of scholarship in each category between 2001– 2012

Year	Humanity	Science	Political Science	Education & Training	Tourism & Hospitality	Law	Media
2001	4.57	7.43	1.71	9.14	1.71	1.14	2.86
2002	0.61	3.64	3.64	12.73	0.00	4.85	1.82
2003	1.06	3.90	3.19	8.87	1.06	3.90	2.84
2004	0.85	3.66	3.10	11.55	0.00	4.51	3.10
2005	0.62	2.26	2.67	11.29	0.00	3.70	1.85
2006	1.03	1.47	4.27	11.19	0.15	3.09	1.77
2007	0.93	2.12	3.84	8.08	0.00	2.65	2.52
2008	0.13	2.02	3.49	5.11	0.13	2.82	2.96
2009	1.83	1.22	5.05	5.14	0.44	2.96	2.09
2010	0.42	1.27	5.49	5.77	0.14	3.38	2.68
2011	0.96	3.21	5.45	4.17	0.00	4.49	3.21
2012	0.89	3.35	6.25	3.35	0.00	3.13	1.12

Scholarships in the field of Biology were high from 2001 to 2003 and then continued to decrease from 2004 to 2012. Engineering scholarships increased continuously from 2001 to 2012. Scholarships in the field of Management also increased from 2001 to 2007, but then dropped each year to 2012. Other fields show consistent trends as the share of scholarships is relatively small compared to Biology, Management and Engineering. The graphs below show the trend of allocation in each field of study.

Figure 3.1

Scholarship in the subject of Biology
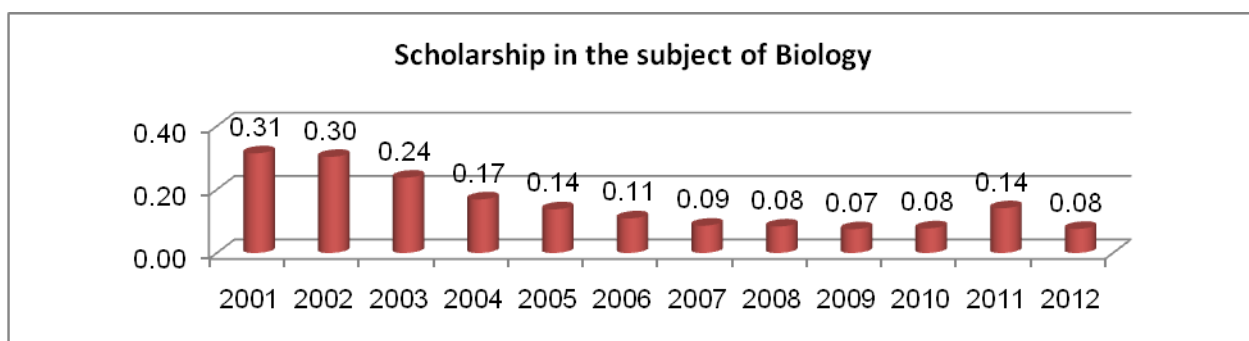
Figure 3.2

Scholarship in the subject of Botany
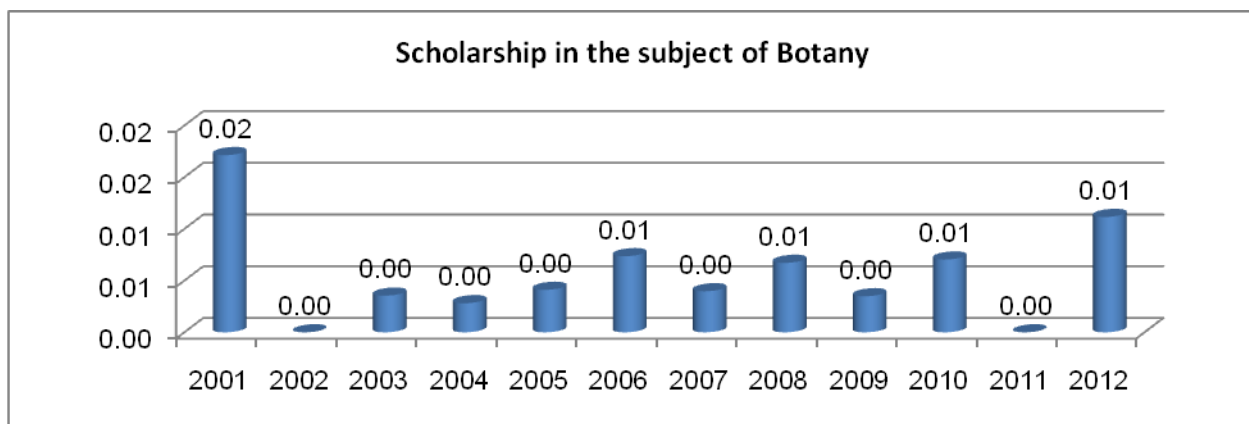
Figure 3.3

Scholarship in the subject of Engineering
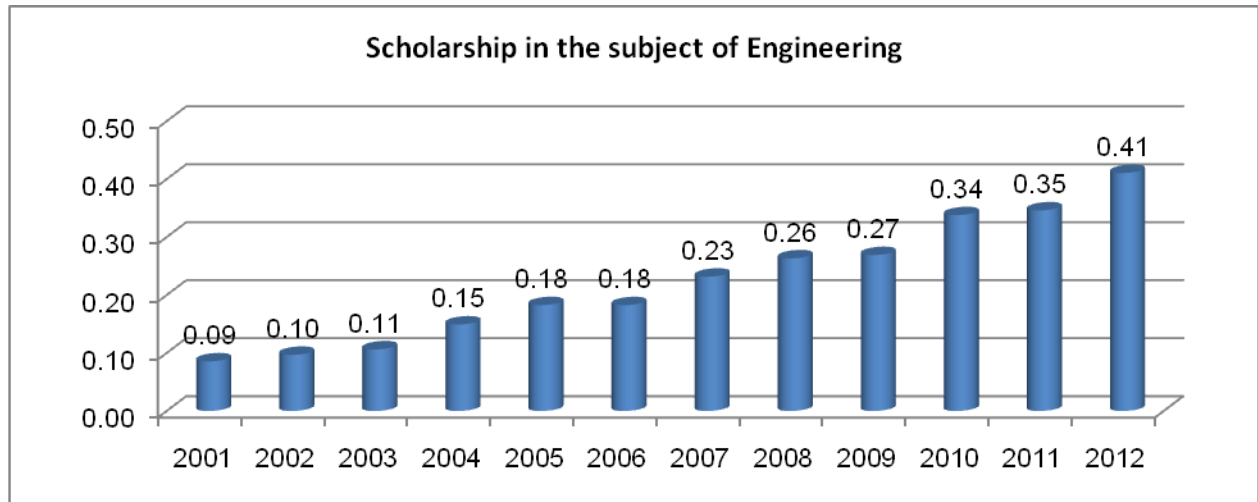
Figure 3.4

Scholarship in the subject of Accounts & Finance
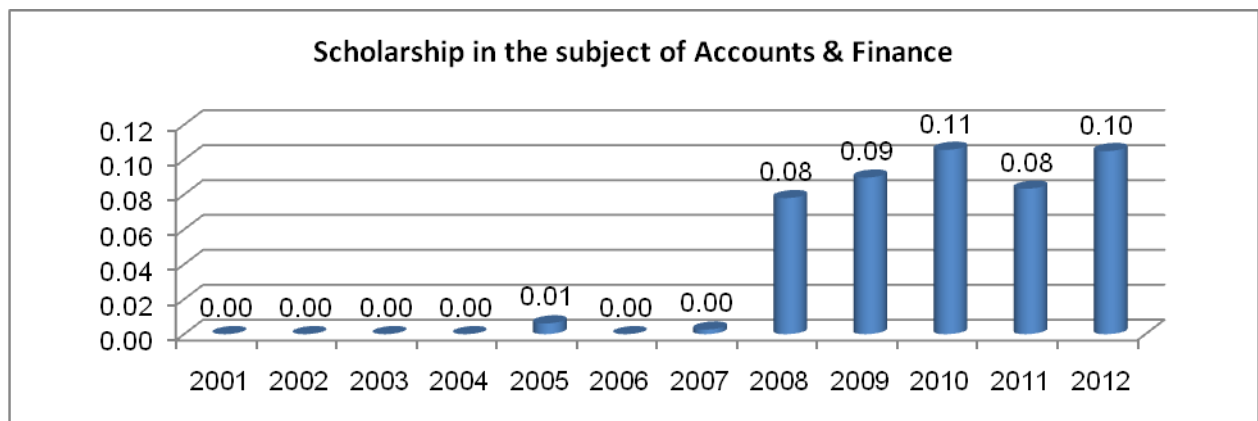
Figure 3.5

Scholarship in the subject of Management

Scholarship in the subject of Management

Year	Value
2001	0.22
2002	0.25
2003	0.31
2004	0.32
2005	0.34
2006	0.37
2007	0.41
2008	0.34
2009	0.33
2010	0.23
2011	0.17
2012	0.19
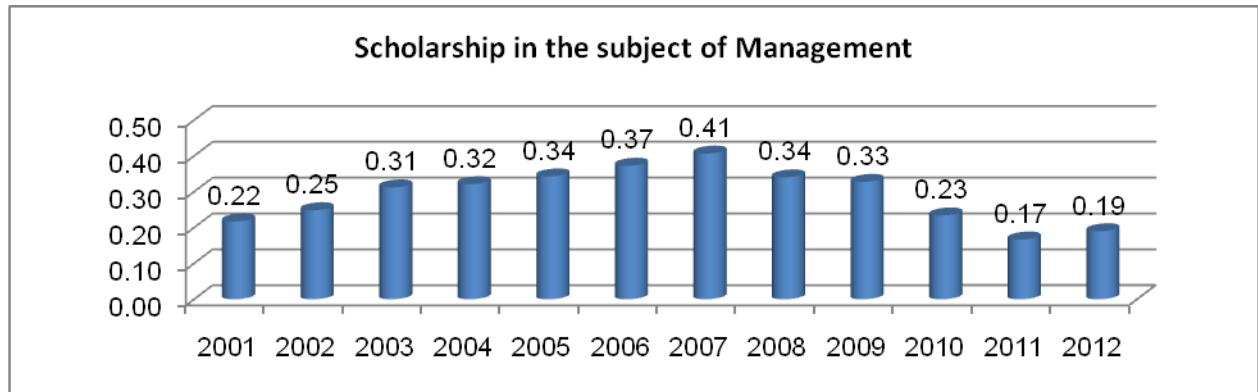
Figure 3.6

Scholarship in the subject of Computer Studies

Scholarship in the subject of Computer

Year	Value
2001	0.08
2002	0.08
2003	0.09
2004	0.09
2005	0.10
2006	0.10
2007	0.07
2008	0.06
2009	0.05
2010	0.05
2011	0.05
2012	0.03
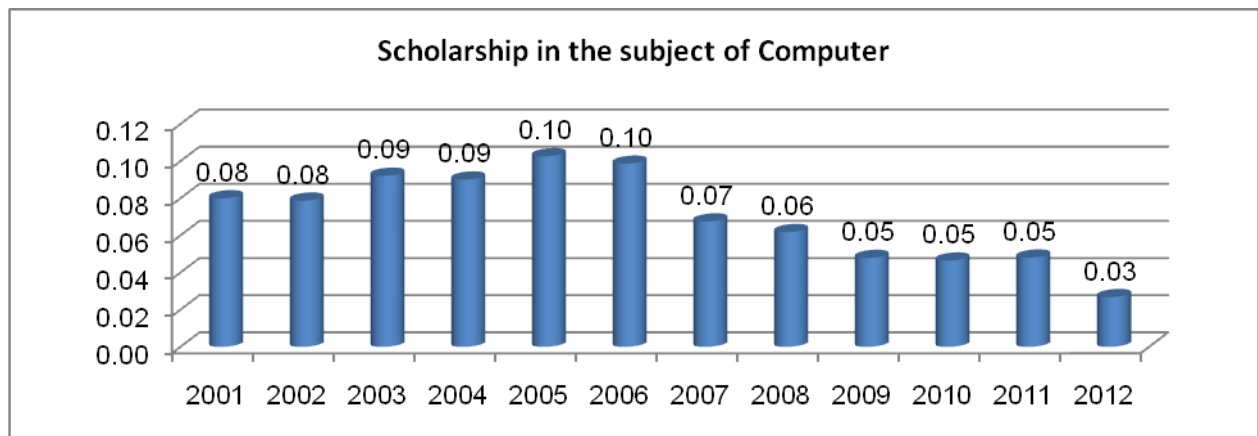
Figure 3.7

Scholarship in the subject of Humanities

Scholarship in the subject of Humanities

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.02	0.00	0.01	0.01
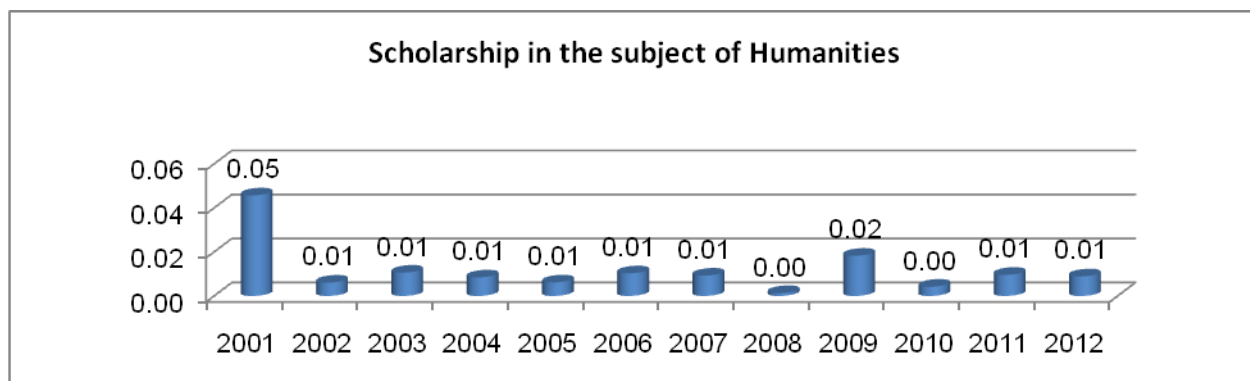
Figure 3.8

Scholarship in the subject of Science

Scholarship in the subject of Science

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
	0.07	0.04	0.04	0.04	0.02	0.01	0.02	0.02	0.01	0.01	0.03	0.03
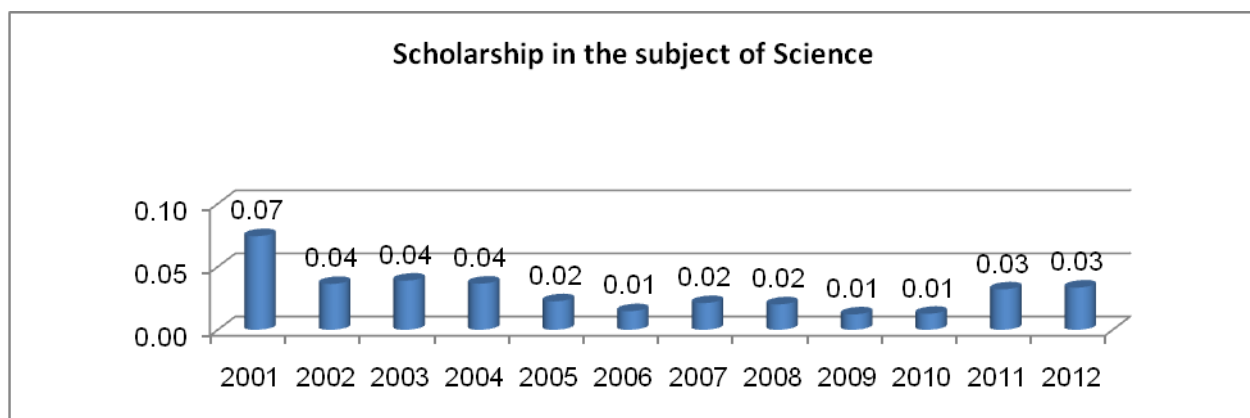
Figure 3.9

Scholarship in the subject of Political Science

Scholarship in the subject of Political Science

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
	0.02	0.04	0.03	0.03	0.03	0.04	0.04	0.03	0.05	0.05	0.05	0.06

Figure 3.10

Scholarship in the subject of Education & Training

Scholarship in the subject of Education & Training
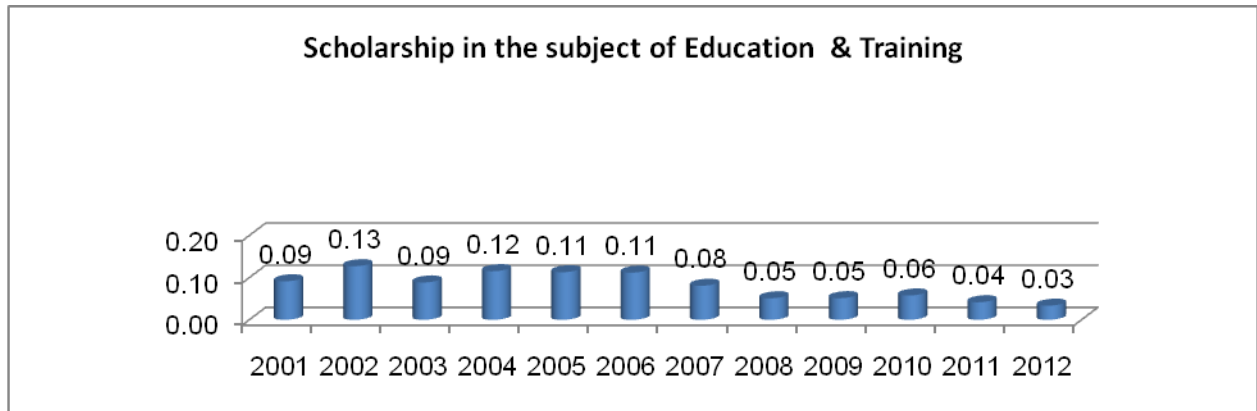
Figure 3.11

Scholarship in the subject of Tourism & Hospitality

Scholarship in the subject of Tourism & Hotelling

Figure 3.12

Scholarship in the subject of Law

Scholarship in the subject of Law
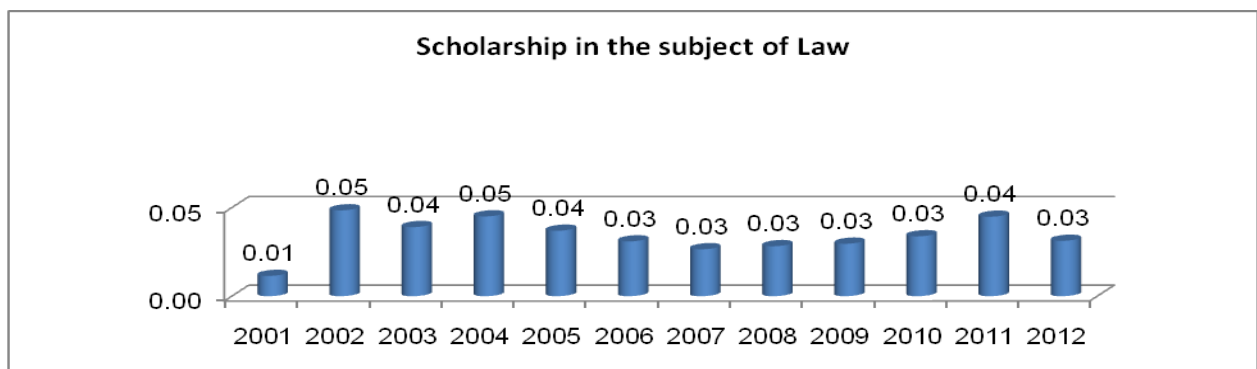
Figure 3.13

Scholarship in the subject of Media
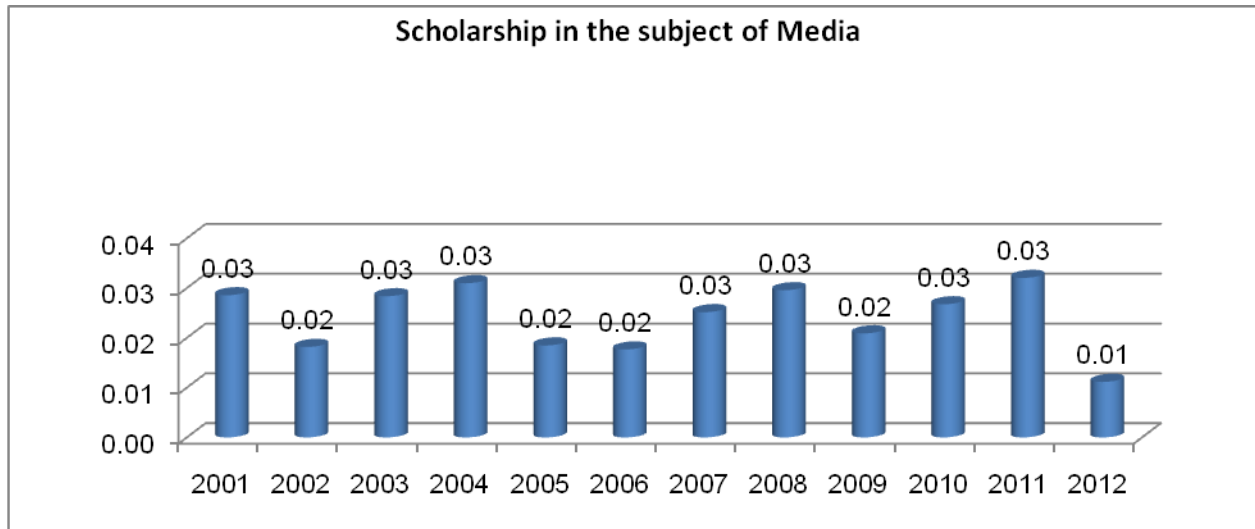
Table 3.3 below shows a summary of the percentage of scholarships in different fields of study from 2001 to 2012:

Table 3.3 Summary of the percentage of scholarship in different fields of study from 2001−12

Subject	Min %	Max %
Biology	7.49	31.43
Botany	0	1.71
Engineering	8.57	41.07
Accounting & Finance	0	10.56
Management	16.67	40.66
Computer	2.68	10.27
Humanity	0.13	4.57
Science	1.22	7.43
Political Science	1.71	6.25
Training	3.35	12.73
Tourism & Hospitality	0	1.71
Law	1.14	4.85
Media	1.12	3.21

Figure 3.14

Description of percentage of scholarship in different fields of study from 2001−12

Description of Subject wise % of Scholarship from 2001-2012
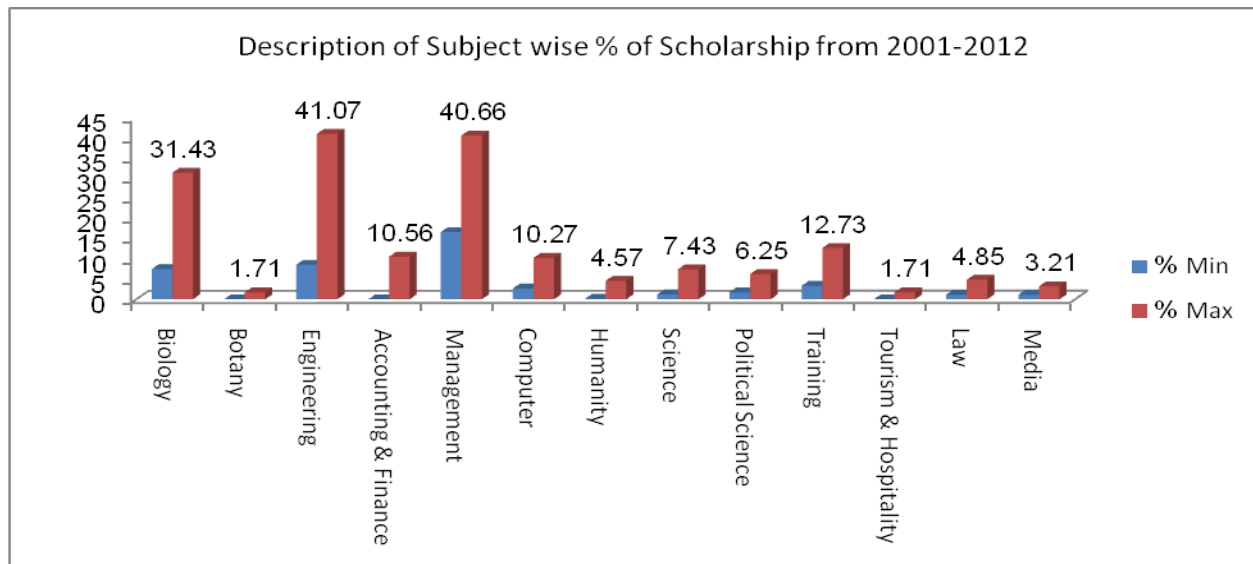
Table 3.3 and Figure 3.14 above show that most numbers of scholarships were awarded in the fields of Biology, Management and Engineering while the share of scholarships in other fields of studies were very small. **:**

Table 3.4 Scholarships offered for bachelor, master and doctoral studies between 2001−12

| Year | Education Degree | | | | | | Total | | |
| | Bachelor | | Master | | Doctor | | | | |
	Male	Female	Male	Female	Male	Female	Male	Female	Total
2001	66	53	10	13	11	22	87	88	175
2002	55	31	24	16	18	21	97	68	165
2003	113	56	36	33	24	20	173	109	282
2004	159	47	67	45	18	19	244	111	355
2005	254	66	77	50	16	24	347	140	487
2006	379	113	101	53	19	14	499	180	679
2007	514	82	74	43	25	17	613	142	755
2008	516	100	51	42	16	19	583	161	744
2009	750	141	114	82	40	21	904	244	1148
2010	473	99	56	57	13	12	542	168	710
2011	201	50	24	19	10	8	235	77	312
2012	307	74	34	23	5	5	346	102	448
TOTAL	3787	912	668	476	215	202	4670	1590	6260

The highest numbers of scholarships were awarded for bachelor degrees as compared to master and doctoral programmes. The highest number of scholarships were awarded in 2009 and the lowest number in 2002. Out of a total of 6,260 scholarships, the percentage of male recipients is calculated as 75% while the percentage of female recipients is 25%.

Figure 3.15 Percentage of bachelor, master and doctoral scholarships 2001–12
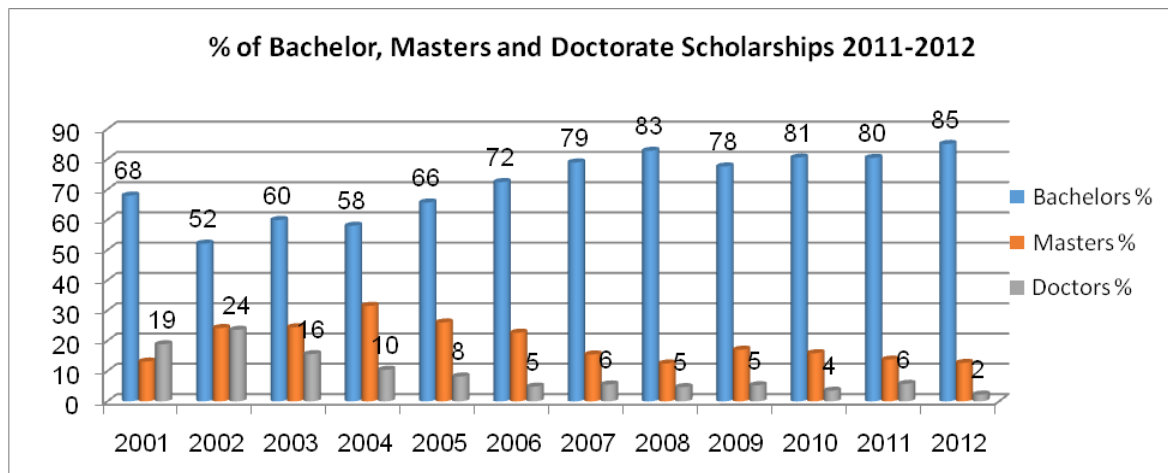
Table 3.5 shows the allocation of scholarships for bachelor, master and doctoral studies.

Table 3.5 Allocation of scholarships for bachelor, master and doctoral studies

Year	Bachelor	Master	Doctor	Total
2001	119	23	33	175
2002	86	40	39	165
2003	169	69	44	282
2004	206	112	37	355
2005	320	127	40	487
2006	492	154	33	679
2007	596	117	42	755
2008	616	93	35	744
2009	891	196	61	1148
2010	572	113	25	710
2011	251	43	18	312
2012	381	57	10	448
TOTAL	4699	1144	417	6260
%age	75.0639	18.2748	6.66134	100

Table 3.5 above shows that the majority of scholarships were awarded for the bachelor programme as compared to masters and doctoral studies. More than 75% won scholarships for undergraduate studies and only 7% of candidates received funding for doctoral studies.

Table 3.6 shows the percentage of scholarships for bachelors, masters and doctoral programmes from 2001 to 2012.

Table 3.6 Percentage of scholarships for bachelor, master and doctoral programme offered between 200 –12

Year	% Bachelor	% Master	% Doctor
2001	68	13	19
2002	52	24	24
2003	60	24	16
2004	58	32	10
2005	66	26	8
2006	72	23	5
2007	79	15	6
2008	83	13	5
2009	78	17	5
2010	81	16	4
2011	80	14	6
2012	85	13	2

Table 3.28 shows that the percentage of scholarships increased for the bachelor programme from 2001 to 2012, while a gradual decrease can be observed in the percentage share for masters and doctoral level scholarships.

The following chapter presents further outcomes of the analysis in terms of survey questionnaires, processes of data collection, analysis and results.

Chapter 4

Methodology used to Evaluate the Effectiveness of

the Scholarship Programme in the UAE

4.1 Introduction

As noted in the previous chapter, this research project has used archive data and data collected through a mixed design approach (see Johnson,Onwuegbuzie, & Turner, 2007; Morse & Niehaus, 2009 Tashakkori & Teddlie 2010; Teddlie & Tashakkori, 2009). That is through a survey and interviews. Indeed, the integration of quantitative and qualitative methodology approaches in the social and behavioural sciences is becoming a benchmark standard necessity. As well as looking at the effectiveness of the scholarship programmes, this section and what follow will highlight the outcomes of the survey, processes of data collection, data analysis, results and main discussion.

 The higher education sector is now widely recognised as a vital contributor to socio-economic development and growth. That is adopting the notion of knowledge based economy. International scholarships in particular may play an important role in this. This research aims to understand what former UAE Scholars and Fellows have been achieving since returning to their jobs in the UAE; and hence to assess the impact of the awards in key priority areas over the past ten years.

This chapter aims to provide detailed analysis of the impact of award holders against the objectives of the UAE Government Scholarship Scheme and its funding bodies. More specifically, the data of the research survey sought to investigate the impact of scholarship awards at three levels – on the individual respondents, on the institutions in which the participants work and on wider society. In each case, the intention is to look not only at the overall level of achievement and impact, but also to consider the extent to which the award had

contributed to this, for example, by enabling recipients to undertake new or more senior roles in their occupations, pass on skills, or introduce new and /or best practices to his/her work settings.

Focusing on the main sample of this study and the archive data presented earlier, it worth indicating that the main participants of this study were collected through a survey of 206 alumni and in-depth interviews conducted with a sample of four managers represented scholarship programme of different institutions, as well as interviews with additional three purposely selected public sector managers. At the initial stage though a total of 236 respondents agreed to be contacted; ten declined and twenty did not returned the questionnaire (for detail of sampling procedures see 4.15 below).

4.2 Measuring effectiveness of the scholarship programme: sample and procedures

Out of more than 6,000 former scholarship award holders, the present research was able to select 250 participants; and around 80% of those participated took part in the survey. The sample was randomly selected. However, it was comprehensive in many ways, and included variables such as gender, programme of study and country of study. The data are skewed in some aspects mainly due to aspects of year of award, occupation and geographical location. It important to note that it is likely that older award holders will have reached more senior positions than younger ones; and this may serve to underestimate impact. Scholarships must be regarded as long-term investment; the costs are quite clear however, benefits will appear over the full working life of the recipient.

The survey used requested respondents to provide factual data, such as their career history, public offices held, awards and honours received, plus their views on how they felt the award had benefited them and their society, with detailed examples. Specifically, respondents were asked about their involvement in different development priority areas, and asked to give details of specific roles, projects and activities. Data collected and responses received were analysed according to several variables; and these included economic sector, subject area, respondents' region, and length of time since award. In addition, throughout this research project , the

reader will find some case examples of alumni explaining how they used the skills and knowledge acquired on their degree courses in specific projects and in their careers.

Effectiveness was measured via alumni responses to questionnaires about the effects of the scholarship on their personal and professional careers and on social and economic developments in the UAE. Our hypothesis was based on the concept that the majority of alumni return home, are able to put their knowledge and skills to good use and claim to have contributed to social and economic development in the UAE.

It should be indicated here that limitations of this method were highlighted and several questions were raised. And these include how reliable are the outcomes? Do the small groups of alumni who participate in the survey represent all alumni? Was there any group biases and hence to many positive responses? Is it true that most scholarship holders are public sector employees who could have better opportunities in work and career?[56] Are the funding ministries and departments confident with the results, would the alumina apply what they have learned?

However, measuring the impact of scholarships is quite complex and the biggest challenge here. The results of a scholarship impacts are clearer at the level of the direct benefits to the alumni; to his/her organisations and institutions; and the longer-term changes in society. In fact, to deal with these issues in a measurable form, more sophisticated research methods need to be used and a number of methodological problems need to be tackled. However, one of the problems is that objectives of scholarship programmes may change over time. This is an important factor to consider because impact is directly related to the stated objectives of a programme. Another problem is that of attribution. There are many factors which influence a change in our lives or in a society. The more years that are spent in receiving the award and completing scholarship and study, the more difficult it is to attribute certain changes to it. Another important aspect of measuring the effectiveness of the UAE Scholarship

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[56] The majority of UAE nationals prefer to work in the Government sector and the majority of alumni still prefer to work in Government departments and ministries.

Programme is trying to establish the cost-effectiveness of scholarships.[57] Is it possible to establish the return on investment rate of scholarships compared to other types of interventions such as setting up an education course in a developing country? It may be possible to calculate and compare the economic benefits of two interventions, but what about the less tangible benefits for individuals or society? Scholarships provide individuals with knowledge and skills, but also expose them to new situations and cultures. They may change attitudes and introduce people to valuable networks. Can we calculate the effects of these opportunities and if so, how?

4.3 Approach to assessment and methodology

The conceptual framework for the results evaluation is based on Kirkpatrick's 'four levels of evaluation' for training programme assessments. The four levels are response (individual satisfaction level), learning (acquired knowledge, skills and attitudes), performance (individual success in learning transfers) and results (changes in organisational efficiency and effectiveness); with the addition of assessing training effectiveness in terms of capacity building.[58]

The evaluation is conducted in two phases: Phase I records results indicators for programme delivery, resources and processes, and develops theories to consider in impact measurement. Phase I was based on three research tools: Review of existing documentation; strategic interviews with sample representatives of the programme managers (old and new); and benchmarking of the programme compared with similar programmes elsewhere using some secondary data sources.

Phase II emphasises impact analysis of the Scholarship Programme. This phase has used the following data research tools: online survey of former scholars in selected organisations such as ADIA, ADNOC, MOHESR etc . and focused interviews with scholars and in

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[57] Cost effectiveness is used here in terms of *implicit* cost as no *explicit* data are available in terms of expenditure costs of scholarship programmes in the selected department, either because the scholarship management office no longer exists or because of data confidentiality.

[58] This conceptual framework was explicitly used in Aguirre International (2004). *Generations of Quiet Progress: The Development Impact of U.S. Long-Term University Training on Africa from 1963 to 2003* (USAID, Bureau for Economic Growth and Trade, Education Office).

person with their employers on visits; strategic interviews with scholarship authorities in relevant fields and with managers and coordinators of the Scholarship Programme in selected organisations of the UAE; meeting with other management officials at headquarters such as ADNOC, ADIA, MOHESR etc. and other relevant representatives in the field to complete the benchmarking exercise.

4.4 Evaluation limitations and challenges of data collection
The survey may encounter the following three main limitations and challenges:

(1) The lack of monitoring systems for scholars in various phases' limited access to data collection ;

(2) The response rate obtained from various stakeholders depends on the limitations of systems for monitoring scholars;

(3) The lack of previous information and data thus impact on evaluation.

The analytical approaches used to estimate the effectiveness and impact yielded different results. Given the lack of a system for monitoring scholars, these approaches resulted in validating 50% to 70%.   It should be noted, however, that all estimates will always reflect the situation at the time of the survey or field visits, whereas the mobility of scholars is a dynamic process. The evaluation documented cases where scholars returned a number of years after the scholarship ended.

Potential direct and indirect impacts of higher education on economic growth and socio-economic development are of particular interest when assessing the 'value-added' factor of higher education. In this respect, although the literature is contradictory, it is possible to understand the many routes through which higher education is critical for developing countries – and particularly least developed countries (LDCs). Highlighting these routes is important to build a consistent theory of change against which investment in higher education can be mapped, measured and eventually evaluated.

4.5 Evaluation methodology

In order to analyse the effectiveness of the UAE Scholarship Programme framework, certain empirical data need to be collected. The objective of this section is to review key aspects of the scholarship programme evaluation framework and make recommendations based on evidence and outcomes of the UAE scholarships scheme. Empirical studies assessing the outcomes and impacts of investment in higher education in general, and of providing higher education grants in particular, are scarce. For instance, an evaluation of the Canadian Francophonie Scholarship Program (CFSP) undertaken by the Canadian International Development Agency shows little evidence of wider societal impacts and outcomes for the programme.[59] Similarly, an evaluation study of the Austrian grants programme commissioned by the Austrian Development Agency concluded that 'the relationship between scholarship programs and Millennium Development Goals (MDGs) is complex and indirect i.e. depends on the impact of the programs on capacity building and better access to modern technologies and economic growth' and hence that 'beyond some success stories', it was claimed that a 'positive contribution e.g. on poverty alleviation is difficult to sustain and predict' (OSB Consulting, 2007).[60]

4.6 Organisational and institutional effects

Assessment of the Scholarship Programme impacts on governance by asking individuals whether they have a personal impact on the organisations they work in or work with. suggested there were neither the magnitude of this impact felt nor its nature is determined. Collecting such particular data systematically was challenging. In addition to this, it is interesting to consider not only 'pull' but also 'push' factors: an individual might not have an organisational impact, not because of a lack of personal potential, but due to objective difficulties in achieving it, i.e. institutional inertia. A more indirect question could be to ask graduates (and eventually employers) whether they consider that the organisation in

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[59] http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUImages/Evaluations/$file/Evaluation%20of%20the%20Canadian%20Francophon e.pdf.
[60] http://www.entwicklung.at/uploads/media/4076_annex_5_review_scholarship_programmes_01.pdf.

which they operate is 'blocking' their potential impact (e.g. in universities). This question can be asked to both employees and employers with multiple-choice answers, i.e. the relevance/irrelevance of position compared to obtained skills, hindrance due to existing organisational constraints, or inertia or responsiveness of organisational structure.

4.7 Private economic outcomes

Although the objective of U A E scholarships is not to enhance private economic gains but to maximise social wealth, numerous private economic outcomes are relevant for a wider socio-economic evaluation framework. For example, average economic conditions of graduates after return to the UAE enables possible emigration to other countries. A weak sustainability of return can naturally reduce wider societal impacts, e.g. if the individuals choose to re-emigrate. Additional information to capture evolution in a dynamic way could consist in asking the extent to which (e.g. in percentage terms) the economic condition of graduates has improved compared to prior conditions.

Two adjustments are proposed: (1) ask about the standard of living of individuals before participation and after completion; (2) ask for the income growth pattern (for instance as a percentage increase). Ideally, the Scholarship Programme could directly ask for income (before and after completion) but this is likely to be unanswered or replied with biases (i.e. 'strategic' answers not reflecting actual income).

4.8 Labour market effects
The Scholarship programme does not include any labour market impact in its evaluation framework even though it is a key aspect of higher education investment and scholarship provision.

In the context of highly educated individuals in developing countries, key labour market outcomes are less about knowing whether the individual is employed or not, and more about knowing whether the individual's skills and specialisation are responding to labour market shortages. This includes universities. Evidence suggests that shortages of professors and

researchers are very high in numerous countries for various disciplines. On the other hand, a surplus of academics has been recorded in specific fields – such as agricultural sciences in some countries. Designing questions responding to this outcome can notably evidence whether *ex ante* selection criteria respond to perceived labour market needs in respective countries.[61] For addressing potential labour market outcomes, two solutions can be envisaged:

(1) The first solution concerns individuals, for example, working in academia, for which the following questions are suggested:

(a) Have individuals launched a new department?

(b) Have they developed new courses/classes?

(c) Were the classes they teach taught by someone else before them?

(d) Can they provide an estimation of the amount of vacancies in their department (as objective criterion)?

(2) The objective of our research is to conduct extensive fieldwork asking directly employers of graduates:

(a) Are they experiencing personnel shortages?

(b) Do they consider that graduates participating in a scholarship programme cover shortages?

(c) What are the strategies used by employers when facing shortages? This information is collected through multiple-choice questions and focus group discussions.

4.9 Innovation

The evaluation has one question on innovation and asks whether the individuals have or have not published academic papers, including the amount of publications if applicable. The scholarship programme does not suggest any particular indicator for capturing this

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[61] https://www2.ed.gov/about/inits/ed/internationaled/background.pdf.

outcome. However, innovation of any form can constitute a key outcome – both for academics as well as for private or public sector employees.

The other studies similar to our questionnaire[62] have suggested that in addition to an evaluation question, additional indicators could include:

(1) Whether the individuals have submitted a patent for any innovation;

(2) Whether individuals working in academia have developed a new department or new course which did not exist prior to their return;

(3) Whether the individuals have started a business;

(4) Whether they have applied any innovative techniques (detailing which).

Furthermore, an additional specification required could be to identify the impact of this innovation technique in the workplace.

4.10 Knowledge, skills and 'know-how' transfers

Evaluation addresses 'brain available gain' by directly asking graduates whether they 'accessed equipment and expertise not in the UAE' – and to what extent. Perhaps this question can be asked in a more straightforward manner, e.g. 'To what extent do you consider you could have acquired a similar level of skills/knowledge in universities of your home country?' Similarly, an additional question linked to international involvement could consist of asking graduates the extent to which their contacts with foreign institutions or individuals (e.g. researchers) are critical for their work and professional development. Multiple possible answers can be proposed when asking this question.

4.11 Wider development impacts

The evaluation considers wider socio-economic impacts through direct questions. For those who state clearly 'helping government thinking' and 'contributing to wider socio-economic

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[62] 1: http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUImages/Evaluations/$file/Evaluation%20of%20the%20Canadian%20Francophone.pdf.
  2: http://www.entwicklung.at/uploads/media/4076_annex_5_review_scholarship_programmes_01.pdf.

impacts' the analysis should stop there. For those stating 'having been involved in projects' the analysis should proceed by asking:

(1) Whether the involvement was direct (project design, delivery, implementation etc.) or indirect (e.g. consulting).

(2) Subsequently, a magnitude of change should be asked for – for instance:

(a) 'On a scale of one to ten, how much of the socio-economic impacts of the projects or intervention can be attributed to your work?'

(b) 'Do you think you could have had the same impact on the project without having carried higher education abroad?'

4.12 Measuring net impacts: attribution and counterfactual

The above improvements are mostly suited to gross outcomes and impacts. A next step is to investigate the extent to which attribution (amount of credit) of the programme and counterfactual (amount that would have happened anyway) can be represented in order to obtain a net outcome/impact figure.

Numerous questions asked by evaluations tackle attribution in an indirect form. We suggest more direct questions: ask applicants directly about the contribution of their foreign education on their professional development. This question, nonetheless, needs to account for all other potential factors influencing their current professional development, such as asking:

'Which of the following elements have helped you with your professional development?'

Yourself − undergraduate studies − graduate studies − social contacts in home country − social contacts abroad, organisation and management, socio-economic background?

When analysing the advantages and disadvantages of existing evaluation indicators, particularly for the purpose of an impact assessment, it is first important to ensure that these indicators are

meaningful in a self-standing way, i.e. regardless of whether they can be inserted, or not, in a quantitative framework.

A further issue is whether these indicators can form the basis of an economic impact assessment. More precisely, the question is whether one can derive induced development impacts even if we assume that (a) net effects and (b) subjective scale of effects (e.g. yes or no) were obtained.

When wanting to evidence the full stream of costs (financial, economic, social and environmental *inputs*) and benefits (financial, economic, social and environmental *impacts*) two approaches are possible, depending on data availability.

The first is conducting a full impact assessment; the second is using a 'proxy' analysis. The first approach is possible when the full stream of impacts is quantifiable; the second approach is useful when it is not possible to evidence and document the full stream of impacts either due to inherent complexities of the intervention or as a consequence of lack of reliable data. If this is the case, the choice can be made to focus on some key quantifiable indicators that can be used to represent and reflect, rather than accurately predicting, part of the identified impacts in view of generating meaningful quantitative results. If choosing a 'proxy' approach, then additional outcomes and impacts (those not reflected in the quantitative analysis) can be presented qualitatively alongside the quantitative analysis.

It is also important to distinguish direct (immediate) from indirect (induced) impacts. Sometimes indirect/induced impacts, though presenting a complete perspective, are difficult to obtain as there may arise further layers of complexity in the analysis. In this case, the choice can be made to identify more direct impacts for a preliminary analysis while conducting case study analyses for investigating indirect ones.

4.13 Detailed methodology, limitations and reporting conventions

As stated throughout this work, this study was designed to evaluate the effectiveness of foreign scholarship programmes in selected departments of the United Arab Emirates. The evaluation design is based on consultations with the Scholarship Section of the selected departments and

related staff, representatives of donor scholarship programmes and reviewed documents including the model and framework of the UAE Scholarship Programme. From these initial consultations, this study presents a draft set of evaluation questions. A workshop was held with a small group of scholarships alumni to further develop the evaluation questions. The resulting evaluation design (see Appendix A) sets out four areas of inquiry:

(1) Individual outcomes;

(2) Links between people and institutions;

(3) Workplace/institutional outcomes;

(4) Contribution to UAE's development.

The design addresses the key Monitoring and Evaluation (M&E) questions specified by the UAE Scholarship Programme which is concerned with:

- Return to home country;
- Reintegration into the workplace;
- Maintaining linkages with foreign country of scholarship and networking with other awardees;
- Applying skills effectively;
- Contributing to national development;
- Strengthening organisational effectiveness;
- Impact on gender, leadership and governance.

The evaluation is a mixed method design, integrating quantitative data collected through a survey, with qualitative data from both the survey and through more in-depth individual interviews with both alumni and public sector managers. The evaluation had four distinct phases:

(1) Document Review;

(2) Qualitative Interviews – with alumni (from different departments) in order to add depth and richness, and an element of flexible inquiry in a complex context;

(3)   and with a small sample of public sector managers to provide an employer's perspective on scholarship graduates;

(4) Analysis and Reporting.

The evaluation was conducted while liaising closely with management of the scholarship programme and some recipients of funding.

4.14 Survey instrument and data management

Based on advice from scholarship management, it was decided to use a written survey questionnaire, in English and Arabic. The questionnaire was developed in consultation with the management, based on the approved survey questionnaire. The intention of this link was to contribute to comparability of data over time. The questionnaire was piloted with a small group of alumni. As a result some changes were made, plus the wording of several questions was clarified and the number of questions was rationalised. See Appendix A for the final version.

4.15 Sample selection and interview procedures

Before of their involvement, participants of this study were asked to indicate their consent to be contacted for the qualitative interviews. A total of 236 respondents agreed to be contacted; ten declined and twenty did not respond to this question. On the basis of this and consented participants, the researcher used a two-stage random sampling process to select 30 alumni at first instance for interview; followed by a further five alumni were purposely selected to complete the sample to become 35. In addition, four managers were selected purposely to provide a perspective from the public sector employer.

The first stage in the sampling was the random selection of 20 interviewees from the three departments, Dubai Police, Ministry of Presidential Affairs and Ministry of Higher Education and Scientific Research (MOHESR), which have supplied the greatest number of scholarships. These departments were oversampled in the hope of capturing potential institutional impacts in the ministries that had the greatest number of scholarships awarded. The second stage was the random selection of ten interviewees from all other employers – both ministries and Abu Dhabi Investment Authority and ADNOC – which had offered fewer

scholarships.

A sampling interval was calculated by dividing the required sample by the eligible population. A random starting point was chosen and this was the first respondent chosen. The sampling interval was then followed to select additional respondents until the sample was achieved.

The additional sample of five respondents was selected purposively in order to include particularly interesting cases. For example, of the small number of respondents (n=5) who indicated they were not making a contribution to UAE's national development, or from amongst those who had offered insightful feedback to main questions in the survey. A further four 'reserve' interesting cases were selected as back-ups for possible non-participation amongst the initial sample of five.

Four senior managers were also selected purposively with input from ADNOC, ADIA, Abu Dhabi Police and MOHESR, with the intention of identifying those who would be likely and willing to provide comprehensive comments on UAE scholarship graduates on their return to the public sector.

4.16 Interview design and implementation

The researcher developed two interview protocols: one for alumni interviews and a second, less comprehensive one, for manager interviews.

Alumni were first approached by representatives from scholarship management, either by phone or email, to inform them of their selection and to obtain their verbal consent to participate. At this stage, five of the selected alumni respondents declined to participate in the interviews and were replaced by further random sampling from same categories (three main ministries or other ministries).The researcher then contacted the respondents to arrange an interview time and location. At this stage two alumni were unavailable during the interviewing period (one due to international travel and one due to work commitments) and were replaced by further random sampling from their categories.

Six alumni were currently living in other countries so phone interviews were planned for

these respondents. Two of these respondents could not be interviewed despite numerous efforts to contact them by phone and email.

Interviews were then conducted by the researcher over three weeks in January 2014. The majority of the interviews were carried out in Arabic, or in a mix of English and Arabic. Most interviewees agreed to have their interviews recorded (only one declined); telephone interviews were not recorded. For those interviews not recorded and transcribed (seven in total), the researcher took detailed notes to transcribe into written records of the interviews. For all interviews, the transcripts were submitted to interviewees for corrections and approval. In all other cases amendments were minor factual corrections only.

Of the four managers selected, and the reserve managers selected, all three agreed to be interviewed.

Two alumni who had initially agreed to participate could not be contacted to confirm interview appointments, despite repeated attempts. Because the majority of interviews had been conducted by this stage the team concluded that the sample was appropriately represented and no replacement sampling was further needed Therefore, by the end of the interview period, a sample of 33 alumni interviews were conducted, this in addition to four manager interviews.

4.17 Limitations

Document analysis was constrained through difficulties locating historical files. To the extent that this evaluation sought to examine a complete set of data from the commencement of scholarships for UAE, this was a considerable limitation.

The survey contains a small number of invalid or missing data in most questions. This is a result of it being a written survey, thus not enabling on-the-spot validation to ensure all questions are answered correctly. Nevertheless the number of invalid responses are very small and do not undermine the overall validity of the data set.

Scholars generally complete up to a year of pre-departure English and other training in Western countries or in the UAE, leading to some confusion between 'year of selection' and 'year of departure to home country' for some respondents. Therefore, after cleaning, data

regarding alumni year of selection and scholarships scheme were replaced with data from the Scholarship Departments' databases as they were judged to be substantially more accurate than the reported data from survey respondents.

The survey asked alumni about their employer at the time of starting their scholarship, so for the purposes of sampling for the interviews, scholarship donor departments' records of originating employer were used. In most cases, the data are highly skewed, which limits the statistical analysis of significance. However, generally an analysis of proportions and frequency is sufficient for understanding the data. Overall, alumni invited to participate in the interviews stage were eager to share their experiences and give feedback on the UAE Scholarship Programme. However, some were uncomfortable about being interviewed in their workplaces and elected to meet at neutral locations such as coffee shops. Of the 91 alumni interviews conducted in person, only 14 were conducted at government offices and the remaining were obtained through emails.

4.18 Conclusion

In the light of existing literature and data collected, this research has provided guidance for future improvements to the current evaluation framework and identified main options through which the socio-economic impacts of the scholarship programme evaluation become a continuous process. Whilst there are no 'silver bullet' approaches to ascertaining effectiveness of the scholarship programme, two options present themselves.

A simple cost-effectiveness approach can be used relatively easily in terms of data collection and analysis. Nonetheless, unlike the other two options, it is extremely restrictive in terms of evidencing impacts. However, the lack of data in terms of scholarship budget restricted our investigation in terms of cost-benefit analysis.

Applying social cost-benefit analysis (option 1) requires considerable primary and secondary data collection. This will inevitably entail a set of assumptions – to varying degrees. Yet, social cost-benefit analysis is far more apt to evidence a wider variety of outcomes and

impacts (albeit so-called 'secondary impacts') and can potentially entail a quantification of development impacts in its most sophisticated versions.

Overall, we consider social cost-benefit analysis to be the optimal methodology. This is because social cost-benefit analysis can be incrementally applied and improved along the journey as more outcomes and impacts are collected. As such, the scholarship programme can commence with a relatively simple model and increase in sophistication over time.

Our final recommendation in the context of methodology is that the scholarship programme develops a simple social cost-benefit analysis approach (option 2) alongside a more extended form of social cost-benefit analysis (option 3) to explore its theory of change and wider socio-economic impacts. In the immediate term this requires integrating the indicators and processes required to capture data. In the medium term, selecting samples and individuals for case studies that are representative of the scholarship programme's and UAE's development strategies will be needed.

Irrespective of the quantitative method chosen, it is worth indicating that a fundamental principle of socio-economic analysis is to measure what matters and make these outcomes measurable. Increasingly, valuation techniques allow us to measure less tangible outcomes and impacts. Nonetheless, it should be also acknowledged that outcomes such as institutional development and governance will probably not be included in such an analysis. It is therefore critical to improve current data collection for the scholarship programme evaluation framework, regardless of the quantitative analysis. Indeed, such enhancement will allow the programme to capture net, rather than gross, impacts in a more systematic way.

The suggested evaluation improvements and methodology should be piloted, refined, learned from and implemented in full if the UAE's scholarship programme and its impact on overall social and economic development are to be understood in a meaningful sense.

Chapter 5

Results

5.1 Introduction

Focusing on UAE Vision 2030, the government is increasingly emphasising on development effectiveness and evidence of the results of official development-assistance spending. Because scholarships have such a long-standing and high profile place in the strategic development, planning and Emiratisation programme in the UAE. This evaluation is designed to explore the extent to which scholarships have made a positive contribution to development, and the factors that influence the extent of the impact scholarships can have in the UAE.

The effectiveness evaluation of this study comprised a survey of 206 alumni plus in-depth interviews with a sample of four managers of the scholarship programme from different institutions, as well as interviews with three purposely selected public sector managers. The survey had a high response rate (78% of selected alumni) and the sample was representative in gender terms. As such, it provides a good basis for evidence about the scholarships programme impacts. The sample of this study and main data were collected from the selected departments of the UAE government. The participants were selected from the alumni of the Ministry of Presidential Affairs (MOPA) as only the MOPA maintained the data of scholarship awards from 2001 to 2012. However, alumni were also randomly selected from ADIA, ADNOC, and Dubai Police. Sixty per cent of respondents were chosen from MOPA and the remaining 40% were taken from the other three organisations.

Some aspects of the alumni's experiences were difficult to address. There was some sensitivity associated with the employment circumstances of many alumni. Questions related to income and placement after completion of scholarship in a public sector position were quite common during interviews, but accurate data were difficult to obtain through the survey questions and focus group discussions.

5.2 Response rate

The response rate for the survey was rather reasonable: 206 graduates of UAE Scholarships – out of a total selected population of 250 – returned the survey questionnaire. Of these, some respondents did not answer of all questions. Overall participants of the survey were (n=206) participants. This represents more than an 80% response rate which is comparable to, or better than, other similar surveys; and provides a strong basis for data analysis and for drawing conclusions about the scholarships programme offered to UAE students by various UAE government agencies .

This excellent response rate was achieved largely due to positive efforts and encouragement on the part of scholarship management staff, which was also assisted by the Directors of relevant Ministries and Departments.

5.3 Reporting conventions

As noted in Chapter 4, the evidence reported here is based on mixed designed approach and the integration of quantitative and qualitative data from both the survey and the interviews. The interviews have explored themes and issues arising from the survey shed light on additional points of interest. Reporting the qualitative data from the survey and the interviews is done anonymously, as a general rule, with only the year of selection identified, unless interviewees explicitly agreed to be quoted and identified as the source. The questionnaire was prepared and presented in both in English and Arabic for the convenience of the respondents.

Data are disaggregated by gender as a general rule, unless such disaggregation reduces data usefulness. As much as possible, responses were analysed and compared to establish differences in the scholarship experience and outcomes for both male and female gender.

5.4 Main Results

The present section will highlight the main findings of both survey (i.e., outcomes of the questionnaire) and interviews. The details are discussed below:

5.4.1 Outcomes of the descriptive data

There have generally been around 500 scholarships awarded each year (on average) offered by different departments and UAE governments agencies; also there are additional scholarships offered through other schemes and projects. The survey reached graduates and included participants selected from a range of departments and since 2001.

5.4.2 Gender

Of the respondents and the sample of the survey, 145 (70%) were men and 61 (30%) were women. This is a small sample as it was not possible to find additional alumni willing to take part in the survey.   As such, the researcher has also done a great deal to keep both gender representation equally divided.

The strategic development plan of the UAE has had a long-standing policy of aiming for gender equity in scholarships programmes. Between 2001 and 2004 this was achieved, but the proportion of women in scholarships decreased notably from 2003 onwards.

5.4.3 Country of residence

The vast majority (95%) of respondents are reported as being resident in the UAE at the time of the survey, with the additional 5% resident in other countries. Disaggregation of country of residence by sex showed no marked difference between men and women, although statistical significance is not measurable due to the highly skewed data. The interview phase of data collection shed a slightly different light on this question. Nevertheless, there is clearly a very high rate of scholarship graduates returning to the UAE, emphasised during one of the manager interviews, particularly when compared to scholarship programmes from other countries.

5.4.4 Qualifications

Reflecting the long-term strategy of the UAE Scholarship Programmes to bestow graduate diploma and master's level qualifications, the vast majority of alumni (75%) graduated with bachelor degrees. Once the data were disaggregated by sex, it became evident that a slightly

higher proportion of women than men gained postgraduate diplomas, and slightly fewer than men earned PhDs, although the statistical significance of these differences cannot be assessed due to the skewed data.

5.4.5 Achievement of original enrolment

Almost all scholars (95%) completed the qualification for which they originally enrolled. Although it is not possible to assess statistical significance on enrolment changes between men and women, it can be concluded however, on the basis of frequency data alone, that there was no significant difference amongst the respondents.

The result of achievement of original enrolment is given in Table 5.1:

Table 5.1 Achievement of original enrolment

Achievement of original enrolment			
	Sex		
	Male	Female	Total
Yes	136	59	195
	93.80%	96.70%	94.70%
No	9	2	11
	6.20%	3.30%	5.30%
	145	61	206
	100.0%	**100.0%**	**100.0%**

Chi-Square Tests					
	Value	Df	Asymp. Sig. (2-sided)	Exact. Sig. (2-sided)	Exact. Sig. (2-sided)
Pearson Chi-Square	.728(b)	1	0.393		
Continuity Correction (a)	0.264	1	0.607		
Likelihood Ratio	0.796	1	0.372		
Fisher's Exact Test				0.513	0.317
Linear-by-linear Association	0.725	1	0.395		
N of Valid Cases	206				

(a): Computed only for 2x2 table

(b): 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.26

The hypothesis that participants did not achieve the original enrolment is rejected as chi-square tests appear significant.

5.5 Scholarship's contribution to individual career development

The research sought to answer the first effectiveness evaluation question, which was 'How did the scholarship contribute to individual career development?', including:

(a) What new skills and knowledge did the scholarship provide?

(b) How have alumni been able to apply these new skills and knowledge in the public sector and elsewhere?

(c) What opportunities has the scholarship brought alumni beyond their public sector employment?

Question (b) above addresses how scholarships have been able to improve the effectiveness of target institutions, as the application of skills and knowledge is a central aspect of how scholarships are contributing to institutional effectiveness.

As the investigation progressed and themes began to emerge, the study also explored additional personal outcomes from scholarship study abroad. The results of the data collection and analysis in response to this set of evaluation questions are discussed in detail below.

Respondents were asked about the professional or career outcomes resulting from their scholarship. After exploring their employment circumstances at the time of their award, the questions then asked about respondents' experience returning to work. They were also asked about promotions at work, and were asked to rate a set of statements about their professional future against a five-point scale from 'decreased a lot' to 'increased a lot'. It should be noted that respondents are likely to be considering their employment in the broad sense when responding to this section.

5.5.1 Category of employment pre-scholarship

As expected, the vast majority (93%) indicated that they were government employees prior to their scholarship. A small number of scholarships have been awarded to public sector staff of non-ministry agencies and organisations; some of the scholarship schemes were not limited to government servants only, and a small number of scholarships were awarded to fresh students -who were not employed and/or part of any government agencies- for undergraduate and graduate level studies abroad.

It is important to note that ten respondents (a little more than 4% of the total) gave invalid responses to this question, in most cases, by selecting more than one answer. Compared with the level of invalid responses throughout the survey, this is noticeably considered high and is the first indication of the complexities and sensitivities associated with employment status for government employees in the UAE. These issues recurred throughout the study and are discussed below.

There are other complexities of professionals' working arrangements in UAE. Public sector salaries in the UAE are relatively high compared to the majority of private sector firms and companies and there is no need for part-time income sources. Therefore the data should be taken as definitive rather than indicative. The interviews provided, therefore, an essential

opportunity to deliver valuable insights into this issue, and their findings are discussed further below.

5.5.2 Returning to work

While in foreign countries on scholarship, 65% of respondents report that they retained contact with their supervisor. There was a difference between male and female participants however: only half of females (49%) stayed in contact with their supervisor, compared to almost three-quarters of male participants (72%), although it is not possible to ascertain the reasons for this difference.

Students on Ministry of Presidential Affairs awards, Abu Dhabi Investment Authority, ADNOC and Dubai Police scholarships are generally bonded by the Government of the UAE to return to their government workplace for a specified period, most commonly two years. As a result, the reported rate of return to the same employer is extremely high amongst respondents (93%), with no significant difference between males and females.

The qualitative data arising through the interviews shed additional light on this question, indicating that the situation is in fact more complex. Some interviewees only took up their former positions for an initial period and some alumni indicted that the scholarship was a direct means of enabling them to find alternative employment, with a primary incentive for this change being the opportunity to secure a higher income. It was not clear what consequences might apply to an alumnus who did not see out his/her two-year commitment to remain in the public sector. No doubt, many alumni and return do see their foreign qualification as an important contribution to their public sector employment and to the UAE's development. This is explored in detail below.

Table 5.2 Return to former workplace

Return to former workplace			Sex		Total
			Male	Female	
Did you return to your former workplace?	No	Count	9	4	13
		% within Sex	6.20%	6.60%	6.30%
	Yes	Count	136	56	192
		% within Sex	93.80%	91.80%	93.20%
	Missing	Count	0	1	1
		% within Sex	0.0%	1.60%	0.5%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	100.0%

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.404(a)	2	0.301
Likelihood Ratio	2.461	2	0.292
Linear-by-linear Association	2.361	1	0.124
N of Valid Cases	206		

(a): 3 cells (50.0%) have expected count less than 5. The minimum expected count is .30.

Three interviewees (9%) talked about finding it difficult to obtain a job at all, which is unexpected when scholarships are awarded to employees with commitments to return to work on completion.

Of those respondents who returned to their former workplace, the majority (53%) returned to a position at the same level as before their studies; and 44% of respondents returned to a position that was higher than the one they held before their scholarship, this applying to marginally more men than women.

Table 5.3 Return to former workplace (re-coded)

Return to Former Workplace (re-coded)					
			Recoded Yr Sel part A		Total
			up to 2001	2001 onwards	up to 2001
Did you return to your former workplace?	No	Count	8	5	13
		% within Recoded Yr Sel part A	6.3%	6.3%	6.3%
	Yes	Count	117	75	192
		% within Recoded Yr Sel part A	92.9%	93.8%	93.2%
	Missing	Count	1	0	1
		% within Recoded Yr Sel part A	0.8%	0.0%	0.5%
Total		Count	126	80	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.640(a)	2	0.726
Likelihood Ratio	0.988	2	0.610
Linear-by-linear Association	0.632	1	0.427
N of Valid Cases	206		

(a): 2 cells (33.3%) have expected count less than 5. The minimum expected count is .39. Appendix M attached presents the contingency table in which the column category is scholarship time (before 2006, after 2006) and the row category is a question's response options. The experience before 2006 and after 2006 based on Chi-Square test and for each category under investigation; it appears that reintegration experience in terms of Timing of Return to Work, Level of Position on Return, Promotions since

Scholarship. Technical Skills, Analytical and Critical Skills, Management Skills, Communication Skills, Cross-Cultural Understanding, Supportiveness for Diversity, Planning Skills, Chance of Achieving Career Goals, Opportunities from Employment Overseas, Increased Salary/Income, Motivation to Work, Confidence in my Abilities, Career Ambitions, Interest in Work, Work Satisfaction, and Personal Empowerment shows no significant difference before and after 2006.

No significant differences were also reported in relation to the selection process, countries of studies, nature of job in public sector departments when compared before and after 2006.

Guided by Kirkpatrick's four-level training evaluation criteria (see 4.3 and Kirkpatrick and Kirkpatrick, 1994, 2007), further analysis of both qualitative and quantitative data of the scholarship programmes effectiveness were preformed at four of the following levels. i) individual level, this level expected to measure individuals satisfaction or reactions to the training 'scholarship' programme ii) level two focuses on learning matters which include how much knowledge, skills and attitudes were acquired through training. This particular level measures areas both before and after training iii) level three of the evaluation model covers behaviour change of participants and knowledge transfer employed in job settings; iv) level four has focused on results and outcomes as well as performance, efficiency and effectiveness in organisation resulted from the applied new information and capacity building resource development; and indeed overall benefit of the training including increase production, improve quality rating, retention rate as well as customer satisfaction. Overall, Kirkpatrick's evaluation criteria are a widely used scientific evaluation method that measure effectiveness of training since 1959 when it was first published in the US Training and Development Journal by Donald Kirkpatrick.

Given the significance of the UAE scholarships as a means of workforce development, it is interesting to note that majority respondents 'reacted positively' and

were satisfied with the scholarship programmes, as some of these programmes have contributed to skills and knowledge development and the reintegration with the work settings upon returning to the UAE (see 5.4, 5.5, 5.5.2, 5.5.3, 5.5.7, 5.5.8, 5.5.9, 5.5.11, 5.5.12, 5.5.18, 5.5.19 and 5.7).

Table 5.4 Level of position on return

Level of Position on Return					
			Sex		Total
			Male	Female	
If **YES** was that position lower/same/higher?	Lower	Count	4	1	5
		% within Sex	2.8%	1.6%	2.4%
	Same	Count	69	32	101
		% within Sex	47.6%	52.5%	49.0%
	Higher	Count	61	24	85
		% within Sex	42.1%	39.3%	41.3%
	Invalid	Count	2	0	2
		% within Sex	1.4%	0.0%	1.0%
	Missing	Count	9	4	13
		% within Sex	6.2%	6.6%	6.3%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.357(a)	4	0.852
Likelihood Ratio	1.935	4	0.748
Linear-by-linear Association	0.036	1	0.849
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .59.

Approximately one in three respondents (34%) returned to work immediately on their return to the UAE with no appreciable difference between males and females. Within a month, 73% of respondents had returned to work and again there is little difference between men and women.

Table 5.5 Timing of return to work

Timing of Return to Work					
			Sex		Total
			Male	Female	
How soon after return did you resume duties?	Immediately	Count	48	22	70
		% within Sex	33.1%	36.1%	34.0%
	Less than 1 month	Count	58	23	81
		% within Sex	40.0%	37.7%	39.3%
	Less than 3 months	Count	26	11	37
		% within Sex	17.9%	18.0%	18.0%
	Less than 6 months	Count	2	1	3
		% within Sex	1.4%	1.6%	1.5%
	More than 6 months	Count	8	4	12
		% within Sex	5.5%	6.6%	5.8%
	Missing	Count	3	0	3
		% within Sex	2.1%	0.0%	1.5%
Total		Count	145	61	206
		% within Sex	100.0%	100.0%	100.0%

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.530(a)	5	0.910
Likelihood Ratio	2.372	5	0.796
Linear-by-linear Association	1.256	1	0.262
N of Valid Cases	206		

Table 5.6 Timing of return to work

Timing of Return to Work				Sex		Total
				Male	Female	
How did you feel about your reintegration into the workplace?	Very negative	Count		6	0	6
		% within Sex		4.1%	0.0%	2.9%
	Somewhat negative	Count		18	11	29
		% within Sex		12.4%	18.0%	14.1%
	Natural	Count		28	15	43
		% within Sex		19.3%	24.6%	20.9%
	Somewhat positive	Count		55	25	80
		% within Sex		37.9%	41.0%	38.8%
	Very positive	Count		34	8	42
		% within Sex		23.4%	13.1%	20.4%
	Invalid	Count		2	0	2
		% within Sex		1.4%	0.0%	1.0%
	Missing	Count		2	2	4
		% within Sex		1.4%	3.3%	1.9%
Total		Count		145	61	206
		% within Sex		**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.051(a)	6	0.234
Likelihood Ratio	10.372	6	0.110
Linear-by-linear Association	0.082	1	0.775
N of Valid Cases	206		

5.5.3 Reintegration experience

The interview respondents had a range of experiences reintegrating into their workplaces after they returned from studying aboard; much more widely than most other indicators. More than half (59%) had a somewhat or very positive experience of returning to work; more males (61%) than females (54%) had a positive reintegration experience. However a substantial proportion of respondents had negative reintegration experience: overall 17% had a negative experience with very similar proportions of males and females.

Interviews explored the experience of returning to work, obtaining some detailed accounts, especially from those interviewees who had had difficulties in their reintegration. The majority, however, had positive or neutral experiences returning to their workplace. There was no evident pattern between the different employing ministries with respect to the reintegration experience amongst interviewees, nor between interviewees from the group of the three large ministries (MOPA, MOHESR and ADEC) and those from the comparatively smaller departments like ADIA and ADNOC. See table 5.7 next page.

Table 5.7 Reintegration experience (re-coded)

Reintegration Experience (re-coded)					
			Recoded Year Sel part A		up to 2001
			Up to 2006	2006 onwards	
How did you feel about your reintegration into the workplace?	Very negative	Count	6	0	6
		% within Recoded Year Sel part A	4.8%	0.0%	2.9%
	Somewhat negative	Count	11	18	29
		% within Recoded Year Sel part A	8.7%	22.5%	14.1%
	Natural	Count	22	21	43
		% within Recoded Yr Sel part A	17.5%	26.3%	20.9%
	Somewhat positive	Count	50	30	80
		% within Recoded Yr Sel part A	39.7%	37.5%	38.8%
	Very positive	Count	34	8	42
		% within Recoded Yr Sel part A	27.0%	10.0%	20.4%
	Invalid	Count	1	1	2
		% within Recoded Yr Sel part A	0.8%	1.3%	1.0%
	Missing	Count	2	2	4
		% within Recoded Yr Sel part A	1.6%	2.5%	1.9%
Total		Count	126	80	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.509(a)	6	0.003
Likelihood Ratio	22.066	6	0.001
Linear-by-linear Association	0.143	1	0.705
N of Valid Cases	206		

(a): 6 cells (42.9%) have expected count less than 5. The minimum expected count is .59.

Four of the 33 interviewees described negative reintegration experiences, some of which were clearly very demoralising and disappointing. There was no apparent pattern to the ministries from which these interviewees came. Some returned to find there was not the same work place for them; another found that colleagues were suspicious and intimidated by the interviewee on return; another felt that every suggestion or contribution was routinely rejected by their managers.

These responses highlight many aspects of the scholarship experience on return to the UAE. It is critical that managers are supportive of their graduates and actively use their new skills and knowledge. This requires forward planning and resourcing. It is also important that work responsibilities match the new skills and knowledge that have been acquired.

At present the Foreign Scholarships programme does not involve managers or employers in the selection process for awards, either in the academic and English preparation programme, or in the scholar's selection of study programme. Neither is there any formal contact with managers or employers in advance, or at the time of alumni's return to the UAE. Further, there is no support provided for alumni following their return to work.

During interviews, interviewees were invited to make suggestions about how they thought the scholarships programme could be improved. While this is discussed in more detail in Chapter 6 (Discussion on Results), one prominent suggestion was a request for the

Scholarship Department of each ministry to be more engaged in, and provide support for, the reintegration experience.

5.5.4 Current employment

Amongst respondents, two-thirds (65%) reported that they still worked for the same employer after their return from scholarship, and there was no substantial difference between men and women. Correspondingly, 33% of respondents reported that they no longer worked for the same employer. Of those respondents who clearly indicated that they no longer worked for their original employer, their current reported category of employment varied widely. But it is notable that less than a third (31%) of respondents who had changed employer reported they were still working in government. This question had a very high incidence of invalid and missing responses. The 21% of respondents who provided invalid, missing or 'other' responses generally indicated that they had a different category of employment after their return. A relatively high number also neglected answering this question (14%), possibly further indicating discomfort with disclosing or discussing their employment status.

Table 5.8 Still work for same employer (by gender)

Still Work for Same Employer					
			Sex		Total
			Male	Female	
Do you still work for the same employer/ministry as when you left?	No	Count	52	16	68
		% within Sex	35.9%	26.2%	33.0%
	Yes	Count	91	42	133
		% within Sex	62.8%	68.9%	64.6%
	Missing	Count	2	3	5
		% within Sex	1.4%	4.9%	2.4%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**Df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	3.669(a)	2	0.160
Likelihood Ratio	3.482	2	0.175
Linear-by-linear Association	2.399	1	0.121
N of Valid Cases	206		

(a): 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.48.

Table 5.9 Still work for same employer (by period)

Still Work for Same Employer					
			Recoded Yr Sel part A		**Total**
			up to 2001	**2001 onwards**	**up to 2001**
Do you still work for the same employer/ministry as when you left?	No	Count	54	14	68
		% within Recoded Yr Sel part A	42.9%	17.5%	33.0%
	Yes	Count	70	63	133
		% within Recoded Yr Sel part A	55.6%	78.8%	64.6%
	Invalid	Count	2	3	5
		% within Recoded Yr Sel part A	1.6%	3.8%	2.4%
Total		Count	126	80	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.552(a)	2	0.001
Likelihood Ratio	15.330	2	0.000
Linear-by-linear Association	1.268	1	0.260
N of Valid Cases	206		

(a): 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.94.

The written survey was ineffective in shedding light on these complexities, despite it having been piloted. Responses to the question asking about how many, and what, income sources people had, elicited such divergent interpretations of the question that the data are not sufficiently robust for analysis or reporting. The interviews were therefore critical in examining this aspect of alumni circumstances.

Seven of the qualitative interviewees (21%) made it clear that they were entirely disconnected from their previous government employment. For example, one respondent explained that he had more experience, abilities and knowledge but not for the workplace because that work was not challenging and didn't have a lot of activities like the private sectors (not in terms of financial benefits). He further explained that he stopped government work and found a new job outside. In fact, he stopped working for the government because he wanted to work in a more challenging environment, explaining that that would allow him to progress further. He did not want to work in an environment which had a lot of free time for chatting and at the end of the month getting paid without having worked, while neither his personal productivity nor that of the country improved. On the other hand their knowledge, experience and skills are put away 'not used'. (Interview with male member of 2005 cohort).

However, the majority of interviewees (70%) made it clear that they continued to be clearly and substantively committed to their government employment (in some cases with additional work on the side).

The remaining interviewees – almost 25% of the sample – described more complex employment arrangements involving some additional work, such as part-time teaching. However, it is indeed not very common practice for returned alumni in the UAE.

5.5.5 Promotions

More than half (63%) of respondents indicated that they had been promoted at least once. However more males (68%) have been promoted than females (51%), and more often, with 6% of men reporting four or more promotions – no women were promoted that often. Nevertheless, the mode (most common) result reported for both men and women is no promotion at all (30% for men and 43% for women). See table 5.10.

Table 5.10 Promotions since scholarship

Promotions since scholarship					
			Sex		Total
			Male	Female	
How many times promoted since return?	None	Count	43	26	69
		% within Sex	29.7%	42.6%	33.5%
	1	Count	36	19	55
		% within Sex	24.8%	31.1%	26.7%
	2	Count	31	5	36
		% within Sex	21.4%	8.2%	17.5%
	3	Count	23	7	30
		% within Sex	15.9%	11.5%	14.6%
	4 or more	Count	9	0	9
		% within Sex	6.2%	0.0%	4.4%
	Missing	Count	3	4	7
		% within Sex	2.1%	6.6%	3.4%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.967(a)	5	0.016
Likelihood Ratio	16.810	5	0.005
Linear-by-linear Association	2.025	1	0.155
N of Valid Cases	206		

(a): 3 cells (25.0%) have expected count less than 5. The minimum expected count is 2.07.

In follow up, those who indicated they had been promoted were asked if they felt that their foreign scholarship contributed to this result. Overall 92% of those who were promoted agreed, at least, part of the reason was attributed to their scholarship, with marginally more women (97%) than men (90%) crediting their scholarship for contributing to their career advancement through promotions.

5.5.6 Chance of promotions with current employer

In thinking about their chances of obtaining promotions with their current employer in the future, 84% of respondents felt confident that they were somewhat or a lot more likely to be promoted in the future with a qualification from abroad. Slightly more males (86%) than females (80%) felt this way but there was not a substantial difference between them. However, closer examination highlights a difference between males and females feeling that their likelihood of promotion with their current employer was increased a lot, as 29% of males felt this way, but only 18% of females.

The issue of networks arose in some interviews with reference to the likelihood of career promotions in existing ministry employment. Furthermore, while many were reluctant to speak about this sensitive issue, for some interviewees the situation was very plain. This section of evaluation sheds some light on the extent of complexity and sensitivity associated with scholarship holders' return to work and their subsequent professional arrangements.

Correlation analysis of survey data shows that respondents who returned to work quickly were more likely to have a positive experience of reintegrating into their workplace. Because the correlation is relatively weak, it is not possible to say that the speed of return to work is the cause of a positive reintegration experience; other factors will also influence that experience including the strength of a scholar's networks in the workplace, institutional or management changes during the period of absence, and changed personal ambitions or expectations.

Data were re-analysed in order to compare respondents who were selected by their ministries (i.e. those selected up to the year 2012) and those who applied independently (i.e. post-2001), in order to explore whether there was any connection between the role of employing ministries in identifying scholarship awardees, and the experiences those scholars had on their return to work and beyond. The data show that the independent respondents were more commonly still with their original employer than the ministry-nominated respondents. While we cannot assess the causation between these two variables (particularly as the number of cases is relatively small), we can see that in fact a much larger proportion of independent respondents remained with their original employer (79%) as compared to ministry-nominated respondents (56%), although in both cases more than half reported that they remained with their original employer. Because independently selected respondents were those from the more recent cohorts (post-2005), it may therefore be that *time since graduation* is a greater influencing factor on retention at the original workplace than whether or not the ministry was involved in nominations.

It was important to examine whether the involvement of the employing ministry in nominating applicants for scholarship awards was an influencing factor on the reintegration experience of alumni. If ministry-nominated alumni had a significantly more positive experience returning to work it might suggest that a return to this approach was warranted. The small number of cases, however, made it impossible to determine the statistical significance; examination of the proportions suggest that Ministry-nominated scholars have more commonly

had a positive reintegration experience (67%) than those scholars who applied after 2005 (48%).

Nevertheless, it is important to note that, even amongst those who applied independently after 2005, 22% reported a somewhat or very negative experience reintegrating in their workplace. In other words, many more scholars from both groups had a neutral or positive return to work than had a negative one. This analysis does not, therefore, present a strong case for a return to ministry involvement in the nomination process.

5.5.7 New skills and knowledge

With respect to new skills and knowledge gained through the scholarship, respondents were asked to rate a set of categories on a four-point scale from 'no change' to 'very much improved'. For all questions the data were strongly positively skewed, which makes it impossible to statistically assess the differences between men and women. However proportional comparisons still provide important insights.

5.5.8 Technical skills

All females reported that their technical skills improved at least a little as a result of their scholarships, with 38% reporting that their technical skills were very much improved. Similarly, all males who gave a valid response also reported improved technical skills, but a notably higher proportion (51%) reported very much improved technical skills. Overall 47% of respondents reported that their technical skills were very much improved. See table 5.11 next page.

Table 5.11 Technical skills

Technical Skills				Sex		Total
				Male	Female	
Technical Skills	Improved a little	Count		7	5	12
		% within Sex		4.8%	8.2%	5.8%
	Somewhat improved	Count		63	33	96
		% within Sex		43.4%	54.1%	46.6%
	Very much improved	Count		74	23	97
		% within Sex		51.0%	37.7%	47.1%
	Missing	Count		1	0	1
		% within Sex		0.7%	0.0%	0.5%
Total		Count		145	61	206
		% within Sex		100.0%	100.0%	100.0%

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.923(a)	3	0.270
Likelihood Ratio	4.195	3	0.241
Linear-by-linear Association	0.660	1	0.417
N of Valid Cases	206		

(a): 3 cells (37.5%) have expected count less than 5. The minimum expected count is .30.

5.5.9 Analytical and critical skills

A total of 62% of respondents indicated that their analytical and critical skills had very much improved as a result of their scholarship. This was obtained by the responses to several open questions, many of which identified these skills as important changes (reported in more detail in other sections). It is clear that proportionally more women (39%) than men (30%) indicated

their skills were somewhat improved and, in contrast, proportionally more men (65%) reported their skills were very much improved compared to women (56%). Please see table 5.12 below.

Table 5.12 Analytical and critical skills

<table>
<tr><td colspan="8">Analytical and critical skills</td></tr>
<tr><td></td><td></td><td></td><td colspan="2">Sex</td><td rowspan="2">Total</td></tr>
<tr><td></td><td></td><td></td><td>Male</td><td>Female</td></tr>
<tr><td rowspan="8">Analytical and critical skills</td><td rowspan="2">Improved a little</td><td>Count</td><td>5</td><td>3</td><td>8</td></tr>
<tr><td>% within Sex</td><td>3.4%</td><td>4.9%</td><td>3.9%</td></tr>
<tr><td rowspan="2">Somewhat improved</td><td>Count</td><td>44</td><td>24</td><td>68</td></tr>
<tr><td>% within Sex</td><td>30.3%</td><td>39.3%</td><td>33.0%</td></tr>
<tr><td rowspan="2">Very much improved</td><td>Count</td><td>94</td><td>34</td><td>128</td></tr>
<tr><td>% within Sex</td><td>64.8%</td><td>55.7%</td><td>62.1%</td></tr>
<tr><td rowspan="2">Missing</td><td>Count</td><td>2</td><td>0</td><td>2</td></tr>
<tr><td>% within Sex</td><td>1.4%</td><td>0.0%</td><td>1.0%</td></tr>
<tr><td rowspan="2">Total</td><td></td><td>Count</td><td>145</td><td>61</td><td>206</td></tr>
<tr><td></td><td>% within Sex</td><td>100.0%</td><td>100.0%</td><td>100.0%</td></tr>
</table>

Chi-Square Tests			
	Value	**Df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	2.705(a)	3	0.439
Likelihood Ratio	3.235	3	0.357
Linear-by-linear Association	0.994	1	0.319
N of Valid Cases	206		

(a): 3 cells (37.5%) have expected count less than 5. The minimum expected count is .59.

5.5.10 Management skills

As with the previous skill categories, almost all women respondents reported improvements in their management skills as a result of their scholarship, with 51% reporting those skills were very much improved. One man reported no change in his management skills and, comparable to the proportion of women, 50% of men reported their management skills were very much improved after their scholarship studies.

Table 5.13 Management skills

Management skills				Sex		Total
				Male	Female	
Management skills	No change	Count		1	0	1
		% within Sex		0.7%	0.0%	0.5%
	Improved a little	Count		8	3	11
		% within Sex		5.5%	4.9%	5.3%
	Somewhat improved	Count		62	27	89
		% within Sex		42.8%	44.3%	43.2%
	Very much improved	Count		72	31	103
		% within Sex		49.7%	50.8%	50.0%
	Invalid	Count		1	0	1
		% within Sex		0.7%	0.0%	0.5%
	Missing	Count		1	0	1
		% within Sex		0.7%	0.0%	0.5%
Total		Count		145	61	206
		% within Sex		**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	1.325(a)	5	0.932
Likelihood Ratio	2.170	5	0.825
Linear-by-linear Association	0.791	1	0.374
N of Valid Cases	206		

(a): 7 cells (58.3%) have expected count less than 5. The minimum expected count is .30.

5.5.11 Communication skills

All women reported improved communication skills with 56% reporting that their communication skills were very much improved. Two men (1%) reported no change in communication skills but proportionally more men (63%) than women (56%) reported that their communication skills were very much improved as a result of their scholarship.

Table 5.14 Communication skills

Communication skills					
			Sex		**Total**
			Male	**Female**	
Communication skills	No change	Count	2	0	2
		% within Sex	1.4%	0.0%	1.0%
	Improved a little	Count	5	4	9
		% within Sex	3.4%	6.6%	4.4%
	Somewhat improved	Count	46	23	69
		% within Sex	31.7%	37.7%	33.5%
	Very much improved	Count	91	34	125
		% within Sex	62.8%	55.7%	60.7%
	Missing	Count	1	0	1
		% within Sex	0.7%	0.0%	0.5%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	3.019(a)	4	0.555
Likelihood Ratio	3.792	4	0.435
Linear-by-linear Association	0.521	1	0.470
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .30.

5.5.12 Cross-cultural understanding

Amongst those respondents who gave a valid response to this question, all of them – both males and females – reported improvements in their cross-cultural understanding after studying in Australia. Sixty per cent of the sample indicated that this understanding was very much improved; with proportionally more women (66%) than men (57%) reporting their cross-cultural understanding was very much improved.

Table 5.15 Cross-cultural understanding

Cross-cultural understanding				Sex		Total
				Male	**Female**	
Cross-cultural understanding	Improved a little	Count		7	2	9
		% within Sex		4.8%	3.3%	4.4%
	Somewhat improved	Count		54	18	72
		% within Sex		37.2%	29.5%	35.0%
	Very much improved	Count		83	40	123
		% within Sex		57.2%	65.6%	59.7%
	Missing	Count		1	1	2
		% within Sex		0.7%	1.6%	1.0%
Total		Count		145	61	206
		% within Sex		**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.869(a)	3	0.600
Likelihood Ratio	1.863	3	0.601
Linear-by-linear Association	0.496	1	0.481
N of Valid Cases	206		

(a): 3 cells (37.5%) have expected count less than 5. The minimum expected count is .59.

5.5.13 Supportiveness for diversity in the workplace

Amongst respondents, 98% indicated that their supportiveness of diversity in the workplace was improved as a result of their scholarship. All women reported that their support was increased, while 97% of men indicated improvements. Interestingly, a substantially higher proportion of women (13%) than men (4%) reported only a marginal improvement. It is not possible, however, to assess whether this was because women were already more supportive of diversity and therefore had less capacity for improvement in this area, or whether there was another influencing factor on this result.

Table 5.16 Supportiveness for diversity

<table>
<tr><th colspan="7">Supportiveness for diversity</th></tr>
<tr><th rowspan="2"></th><th rowspan="2"></th><th rowspan="2"></th><th colspan="2">Sex</th><th rowspan="2">Total</th></tr>
<tr><th>Male</th><th>Female</th></tr>
<tr><td rowspan="10">Supportiveness for diversity in the workplace</td><td rowspan="2">No change</td><td>Count</td><td>2</td><td>0</td><td>2</td></tr>
<tr><td>% within Sex</td><td>1.4%</td><td>0.0%</td><td>1.0%</td></tr>
<tr><td rowspan="2">Improved a little</td><td>Count</td><td>6</td><td>8</td><td>14</td></tr>
<tr><td>% within Sex</td><td>4.1%</td><td>13.1%</td><td>6.8%</td></tr>
<tr><td rowspan="2">Somewhat improved</td><td>Count</td><td>66</td><td>23</td><td>89</td></tr>
<tr><td>% within Sex</td><td>45.5%</td><td>37.7%</td><td>43.2%</td></tr>
<tr><td rowspan="2">Very much improved</td><td>Count</td><td>69</td><td>30</td><td>99</td></tr>
<tr><td>% within Sex</td><td>47.6%</td><td>49.2%</td><td>48.1%</td></tr>
<tr><td rowspan="2">Missing</td><td>Count</td><td>2</td><td>0</td><td>2</td></tr>
<tr><td>% within Sex</td><td>**1.4%**</td><td>**0.0%**</td><td>**1.0%**</td></tr>
<tr><td rowspan="2">**Total**</td><td></td><td>Count</td><td>145</td><td>61</td><td>206</td></tr>
<tr><td></td><td>% within Sex</td><td>**100.0%**</td><td>**100.0%**</td><td>**100.0%**</td></tr>
</table>

Chi-Square Tests			
	Value	**Df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	7.403(a)	4	0.116
Likelihood Ratio	8.019	4	0.091
Linear-by-linear Association	0.909	1	0.340
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .59.

5.5.14 Planning skills

Planning skills through valid responses indicated improvements resulting from study abroad on scholarship. Women reported marginally more improvement at the lower end of the scale, with 10% reporting their planning skills improved a little and 44% reporting these skills very much improved. By comparison, 6% of men reported planning skills had improved a little and 48% indicated these skills were very much improved.

Table 5.17 Planning skills

<table>
<tr><th colspan="7">Planning Skills</th></tr>
<tr><th></th><th></th><th></th><th colspan="2">Sex</th><th rowspan="2">Total</th></tr>
<tr><th></th><th></th><th></th><th>Male</th><th>Female</th></tr>
<tr><td rowspan="8">Planning skills</td><td rowspan="2">Improved a little</td><td>Count</td><td>8</td><td>6</td><td>14</td></tr>
<tr><td>% within Sex</td><td>5.5%</td><td>9.8%</td><td>6.8%</td></tr>
<tr><td rowspan="2">Somewhat improved</td><td>Count</td><td>66</td><td>28</td><td>94</td></tr>
<tr><td>% within Sex</td><td>45.5%</td><td>45.9%</td><td>45.6%</td></tr>
<tr><td rowspan="2">Very much improved</td><td>Count</td><td>70</td><td>27</td><td>97</td></tr>
<tr><td>% within Sex</td><td>48.3%</td><td>44.3%</td><td>47.1%</td></tr>
<tr><td rowspan="2">Missing</td><td>Count</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>% within Sex</td><td>0.7%</td><td>0.0%</td><td>0.5%</td></tr>
<tr><td colspan="2" rowspan="2">Total</td><td>Count</td><td>145</td><td>61</td><td>206</td></tr>
<tr><td>% within Sex</td><td>**100.0%**</td><td>**100.0%**</td><td>**100.0%**</td></tr>
</table>

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.747(a)	3	0.626
Likelihood Ratio	1.953	3	0.582
Linear-by-linear Association	0.533	1	0.465
N of Valid Cases	206		

(a): 3 cells (37.5%) have expected count less than 5. The minimum expected count is .30.

These results show that alumni felt that the full range of their professional or work skills had been improved through their undergraduate and postgraduate studies abroad. Interestingly, it is the 'softer' skills such as communication and cross-cultural understanding that had the largest proportion of respondents judging their skills had very much improved. However, this is not entirely supported by the qualitative data that follow. The survey asked respondents to expand on the improvements in their work skills rated in the preceding questions and 205 answered this question. These qualitative responses were coded and analysed. The most common improvements were related to technical skills relevant for their work, as follows:

- Communication/interpersonal skills

- Management skills

- Planning skills

- Specific technical skills

- Critical thinking/analytical skills

- English language skills

- Information and communication technology skills

- Policy skills

- Study/research skills/new ways to learn.

5.5.15 Collaboration/teamwork skills

Four of these skills emerged most strongly in the data. Firstly, English language skills gained through study abroad are clearly very highly-valued by both the interviewees and by their employers. In some cases these bring additional responsibilities and opportunities, such as attendance at international meetings or increased collaboration with international consultants; in others it means interviewees are constantly called upon to translate documents and interpret in meetings. For example, when asked 'did you use the things you learnt in your

University abroad?' one interviewee (a male member of the 2007 cohort) responded simply: 'Yes, yes, my English. My English is very important.'

Closely related to English language skills, and also often linked to the increased confidence discussed above, the second most highlighted in interviews was communication/interpersonal skills.

It is interesting to note the differences between the skills data from the questionnaire and those from the interviews. The response from the questionnaire survey presents much higher reported levels of technical skills development, while the interviews focus on the 'softer' skills of communication and management, with technical skills discussed somewhat less. It is also interesting to note that technical skills were not as prominent in the survey data in this section of the survey, compared to its emphasis in the interviews, although much of the other data from the survey highlights the value of new technical skills for alumni.

It is possible to conclude that, while technical skills gained through study abroad are very important, communication skills are also seen by both alumni and their employers as extremely important benefits gained through the scholarship programme.

5.5.16 Opportunities outside the public sector

The first evaluation question also sought to identify the opportunities foreign scholarship had brought alumni outside their official public sector employment and their government careers. One area of enquiry related to employment with other organisations. Thinking about other future opportunities, 89% of respondents felt that their chances of employment elsewhere were also increased somewhat or a lot, with the responses from males (89%) and females (88%) very similar. Interestingly, slightly more respondents (33%) felt that their chances of employment elsewhere were increased a lot compared to those who felt similarly confident about promotions at their current employer (26%).

Table 5.18 Employment with other organisations

Employment with Other Organisations			Sex		Total
			Male	Female	
Future chance of employment with other organisations	Decreased a lot	Count	2	0	2
		% within Sex	1.4%	0.0%	1.0%
	Decreased somewhat	Count	1	0	1
		% within Sex	0.7%	0.0%	0.5%
	No change	Count	13	5	18
		% within Sex	9.0%	8.2%	8.7%
	Increased somewhat	Count	79	36	115
		% within Sex	54.5%	59.0%	55.8%
	Increased a lot	Count	50	18	68
		% within Sex	34.5%	29.5%	33.0%
	Missing	Count	0	2	2
		% within Sex	0.0%	3.3%	1.0%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.525(a)	5	0.258
Likelihood Ratio	7.490	5	0.187
Linear-by-linear Association	4.812	1	0.028
N of Valid Cases	206		

(a): 6 cells (50.0%) have expected count less than 5. The minimum expected count is .30.

Discussing this issue during the interviews confirmed that for many, their foreign qualification was a turning point in securing new or extra employment (and thus, extra income). As discussed earlier, this is a prominent outcome in the careers of alumni.

5.5.17 Achieving career goals

A very high percentage of respondents (94%) indicated that their foreign qualification meant that opportunities for achieving career goals were increased somewhat or a lot. Men (94%) and women (92%) felt this way in similar proportions. This agrees with the positive responses to the question regarding the impact of scholarship on alumni ambitions. See table 5.19

Table 5.19 Chance of achieving career goals

Chance of achieving career goals					
			Sex		Total
			Male	Female	
Future chance of achieving my career goals	Decreased a lot	Count	1	0	1
		% within Sex	0.7%	0.0%	0.5%
	Decreased somewhat	Count	6	3	9
		% within Sex	4.1%	4.9%	4.4%
	No change	Count	75	32	107
		% within Sex	51.7%	52.5%	51.9%
	Increased somewhat	Count	62	24	86
		% within Sex	42.8%	39.3%	41.7%
	Increased a lot	Count	1	1	2
		% within Sex	0.7%	1.6%	1.0%
	Missing	Count	0	1	1
		% within Sex	0.0%	1.6%	0.5%
Total		Count	145	61	206
		% within Sex	100.0%	100.0%	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.381(a)	5	0.641
Likelihood Ratio	3.684	5	0.596
Linear-by-linear Association	2.266	1	0.132
N of Valid Cases	206		

(a): 7 cells (58.3%) have expected count less than 5. The minimum expected count is .30.

These findings are hardly surprising as career ambitions would play a very substantial role in influencing a decision to apply for a scholarship in the first place, and further, that achieving a scholarship award would be likely to increase an individual's ambitions for the future.

5.5.18 Opportunities for employment overseas

Compared to the other questions about the impact of foreign qualifications on their professional futures, slightly fewer respondents (76%) felt that their qualification had increased their chance of employment overseas. Looking at the differences between men and women, proportionally more men (79%) than women (69%) felt their chances of employment overseas were increased with foreign qualifications – but there is likely to be a wide range of factors influencing this difference including cultural and family obligations as well as qualifications.

Table 5.20 Opportunities for employment overseas

Opportunities for Employment Overseas					
			Sex		Total
			Male	Female	
Future chance of opportunities for employment overseas	Decreased a lot	Count	1	0	1
		% within Sex	0.7%	0.0%	0.5%
	Decreased somewhat	Count	0	1	1
		% within Sex	0.0%	1.6%	0.5%
	No change	Count	30	14	44
		% within Sex	20.7%	23.0%	21.4%
	Increased somewhat	Count	84	30	114
		% within Sex	57.9%	49.2%	55.3%
	Increased a lot	Count	30	12	42
		% within Sex	20.7%	19.7%	20.4%
	Invalid	Count	0	1	1
		% within Sex	0.0%	1.6%	0.5%
	Missing	Count	0	3	3
		% within Sex	0.0%	4.9%	1.5%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi -Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.025(a)	6	0.043
Likelihood Ratio	13.604	6	0.034
Linear-by-linear Association	9.358	1	0.002
N of Valid Cases	206		

(a): 8 cells (57.1%) have expected count less than 5. The minimum expected count is .30.

5.5.19 Increased salary or personal income

It is clear from the data that there was general agreement amongst alumni that scholarship was likely to lead to increased salary or other income: 92% of respondents felt this way, with no notable difference between men (93%) and women (90%). Again, the qualitative data confirmed that expectations of increased income were widely held amongst alumni as a result of their scholarship and a higher qualification.

Table 5.21 Increased salary/personal income

Increased Salary/Personal Income					
			Sex		Total
			Male	Female	
Future chance of increased salary or personal income	Decreased a lot	Count	1	0	1
		% within Sex	0.7%	0.0%	0.5%
	No change	Count	9	5	14
		% within Sex	6.2%	8.2%	6.8%
	Increased somewhat	Count	91	32	123
		% within Sex	62.8%	52.5%	59.7%
	Increased a lot	Count	44	23	67
		% within Sex	30.3%	37.7%	32.5%
	Missing	Count	0	1	1
		% within Sex	0.0%	1.6%	0.5%
Total		Count	145	61	206
		% within Sex	100.0%	100.0%	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.526(a)	4	0.339
Likelihood Ratio	4.855	4	0.302
Linear-by-linear Association	2.600	1	0.107
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .30.

The survey asked participant a follow-up question inviting them to mention any additional ways in which they felt their foreign qualification would change their futures. In addition to increased income, promotion and employment opportunities, respondents most commonly saw a scholarship as increasing their chance for further study – generally a PhD, also with a view to securing a scholarship to complete such study overseas.

Scholarships have a very positive impact on alumni's careers in many ways. The vast majority secure promotions and/or new work, and increased income. Many move on to work in the private sector (often in tandem with their government employment), and most have very positive expectations about their likely future career opportunities as well.

5.6 Personal outcomes

In addition to the questions posed in the initial evaluation design, the evaluation also examined the impact of scholarship on alumni's personal characteristics. The survey respondents were asked about the effect of the scholarship on a set of personal aspects and rated these on a five-point scale. For all these questions the data are strongly skewed, meaning that it is not possible to analyse statistical significance of differences between males and females. However, proportion of responses were found still showing an interesting results about the personal outcomes.

5.6.1 Motivation to work

Overall, 94% of alumni reported that their motivation to work increased somewhat or a lot as a result of their scholarship. Proportionally fewer women (88%) as compared to men (96%) reported this extent of increased motivation. However, the motivational impact of scholarships on both men and women was strong. Only 2% of respondents indicated that their motivation had decreased.

Table 5.22 Personal outcomes

Personal outcomes					
			Sex		Total
			Male	Female	
My motivation to work	Decreased a lot	Count	2	0	2
		% within motivation to work	100.0%	0.0%	100.0%
		% within Sex	1.4%	0.0%	1.0%
	Decreased somewhat	Count	1	1	2
		% within motivation to work	50.0%	50.0%	100.0%
		% within Sex	0.7%	1.6%	1.0%
	No change	Count	3	6	9
		% within motivation to work	33.3%	66.7%	100.0%
		% within Sex	2.1%	9.8%	4.4%
	Increased somewhat	Count	39	15	54
		% within motivation to work	72.2%	27.8%	100.0%
		% within Sex	26.9%	24.6%	26.2%
	Increased a	Count	100	39	139

	lot	% within motivation to work	71.9%	28.1%	100.0%
		% within Sex	69.0%	63.9%	67.5%
Total		Count	145	61	206
		% within motivation to work	70.4%	29.6%	100.0%
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	7.417(a)	4	0.115
Likelihood Ratio	7.273	4	0.122
Linear-by-linear Association	0.943	1	0.332
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .59.

5.6.2 Confidence in abilities

The impact of scholarship study on men's and women's confidence was very strong. In fact all women alumni reported their confidence had increased somewhat or a lot, as did 99% of men. Almost three-quarters of respondents reported that their confidence had increased a lot: 74% of women and 71% of men. This strongly positive effect on the confidence of individuals is reflected in the qualitative data from both the survey and the interviews, and is discussed further below.

Table 5.23 Confidence in abilities

Confidence in abilities			Sex		Total
			Male	Female	
Confidence in my abilities	Decreased a lot	Count	1	0	1
		% within motivation to work	100.0%	0.0%	100.0%
		% within Sex	0.7%	0.0%	0.5%
	No change	Count	1	0	1
		% within motivation to work	100.0%	0.0%	100.0%
		% within Sex	0.7%	0.0%	0.5%
	Increased somewhat	Count	40	16	56
		% within motivation to work	71.4%	28.6%	100.0%
		% within Sex	27.6%	26.2%	27.2%
	Increased a lot	Count	103	45	148
		% within motivation to work	69.6%	30.4%	100.0%
		% within Sex	71.0%	73.8%	71.8%
Total		Count	145	61	206
		% within motivation to work	70.4%	29.6%	100.0%
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	.915(a)	3	0.822
Likelihood Ratio	1.478	3	0.687
Linear-by-linear Association	0.463	1	0.496
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .59.

5.6.3 Career ambitions

Amongst respondents, 93% indicated that their career ambitions had increased somewhat or a lot as a result of their scholarship. Proportionally more men (94%) than women (88%) reported this increase. However, there is still a strongly positive impact of scholarships on career ambitions for both men and women.

Table 5.24 Career ambitions

Career ambitions			Sex		Total
			Male	**Female**	
Career ambitions	Decreased a lot	Count	1	0	1
		% within motivation to work	100.0%	0.0%	100.0%
		% within Sex	0.7%	0.0%	0.5%
	Decreased somewhat	Count	0	1	1
		% within motivation to work	0.0%	100.0%	100.0%
		% within Sex	0.0%	1.6%	0.5%
	No change	Count	6	5	11
		% within motivation to work	54.5%	45.5%	100.0%
		% within Sex	4.1%	8.2%	5.3%
	Increased	Count	46	18	64

	somewhat	% within motivation to work	71.9%	28.1%	100.0%
		% within Sex	31.7%	29.5%	31.1%
	Increased a lot	Count	91	36	127
		% within motivation to work	71.9%	28.3%	100.0%
		% within Sex	62.8%	59.0%	61.7%
	Invalid	Count	1	0	1
		% within motivation to work	100.0%	0.0%	100.0%
		% within Sex	0.7%	0.0%	0.5%
	Missing	Count	0	1	1
		% within motivation to work	0.0%	100.0%	100.0%
		% within Sex	0.0%	1.6%	0.5%
Total		Count	145	61	206
		% within motivation to work	70.4%	29.6%	100.0%
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	7.086(a)	6	0.313
Likelihood Ratio	7.665	6	0.264
Linear-by-linear Association	0.579	1	0.447
N of Valid Cases	206		

(a): 9 cells (64.3%) have expected count less than 5. The minimum expected count is .30.

5.6.4 Interest in work

Respondents also reported a strongly positive impact of scholarship study on their interest in work, with 93% indicating their interest has increased somewhat or a lot. Men reported this increase slightly more than women (93% as compared to 90%) but again the impact on interest in work is strongly positive for both men and women. See table 5.25 below.

Table 5.25 Interest in work

Interest in Work					
			Sex		**Total**
			Male	**Female**	
Interest in my work	Decreased a lot	Count	3	0	3
		% within Sex	2.1%	0.0%	1.5%
	Decreased somewhat	Count	1	1	2
		% within Sex	0.7%	1.6%	1.0%
	No change	Count	5	5	10
		% within Sex	3.4%	8.2%	4.9%
	Increased somewhat	Count	50	22	72
		% within Sex	34.5%	36.1%	35.0%
	Increased a lot	Count	85	33	118
		% within Sex	58.6%	54.1%	57.3%
	Missing	Count	1	0	1
		% within Sex	0.7%	0.0%	0.5%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	4.260(a)	5	0.513
Likelihood Ratio	5.177	5	0.395
Linear-by-linear Association	0.485	1	0.486
N of Valid Cases	206		

(a): 7 cells (58.3%) have expected count less than 5. The minimum expected count is .30.

5.6.5 Work satisfaction

Along with the other personal outcomes, a large majority of respondents (92.8%) indicated that their level of satisfaction with their work increased somewhat or a lot, as a result of their scholarship.

It is interesting to note that compared to indicators such as confidence and ambition, proportionally few respondents indicated satisfaction increased a lot, and more have only somewhat increased satisfaction. In other words, these data are less skewed than most other indicators of personal outcomes.

Table 5.26 Work satisfaction

Work Satisfaction			Sex		Total
			Male	**Female**	
Satisfaction with my work	Decreased a lot	Count	2	0	2
		% within motivation to work	100.0%	0.0%	100.0%
		% within Sex	1.4%	0.0%	1.0%
	Decreased	Count	3	1	4

	somewhat	% within motivation to work	75.0%	25.0%	100.0%
		% within Sex	2.1%	1.6%	1.9%
	No change	Count	4	4	8
		% within motivation to work	50.0%	50.0%	100.0%
		% within Sex	2.8%	6.6%	3.9%
	Increased somewhat	Count	58	27	85
		% within motivation to work	68.2%	31.8%	100.0%
		% within Sex	40.0%	44.3%	41.3%
	Increased a lot	Count	78	28	106
		% within motivation to work	73.6%	26.4%	100.0%
		% within Sex	53.8%	45.9%	51.5%
	Missing	Count	0	1	1
		% within Sex	0.0%	1.6%	0.5%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**Df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	5.563(a)	5	0.351
Likelihood Ratio	6.053	5	0.301
Linear-by-linear Association	2.168	1	0.141
N of Valid Cases	206		

(a): 7 cells (58.3%) have expected count less than 5. The minimum expected count is .30.

5.6.6 Personal empowerment

The survey questionnaire also asked an overarching question: do you feel the foreign scholarship has empowered you personally? A strongly positive response to the question – 96% of respondents – indicated that they felt personally empowered as a result of their scholarship.

Analysis of the answers to the subsequent open question: 'If yes, can you explain how it empowered you?' identified a large number of reasons. It is clear that the impact of scholarships for many interviewees was both personal and professional.

Table 5.27 Personal empowerment

Personal empowerment					
			Sex		Total
			Male	Female	
Do you believe your Australian Scholarship has empowered you personally?	No	Count	3	2	5
		% within Sex	2.1%	3.3%	2.4%
	Yes	Count	139	59	198
		% within Sex	95.9%	96.7%	96.1%
		Count	3	0	3
		% within Sex	2.1%	0.0%	1.5%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.524(a)	2	0.467
Likelihood Ratio	2.355	2	0.308
Linear-by-linear Association	1.289	1	0.256
N of Valid Cases	206		

(a): 4 cells (66.7%) have expected count less than 5. The minimum expected count is .89.

The results related to personal empowerment highlight personal outcomes in some depth, with themes emerging throughout the discussion. Data from alumni interviews were coded for a range of personal outcomes, as follows:

- Changed behaviour at work

- Changed views on women, gender

- Confidence to speak out at work, make suggestions etc.

- Migrated/living abroad

- Experienced how things work in developed country (government, society etc.)

- Increased income

- Negative personal outcomes

- Independence through living away from UAE

- Increased motivation

- Greater respect from others

- Opened mind/broader perspective.

Some other additional main findings and results are reported below:

Only two interviewees reported negative personal outcomes from their scholarship experiences. For one this was because: 'my working life is unhappy because I don't have a job', although it should be noted that this interviewee is actually still employed in his government position so this comment may refer to his lack of additional work. For the second interviewee, discussion clarified that his perception of negative outcomes resulted more from the UAE's economic downturn rather than the scholarship itself.

Four positive themes emerged in the discussion about personal outcomes resulting from the scholarship. Most common was the value of the experience of living in a foreign country with a democratic government and an open society – both for the interviewee and their

families. This theme also included experiencing how a university operates in a foreign country, both administratively and academically; several interviewees are now drawing on that aspect of their time abroad.

Secondly, interviewees talked about how their scholarship experience led them to develop a more open mind, or a broader perspective on the world and society. This theme is clearly linked closely to the previous theme, but it also shows the academic experiences of interviewees. For example, one respondent quoted that: 'In the past I had a narrow mind. When I studied abroad on a scholarship, I met many classmates who came from many countries/nationalities. This opened my perceptions. In the past, I lived like a frog in the well; I didn't know everything that happened in the world. When I lived abroad, I thought that it is so large, my negative thinking reduced. I think that it was a good impact for me. The important point is that I learned to think outside the box. I am able to see things in a different way' (Interview with male member of 2007 cohort).

Many interviewees highlighted how their whole attitude to work and their professional behaviour has changed since their scholarship. They mentioned changes such as an increased work ethic, altering their interaction with subordinates to encourage them to speak out and make contributions, and more participatory management styles. For example, another respondent explained that: 'Also, before I came here I didn't actually work so hard. We really work only one or two hours. But I saw there that the academic staffs work very hard. They sit in front of a computer for a long time and even do not go out of their offices for lunch. They work very hard and work fast and are busy. In comparison, the UAE people work less and when I came abroad I learned a lot and when I went back I tried to do as much as I could. The commitment and dedication of these people can be an example' (Interview with male member of 2007 cohort).

The fourth major theme that emerged in discussing personal outcomes was the increase in confidence of respondents, especially in the context of work. They are now much more likely to make contributions in meetings, to make suggestions to their colleagues and to their superiors (most significantly), and to speak up with opinions and ideas. This is a marked

difference from the more usual UAE way where seniority largely determines who speaks and when. For some women interviewees, this increased confidence was especially important. For example, one female respondent described: 'we have more courage to talk and campaign in the meeting. Before as we know, "Arabic follow what the teacher says". However, if the teacher says something incorrect, we don't dare to disagree. But after [the scholarship] we can analyse to find the reasons that we can debate. Yes, it encourages us to dare to get the result like this, especially for women' (Interview with female member of 2009 cohort).

These positive personal outcomes show that personal growth, changes in attitude and thinking, and increases in confidence, for example, are highly valued personal outcomes for alumni. These changes result from the whole scholarship experience, not just the academic section.

5.6.7 Linkages between the UAE, foreign universities, and the local region

One of the long-standing aims of UAE Higher Education Foreign Scholarships is to contribute to establishing links between individuals from the UAE, advanced countries and within the region. The current phase of the Scholarships Programme explicitly identifies this as one of its objectives. Therefore, the second evaluation question posed was to ascertain to what extent scholars have developed and maintained links between the UAE, foreign universities, and the region in general, as a result of studying abroad and what have been the results of those links? The evaluation sought to understand the personal connections and linkages respondents developed during their study abroad, the extent to which those links are being maintained after graduation, as well as the benefits respondents see in these links.

5.6.8 Social group during scholarship

Respondents were asked to indicate who they mainly mixed with socially during their studies abroad. For the majority (85%) they mixed with other international students, with women somewhat more often mixing with international students than men (93% compared to 81%). The next most common social group, unsurprisingly, was other UAE students. The results indicated that 61.2% of respondents mixed with other UAE students with little difference

between males and females; it is likely that this proportion is not high mainly because some scholars would have been the only UAE student at their institution or even in their host city.

Table 5.28 Maintained links – staff

			Recorded Year of Selection						
		Total	2001–02	2003–04	2005–06	2007–08	2009–10	2010–11	2011–12
Maintained Links – staff in the institution where you studied	No	97	14	25	12	18	12	12	4
	Yes	109	9	20	11	17	20	23	9
	Total	206	23	45	23	35	32	35	13

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided
Pearson Chi-Square	8.424(a)	6	0.209
Likelihood Ratio	8.536	6	0.201
Linear-by-linear Association	7.785	1	0.005
N of Valid Cases	206		0.209

(a): 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.12.

Of all categories, respondents were least likely to mainly mix socially with students of the host country, with only 38% indicating that they were included in their main social network. Notably there was no significant difference between the experiences of men and women in this area.

5.6.9 Personal links developed

Turning to a broader notion of links with other people to include any friendships and connections within the academic institution, respondents gave a more mixed picture. In this case, most respondents reported having some links with foreign Nationals (72%); if not establishing these links as part of their main social grouping. Overall, the data showed that most scholars established links with a range of people during their studies abroad, although most commonly with other UAE and international students.

Only 69% of respondents reported that they established links with staff in the institutions where they studied. The proportions were comparable for both men and women on this point. This is of some concern as it suggests that almost a third of scholarship students did not feel they were linked with their academic or other staff.

The Arab community in foreign countries was very important for UAE students on scholarship, particularly for women, for whom the Arab community was the second most common group with whom they developed links. The experiences of arriving in, and living in, a foreign country recounted by a small number of interviewees reflected this. For them, the Arab community was important, especially when they first arrived, to give them practical and social support with everything from navigating unfamiliar food and grocery shopping, to having a community with whom to celebrate important holidays.

Table 5.29 Maintained links – friend of foreign nationality

Friend of Foreign Nationality* Recorded Year of Selection Cross Tabulation									
		Recorded Year of Selection							Total
		1992–95	1996–97	1998–99	2000–01	2002–03	2004–05	2006–08	
Maintained Links – Friends of Australian nationality	No	19	26	14	21	23	11	5	119
	Yes	4	19	9	14	9	24	8	87
	Total	23	45	23	35	32	35	13	206

Friend of Foreign Nationality* Recorded Year of Selection Cross Tabulation									
		Recorded Year of Selection							Total
		1992–95	1996–97	1998–99	2000–01	2002–03	2004–05	2006–08	
Maintained Links – Friends of foreign nationality	No	19	26	14	21	23	11	5	119
	Yes	4	19	9	14	9	24	8	87
	Total	23	45	23	35	32	35	13	206

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	20.529(a)	6	0.002
Likelihood Ratio	21.220	6	0.002
Linear-by-linear Association	9.127	1	0.003
N of Valid Cases	206		

(a): 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.49.

5.6.10 Personal links maintained

The most common links respondents have maintained since completing their scholarships are those with other UAE students: 72% reported that they are still connected with their colleagues from the UAE who also studied in the same country where they completed their studies. At 79% women are maintaining these links somewhat more than men are (70%).

Given the significance the UAE attaches to scholarships as a means of developing and maintaining links with advanced universities and their people, it is interesting to note that overall only 42% of respondents reported that they still have links to university friends, with

men and women reporting almost the same proportions. More reported that they retained their links with staff in the institution where they studied: 53% have kept these links and again there is little difference between men and women on this point.

The interviews also explored this aspect of the scholarship experience. In fact personal links were the most commonly discussed kind of links that interviewees retain. These links are mostly with their UAE colleagues, and with the other international students with whom they studied abroad. More than a third of interviewees (36%) talked about their continuing personal relationships with friends in other countries, both near and far. Many actually made the point that their links were social and friendly rather than professional or work-related.

Interviewees certainly also maintained connections with their UAE colleagues from the scholarship programme, although by no means universally. The extent and depth of these links also varied substantially: For some it is limited to attending alumni functions; for others it is a deep and ongoing network connected to professional interests and work responsibilities. As with the links to international colleagues, though, the links are more commonly social than professional.

In order to explore whether there is a significant relationship between the cohort year and the maintenance of links with friends in foreign universities and with staff of the academic institutions, a chi-square test was performed. However, in both cases there is no statistically significant relationship between how recently a respondent went abroad on scholarship (and conversely, how long they have been back in the UAE) and whether or not they retain links to the country of their study programme. This, therefore, suggests that factors other than time are influencing the extent to which alumni establish and maintain links to their university and friends abroad.

An analysis of correlations between these variables illustrates that there are significant association between the social groups and links developed, and those subsequently maintained. While this is not a surprising finding it does emphasise that the study-abroad

experience is critical to the nature of the links scholars develop and maintain as a result of their scholarships.

5.6.11 Return travel to country of scholarship award

Three-quarters of respondents (65%) have not been back to the country of their study programme since their scholarship was completed, and 16% have been back once. Proportionally more females (21%) have returned once, compared to males (14%); and the proportion of men and women who have returned more than once is similar (12% and 13% respectively).

5.6.12 Benefits of links

The respondents were invited to provide additional comments about how the links they reported had benefited them either personally or professionally.

In the interviews, it was less clear that the links developed and maintained through scholarship study abroad had led to many tangible benefits, although there were certainly strong themes of friendship with UAE and other international students. The interviews confirmed that there was much less connection with Nationals in other countries (including the university at which an interviewee had studied) than with other international or UAE students. It may be that links to foreign Nationals are simply seen as much less useful or valuable in comparison with networks to and within the UAE government, which could be important for career and family reasons. Only a small number of interviewees mentioned tangible benefits such as opportunities to deliver training elsewhere in the region and the chance to do further study as a result of continuing professional links abroad.

5.6.13 Links with formal foreign entities or organisations

Almost half of respondents (45%) reported that they had links with formal foreign entities or organisations; proportionally fewer females (38%) than males (47.6%) were included in this

group. Conversely of course, more than half of respondents (54%) had no links with formal foreign entities, including 59% of women respondents and 52% of men.

5.7 Improved institutional effectiveness

The third question posed in the evaluation design related to the effectiveness of scholarships as a mechanism in improving the efficiency of target institutions, as follows:

(a) How are alumni valued in the public sector?

(b) What contributions have alumni made to their institutions?

This was a challenging aspect of the evaluation. The evaluation here focused on seeking the views of alumni and, to a lesser extent, their managers. This approach is recognised as having limitations as a means of establishing evidence of institutional change, but was necessary in light of the difficulties associated with undertaking detailed institutional assessment without existing, and in-depth, relationships with those institutions. The difficulties were exacerbated by the wide spread of scholarship alumni across a large number of institutions.

Three managers from a range of sectors (ADNOC, ADIA and Ministry of Presidential Affairs) were interviewed. As noted in the methodology, it proved difficult to secure participation from managers; only three of the eight managers identified agreed to participate. While this sample was too small to be relied upon for general conclusions about the view of public sector employers, the data collected through the interviews do still give insights into the sorts of impressions the scholarships programme makes on some managers in government.

5.8 Valuing alumni in the public sector – the managers' perspective

All managers highlighted the importance of the improved communication skills alumni bring to the workplace. They described how valuable this is generally, and particularly with respect to working with international technical advisers and in international meetings. The other ability that was mentioned was analytical skills, or 'a new way of thinking' about problems. These highlighted skills echo those most commonly-mentioned in the tracer survey and the qualitative

interviews with alumni. As a result, it is reasonable to conclude that these are among the main skills benefits derived from foreign study scholarships.

All managers discussed the levels of probable benefit arising from their institution`s scholarship section providing support both to graduates and the employing organisation on the return of the student from their study course, which would also assist the employing ministry in making better use of their newly improved human resource. In one case the challenge faced (and generally lost) was retaining graduates in competition with much higher salaries on offer from other ministries, departments and especially the private sector; there was general agreement that comparatively low salaries in the private sector were a very substantial barrier to retaining highly qualified staff.

All managers felt that scholarships make a substantial contribution to the UAE's human resources, although one did comment that: 'Ministries have big budget to train staff' when that staff member may not stay with the work unit on return. However another manager commented that: 'even though they work in governmental work or other companies […] I think they also contribute to the development of UAE […] they contribute to solving the problem in their responsibilities […] because they have knowledge'.

Two of the three managers mentioned that alumni retain links with their international links and UAE networks, and they saw this as a positive aspect of the alumni experience. One also mentioned specific ongoing links between his work unit and the university where he and some of this staff had studied. This is an example of a fairly intensive relationship that is not typical:

> Before as you know the human resources in UAE especially in the field of research, health, including engineering and computer sciences are quite low […] now I think the young UAE research teams learn how to crawl, to stand up, to walk and to run. Then we see the fruits of their study. Study abroad and elsewhere.

In conclusion, the general consensus amongst the three managers interviewed was that scholarship graduates' enhancement and as a human resource is a beneficial for the nation, but

the challenges in retaining and utilising them in the public sector are often very great. They also agreed that scholarships deliver substantial individual benefits to alumni, and expressed a desire for more support and engagement from the scholarship programme to improve the way the public sector uses and retains alumni on their return.

5.9 Scholarship graduates' contribution to institutions

In considering the impact their new skills and knowledge have had on their workplace, the questionnaire respondents were asked to rate several statements against a four-point scale from not at all to very much. These particular results though should be interpreted with an element of caution, as given the complexities of many respondents' work circumstances, it is not possible to determine the extent to which these results refer only to respondents' government work, or more broadly to their range of professional and business activities.

5.9.1 Relevance of skills and knowledge

Respondents indicated a very high degree of alignment between the knowledge and skills they gained in study abroad and their current work. In fact 93% indicate that their skills and knowledge match their jobs somewhat or very much, with no appreciable difference between men and women (93% and 92% respectively). Only two male respondents felt that their skills and knowledge were not at all relevant to their work.

Table 5.30 Relevance of skills and knowledge

Relevance of skills and knowledge					
			Sex		Total
			Male	Female	
Content, knowledge and skills match my job	Not at all	Count	2	0	2
		% within Sex	1.4%	0.0%	1.0%
	A little	Count	8	3	11
		% within Sex	5.5%	4.9%	5.3%
	Somewhat	Count	53	29	82

		% within Sex	36.6%	47.5%	39.8%
	Very much	Count	82	27	109
		% within Sex	56.6%	44.3%	52.9%
	Missing	Count	0	2	2
		% within Sex	0.0%	3.3%	1.0%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.153(a)	4	0.086
Likelihood Ratio	8.830	4	0.065
Linear-by-linear Association	4.532	1	0.033
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .59.

5.9.2 Utilisation of skills and knowledge

Only one male respondent reported that he had not utilised the knowledge and skills he gained in foreign study in his current job, indicating a very high degree (97%) of their use amongst scholars. Females were less likely to routinely use their new knowledge and skills (93%) compared to males (98%). The results between males and females differ further amongst those respondents who indicated that they had used their knowledge and skills very much in their current work: only 34% of females compared to 59% of males. It is worth noting that these data do not differentiate between the technical and academic skills, and knowledge and the broader personal and cultural experience that many respondents also indicated were an important and valuable part of their foreign scholarship programme. Please see table 5.31.

Table 5.31 Utilisation of skills and knowledge

Utilisation of Skills and Knowledge				Sex		Total
				Male	Female	
Used knowledge and skills	Not at all	Count		1	0	1
		% within Sex		0.7%	0.0%	0.5%
	A little	Count		7	3	10
		% within Sex		4.8%	4.9%	4.9%
	Somewhat	Count		50	33	83
		% within Sex		34.5%	54.1%	40.3%
	Very much	Count		85	21	106
		% within Sex		58.6%	34.4%	51.5%
	Missing	Count		2	4	6
		% within Sex		1.4%	6.6%	2.9%
Total		Count		145	61	206
		% within Sex		**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.359(a)	4	0.010
Likelihood Ratio	13.366	4	0.010
Linear-by-linear Association	3.718	1	0.054
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .30.

During the interviews, there was discussion of the relevance of interviewees' new skills and knowledge to their workplaces, both ministry and non-ministry, and the extent to which they

have been able to make use of their new abilities. Half of the interviewees (51%) described examples of their relevance to ministry employment, showing a positive, if not extensive, degree of connection between scholarship training and public sector work. In some cases, interviewees achieved increased alignment by moving from their original workplace to another government position.

Several interviewees expressed the view that non-ministry employers made more effective use of scholarship graduates than ministry employers. They commented that non-ministry employers such as ADIA and ADNOC were more likely to promote and employ on merit – often because they were not tied to the very hard rules and regulations.

Less than half of the respondents (41%) felt that their current supervisor was highly supportive of them in using their new skills and knowledge, with women much less commonly feeling this way – only 26% indicated that this was their experience. The data further showed that 86% of respondents indicated that their supervisor was somewhat or highly supportive of them using their new skills and knowledge. Only 2% of respondents felt that their current supervisor was very or somewhat unsupportive, with similar results for both men and women (2% and 3% respectively). Amongst respondents, 7% felt that their supervisor was neither supportive nor unsupportive.

Table 5.32 Support from supervisor

Support from Supervisor					
			Sex		Total
			Male	Female	
Supervisor is supportive of using new knowledge and skills	Very unsupportive	Count	1	0	1
		% within Sex	0.7%	0.0%	0.5%
	Unsupportive	Count	2	2	4
		% within Sex	1.4%	3.3%	1.9%
	Neither	Count	10	5	15
		% within Sex	6.9%	8.2%	7.3%

	Somewhat supportive	Count	58	34	92
		% within Sex	40.0%	55.7%	44.7%
	Highly supportive	Count	69	16	85
		% within Sex	47.6%	26.2%	41.3%
	Invalid	Count	0	1	1
		% within Sex	0.0%	1.6%	0.5%
	Missing	Count	5	3	8
		% within Sex	3.4%	4.9%	3.9%
Total		Count	145	61	206
		% within Sex	100.0%	100.0%	100.0%

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.061(a)	6	0.086
Likelihood Ratio	11.654	6	0.070
Linear-by-linear Association	0.658	1	0.417
N of Valid Cases	206		

(a): 8 cells (57.1%) have expected count less than 5. The minimum expected count is .30.

During the interviews, ten interviewees recounted examples of their managers' support for their new skills and knowledge. For example one respondent quoted: 'I have abilities to do it so my boss […] our upper level, likes me which provides me with more opportunities […] and responsibilities' (Interview with male member of 2009 cohort).

When asked about support from colleagues, as opposed to supervisors, the results were similar, as 86% indicated that their colleagues were somewhat or highly supportive. Again, however, women less commonly (26%) felt that colleagues were highly supportive of them using their new skills.

Table 5.33 Support from colleagues

Support from Colleagues			Male	Female	Total
			Sex		**Total**
			Male	**Female**	
Colleagues are supportive of using knowledge and skills	Very unsupportive	Count	1	0	1
		% within Sex	0.7%	0.0%	0.5%
	Unsupportive	Count	1	1	2
		% within Sex	0.7%	1.6%	1.0%
	Neither	Count	11	5	16
		% within Sex	7.6%	8.2%	7.8%
	Somewhat supportive	Count	60	32	92
		% within Sex	41.4%	52.5%	44.7%
	Highly supportive	Count	69	16	85
		% within Sex	47.6%	26.2%	41.3%
	Invalid	Count	1	1	2
		% within Sex	0.7%	1.6%	1.0%
	Missing	Count	2	6	8
		% within Sex	1.4%	9.8%	3.9%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**Df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	15.073(a)	6	0.020
Likelihood Ratio	14.786	6	0.022
Linear-by-linear Association	8.126	1	0.004
N of Valid Cases	206		

(a): 8 cells (57.1%) have expected count less than 5. The minimum expected count is .30.

During the interviews, four interviewees (12%) described negative reactions they had experienced from their colleagues when they returned to work after completing their studies. The majority of respondents (91%) reported making at least a few changes to their management style as a result of their scholarship, with similar results for both males and females. Almost a third of respondents (32%) felt that they had made many changes, and again the results were similar for men and women.

Table 5.34 Changes in management style

Changes in management style			Sex		Total
			Male	**Female**	
Changes in management style since returning	No change	Count	8	5	13
		% within Sex	5.5%	8.2%	6.3%
	A few changes	Count	13	8	21
		% within Sex	9.0%	13.1%	10.2%
	Some changes	Count	73	27	100
		% within Sex	50.3%	44.3%	48.5%
	Many changes	Count	49	18	67
		% within Sex	33.8%	29.5%	32.5%
	Missing	Count	2	3	5
		% within Sex	1.4%	4.9%	2.4%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**Df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	3.998(a)	4	0.406
Likelihood Ratio	3.713	4	0.446
Linear-by-linear Association	2.078	1	0.149
N of Valid Cases	206		

(a): 8 cells (30.0%) have expected count less than 5. The minimum expected count is 1.48.

Of the respondents who expanded on how they felt they had made many changes to their management style, the strongest theme to emerge was a shift to a more participatory or team-based approach – a significant change from a more conventional command-and-control approach that is common in UAE workplaces.

Of those respondents who clearly articulated examples of how they made changes to operations in their workplace, the strongest theme was clearly in the introduction of greater teamwork and staff participation, echoing the most common change in management described above. The second most common example provided related to establishing greater attention to performance and accountability for results. Others offered specific new operational examples such as establishing a library system or changing the management of information technology in the workplace.

Table 5.35 Changes in workplace operations

Changes in Workplace Operations					
			Sex		**Total**
			Male	**Female**	
Changes in operations since returning	No changes	Count	15	5	20
		% within Sex	10.3%	8.2%	9.7%
	A few changes	Count	25	13	38
		% within Sex	17.2%	21.3%	18.4%
	Some changes	Count	70	28	98
		% within Sex	48.3%	45.9%	47.6%
	Many changes	Count	29	9	38
		% within Sex	20.0%	14.8%	18.4%
	Missing	Count	6	6	12
		% within Sex	4.1%	9.8%	5.8%
Total		Count	145	61	206
		% within Sex	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.674(a)	4	0.452
Likelihood Ratio	3.488	4	0.480
Linear-by-linear Association	2.469	1	0.116
N of Valid Cases	206		

(a): 1 cell (10.0%) has expected count less than 5. The minimum expected count is 3.55

5.9.3 Skills transfer

Respondents reported a very high level (92%) of transferring their new skills and knowledge to colleagues within and outside their workplace. Males reported this slightly more (94%) than females (87%).

The additional information provided in the follow-up open question provided greater insights into the understanding of skills transfer amongst respondents. Different ways to transfer skills and knowledge were mentioned, the most common approach being an informal one associated with using and demonstrating new skills and knowledge and sharing it with colleagues. Next most common, however, is the practice of teaching – generally part-time – at one of the many universities in the UAE. Twenty respondents indicated that they have taken a more formal approach to skills transfer, delivering workplace training to colleagues.

There are weak positive correlations between the relevance of skills and knowledge, the extent of support from supervisors and colleagues, and the extent to which scholars have been able to make changes in operations and management style.

While the analysis does not provide evidence of very strong links, there is nevertheless substantiation that the better the match between a scholar's skills and their job, together with

the extent of support from their supervisor and colleagues, the more likely they are able to use their skills and knowledge and to make changes in their management and operations at work.

It is interesting to note the themes emerging from qualitative data about how respondents have been able to change their management style and operations in their workplaces. The common leading theme is introducing a more participatory or team-based approach to work. This can be seen as linked to the skills outcomes that came through most strongly too, such as improved communication and interpersonal skills, and the personal outcomes that were prominent such as a more open mind, changed behaviours at work to be more ethical and hard-working, and the experience of living in a more egalitarian society.

The survey questions were not designed to provide data that enabled analysis of respondents' level of seniority and the influence that might have on their experiences. This was based on the understanding that for many government civil servants in the UAE, work titles do not give a clear indication of their position in the hierarchy. The database managed by scholarship sections of ministries and other departments face similar challenges in capturing such details. It would be useful for subsequent studies to pilot such data collection and analysis, based on the lessons learned from this study. The common themes emerging from the interview data are that, in government and other employment many interviewees are using their new skills and knowledge and find them relevant to at least some of their work. However the more flexible and comfortable format of the interview allowed many interviewees to talk in some depth about the difficulties associated with trying to influence change in the UAE public sector.

Some participants also commented on how limited their personal influence was when they were at relatively junior levels, and a number clearly recognised that influencing change in the public sector is a very long-term undertaking. Another very strong theme that emerged in the interview discussions of achieving change at the workplace addressed working with international consultants. Because they are so common in UAE public sector organisations, for many interviewees their increased technical skills and English language abilities mean that they are able to work much more effectively with international advisers. This is seen as one of the

major contributions their scholarship studies can make to their workplace: they and their employer can get more value from their international consultants.

Some interviewees also mentioned the lack of operational resources as a constraint on achieving change in their workplace. They felt that without funding to support the implementation of their ideas, there was little scope to introduce new ways of working, or new plans or projects.

Underpinning all aspects of the survey questions and the interview discussions is the issue of mismanagement of the scholarship sections of different departments in the UAE. In the qualitative data from the respondents, it was mentioned openly and implicitly through euphemisms such as 'networks' or 'other factors that affect careers'.

As part of the long-term strategy and Vision 2030, scholarships are intended to make a contribution to the UAE's development. As described already, the general intention is to strengthen the capacity of public sector institutions and agencies by investing in human resource development through the scholarships, recognising that it is a long-term undertaking in a complex context.

Therefore, the fourth evaluation question which this study included and investigated was: 'How have scholars contributed to the UAE's development as a result of their scholarship?' In seeking to explore this fundamental question, the respondents were asked whether they believe they were making a contribution to the development of the UAE, and whether they felt that any contribution was directly or partially attributable to their study abroad. In answer to the first question 97% felt that they were making a contribution with comparable numbers of men and women responding in this way (97% and 95%). In fact only five respondents (three men and two women) did not feel they were making any contribution to their country's development. In answer to the second question, only two men and one woman felt that their contribution was not at least partly as a result of their foreign qualification.

Table 5.36 Contribution to UAE development

		Male	Female	Total
Do you believe you have made a contribution to the UAE development?	No	3	2	5
		2.1%	3.3%	2.4%
	Yes	141	58	199
		97.2%	95.1%	96.6%
	Missing	1	1	2
		0.7%	1.6%	1.0%
Total		145	61	206
		100.0%	**100.0%**	**100.0%**

Some respondents made fairly generic statements on their written surveys regarding the contribution they were making to the UAE's development. However, the more specific statements were coded and analysed, bringing to light some important themes:

Thirty-three respondents related the skills and knowledge they had developed in foreign universities to improvements they can see in the sectors in which they work: health (12 responses); community development (9); education (7); economics, banking and finance (6); engineering (5) and computer sciences (3).

A number of respondents (20) mentioned examples of how they are directly using the content of their degrees, or the skills they developed while studying abroad, in the day-to-day work they undertake, emphasising the relevance of those skills. The discussion of the UAE's development during the interviews generated some useful additional data. They were coded according to a range of themes:

- Development takes a long time
- Scholarships empower UAE Nationals to change their own country
- Scholarships are a chance for women to improve their skills

- Scholarships improve ability to work with international consultants and/or donors
- Scholarships contribute to development through ongoing skills transfer, teaching and using experiences
- Scholarships contribute to the UAE's overall stock of human resources.

The most strongly-emerging themes from the interview data were that scholarship graduates make important contributions to the work of both ministry and non-ministry workplaces, especially through passing on their skills and experiences to colleagues and staff through formal training and informal processes. Interviewees talked about both technical skills and the less tangible changes in attitude and behaviour they brought back as a result of the general experience of living and studying in an advanced foreign country.

For one unusual interviewee, the contribution he is making to the UAE's development is to operate his private company – his contribution is employment creation, as well as his general attitude to being an employer, which he describes as strongly influenced by his experiences abroad:

> My company was created, I don't use […] foreigners, I use only local national workers. We want to provide some knowledge to them and they work to develop our country. We are doing everything for ourselves but it is one part of developing the country too […] I manage, I help with technical knowledge and I provide appropriate salary and I try to train them to develop themselves and they have knowledge. Sometimes they stop working here to work in another place so that they can develop themselves. I think this is one part that I can help develop […] I try to use […] other ways […] to make my staff understand our objective […] I don't keep my experience secret; whatever I know I share with my staff […] sometimes they bring new ideas for us too. (Interview with male member of 2005 cohort)

For many, the most tangible example they could provide about how they are contributing to the UAE's development was their work as part-time or full-time teaching staff at universities, as already discussed, and as reflected in tracer study data. For example one respondent quoted:

> Yes […] I like my work because I think that, the teacher […] the lecturer is good work while we got the salary and we are honored by other people too. These are good actions. For me, I'm never upset at work and I don't want to resign from my work. Also I don't want to look for a new job because I love this work and I can share and contribute to the development of UAE. Every year, at least 300–400 university students graduate and I think that in a year, a lot of students graduate because of my teaching. This is my contribution to the development of UAE. (Interview with male member of 2004 cohort)

Many interviewees perceive scholarships as a broad contribution to the overall level of human resources in the UAE, rather than (or as well as) a direct contribution to human resource development in the targeted institutions of sectors:

> Scholarships can contribute, not only in [sector], but in other areas, many different sectors. Scholarships develop the human resources of UAE. It's a long-term thing. My knowledge now can be transferred to new generations. I can pass on what I know. Scholarships help people to be more confident, have more knowledge, more good ideas and experience which help with the development of UAE. (Interview with female member of 2009 cohort)

It is interesting to note that few interviewees gave very tangible examples of how they were contributing to the UAE's development. For most, their contribution was described in the broad terms already discussed above. It is not possible to conclude definitively that scholarships contribute to the UAE's development. The causal links are too remote and the multitude of

other contributing factors, many much more significant, makes attribution impossible. However, a number of findings from this evaluation provide a positive indication: a very high proportion of UAE scholarship awardees complete their qualification and return to the UAE. Almost all are employed in at least one, and often more than one, professional job where they are using at least some of the skills and knowledge they gained in universities abroad. There is therefore no doubt that scholarships do contribute to increasing the sum total of internationally qualified human resources in the UAE. Whether or not this represents value for money is more difficult to assess, and few alumni provided tangible examples of how they are contributing to national development beyond generic statements about their work.

5.10 Most significant change as a result of scholarship

Responses to this question in the survey were coded and analysed, revealing a mixed picture of change. As the question was written rather than asked face-to-face, in many cases respondents included a list of significant changes or a complex story, rather than identifying a single most significant change. The changes reported included very personal growth stories as well as material changes in income or status, new or increased professional opportunities and greater confidence and self-esteem:

> As a result of winning and experiencing UAE Foreign Scholarship, I become more open-minded, more confident in doing my job. I moved to work in a more interesting place and was promoted. Furthermore, I became better at communicating and more socialised. Finally I now see the world in a much more positive way. (Member of the 2002 cohort)

The next most common response (n=16) was to mention making a contribution to the UAE's development as part of the most significant change story:

> Higher self-confidence and self-esteem [...] making more effort to learn more about UAE (i.e. history, culture, language); sometimes a UAE needs to step away from the

country for a while in order to see a better picture of UAE as a whole, and learn to appreciate life in UAE more. (Member of the 1996 cohort)

5.11 Computation of rate of returns

The rate of returns to any investment is the discount rate which equates the stream of benefits to the stream of costs and is relevant in education as it involves investments in human capital. Historically, rate of returns to higher education were calculated as the earnings differential between university and secondary school graduates (Psacharopoulos, 1986,1994). Included are the direct costs of education and the opportunity costs (measured as the earnings that the secondary school graduates sacrifice to pursue an undergraduate degree). However, this method assumes an earnings stream of 45 years from the ages of 15 to 60 years. Therefore, the method has restricted use because it includes earnings discounted over a very long time period. The simpler method, called the short-cut method (Psacharopoulos, 2002) is based on the net earning differential at graduation and thus can be used without considering the age of the respondents.

5.11.1 Data for the computation of rates of returns to education on scholarship

Primary data were collected using questionnaires distributed to 207 alumni of foreign scholarship holders during 2001–2012. The alumni were chosen for the study because their perceptions about earnings from work were expected to be more realistic. Respondents were asked to record their expectations of future earnings at two specific points (before their study abroad and after completing those studies). Also, information on variables such as age, gender, and socio-economic status was collected.

The sample included 50 males and 30 females from the survey. The annual earnings for each respondent were worked out as follows: The differences between the estimated monthly earnings were computed and averaged over the number of years. The monthly estimates were then multiplied by a factor of 12 (for the number of months in a year) to convert them to total annual earnings. The same procedure was followed to estimate the annual earnings before

scholarship award and after the respondent returned from study abroad. Using this procedure, the earning streams for the respondent in the two contexts were obtained; namely, before and after higher education abroad on a scholarship programme.

When a scholar chooses to enter higher education abroad, he may forego the earnings/salary of the years that he spends abroad. This is the opportunity cost of choosing higher education on a scholarship. Our data show very interesting results regarding perceived average salary with and without scholarship. The outcome observed, based on the response of respondents, is presented in Table 5.37:

Table 5.37 Expected average monthly salary

Career Point	Expected Average Monthly Salary (AED/per month)	
	Without Higher Education Abroad	With Higher Education Abroad
Initial Year	12000–15000	16000–20000
After 10 years	18000–22000	25000–32000

With secondary school-level education, the data show that a young person expects to achieve an average monthly starting salary of AED12, 000–15,000 ($4000). If he/she starts their career with an undergraduate degree, the average monthly salary expectation is 50% greater. After five years of work experience without a foreign degree, predicted salary will be 30% to 40% higher. However, with an education from abroad, the anticipated salary will be 50% to 60% higher.

The perceived rate of returns includes only the expected average monthly returns and not the direct cost of education abroad as that cost is compensated for by the scholarship. The table below describes the perceived rate of returns estimated for the sample.

Table 5.38 Perceived rate of returns in 2011–12 calculated using short-cut method

Sample data	N	Mean	S.D.
Scholarship Awardees (2011–12)	100	10.92	5.07

The returns estimated indicate that the alumni are aware of the income differential in favour of higher education abroad. The data also indicate that according to the perception of alumni, it is profitable to enter the workforce in a government organisation and obtain lucrative job offers as soon as they finish their study abroad. Findings from the survey support this statement. In the long run, this could increase the quality of human capital, which is, indeed, the central thesis of Human Capital Theory. In this scenario, increasing the number of scholarships available could encourage Emirati youth to pursue higher education abroad, as would building a strong system of incentives into the higher education plan.

Policymakers need to track possible changes in perceptions of Emirati youth toward earnings, not only those who pursue higher education but also those who join the labour force immediately after completion of school. If the perceived costs are higher than the perceived benefits, demand for higher education may decline. Therefore, the apparent returns to education can act as an indicator of demand for education at any point in time.

The findings presented in this study highlight the perceived rate of returns to higher education and its influence on the educational decisions made by young Emiratis. However, this should not lead one to lose sight of the several other variables that have a significant effect on the decision to enter higher education abroad. Further analysis, including the other relevant variables, will lead to a more informed understanding of the role of higher education scholarships on the rates of return to education. Another area worthy of future research is the comparison of perceived rate of returns with social rate of returns, if reliable data on costs and earnings are available. Also, a longitudinal study could help in understanding the change in perceived returns to higher education from overseas over time.

Chapter 6

Discussion of Main Findings

6.1 Introduction

The results presented in Chapter 5 are based on the mixed designed approach used. That is the survey questionnaire and focus group discussions with scholarship alumni and staff managers of scholarship offices in the relevant selected public sector organisations of the UAE. Prior to that and in chapter 4 descriptive analysis and archive findings data were presented and highlighted several issues including government agencies providing the scholarship awards, field of studies, years, gender and other important variables for the duration 2001-2012. Scholarships are awarded to UAE's public servants on the understanding that they return to their original workplace for at least two years on completion. The study found a very high level of compliance with this obligation, with 93% returning to their workplace, the majority (53%) to a position equivalent to the one they had left, and 44% to a higher position.

Most alumni had a positive experience returning to work. Only one in six study respondents (both males and females) had a negative experience reintegrating in their workplace, confronting unsupportive managers or colleagues, and suffering the consequences of the lack of planning or preparation for their return (by their employer). Alumni who returned to work quickly were more likely to have had a positive experience, with many factors liable to influence the speed of their return.

Two-thirds of respondents report that they still work for the same employer, with no substantial difference between men and women. There is no indication that alumni who applied independently of their department are more likely to be employed at their original work place.

Almost two-thirds of respondents (63%) have been promoted at least once, although this is proportionally more common for men than women.

6.2 Skills and knowledge

The strongest skills outcomes that emerged from the evaluation were the levels of increase in technical skills and communication skills. Most respondents to the questionnaire reported very high increases in a range of skills: planning, analytical and critical, management, communication, cross-cultural understanding, technical, and supportiveness of diversity in the workplace. The strongest increases were found in communication skills and cross-cultural understanding – all valid responses to both questions indicated these skills had increased at least a little. Technical skills were also very much increased. Interview data also highlighted the value of English language skills, and their link to communication skills.

6.3 Opportunities outside the public sector

A large majority of alumni are confident that their professional careers will be at least somewhat improved as a result of their scholarship, in terms of promotions and employment opportunities in the UAE, while 93% feel their chance of earning a higher income has increased somewhat or a little. Many have already secured additional work assignments, with supplementary benefits, in their respective departments.

6.4 Personal outcomes

Increased confidence was the most significant personal outcome that emerged in the evaluation. Survey respondents reported very large increases in their levels of motivation, confidence and ambition as a result of their scholarship, with confidence the most notable: 99% of alumni, including all women, experienced increased confidence somewhat or a lot. The level of interest in, and satisfaction with, work has also increased a great deal, although not as substantially.

The experience of living and studying abroad was also an important aspect of the scholarship for many. The evaluation found that many alumni value the exposure to life in a developed country. A useful academic environment and interaction with students from different countries was very important, and this experience continues to influence them now that they are back in the UAE. It also found that the scholarship contributed to many alumni

developing new ways of thinking, a more open mind, and a broader perspective on the world, as well as positive changes in their behaviour at work.

For many alumni, the study abroad experience had positive and negative aspects, with the most notable difficulty being the stress and anxiety associated with studying at postgraduate level, in a foreign language and in an unfamiliar education context. Many commented on how different study and learning expectations were, compared to their experience in the UAE and elsewhere.

6.5 Linkages between the UAE, foreign countries and within the region

The survey respondents most commonly mixed with other UAE or international students during their studies abroad. Nationals of the country of study were least commonly reported as a main social group. Only 69% reported establishing links with the staff at the institution where they were studying. In terms of continuing links, 72% remain connected to their UAE alumni colleagues, but only 42% report having any links with contacts in the country of their scholarship programme. The main themes associated with all discussion of links were friendship, sharing information and professional networking.

6.6 Improving institutional effectiveness

The impact of scholarships on institutions was the most difficult to assess, particularly in light of the fact that many alumni were not able to respond accurately about the questions related to contributions to their institution. The evaluation did not find concrete evidence that scholarships are having a significant impact on institutional performance. Furthermore, there was no substantial difference between those institutions which had received relatively larger numbers of scholarships (Management Studies, Biology, Engineering and Computer Studies), and those who had received few. An in-depth assessment of individual institutions is necessary to analyse such evidence.

However, some important messages did arise out of this section of the evaluation. Communication and interpersonal skills, as well as English language skills, were seen as highly valued and useful. Alumni place a lot of emphasis on the importance of skills transfer, including

through teaching at universities. The major challenge in this context was rejoining departments after the completion of scholarship studies. The alumni commented on many factors including: the need for a critical mass of people to achieve change; that change as a process is a long-term exercise; and that people at more junior levels experience an increased struggle to influence change. Data showed strongly positive improvements in the relevance of skills and knowledge gained, in the utilisation of those skills and knowledge, in the supportiveness of supervisors and colleagues, and in respondents' success in changing their management style. Fewer, but still a majority, felt they had been able to make changes in workplace operations.

6.7 Contribution to the UAE's development

Following Vision 2030 and development planning by the UAE government, the more formal scholarships programme began in 2001 through government assistance in different categories of higher education at bachelor's, master's and doctoral level programmes; and has provided (on average) more than 200 scholarships each year since then. As a result, more than 6,000 scholarships have been awarded in various programmes since 2001. In addition, there are approximately 500 scholars currently studying in different countries.

The UAE is increasingly focusing on development effectiveness and evidence of the results of official development assistance spending. Because scholarships have such a long-standing and high profile place in the development programme, this evaluation is designed to explore the extent to which they have made a positive contribution and the factors that influence the extent of the impact scholarships can have in the UAE.

The majority of government-funded scholarships awarded to Emiratis are through various ministries and departments and more formal data are available from the Ministry of Presidential Affairs as discussed in Chapter 5. These scholarships support the completion of undergraduate degrees, postgraduate diplomas, master's level qualifications and PhDs in mainly advanced countries. In addition, UAE embassies in some countries have arrangements with selected universities to support a small number of students to complete their academic

programmes at those institutions. The scholarship sections of different ministries and departments have also funded scholarships as part of individual aid projects in the UAE.

Originally, the scholarship programme was wholly managed and administered by individual ministries and departments. However, the Ministry of Presidential Affairs has compiled a data set of awards, which, though comprehensive, are incomplete in terms of the cost associated with these scholarships.

When the scholarships programme was formally initiated in 2000, the targeted ministries nominated their staff for awards, playing a direct role in identifying and supporting individuals for scholarship opportunities. However, citing concerns that this compromised the process, each ministry established a more independent selection procedure, changing practice according to their requirements and the number of scholarships and funds available in the budget. Since then, these ministries and departments, working independently, have developed a list of target institutions and sectors of study, broadly linked to the country's programme strategy priorities and Vision 2030. Within these parameters, applications are open to any staff from those institutions or sectors and they are assessed on merit and eligibility against a set of published selection criteria, including an interview process. There are also requirements regarding the level of English language skills of applicants, as assessed through the International English Language Testing System (IELTS). These scholarships do not require any indication of formal support or endorsement of applications from applicants' supervisors or employing ministry.

The extent of targeting scholarships has varied considerably over time in terms of both the *number* of departments and the *specific ministries* and *sectors* targeted. When the programme first began it was tightly linked to two key ministries (the Ministry of Higher Education and Scientific Research, and the Ministry of Presidential Affairs), but from 2005 onwards, ministry of interior and other government agencies were considered eligible organisations, such as ADIA, ADNOC and Dubai Police, for example. Targets have shifted over the years in line with changes in the focus of the UAE scholarship programme and the objectives articulated in the Development Cooperation Strategies, as well as the expansion of

the UAE government structure. Generally there has only been partial alignment of priority sectors to the critical areas in the scholarship programme and Emiratisation Programme Strategy for the UAE, with the remainder awarded on individual merit alone, although this alignment is increasing substantially in 2009. As a general rule, scholarships are awarded on the condition that scholars return to their employing ministry or government agency for at least two years on graduation.

Throughout the survey and the interviews, alumni expressed many thoughts about the scholarship programme and had several suggestions for its improvement. Many interviewees took this study as an opportunity to express gratitude to their ministries, departments and the UAE government for sponsoring them to study in the universities abroad and acknowledged that they would never have been able to do so without their support. In addition to suggesting increased numbers of scholarships, some also suggested providing support for undergraduate, technical and PhD qualifications as well as master's level degrees. However, the data do not suggest that this change is necessarily warranted. The scholarship programme already supports PhD study. With reference to undergraduate or technical study, the need for a degree of personal maturity to cope with living independently in a foreign country away from family, friends and community, and dealing with new learning systems and a foreign language – as reflected in the stories told during this evaluation about experiences in foreign universities – suggest that the focus on master's level study should be retained.

Only a few do not feel that they are making a contribution to the UAE's development as a result of their studies. However, a minority could provide concrete examples of their contribution. The most common ways alumni see themselves contributing are through using their skills at work (both government and semi-government). Meanwhile, many saw that scholarships were a critical contribution to the UAE's overall stock of human resources, whether deployed in the public, private or civil sectors.

The second significant message that emerged from the invitation to comment and provide suggestions was a plea for much more support from their department on their return

to the UAE. This appeal corresponds to one of the most striking themes that emerged, about the many and varied challenges alumni face on their return to work. In comparison to scholarships support in some other countries in the region, this is one area where the UAE government is notably disengaged. The irony is that, while one objective of the scholarship programme is to address the human resource needs of UAE institutions, those institutions are not involved in the planning for scholarship awards, nor are they supported in making the best use of returning graduates. One interviewee was very clear on this point:

> The scholarship section should follow up new graduates in getting appropriate job arrangement and tell or explain to people in the ministries that these graduates have no intention to take their jobs, but want to help improve work productivity and stimulate other possible development. (Interview with male member of 2008 cohort)

Suggestion 1 – Support for reintegration

The most obvious gap in the programme is the absence of planning and support for the reintegration of scholars into their workplace on graduation. The independent, merit-based selection process was deliberately initiated to ensure a transparent selection, and the evaluation does not indicate that this approach should be changed. However, it does suggest that the lack of any ministry involvement in the scholarship programme is undermining the potential impact.

Therefore, it is recommended that the scholarship section in each department and ministry develop, and resource, additional activities throughout the scholarships' cycle to better support the integration of scholars in their workplaces. Any initiatives should consider important differences in the needs of men and women on their return to work in light of the evaluation findings about women's experiences with securing support from supervisors and colleagues and utilising their new skills and knowledge.

These initiatives can be introduced while retaining the independent selection process; could equally apply to ministry and open category scholars; and could include:

- Once a scholarship award is made, the scholarship section should involve the scholar's supervisor/senior manager in the pre-departure programme. The exact nature of this involvement requires further consideration, but it could include anything from a simple tailored briefing, to an involvement in the scholar's choice of university and study programme (to maximise alignment between individual interest and workplace needs, and to increase the relevance of the scholarship programme overall), to the development of a formal (written) Return-to-Work Plan. The Plan should cover at least one and possibly two years of actions, including support by the ministry or department concerned in follow-up to the completion of a scholarship award.

- During a scholar's studies abroad, the scholarship section should maintain regular (e.g. six-monthly) contact with the workplace supervisor or senior manager so as to stay up-to-date with developments in the institution that could affect a returning scholar's reintegration. It would also ensure that supervisors and senior managers have regular opportunities to ask questions and seek information about the scholarship programme, with reference to individual scholars and the programme overall. This will contribute to enhanced engagement with the sectors and institutions where each ministry and department's scholarship section is targeting its support.

- The scholarship office should also maintain periodic contact with scholars while they are in their universities abroad, and facilitate or encourage contact between the scholar and their workplace.

- Six months before expected study completion departments and awardees should initiate more detailed contact with the workplace and commence three-way planning for the scholar's return (i.e. between scholarship office, the workplace and the scholar). This could include the development of the Return-to-Work Plan, or the updating of the Plan if it was developed during the pre-departure programme. It

would also include encouraging a workplace to ensure that a returning graduate will have a work station and an appropriate work allocation.

- On return from abroad, the scholarship office management should meet with both the alumnus and their employer, either together or separately, to welcome the returning graduate and to support both parties in the reintegration process.

- In order to achieve this, the ministry or department concerned also needs to continue its corporate efforts to resolve difficulties arising from tertiary institutions in foreign country sometimes failing to notify the scholarship office of the impending completion, and return to the UAE, of scholars.

- Finally, this new programme of support could include a modest allocation of grant funding. This would provide small-scale funding, awarded on assessment of a formal proposal, to enable alumni and their employer to initiate innovations in the workplace arising from the scholar's new skills and experience. Such grant funding may also have an incentive effect and encourage workplaces to take a more constructive approach to fully utilising their graduates on return to the UAE.

The exact nature and extent of these activities will require a small design exercise to explore feasibility and the extent of support in the government of the UAE, and to detail the precise objectives, processes and responsibilities.

Suggestion 2 – Links within the Development Cooperation Programme

The rationale of linking scholarships to the areas where the UAE government is providing other support – its priorities and activities in the Development Cooperation Strategy – is sound. However it raises some practical challenges for the programme, one being that from selection for scholarship to return from foreign study with a master's degree can take at least four years.

There remains considerable weakness in the UAE's approach to human resources reform in the public sector. In the absence of this reform it will continue to be difficult to target scholarship awards directly to support institutional development, and the impact of

scholarships on institutional effectiveness will continue to be difficult to ascertain. However, the position of scholarship alumni in the public sector should support a strong link between the programme and the government of the UAE, by contributing to more effective networking with key institutions and through increased technical and communication skills that are relevant to the scholarship programme.

The evaluation did not provide evidence of a close link between scholarship offices' other activities and the scholarships programme. This reinforces the critical necessity of relevant scholarship management officers taking a long-term perspective and establishing lasting engagement in support of scholarships (particularly as they often 'outlive' other aid activities such as projects or institutional support programmes) in order to achieve the greatest effectiveness. This is an issue both for the *allocation* of scholarship support – the strategic use of scholarships – and for the *utilisation* of scholarship graduates on their return after completion of their studies abroad.

Therefore, linked to *Suggestion 1*, it is recommended that each ministry's/department's scholarship office develop a closer integration with other scholarship offices in the UAE.

Suggestion 3 – Women's participation in scholarships

Because the data show that the participation of women is affected by the extent of English language training support available to them, it is recommended that management commit to maintaining at least the current provision of training for women in the public sector.

It is also recommended that management monitor the level of women's participation in scholarships closely and, by providing data to concerned departments, ensure that support is made available to provide equal opportunities for their inclusion in accessing equal scholarship opportunities.

Suggestion 4 – Links with foreign universities

Scholarship management offices in the UAE should engage with the universities to explore the data from the annual on-award student surveys over time, examining data as far back as possible. In particular, this inquiry should examine:

- Whether there are specific difficulties UAE scholars face in engaging with their academic staff, and whether there are opportunities for management and the tertiary institutions to provide different, or additional, support for scholars to build connections with their teachers.

- Whether there are specific issues constraining UAE students from more often building relationships with foreigners while on-award, and whether there are any actions scholarship management can take to support greater links between Nationals and students while studying abroad.

Suggestion 5 – Course duration

In light of the feedback from some scholars who struggled with completing a one-year master's programme, management should encourage all scholars to undertake two-year programmes unless there are exceptional circumstances.

Suggestion 6 – Scholarship monitoring surveys

Conducting the survey with a written instrument created some difficulties, with invalid data, inconsistencies in responses to unclear questions, and the need for some intensive follow-up to secure a high response rate. Learning from this experience, it is necessary to administer regular M&E surveys (which target a single cohort of students at a time and comprise much smaller sample sizes) by telephone. In addition, it is recommended that management ensure its regular M&E surveys of alumni allow them opportunities to discuss in detail their experiences on return to work.

Suggestion 7 – Future evaluation work

Clearly it is difficult to see impact from individual scholarships in the short-term. The evaluation indicates that it emerges over a scholar's lifetime. The regular monitoring survey plans for Scholarships, which cover the period up to two years after an alumnus returns, are critical. In addition, regular studies and periodic evaluations are essential to continue to build each ministry's and department's understanding of the programme. The complexity of the context in

which scholarships occur, especially in the public sector, suggests that this regular evaluative inquiry needs to be creative and contextually-appropriate. Therefore it is recommended that:

- Scholarship management need to develop and resource an explicit forward-programme of evaluative inquiry regarding scholarships – for example, over the life of the strategy and Vision 2030.

- Management explore a range of approaches to this evaluative inquiry in addition to survey questionnaires, such as in-depth institutional analysis and detailed individual case studies, in order to deepen the understanding of how scholars experience their studies and their work life post-scholarships, and to inform choices about future developments in the scholarships programme.

- In order to ensure maximum understanding of the complexities in the public sector context, the scholarship management office should ensure increasing participation by UAE evaluators in the conduct of future evaluative inquiries.

- Future evaluations must also compare the effectiveness of ministry-linked and open scholarships in order to inform future decisions about the mix of targeted and open awards within UAE Foreign Study Scholarships.

Overall and applying Kirkpatrick's main criteria of learning effectiveness (Kirkpatrick and Kirkpatrick, 1994, 2007) and other indicators, it was confirmed that participants alumni have gained a wide range of skills and experience whilst on-award and that these skills can be readily implemented on return home. Further, the results show that our alumni work and have influence in areas of high priority for development and leadership, including education, health and governance. The answers show that over 90% of respondents are working in the UAE and they found that the programme contributes to international collaboration and partnerships. These findings are just some of the very positive set of outcomes from the preliminary analysis of the evaluation survey.

Furthermore, it was suggested (Pruitt, 1978; Zimmerman 1995) overseas students can benefit from interaction with the host nations socially, psychologically and academically. For example, a greater amount of interaction with host nationals has been associated with fewer social and academic problems, improved communication competency, and better general adaptation to life overseas (Zimmerman 1995). Additionally, contact and friendships with local students is associated with emotional benefits and satisfaction (Rohrlich and Martin 1991) better psychological adjustment (Searle and Ward, 1990). Finally, the focus of the present research has the merit of leading not only to interesting research findings, but also to implications for the pre- and post-departure preparation of both students and policy makers.

Chapter 7

Concluding Remarks and Policy Implications

7.1 Conclusion

The UAE Foreign Scholarship Programme is one of the most sought-after public scholarships for students to pursue tertiary education abroad. From 2001–2012 applicants vied for more than 6,000 scholarships as the Ministry of Presidential Affairs databank shows a total of 6,260 awards for study abroad. Due to the intensity of competition and the prestigious prize, the annual selection process has captured the public's attention and there have been constant debates about its effectiveness, specifically on personal, institutional and national levels. Furthermore, from the country's viewpoint, these public scholarships indeed have a critical role to play in the development of human capital in a developing country such as the UAE. However, little attention has been devoted to the effectiveness of these scholarships in terms of their influence on personal, institutional and national level development.

In the context of Human Capital Theory, the main objective of this study is to evaluate the contribution, potential impact and constraints related to government scholarship schemes for human resources development in the UAE. An attempt, therefore, has been made to study these strategies with a due focus on scholarship opportunities provided to employees and local graduates. Hence, to measure investment made and potential outcomes and effectiveness of such opportunities provided to the UAE local Nationals.

Impact evaluation is important for a number of reasons:

- Primarily, it is needed in order to get a sense of the long-term impact of awards and whether the programme is meeting its objectives. This is of particular relevance for programmes offering scholarships and fellowships, as intended outcomes –

particularly those which are not easily measurable such as socio-economic and political impact – are unlikely to be immediately apparent.

- Impact evaluation also enables programme managers and funders to examine policy and processes and, where appropriate, adapt and improve a programme in line with objectives and their achievement and in response to the changing external environment. It can also be a useful tool in demonstrating to a government's funding agency that the programme is one in which it is worth investing time and money.

The nature of the scholarship programme, however, signifies that meaningful evaluation and impact analysis can be challenging. Some of the difficulties can be summarised as follows:

- Sufficient resources are needed in order to trace and/or maintain contact with former award holders, as well as to undertake data collection and analysis.
- Evaluation work can be time-consuming for both scholarship management and alumni. Care needs to be taken to ensure the process does not discourage the latter from being willing and able to participate. It also requires long-term commitment and planning, particularly with regard to the recording of baseline data.
- Assessing the specific contribution of an award to any outcome or activity can be difficult, particularly when some time has elapsed since completion.
- Outcomes are generally tied up in individuals, meaning that issues such as the availability of employment and resources at home can affect the potential for positive impact.
- Identifying indicators to quantify impact can be difficult, particularly in certain sectors where benefits may not be easily measurable. It can be easy to identify 'headline stories', but difficult to ensure that the programme as a whole is working and those long-term objectives are being met.

- Measuring what might have happened if the award had not been offered is also difficult.

Despite these challenges, the effectiveness of the UAE's scholarship programme urgently needs to be understood as no such evaluation is being conducted to influence guidelines for policy-making in the country. Whilst acknowledging that this kind of impact reporting is to some extent subjective and perception of its importance very personal, enough responses have been received to indicate that many respondents are not only working in fields of key significance, but are also in higher level positions of influence. Although a wider impact than this would obviously be of key importance, we should not lose sight of the fact that scholarships are aimed at benefiting individual award holders and their professional development, as well as their employers and home institutions. Therefore, the impact of scholarships on both individual and institutional capacity development, and on the encouragement of international partnerships was examined.

The role of this formative evaluation is to help policy-makers in different scholarship management offices and participating institutions to develop an understanding of 'what works best and why' in relation to the design and delivery of the scholarship programme. The evaluation also offers cumulative insights into the impact and influence that the programme has on awardees' decision-making, participation and retention amongst different ministries and departments in the UAE. The evaluation is being conducted in a series of interlocking phases designed to capture longitudinal data from a range of stakeholders over the programme's ten years of operation from 2001–12.

This study draws upon evidence captured through a review of existing documentation, investigative interviews with members of the scholarship programme, and surveys and interviews with participating institutions. It aims to describe the ways in which institutions have set up the programme, considering whether institutions have been able to usefully incorporate the scholarships into broader strategies for widening participation; providing an indication of the anticipated and the perceived impacts of the programme, including possible benefits and

bearing on student choice; and considering the appropriateness of aligning the scholarship programme with that of Emiratisation and institutional effectiveness. The evaluation survey was particularly seeking answers to the following questions:

- Did the award benefit you in terms of your individual knowledge and skills?
- Did the award, and those skills, benefit you in terms of your employment and career?
- Have you been able to pass those skills and that knowledge on?
- Has your award increased your ability to have an impact on your place of work?
- Have you maintained links with contacts in the United Kingdom?
- Have you been able to have an impact on wider society?

This study provides a relatively brief overview of the findings of a survey in which we asked alumni about their awards, employment and the extent to which they have been involved with projects, policymaking and wider socio-economic impacts in a number of key areas. The study involves the collection of qualitative and quantitative data through a survey, the initial results of which are the focus of this study. In particular, we sought information regarding:

- The skills and experience gained on award.
- The ability and willingness to implement those skills and experience.
- The level, sector and location of employment.
- Evidence of international links and collaboration.
- Involvement and influence within key leadership or development priority areas.
- The nature of scholarships and fellowships (the number of individuals who benefit and the range of schemes and sectors of study covered suggest that meaningful evaluation and impact analysis can be challenging).

The evaluation survey was sent to 250 alumni and 207 responses were received, giving us a response rate of nearly 83%. When analysed by gender, country of study, area of study and year of award, the respondents were a small representative sample of the total alumni group of more than 6,000 from 2001–2012. This sample was chosen as almost all the institutions awarding scholarship did not maintain accurate data of their awardees. The survey responses allow us to analyse respondents' perceptions of the benefits of their awards and the extent to which they have had a wider impact. We found:

- Almost 95% of respondents have returned home and are currently based in the UAE.
- Awards have had a direct impact on individual Scholars and Fellows.
- Around 99% of participants reported that they had gained knowledge in their field of expertise and 96% that they had increased their analytical and technical skills. These benefits were extended to employing organisations.
- Also 95% participants reported that they used the specific skills and knowledge gained on-award in their work, whilst 87% had at least to some extent been able to introduce new practices or innovations in their workplaces.
- A high number of our respondents, over 75%, work in the public sector and large numbers of alumni reported that they had influenced government thinking and policy and/or had wider socio-economic impact through their work.
- One of our objectives is to encourage and support partnerships and links with the foreigners and foreign universities and it was found that 70% of respondents maintained links with universities and 52% with work contacts. 72% reported maintaining social links.

The findings are positive, and enable us to identify a number of key areas for further investigation and evaluation. This survey and its results demonstrate very clearly that the programme is, to put it simply, a good one. It was found that the scholarships offered by

different ministries and departments enable the transfer of skills and knowledge not only to individual award holders, but also beyond, to their colleagues, employers and institution as a whole. In particular, through the survey, It was found that scholarship awards are beneficial for individuals, institutions and wider society, for example:

- At an individual level, respondents report that they have gained both skills and experience while on award and that these skills are both used and disseminated upon return home. We found that the UAE Scholarship Programme has had a positive impact on professional development and employment prospects with higher rates of return to foreign education.
- At institution level, the results show that alumni feel that they are able to use the skills obtained on award to make changes and influence their workplaces. It is also found that the programme as a whole does seem to contribute to international collaboration and partnerships, particularly in higher education. There is no concern of brain drain as almost 90% of our respondents are working in the UAE.
- At national level, the respondents report working and having influence in areas of high priority for development and leadership, including skill transfer and governance.

Areas of interest for further investigation have been identified, not least in the sectors of health, higher education capacity building, and leadership and policy impact. It was found that awards do not need to be in specific fields for alumni to have an impact in that sector. However, the subject area/background may influence the extent of that impact. We also found that scholarship awards have a clear impact on development, with high levels of involvement reported by respondents from different ministries and department.

The study highlights that, although we would expect much of the programme impact to be long-term, many recent alumni are also reporting almost immediate results on completion of their awards and demonstrated that newer schemes, such as scholarships at department

level (other than ministries) are already contributing to positive outcomes. On the basis of the present findings, it can be said that the scholarship programme is going some considerable way to meeting its objectives in terms of having an impact at individual, institutional and, to some extent, at national level.

Two questions emerged from discussing the current evaluation framework for UAE overseas scholarships:

- What are the appropriate criteria to evaluate applicants for a career-specific scholarship?
- Who should be evaluating these applicants?

This initiative, in part, has shifted the duty to evaluate the applicants from the individual scholarship office in each ministry and each department to one consolidated scholarship office administered by the Ministry of Presidential Affairs. The joint office can concentrate on deciding what areas are required by the government and private sectors in which to offer scholarship awards, and it can then proceed to establish scholarships in various subjects across the major universities around the world for UAE students. These scholarships should then be communicated to the public. The applicants will apply directly to these top universities and overseas scholarship will be awarded upon their successful admission to the specific course in these universities. On the one hand, the joint office benefits through a more precise, yet independent, evaluative structure to award the scholarship, and on the other hand concentrates on administering and managing the scholarship as well as the subsequent career development of the scholars, in a more efficient manner.

The implementation suggested in the previous section – where the scholarship is established in a particular university and for a selected course – besides being more objective in terms of the evaluation, is also arguably more efficient. In this regard, universities already have an evaluation system in place for students seeking admission. The office of scholarship in the UAE, on the other hand, can specialise in recruitment and management of human resources for different ministries and departments, according to the needs and programme of Emiratisation.

As a whole, the overseas scholarship, as with other national scholarships, has an important role to play in the development of human capital in the UAE. While the public has been concerned about the issue of selection criteria, fairness and transparency, this study has raised three points that have remained unclear or missing from the discussion about these public scholarships:

- Their unclear and overlapping purpose.

- An inflated and subjective evaluation criterion.

- The absence of monitoring and evaluation of outcomes by an independent consolidated single scholarship office.

Without a clear understanding of the purpose of these scholarships, it is difficult to examine the evaluation framework for selection. There are many weaknesses in the existing evaluation framework, and a clear distinction is required between a career-specific and merit-based scholarship, as well as an institution's own needs. All of these elements may enhance the efficiency of scholarship management, with implications for meeting Vision 2030. In recognising these points and being prepared to invest more time and thought about the issues they raise, a contribution could be made towards developing a fairer and more efficient public scholarship system in the UAE. This is important in the context that most of the positions and responsibilities in the organisations can eventually be managed by efficient local employees if the Emiratisation process is monitored accurately.

To make the process effective, some factors such as education and training are found to be crucial from the findings. The local population needs to be educated through an updated university curriculum that matches industry requirements and assisted in finding employment with companies. Moreover, the scholarship management can form a consultative committee of educators' and employers' representatives, from government and private sectors, to determine current and future skills requirements, based on reliable statistics. Further, the local graduates need to be educated and trained in advanced countries for skill enhancement and the subsequent holding of key positions. Once the local graduates have obtained prerequisite

qualifications for a position, the private sector will also accept them into the mainstream labour market. The other issues like salary package and career development will follow in due course and allow them to be part of a successful organisational culture and build trust.

A single consolidated office in the UAE is needed to establish what is called a 'Career and Succession Plan Review Board', whose task would be to focus on the career development of UAE Nationals. Human resource managers and others charged with managing careers within organisations (who prefer UAE Nationals in management due to a shared perspective and understanding of culture) are also needed to develop career systems favourable to UAE National employees.

7.2 Limitations and direction for future research

Limitations of this study and directions for future research need to be acknowledged. The limitations relate to its methodology and scope. In terms of methodology, the questionnaire and interview responses were from a less representative sample than would be preferred, as the required data have not yet been organised and therefore it was difficult to obtain relevant information about the number of scholarships awarded in each year. Inclusion of more respondents would have made the study more comprehensive and representative. The views of the higher authorities and policymakers in government related to the Emiratisation programme and Vision 2030 are not covered in greater depth in this study. In particular its main section on that covered 'Human Resource and Capital Development'.

The conceptual framework of the study was based on three constructs: personal, organisational and national levels. All these constructs are very much internal to the organisations. Inclusion of external factors (e.g., cost of scholarships, overview of labour market in terms of demand and supply, and linking education and labour market requirements) might influence the interactions of variables and produce some changes in the results.

In terms of scope, it is clear that quantitative data analysis alone is not sufficient to conclude and generalise findings of the research. Any future study requires investigations in this area, in different states within the UAE, in order to achieve more wide-ranging conclusions. A similar comparative study could be extended to other countries facing the 'expatriate versus local labour' issues similar to the UAE. However, the study in its present form with its mixed design approach will be of much benefit to the managers of UAE Nationals, academic researchers studying Emiratisation/localisation issues, and policymakers; they may find some of the issues discussed here of use in formulating future decision-making.

Overall and in the line with UAE Vision 2021, education remains a top government priority; and developing human capital is considered to be a key enabler in the country's efforts to establish a diversified knowledge-based economy. This particular focus on education is underpinned by the allocation of a 21 per cent budget, or DH 9.8 billion (i.e., $2, 64 billion) in the 2014 federal budget. Indeed, Dh 6 billion of this was devoted to improvement of general education; and over one billion dollars (Dh3.8 billion) were allocated for academic excellence programmes in local universities.

Whilst UAE general strategy is determined by the Ministry of Education, Ministry of Higher Education and Scientific Research (MOHESR) and local Education Councils. The latter are set up in individual emirates to assist in implementing government policy. Abu Dhabi Education Council (ADEC) for example was set up to enhance education and develop educational reform in Abu Dhabi. Meanwhile, Knowledge and Human Development Authority (KHDA) is the primary driver of educational reform in Dubai; also Sharjah Education Council was established to enhance the education sector in that particular emirate.

Despite the progress made so far in the education sector, the debate on national workforce development and building a knowledge based economy shall continue to be a focus of Government projects and for sometime to come. Indeed, establishing knowledge based economy and becoming a regional and international hub will not happen without ample investment in the training, skills and workforce development. And Education in particular is the backbone of what the UAE is trying to achieve on all fronts. Hence, educational opportunities

need to be diverse to meet market needs and should address the current gap in skills, leadership and talent development.

As indicated above the workforce planning and the need to bridge the education-workforce gap shall remain in the forefront of the UAE's agenda and perhaps for several years to come. As a result the MOHESR strategic plan for 2014 highlighted several priorities on workforce and talent development and included the followings recognised gap:

i) Raising the effectiveness of higher education and fostering opportunities for citizens to attend the best universities abroad to help meeting the needs of the labour market.

ii) Achieve the ministry's vision of developing a knowledge-based society and to improve higher education and scientific research.

It has been suggested in the 2014 strategic plan that both of the above priorities will be organised -as it was suggested in this research project- through effective management of scholarships and will require tighter organisation of higher education institutions to ensure quality.

iii) Other identified values in 2014 MOHESR plan included equality, respect, fairness, transparency and credibility which will come through the delivery of services. Though the ministry will also be applying internal and external regulations, teamwork and collaboration to develop and improve its own work systems.

Alongside the 2014 MOHESR strategic plan, the UAE government plans to boost spending on research and development through 2021 to increase "knowledge based economy" hence increase employment from 22 per cent of the workforce to 40 per cent, and indeed longer-term plans to diversify the economy and increase the participation of Emiratis in the labour force by more than two thirds to 460,000 by 2021. Indeed, any comprehensive plan to succeed should also include the technical, skills oriented training and both higher and further education that meet the basic demands of market economy.

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Appendices A-M

Appendix A

Evaluation design, copy of blank questionnaire

LONDON
METROPOLITAN
UNIVERSITY

Research Title: Strategies and Public Policy Models of Effective Human Capital, Talents and Workforce Development: An Investigation into the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE.

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

UAE Scholarships Study:

About this Study

Scholarships are an important part of the UAE Development Strategy Programme. The author of this study is interested in studying the impact that the UAE Scholarships have on you professionally, on your workplace and on the development of the country. In order to gain feedback and develop a picture of the impact of the UAE Scholarship Programme, the author has developed a Monitoring and Evaluation plan and hence this questionnaire plays a central role in the main research project entitled '*An Investigation into the Effectiveness of the*

Scholarship Programmes as Public Policy Strategies and a Model of Workforce Development in the United Arab Emirates (UAE)' .

Personal data from this study will remain highly confidential. The objective of this questionnaire is to pool all information and then to conduct numerical analysis based on the responses. A follow-up qualitative survey may be conducted where more specific individual opinions and impressions will be sought.

For this study, please indicate below whether you wish to share your responses.

1

1: Do you consent to share information from this tracer study for anonymous use?

YES   NO

Do you consent to be cited as the source of this information?

YES   NO

2: Biographical information

Family name: _____

Given Name: _____

Gender: Male   Female

Date of birth (DD/MM/YYYY):

Country where you currently reside:

Mailing address:

Email address:

Alternative email address:

3: Details of Scholarship

Which scheme was your UAE Scholarship? (*tick one*)

UAE-Public

Government Sector   UAE-Open

Non-Government Sector

Date you were selected in UAE Scholarship Programme: (*approximately if known*)

(Month/year) _____

Date you departed for studies in the foreign country
(Month, year) _____

Date you began your study in University/College in foreign country
(Month, year) _____

Date you first returned to the UAE after completing your Scholarship
(Month, year) _____

What level of qualification did you achieve? (*tick one*)

Bachelor's degree Post graduate diploma Master's degree Doctoral degree Other _ _ _ _

Did you obtain the qualification you originally enrolled for?

Yes   No

If NO, can you provide more details about why not?

_____
_____
_____
_____

Name of educational institution?

Name of qualification (e.g. Masters of Business)

Area of study (e.g. Finance and Banking)

Thesis title (if applicable) and its word length

_____

4: Details of any scholarships you have received after your UAE Scholarship (if any)

Sr. No.	Name of qualification and area of study	Educational institution	Country	Length	Year Completed	Funding Source
1						
2						
3						

5: Your UAE Scholarship and you

Now that you have completed your study abroad, how much do you believe that your foreign qualification has affected the following personal aspects? (*tick one*)

My motivation to work

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Confidence in my abilities

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Ambitions for my career

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Interest in my work

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Satisfaction with my work

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Now that you have completed your study abroad, how much do you believe that your foreign qualification has affected the following work skills? (*tick one*)

Technical skills

| No change | Improved a little | Somewhat improved | Very much improved |

Analytical and critical skills

| No change | Improved a little | Somewhat improved | Very much improved |

Management skills

| No change | Improved a little | Somewhat improved | Very much improved |

Communication skills

| No change | Improved a little | Somewhat improved | Very much improved |

Cross-cultural understanding

| No change | Improved a little | Somewhat improved | Very much improved |

Supportiveness for diversity in the workplace

| No change | Improved a little | Somewhat improved | Very much improved |

Planning skills

| No change | Improved a little | Somewhat improved | Very much improved |

6: For above questions, if you indicated that your work skills were 'Somewhat improved' or 'Very much improved', can you elaborate as to the specific improvements?

_____
_____
_____
_____
_____
_____
_____
_____

Do you believe your Scholarship has empowered you personally?

Yes   No

If YES, can you explain how (it empowered you)?

_____
_____
_____
_____
_____
_____
_____
_____

7: When you were abroad on study scholarship, which of the following best describes your main social group? (*tick as many as appropriate*)

The students from UAE   ☐

Individuals from UAE who live in country of your Study Scholarship   ☐

The international students   ☐

Native Nationals of the country   ☐

When you were abroad on study scholarship, did you develop links with any of the following? (*tick as many as appropriate*)

Friends with other UAE students   ☐

Friends in the local UAE community   ☐

Friends of other nationalities   ☐

Friends of local nationals   ☐

Friends in the local community (e.g. neighbours, participation in sports clubs, ethnic associations, etc.)   ☐

Staff in the institution where you studied (e.g. lecturers, university administrative staff, etc.)   ☐

8: Please comment on whether, or how, the above links have benefited you personally or professionally (i.e. in your career).

_____
_____
_____
_____
_____
_____

9: What was the most positive experience you had while studying abroad?

_____
_____
_____
_____
_____
_____

10: What was a negative experience you had while studying abroad?

_____
_____
_____
_____
_____
_____

11: Since completion of your study in country of your scholarship, how many times have you travelled back to that country?

Since returning to the UAE, have you had or do you currently have any links with any formal Scholarship country's entities? (e.g. the Embassy, a UK, USA or UAE Government Project, etc.)

Yes   No

If YES, can you provide more details?

_____
_____
_____
_____
_____

12: Are you a currently registered member of the Alumni Association of UAE (if there are any alumni of foreign scholarship holders)?

Yes   No

13: Your Foreign Scholarship and your workplace

Now that you have completed your study abroad, describe the effects that your foreign qualification has had for you in your workplace.

What was your category of employment before leaving to study in Australia? (*tick one*)

Government

Civil society/NGO

Private sector

Self-employed

Unemployed

Other _ _ _ _ _ _ _

14: During your study abroad, did you retain regular contact with your immediate supervisor/employer?

Yes   No

15: If NO, at what point did you contact your immediate supervisor/employer? (*tick one*)

While in country of study Just before returning to UAE After returning to UAE

16: Did you return to your former workplace?

Yes   No

17: If YES, that position was (*tick one*)

Lower position than before Same position as before Higher position than before

18: How soon after you returned to the UAE did you officially resume your duties? (*tick one*)

Immediately	less than 1 month	less than 3 months	less than 6 months	more than 6 months

19: How did you feel about your reintegration into the workplace when you returned to the UAE? (*tick one*)

Very negative	negative	Neutral	Somewhat positive	Very positive

20: Can you provide more details to explain why you felt this way?

_____
_____
_____
_____
_____
_____

21: Do you still work for the same employer or Ministry that you did before leaving to study abroad?

Yes	No

22: If NO, my current category of employment is (*tick one*)

Government
Civil society/NGO
Private sector
Self-employed
Unemployed
Other _ _ _ _ _ _ _

23: How many times have you been promoted since returning to the UAE? (*tick one*)

None	1	2	3	4 or more

24: If you have been promoted, do you believe that your study abroad played a role in making these promotions possible?

Yes   No

25: If YES, can you provide more details?

_____
_____
_____
_____
_____
_____

26: How many different positions do you currently have either in your Ministry or with another employer? (e.g. supplementary income generation)

Number of positions:

Complete the following table by listing your primary job first:

Position title	Immediate supervisor	Section/department	Ministry/agency	Year Started

27: The content, knowledge and skills I gained abroad are well-matched to my current job (*tick one*)

Not at all   A little   Somewhat   Very much

28: I have utilised the knowledge and skills I gained abroad in my current job (*tick one*)

Not at all   A little   Somewhat   Very much

29: My current supervisor is supportive of me using the knowledge and skills I gained abroad (*tick one*)

Very unsupportive	Unsupportive	Neither	Somewhat supportive	Highly supportive

Appendix B

Sample of completed questionnaire by participant

Research Title: Strategies and Public Policy Models of Effective Human Capital, Talents and Workforce Development: An Investigation into the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE.

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

UAE Scholarships Study:

About this study

 Scholarships are an important part of the UAE Development Strategy Programme. The author of this study is interested in studying the impact that the UAE Scholarships have on you professionally, on your workplace and on the development of the country. In order to gain feedback and develop a picture of the impact of the UAE Scholarship Programme, the author has developed a Monitoring and Evaluation plan and hence this questionnaire plays a central role in the main research project entitled '*An Investigation into the Effectiveness of the Scholarship Programmes as Public Policy Strategies and a Model of Workforce Development in the United Arab Emirates (UAE)*' .

Personal data from this study will remain highly confidential. The objective of this questionnaire

is to pool all information and then to conduct numerical analysis based on the responses. A follow-up qualitative survey may be conducted where more specific individual opinions and impressions will be sought.

For this study, please indicate below whether you wish to share your responses.

1: Do you consent to share information from this tracer study for anonymous use?

YES   NO

Do you consent to be cited as the source of this information?

 YES   NO

2: Biographical information

Family name: __Aldarmaki_____

Given Name: __Khaled_____

Gender: Male   Female

Date of birth (21/09/1982):

Country where you currently reside:

                        UAE

Mailing address:

Email address: K h . a l d a r m a k i @ g m a i l . c o m

Alternative email address: k h a l e d . a l d a r m a k i @ b r u n e l . a c . u k

3: Details of scholarship

Which scheme was your UAE Scholarship? (*tick one*)

UAE-Public

Government Sector

Non-Government Sector

Date you were selected in UAE Scholarship Programme: (*approximately if known*)

(Month, year) _____June/2005_____

Date you departed for studies in the foreign country
(Month, year) ____Feb/2007_____

Date you began your study in University/College in foreign country
(Month, year) _____Sept/2008_____

Date you first returned to the UAE after completing your Scholarship
(Month, year) ___Nov/2009_____

What level of qualification did you achieve? (*tick one*)

| Bachelor's degree | Post graduate diploma | Master's degree | Doctoral degree | Other _ _ _ _ |

Did you obtain the qualification you originally enrolled for?

| Yes | No |

If NO, can you provide more details about why not?
_____
_____
_____
_____

Name of educational institution?
Coventry University

Name of qualification (e.g. Masters of Business)

MSc

Area of study (e.g. Finance and Banking)
Disaster Management

Thesis title (if applicable) and its word length

How IEM Integrated Emergency Management can help to reduce traffic collision in the UAE

_____

4: Details of any scholarships you have received after your UAE Scholarship (if any)

Sr. No.	Name of qualification and area of study	Educational institution	Country	Length	Year Completed	Funding Source
1	Master	Coventry University	U.K.	1 year	2009	Abu Dhabi police GHQ
2	PhD	Brunel University	U.K.	3 – 4 years	Ongoing	Abu Dhabi police GHQ
3						

5: Your UAE Scholarship and you

Now that you have completed your study abroad, how much do you believe that your foreign qualification has affected the following personal aspects? (*tick one*)

My motivation to work

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Confidence in my abilities

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Ambitions for my career

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Interest in my work

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Satisfaction with my work

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Now that you have completed your study abroad, how much do you believe that your foreign qualification has affected the following work skills? (*tick one*)

Technical skills

| No change | Improved a little | Somewhat improved | Very much improved |

Analytical and critical skills

| No change | Improved a little | Somewhat improved | Very much improved |

Management skills

| No change | Improved a little | Somewhat improved | Very much improved |

Communication skills

| No change | Improved a little | Somewhat improved | Very much improved |

Cross-cultural understanding

| No change | Improved a little | Somewhat improved | Very much improved |

Supportiveness for diversity in the workplace

| No change | Improved a little | Somewhat improved | Very much improved |

Planning skills

| No change | Improved a little | Somewhat improved | Very much improved |

6: For above questions, if you indicated that your work skills were 'Somewhat improved' or 'Very much improved', can you elaborate as to the specific improvements?

I can say that over the years I been a broad there was a dramatic change upon my skills and personality. I had absorbed a numerous skills as follow: planning skills – cascading the objectives and prioritizing the tasks at hand

Technical skills – How to use SPSS

Communication skills - Note-taking, Variance-feedback, and presentation skills

Supportiveness of Diversity – Release disparity whether it is among nationalities or gender or abilities

_____
_____
_____
_____
_____

_____
_____
_____

Do you believe your Scholarship has empowered you personally?

Yes   No

If YES, can you explain how (it empowered you)?

The knowledge I have obtained over years as well as skills I got distinguished me among my peers and my subordinates._____
_____
_____
_____
_____
_____
_____
_____

7: When you were abroad on study scholarship, which of the following best describes your main social group? (*tick as many as appropriate*)

The students from UAE

Individuals from UAE who live in country of your Study Scholarship

The international students

Native Nationals of the country

When you were abroad on study scholarship, did you develop links with any of the following? (*tick as many as appropriate*)

Friends with other UAE students

Friends in the local UAE community

Friends of other nationalities

Friends of local nationals

Friends in the local community (e.g. neighbours, participation in sports clubs, ethnic associations, etc.)

Staff in the institution where you studied (e.g. lecturers, university administrative staff, etc.)

8: Please comment on whether, or how, the above links have benefited you personally or professionally (i.e. in your career).

Friends with other UAE-students that helps me to get a knowledge and experience about my city and the UK Public regulations and law in general

_____
_____
_____
_____
_____
_____

9: What was the most positive experience you had while studying abroad?

1. **Enhance my reading and writing skills.**_____ **2. Cross-cultural understanding.**_____
   _____
   _____
   _____
   _____
   _____
   _____

10: What was a negative experience you had while studying abroad?

Becoming extremely negative toward some of my friend's and family's practices.

_____
_____
_____
_____
_____
_____

11: Since completion of your study in country of your scholarship, how many times have you travelled back to that country? More than 4 times

Since returning to the UAE, have you had or do you currently have any links with any formal Scholarship country's entities? (e.g. the Embassy, a UK, USA or UAE Government Project, etc.)

Yes   No

If YES, can you provide more details?

_____
_____
_____
_____
_____

12: Are you a currently registered member of the Alumni Association of UAE? (if there are any alumni of foreign scholarship holders)

Yes   No

13: Your foreign Scholarship and your workplace

Now that you have completed your study abroad, describe the effects that your foreign qualification has had for you in your workplace.

What was your category of employment before leaving to study abroad? (*tick one*)

Government

Private sector

Self-employed

Unemployed

Other _ _ _ _ _ _ _

14: During your study abroad, did you retain regular contact with your immediate supervisor/employer?

Yes   No

15: If NO, at what point did you contact your immediate supervisor/employer? (*tick one*)

While in country of study   Just before returning to UAE   After returning to UAE

16: Did you return to your former workplace?

| Yes | No |

17: If YES, that position was (*tick one*)

| Lower position than before | Same position as before | Higher position than before |

18: How soon after you returned to the UAE did you officially resume your duties? (*tick one*)

| Immediately | less than 1 month | less than 3 months | less than 6 months |

| more than 6 months |

19: How did you feel about your reintegration into the workplace when you returned to the UAE? (*tick one*)

| Very negative | negative | Neutral | Somewhat positive | Very positive |

20: Can you provide more details to explain why you felt this way?

Because although I had 1 week tour in different department within my directorate, however, I haven't given any option to choose which of these department are appropriate to my knowledge and experience_____
_____
_____
_____
_____
_____
_____

21: Do you still work for the same employer or Ministry that you did before leaving to study abroad?

| Yes | No |

22: If NO, my current category of employment is (*tick one*)

| Government |

| Private sector |
| Self-employed |
| Unemployed |
| Other _ _ _ _ _ _ _ |

23: How many times have you been promoted since returning to the UAE? (*tick one*)

| None | | 1 | | 2 | | 3 | | 4 or more |

24: If you have been promoted, do you believe that your study abroad played a role in making these promotions possible?

| Yes | | No |

25: If YES, can you provide more details?

_____
_____
_____
_____
_____
_____

26: How many different positions do you currently have either in your Ministry or with another employer? (e.g. supplementary income generation)

Number of positions:

Complete the following table by listing your primary job first:

Position title	Immediate supervisor	Section/department	Ministry/agency	Year Started
Director		Security vetting	Ministry of Interior	2013

27: The content, knowledge and skills I gained abroad are well-matched to my current job (*tick one*)

| Not at all | A little | Somewhat | Very much |

28: I have utilised the knowledge and skills I gained abroad in my current job (*tick one*)

| Not at all | A little | Somewhat | Very much |

29: My current supervisor is supportive of me using the knowledge and skills I gained abroad (*tick one*)

| Very unsupportive | Unsupportive | Neither | Somewhat supportive | Highly supportive |

30: My current colleagues are supportive of me using the knowledge and skills I gained abroad (*tick one*)

| Very unsupportive | Unsupportive | Neither | Somewhat supportive | Highly supportive |

31: Since returning to the UAE, I have made changes in my management style *partly or entirely as a result of my study abroad* (*tick one*)

| No changes | A few changes | Some changes | Many changes |

Can you give examples?

Statistical skills which I have learnt in UK, I do still use them at my work. Moreover, my supervisor supporting me by giving me some autonomy on how to accomplish my tasks, and my colleagues whether higher or lower than my rank are supporting me by cooperating fully with my initiatives.

_____
_____
_____
_____
_____

32: Since returning to the UAE, I have made changes in operations in my workplace *partly or entirely as a result of my study abroad* (*tick one*)

No changes	A few changes	Some changes	Many changes

Can you give examples?

Strategic Objectives
Emergency Plan in place
Operational procedure manual

_____
_____
_____
_____
_____

33: I have transferred some of the skills and knowledge I gained abroad

Colleagues within my organisation   Yes   No

People outside my organisation   Yes   No

What contributions to your current workplace can you directly attribute to your study in a foreign country? Can you provide more details?

Initiating strategic objectives and emergency plan

_____
_____
_____
_____
_____

34: Do you believe that you have made a contribution to the development of the UAE?

Yes   No

35: If YES, can you directly or partially attribute this contribution to your study abroad?

Yes   No

Can you provide more details or describe an example?

My Department are the backbone of security services and to have strategic and emergency plan in place will directly affect the overall welfare of the community_____
_____
_____
_____
_____
_____

Your foreign Scholarship and your future

36: How much do you believe that your UAE qualification will continue to affect your future in the following ways? (*tick one*)

Future chance of obtaining promotions with my current employer

Decreased a lot	Decreased somewhat	No change	Increased somewhat	Increased a lot

37: Future chance of employment with other organisations

Decreased a lot	Decreased somewhat	No change	Increased somewhat	Increased a lot

38: Future chance of achieving my career goals

Decreased a lot	Decreased somewhat	No change	Increased somewhat	Increased a lot

39: Future chance of opportunities for employment overseas

Decreased a lot	Decreased somewhat	No change	Increased somewhat	Increased a lot

40: Future chance of increased salary or personal income

Decreased a lot	Decreased somewhat	No change	Increased somewhat	Increased a lot

Describe any other ways you think that your qualification has already changed or will change your future.

Perhaps the knowledge I got and the increased level of English language skills can affect my future on some aspects. Guiding my children maybe.

_____
_____
_____
_____
_____
_____

41: Your suggestions about the UAE Scholarship Programme

What do you consider the most significant change you have experienced as a result of winning and experiencing a UAE Scholarship?

As mentioned above increased level of English and reading and writing skills and the knowledge and cross-cultural experience, and project plan.

_____
_____
_____
_____
_____

42: Looking back on your experience, do you have any suggestions about how to improve the management of the UAE Scholarships?

Your suggestions

I have met number of UAE students who are currently doing PhD in UK. They all struggle to meet the deadline of their thesis because of couple of reasons as follows:

1. A friend works in ADNOC the biggest oil company in the UAE territory and he told me that the scholarship only include the tuition fees, which means that tickets and accommodation paid by his own bucket. Moreover, the holidays he usually took is deducted from his annual leave.
2. Another case from an employee in Etihad airways similar to the ADNOC employee case but to complicate the matter further he only allowed to leave for (1 day)

3. Furthermore another case from a girl who has scholarship from Ministry of Higher Education, although she is fully-released from duty, however, she stated that her scholarship only include the tuition fees without any support for the tickets and the accommodation.

4. The final example is myself, I have scholarship from Abu-Dhabi police GHQ include the tuition fees and the support for the ticket and the accommodation, but I'm not released from duty which means every time I have to leave the country will take a long bureaucratic process with letter from my supervisor goes to the attaché office in London forwarded to my department and needs an approval from my supervisor.

My Suggestion is that for any scholarship to be successful all life disturbances must be accounted for long before award anybody a scholarship._____
_____
_____
_____
_____
_____

Thank you for taking the time to complete this tracer study. Your feedback is greatly valued.

The researcher will analyse the responses from all alumni in order to understand your experiences of study in Australia, and to explore the impact UAE Scholarships have. We may also contact you to invite you to participate in additional interviews during a second stage of our research. You do not have to participate, but we will be very grateful if you do.

Do you agree that we may contact you to invite you to participate in further research?

Yes   No

Please return your completed survey by either soft copy or hard copy by January 15, 2013 to:

Zayed Alafifi (Mobile: 0504566663)

Email: 4566663@gmail.com

Please feel free to contact us if you have any questions or concerns about this survey.

Thank you again for your assistance.

Appendix C

Sample II of completed questionnaire by a participant

Research Title: Strategies and Public Policy Models of Effective Human Capital, Talents and Workforce Development: An Investigation into the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE.

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

UAE Scholarships Study:

About this Study

Scholarships are an important part of the UAE Development Strategy Programme. The author of this study is interested in studying the impact that the UAE Scholarships have on you professionally, on your workplace and on the development of the country. In order to gain feedback and develop a picture of the impact of the UAE Scholarship Programme, the author has developed a Monitoring and Evaluation plan and hence this questionnaire plays a central role in the main research project entitled '*An Investigation into the Effectiveness of the Scholarship Programmes as Public Policy Strategies and a Model of Workforce Development in the United Arab Emirates (UAE)*' .

Personal data from this study will remain highly confidential. The objective of this questionnaire is to pool all information and then to conduct numerical analysis based on the responses. A follow-up qualitative survey may be conducted where more specific individual opinions and

impressions will be sought.

For this study, please indicate below whether you wish to share your responses.

1: Do you consent to share information from this tracer study for anonymous use?

<mark>YES</mark>   NO

Do you consent to be cited as the source of this information?

<mark>YES</mark>   NO

2: Biographical information

Family name: _____Almutawa_____

Given Name: _____Khamis_____

Gender: <mark>Male</mark> Female

Date of birth (DD/MM/YYYY): 2 6 / 0 9 / 1 9 8 3

Country where you currently reside: U K

Mailing address: D u b a i

Email address: k h - a l m u t a w a @ h o t m a i l . c o m

Alternative email address: ---

3: Details of Scholarship

Which scheme was your UAE Scholarship? (*tick one*)

UAE-Public

<mark>Government Sector</mark>

Non-Government Sector

Date you were selected in UAE Scholarship Programme: (*approximately if known*)

(Month, year) _____11/2006_____

Date you departed for studies in the foreign country
(Month, year) _____11/2006_____

Date you began your study in University/College in foreign country
(Month, year) _____08/2007_____

Date you first returned to the UAE after completing your Scholarship
(Month, year) _____Still studying_____

What level of qualification did you achieve? (*tick one*)

| Bachelor's degree | Post graduate diploma | Master's degree | Doctoral degree | Other _ _ _ _ |

and doing Doctoral degree

Did you obtain the qualification you originally enrolled for?

Yes   No

If NO, can you provide more details about why not?

_____
_____
_____
_____

Name of educational institution?
Southampton Solent University

Name of qualification (e.g. Masters of Business)

Bachelor in Law
Master in Law
Doing PhD in commercial law

Area of study (e.g. Finance and Banking)

Thesis title (if applicable) and its word length

4: Details of any scholarships you have received after your UAE Scholarship (if any)

Sr. No.	Name of qualification and area of study	Educational institution	Country	Length	Year Completed	Funding Source
1						
2						
3						

5: Your UAE Scholarship and you

Now that you have completed your study abroad, how much do you believe that your foreign qualification has affected the following personal aspects? (*tick one*)

My motivation to work

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Confidence in my abilities

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Ambitions for my career

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Interest in my work

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Satisfaction with my work

| Decreased a lot | Decreased somewhat | No change | Increased somewhat | Increased a lot |

Now that you have completed your study abroad, how much do you believe that your foreign qualification has affected the following work skills? (*tick one*)

Technical skills

No change   Improved a little   ==Somewhat improved==   Very much improved

Analytical and critical skills

No change   Improved a little   ==Somewhat improved==   Very much improved

Management skills

No change   Improved a little   Somewhat improved   ==Very much improved==

Communication skills

No change   Improved a little   ==Somewhat improved==   Very much improved

Cross-cultural understanding

No change   Improved a little   Somewhat improved   ==Very much improved==

Supportiveness for diversity in the workplace

No change   Improved a little   ==Somewhat improved==   Very much improved

Planning skills

No change   Improved a little   ==Somewhat improved==   Very much improved

6: For above questions, if you indicated that your work skills were 'Somewhat improved' or 'Very much improved', can you elaborate as to the specific improvements?

Being in foreign country polish the skills and push the students to think wisely which is change his personally in positive way.

Do you believe your Scholarship has empowered you personally?

==Yes==   No

If YES, can you explain how (it empowered you)?

The culture impacts the student's attitude and pushes him to find solutions for difficulties he face in different situations.

7: When you were abroad on study scholarship, which of the following best describes your main social group? (*tick as many as appropriate*)

The students from UAE

Individuals from UAE who live in country of your Study Scholarship

The international students

Native Nationals of the country

When you were abroad on study scholarship, did you develop links with any of the following? (*tick as many as appropriate*)

Friends with other UAE students

Friends in the local UAE community

Friends of other nationalities

Friends of local nationals

Friends in the local community (e.g. neighbours, participation in sports clubs, ethnic associations, etc.)

Staff in the institution where you studied (e.g. lecturers, university administrative staff, etc.)

8: Please comment on whether, or how, the above links have benefited you personally or professionally (i.e. in your career).

Contacting them gives the student the opportunity to take from their experience and avoid the future situations that he might face.

9: What was the most positive experience you had while studying abroad?

Getting huge experience from the society and found out your strength and weakness. In addition, the knowledge.

10: What was a negative experience you had while studying abroad?

Feeling homesick and the stress.

11: Since completion of your study in country of your scholarship, how many times have you travelled back to that country?

Have not completed my study yet.

Since returning to the UAE, have you had or do you currently have any links with any formal Scholarship country's entities? (e.g. the Embassy, a UK, USA or UAE Government Project, etc.)

Yes   No

If YES, can you provide more details?

_____
_____
_____
_____
_____

12: Are you a currently registered member of the Alumni Association of UAE (if there are any alumni of foreign scholarship holders)?

Yes   No

13: Your foreign Scholarship and your workplace.

Now that you have completed your study abroad, describe the effects that your foreign qualification has had for you in your workplace.

What was your category of employment before leaving to study abroad? (*tick one*)

Government

Private sector

Self-employed

Unemployed

Other _ _ _ _ _ _ _

14: During your study abroad, did you retain regular contact with your immediate supervisor/employer?

<mark>Yes</mark>   No

15: If NO, at what point did you contact your immediate supervisor/employer? (*tick one*)

While in country of study   Just before returning to UAE   After returning to UAE

16: Did you return to your former workplace?

Still studying.

Yes   No

17: If YES, that position was (*tick one*)

Lower position than before   Same position as before   Higher position than before

18: How soon after you returned to the UAE did you officially resume your duties? (*tick one*)

Immediately   less than 1 month   less than 3 months   less than 6 months
more than 6 months

19: How did you feel about your reintegration into the workplace when you returned to the UAE? (*tick one*)

Very negative   negative   Neutral   Somewhat positive   Very positive

20: Can you provide more details to explain why you felt this way?

_____
_____
_____
_____
_____
_____

21: Do you still work for the same employer or Ministry that you did before leaving to study abroad?

Yes   No

22: If NO, my current category of employment is (*tick one*)

Government
Private sector
Self-employed
Unemployed
Other _ _ _ _ _ _ _

23: How many times have you been promoted since returning to the UAE? (*tick one*)

None   1   2   3   4 or more

24: If you have been promoted, do you believe that your study abroad played a role in making these promotions possible?

Yes   No

25: If YES, can you provide more details?

_____
_____
_____
_____
_____
_____

26: How many different positions do you currently have either in your Ministry or with another employer? (e.g. supplementary income generation)

Number of positions:

Complete the following table by listing your primary job first:

Position title	Immediate supervisor	Section/department	Ministry/agency	Year Started

27: The content, knowledge and skills I gained abroad are well-matched to my current job (*tick one*)

| Not at all | A little | Somewhat | Very much |

28: I have utilised the knowledge and skills I gained abroad in my current job (*tick one*)

| Not at all | A little | Somewhat | Very much |

29: My current supervisor is supportive of me using the knowledge and skills I gained abroad (*tick one*)

| Very unsupportive | Unsupportive | Neither | Somewhat supportive | Highly supportive |

30: My current colleagues are supportive of me using the knowledge and skills I gained abroad (*tick one*)

Very unsupportive	Unsupportive	Neither	Somewhat supportive	Highly supportive

31: Since returning to the UAE, I have made changes in my management style *partly or entirely as a result of my study abroad* (*tick one*)

No changes	A few changes	Some changes	Many changes

Can you give examples?

_____
_____
_____
_____
_____

32: Since returning to the UAE, I have made changes in operations in my workplace
partly or entirely as a result of my study abroad (_tick one_)

No changes	A few changes	Some changes	Many changes

Can you give examples?

_____
_____
_____
_____
_____

33: I have transferred some of the skills and knowledge I gained abroad

Colleagues within my organisation   Yes   No

People outside my organisation   Yes   No

What contributions to your current workplace can you directly attribute to your study in a foreign country? Can you provide more details?

_____
_____
_____
_____
_____

34: Do you believe that you have made a contribution to the development of the UAE?

Yes   No

35: If YES, can you directly or partially attribute this contribution to your study abroad?

Yes		No	

Can you provide more details or describe an example?

_____
_____
_____
_____
_____

Your Foreign Scholarship and your future

36: How much do you believe that your UAE qualification will continue to affect your future in the following ways? (*tick one*)

Future chance of obtaining promotions with my current employer

Decreased a lot	Decreased somewhat	No change	Increased somewhat	Increased a lot

37: Future chance of employment with other organisations

Decreased a lot	Decreased somewhat	No change	Increased somewhat	Increased a lot

38: Future chance of achieving my career goals

Decreased a lot	Decreased somewhat	No change	Increased somewhat	Increased a lot

39: Future chance of opportunities for employment overseas

Decreased a lot	Decreased somewhat	No change	Increased somewhat	Increased a lot

40: Future chance of increased salary or personal income

Decreased a lot	Decreased somewhat	No change	Increased somewhat	Increased a lot

Describe any other ways you think that your qualification has already changed or will change your future.

_____
_____
_____
_____
_____
_____

41: Your suggestions about the UAE Scholarship Programme

What do you consider the most significant change you have experienced as a result of winning and experiencing a UAE Scholarship?

_____
_____
_____
_____
_____

42: Looking back on your experience, do you have any suggestions about how to improve the management of the UAE Scholarships?

Your suggestions

_____
_____
_____
_____
_____

Thank you for taking the time to complete this tracer study. Your feedback is greatly valued.

The researcher will analyse the responses from all alumni in order to understand your experiences of study in Australia, and to explore the impact UAE Scholarships have. We may also contact you to invite

you to participate in additional interviews during a second stage of our research. You do not have to participate, but we will be very grateful if you do.

Do you agree that we may contact you to invite you to participate in further research?

Yes   No

Please return your completed survey by either soft copy or hard copy by January 15, 2013 to:

Zayed Alafifi (Mobile: 0504566663)

Email: 4566663@gmail.com

Please feel free to contact us if you have any questions or concerns about this survey.

Thank you again for your assistance.

Appendix D

Sample of completed qualitative interview guide

Research Title: Strategies and Public Policy Models of Effective Human Capital, Talents and Workforce Development: An Investigation into the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE.

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

Qualitative Interview Guide – Evaluation for non-alumni managers

Introduction and Informed Consent

Thank you for making time to meet with us today. We've come to interview you about your experience with UAE Foreign Scholarship Programme and other scholarships provided through UAE major departments such as ADIA and ADNOC etc. Your feedback will help to inform our evaluation of the scholarship programme in UAE.

Do you agree to be interviewed?   Yes/No

We would really like to record our interview on tape. This will help to ensure that we don't miss or forget any information that you give us. Altogether we will interview about 40 people, including a small number of senior managers in government. However, if we have your permission to record we will only use a code number to identify your interview – not your name. We will transcribe your interview onto computer, again without using your name and then the cassette record will be blanked. This way your interview record will become anonymous with the other 39 interviews.

Do you agree to our interview being recorded?   Yes/No

the answers been taken in written

Would you like us to make your interview anonymous?   Yes/No

Would you like a copy of your interview to make corrections?   Yes/No

Individual Impact

Thinking about your staff, colleagues or other senior managers who have studied under UAE Scholarships, what impact do you think the scholarship has had on them personally?

Taking a chance to study and get more knowledge is always good thing. Chosen correct field to study based on the requirements of such study and connecting to the job he is looking for in future or the job he is undertaken.

Being in a foreign country will definitely impact on the student. Social Society and the atmosphere in the country he is studying will refine his personality.

Prompts:

• *Do you think the scholarship brings them opportunities they would not otherwise have?*

Depends on the student himself and how is he looking at the scholarship. Getting opportunities is advantage.

• *What new skills or knowledge do they bring back from foreign country(s)?*

Ability to take decisions.

Working under stress.

Links to Other Countries

To what extent do UAE scholarship graduates bring new linkages to the UAE or the region and do those links have any benefits to your workplace?

The benefits depends on the plan that been put at the beginning. If there are clear aims and correct timeline that the workplace consider, the graduator will help in develop the placework.

Impact on the workplace

Thinking about your staff and colleagues who have postgraduate qualifications from abroad and their work in your unit/department/Ministry: what difference do they make to how effectively you can operate?

Fresh graduators will be exacting to develop the workplace once they get right guidance.

Prompt:

• Can you give us an example?

Impact on the development of the UAE

How do you think the scholarships programme contributes to UAE development?

It is very good as long as there are future plan for the graduators.

Feedback on Scholarship Programme

Do you have any suggestions for UAE Scholarship Management Committee(s) to improve the scholarship programme?

Getting feedback from the students annually and encourage them state the positives and negatives that they face.

Thank you very much for your time and for agreeing to meet us today.

Appendix E

Participant information form

Research Title: Strategies and Public Policy Models of Effective Human Capital, Talents and Workforce Development: An Investigation into the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE.

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

Dear Participant,

You are invited to take part in a research study. This PhD research project is designed to investigate the above indicated topic**.** Please read the below information carefully and if you wish, you are welcome to contact the researcher should you need further information. Please see contact information. Take your time in deciding whether you would like to volunteer and take part in this study.

Why is this study being done?

This study is being carried out to help the researcher to learn more about the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE on Workforce Development .

Why have I been asked to take part?

The study is intended to include volunteer participants of alumni currently work of various departments who would answer a set of questionnaire should they like to participate voluntarily in this study.

Do I have to take part?

No, you do not have to take part in the study. It is entirely your choice. Your rights will not be violated in any way. Should you decide to take part, you will need to liaise with the researcher of this project and perhaps your manager, because they need to give you permission to be involved. This approval requirement additional to your consent.

Can I pull out of the study at any time?

You can pull out of the study at any time you like. No questions will be asked as to why you want to pull out, and any information you have given us will be destroyed.

What will happen to me if I take part?

If you would like to take part and the manager or your head of department agree to this participation, they will have to fill out a consent form, which needs to be returned to the researcher. Then you will be invited to attend a short meeting, and you will have a chance to meet the researcher and ask any questions. If you are still happy to take part, you will be asked to sign a consent form as well. Shortly after this, you will be invited to take part and give answers to questions that will be asked.

When and where will the study take place?

The study will be carried out at a place of convenient for both the participant and the researcher with assistance of HR department and their approval. You will be notified of the date and asked whether you are able to attend. The study will take place in the morning hours; the time needed will last between 45- 50 minutes maximum.

What if I can't answer the questions, or do not want to answer the questions?

You do not have to answer the questions that the researcher asks you and those presented in the survey. If you are unsure of how to answer a question, or if you do not want to give an answer, the researcher will not put any pressure on you, but will go onto the next question. Remember that you are able to pull out of the study at any time.

What will happen to the questionnaire and the answers that I have given?

The questionnaires with the answers that you have given will be stored safely and securely with the researcher. All the answers will be anonymous and destroyed once the study has been marked and completed. Any data required for publication will be kept for 5 years, after such

period they will be destroyed. The data will be read by the university staff, when marking. However, no part of the questionnaire will reveal the identity of the participants.

Will anyone know what I have said or that I have taken part?

Please note that apart from the main researcher of this study and his supervisor, no one will know that you have taken part in this study. The study will take place in a room allocated for it, so nobody will hear what is being said. All the questionnaires will be carefully and securely locked up. All the information that identifies you in the questionnaires will be removed and kept separate from the consent and the consent forms. All information on these forms will not be available to anyone else. If you pull out of the study, all the information you have given will be destroyed. The only time when your details will be disclosed is if the researcher thinks you are at risk of harm or if you wish to get help with anything that is concerning you.

Is this study safe to do?

The study has been checked and approved by Research Ethics Review Panels at London Metropolitan University. This means that they are satisfied that the study follows the ethical guidelines provided by the professional body.

What if I have concerns and worries about the study?

If you have any concern about the study or the researcher, please contact Dr.Amer Hosin and Dr Pat Gray the Project Supervisors at London Metropolitan University (see contact information below). Thank you very much for taking the time to read this information sheet and thinking about taking part in the study.

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

Contact information

i) Dr. Amer Hosin (Project Supervisor)   Address: London Metropolitan University

Email: a.hosin@londonmet.ac.uk

ii) Dr Pat Gray :   Address: London Metropolitan University   Email: p.gray@londonmet.ac.uk

NOTE: Should you need any further information, please feel free to contact the researcher directly by emailing: zayed_4you@hotmail.com

Thank you very much for your time and cooperation.

Participant consent form

Research Title: Strategies and Public Policy Models of Effective Human Capital, Talents and Workforce Development: An Investigation into the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

I have been given time to read the information sheet and I am aware of the time needed to complete the questionnaires, as well as my right to withdraw at any time without having to sate a reason : I understand that my participation is voluntary and I am aware of what my participation will involve.

I also understand that there are no risks involved in the participation of this study.

All my queries and questions that I have about the research have been addressed

answered' satisfactorily.

I agree to participate and give my consent to be involved in the study

Participant's signature:

Participant's name:

Date:

Appendix G

Debriefing sheet for participants

Research Title: **Strategies and Public Policy Models of Effective Human Capital, Talents and Workforce Development: An Investigation into the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE**

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

Dear Participant,

Thank you very much for your volunteer participation in this study. The aim of this PhD research is to the Effectiveness of Different Scholarship Programmes in the United Arab Emirates on Talents and Workforce Development.

This PhD research will be carried out with a sample of staff 'Alumni' working in various departments. The main questions/aims that are addressed in the planned research investigation will hope to assess the effectiveness of various scholarship programmes offered to UAE national on talents and workforce development. Indeed, the study will address appropriate policies and future strategies for Human Capital Development that are related to UAE vision.

Your answers to the questionnaires are completely anonymous and the collected data from the study are treated in a completely confidential way. This data will be exclusively used for this

particular research project; and it will never be used for any other purpose. Participants can withdraw at any time and their data will be destroyed.

If after the completion of this survey you feel you may need any kind of advice regarding your well-being as a result of the participation in this study, please feel free to contact me by email or telephone as I could provide you with information about resources and institutions that may be helpful.

If you would like to know the results of this research work or if you have any question about the study, feel free to contact me, and I will be delighted to let you know the main findings of my study or address questions you may want to raise.

I really appreciate your participation in this study and I would like to thank you for taking time to complete the survey and the interview. Many thanks

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

NOTE: Should you need any further information, please feel free to contact the researcher directly by emailing: zayed_4you@hotmail.com

Appendix H

Volunteer's participation invitation letter

Research Title: Strategies and Public Policy Models of Effective Human Capital, Talents and Workforce Development: An Investigation into the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

Dear Manager,

I am currently studying for the PhD award at London Metropolitan University. I am conducting research related to the above titled.

I am therefore looking for Alumni participants to form the sample of my PhD research work. This study has been approved by the Research Ethics Review Panel at London Metropolitan University. The planned PhD research work will be carried out with a sample of staff working in various departments. The main questions/aims that are addressed in this research investigation include assessment of the effectiveness of different scholarship programmes in the United Arab Emirates, UAE on talents and workforce development.

In order to achieve the aims of this study, volunteer participants will be asked to complete the questionnaires which take approximately 40-50 minutes each to complete during the morning period of your work. It is important that you are aware that if participants wish to withdraw from the survey at any time, they can do so, without having to state a reason. confidentiality will be maintained throughout.

If there are any questions you would like to ask about the study, please feel free to do so and contact me; I will be happy to answer any question and if there are no objections on participation and recruitment to participate, please read and sign the consent form below. Thank you very much for you time and cooperation.

Sincerely,

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

NOTE: Should you need any further information, please feel free to contact the researcher directly by emailing: zayed_4you@hotmail.com

Appendix I

Collaborating organisation approval form: to be signed by the manager

Research Title: Strategies and Public Policy Models of Effective Human Capital, Talents and Workforce Development: An Investigation into the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

Volunteer Participant Name:

Collaborating Organisation Manager Name and Address:

Tel No if available:

Date:

I, the undersigned, have given permission to the above research work to be conducted at various department and units in the organisation named above. I have been fully briefed as to the nature of the project and the requirements for obtaining a suitable sample and administration of the questionnaires and agree this can be undertaken in this organisation. All ethical implications that might affect the organisation's reputation and the well-being of its employees and significant third parties have been discussed; and where necessary appropriate action taken. The participants have been and/or will be briefed on health, wellbeing and safety procedures in the organisation.

Signed

Position in organisation:

Date:

Appendix J

Additional summary information for participants

Research Title: **Strategies and Public Policy Models of Effective Human Capital, Talents and Workforce Development: An Investigation into the Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE**

Zayed Hassan Al Afifi

PhD Student, London Metropolitan University

Dear Participant,

I would like to extend an invitation to you to participate in this PhD research project which I am conducting on Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE on Talents and Workforce Development. However, before you proceed to do so, you are kindly asked to read more about this research project which tends to address few questions that participants might want to ask on research aims, nature of the project etc.

Research Aims:

This study is designed to examine the above indicated title with focus on Effectiveness of Different Scholarship Programmes in the United Arab Emirates, UAE on Talents and Workforce Development. The hope is therefore to formulate recommendations and polices that will enhance workforce and talents development that relate to the vision of UAE government.

Who shall we asked to participate?

A volunteer sample of former scholarship awardees and/or alumni employee participants will take part in this study, their departments will be randomly selected and we aim to recruit an appropriate sample for this research project.

How shall the researcher recruit the sample?

The prospective participants will be recruited from randomly selected departments in question by flyers, emails through word of mouth. Contact details will be provided in order to have the introductory conversation and to explain the reason and implications of the surveys.

Who is organising this project

This project is carried out as part of my PhD research project.

What will we require from you?

All participants will be asked to provide a form of identity and asked to state their age, sex, level of education, etc. on the questionnaire. In addition, we need your consent to obtain some relevant data. Please note these data will be covered by Privacy and Confidentiality Data protection act 1998 and shall never be disclosed to anyone; and shall never be used beyond the research purpose.

How shall we ensure privacy and confidentiality of the obtained data?

We shall store all the raw data and your answer on questionnaires securely in a safe. The access to this saved information will be only by the researcher. When the raw data is stored in a database, all names and other personal details will be replaced with a uniquely generated ID; hence your details will never be exposed at any time. It is recommended that we shall keep the data for a certain amount of time, but promise to destroy it after a period of 5 years.

Your rights as a participant

Your time and assistance must be respected and as such we promise to maintain strict ethical considerations. We hope to do this by:

- Guaranteeing to remove your personal details and replaces them with codes particularly when entered in the database so no one shall be able to indentify anyone; as no name will be recorded or entered.

- You are able to withdraw from participation at any time, and particularly so when you are experiencing any level of stress/distress or fear that may compromise your wellbeing.

- Under no circumstances you will be forced or pressurised into participating. in this research work.

- You have the right to answer the questions as you will, and there are no wrong or right answers/

- Please make sure you understand the questions of the survey and when in doubt, please feel free to contact the researcher for any further assistance.

- You have the right to request the questionnaire in both Arabic and English.

The following ethical considerations and codes will be respected:

Please note that strict ethical considerations will be applied. The researcher will guarantee to withhold the individual's identity therefore ensuring anonymity in addition to ensuring the right to withdraw from participation at any time.

Further considerations will be made to avoid deception and conflict of interests. Consent will be obtained in addition to and concise explanation provided on the purpose of the research, the role of participants and possible alternatives to participation. Under no circumstances should any participant be forced or pressurised into participation. Participants are to be reminded that the data and information sought are for research purposes only.

Data Storage

The researcher will enter the participants' data into the database, which will be password protected and encrypted. Participants will be assigned to unique ID. And ID will help to serve encapsulate the personal details such as name; staff ID along with the results of the survey.

Conflicts of Interest/Relationship Disclosure

This project is carried out as part of a PhD research project. The researcher was working for AD Police and is currently on scholarship (study leave), thus has no relevant relation and not involved in day to day work with any of the departments at the moment. Also the departments will be randomly selected from

a range of organisations which has staff of former scholarship awardees and alumni.. Only volunteer participants of various departments are included.

Should you need any further information, please feel free to contact the researcher directly by emailing: zayed_4you@hotmail.com

Thank you for your time.

Appendix K

Abbreviation list

The following abbreviations are used throughout the text of this study:

ADEC	Abu Dhabi Education Council
ADIA	Abu Dhabi Investment Authority
ADNOC	Abu Dhabi National Oil Company
AED	Arab Emarati Dirhams
CAO	Cultural Attaché Offices
CEO	Chief Executive Officer
Dh	Dirhams
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GHQ	General Headquarter
HCT	Higher Colleges of Technology
HEI	Higher Education Institution
HRD	Human Resource Development
MOHE	Ministry of Higher Education
MOHESR	Ministry of Higher Education & Scientific Research

MOPA   Ministry of Presidential Affairs

UAE   United Arab Emirates

UK   United Kingdom

USA   United States of America

Appendix L

List of Tables showing different categories of field of studies in different countries from 2001-2012

Table 3.1 Number of scholarship recipients in different categories, 2001

2001									
Scholarship Department & Cultural Foreign Relations									
Description	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Biology	9	23	1	2	7	13	17	38	55
Botany		1				2	0	3	3
Engineering	13	1	1				14	1	15
Accounts & Finance							0	0	0
Management	23	3	4	4	2	2	29	9	38
Computer	8	5	1				9	5	14
Humanity		5		1		2	0	8	8
Science	6	5		2			6	7	13
Political Science	3						3	0	3
Training	1	7		3	2	3	3	13	16
Tourism & Hospitality		1	2				2	1	3
Law	1		1				2	0	2
Media	2	2		1			2	3	5
Total	66	53	10	13	11	22	87	88	175
	119		**23**		**33**		**175**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.2 Number of scholarship recipients in different countries, 2001

<table>
<tr><th colspan="10">2001</th></tr>
<tr><th colspan="10">Scholarship Department & Cultural Foreign Relations</th></tr>
<tr><th rowspan="3">Description</th><th colspan="6">Education Degree</th><th colspan="3" rowspan="2">Total</th></tr>
<tr><th colspan="2">Bachelor</th><th colspan="2">Master</th><th colspan="2">Doctor</th></tr>
<tr><th>Male</th><th>Female</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th><th>Total</th></tr>
<tr><td>Canada</td><td>6</td><td>4</td><td></td><td></td><td>5</td><td>5</td><td>11</td><td>9</td><td>20</td></tr>
<tr><td>Australia</td><td>8</td><td>11</td><td>2</td><td></td><td>1</td><td>1</td><td>11</td><td>12</td><td>23</td></tr>
<tr><td>UAE</td><td>13</td><td>10</td><td>3</td><td>2</td><td>4</td><td>5</td><td>20</td><td>17</td><td>37</td></tr>
<tr><td>Ireland</td><td>4</td><td>4</td><td></td><td></td><td></td><td></td><td>4</td><td>4</td><td>8</td></tr>
<tr><td>Italy</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Lebanon</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td>0</td><td>1</td><td>1</td></tr>
<tr><td>Oman</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td>0</td><td>1</td><td>1</td></tr>
<tr><td>Albania</td><td></td><td></td><td></td><td></td><td></td><td>2</td><td>0</td><td>2</td><td>2</td></tr>
<tr><td>USA</td><td>31</td><td>5</td><td>4</td><td>6</td><td></td><td>3</td><td>35</td><td>14</td><td>49</td></tr>
<tr><td>KSA</td><td>3</td><td>4</td><td></td><td></td><td></td><td>1</td><td>3</td><td>5</td><td>8</td></tr>
<tr><td>New Zealand</td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Bahrain</td><td></td><td>5</td><td></td><td></td><td></td><td></td><td>0</td><td>5</td><td>5</td></tr>
<tr><td>Egypt</td><td></td><td></td><td>1</td><td>5</td><td>1</td><td>4</td><td>2</td><td>9</td><td>11</td></tr>
<tr><td>Jordan</td><td></td><td>7</td><td></td><td></td><td></td><td></td><td>0</td><td>7</td><td>7</td></tr>
<tr><td>Alswaid</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>0</td><td>1</td><td>1</td></tr>
<tr><td>Qatar</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td>0</td><td>1</td><td>1</td></tr>
<tr><td rowspan="2">Total</td><td>66</td><td>53</td><td>10</td><td>13</td><td>11</td><td>22</td><td>87</td><td>88</td><td>175</td></tr>
<tr><td colspan="2">119</td><td colspan="2">23</td><td colspan="2">33</td><td colspan="3">175</td></tr>
</table>

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.3 Number of scholarship recipients in different categories, 2002

	2002								
Scholarship Department & Cultural Foreign Relations									
Description	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Biology	10	10	3	4	9	14	22	28	50
Botany							0	0	0
Engineering	7		4		2	3	13	3	16
Accounts & Finance							0	0	0
Management	23	8	3	3	3	1	29	12	41
Computer	8	4		1			8	5	13
Humanity					1		1	0	1
Science		3	2	1			2	4	6
Political Science	3		2		1		6	0	6
Training	3	3	4	6	2	3	9	12	21
Tourism & Hospitality							0	0	0
Law		2	5	1			5	3	8
Media	1	1	1				2	1	3
Total	55	31	24	16	18	21	97	68	165
	86		40		39		165		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.4 Number of scholarship recipients in different countries, 2002

2002									
Scholarship Department & Cultural Foreign Relations									
Description	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Canada	4	1		1	6	1	10	3	13
Australia	10	1	4	3		2	14	6	20
UAE	8	3	7	7	6	5	21	15	36
Ireland	7	7		1		2	7	10	17
France	1			1			1	1	2
Syria						1	0	1	1
Oman		1					0	1	1
Albania					1	3	1	3	4
USA	24	7	5	1		2	29	10	39
KSA		1				1	0	2	2
Bahrain		3		1			0	4	4
Egypt	1	3	7	1	1	4	9	8	17
Jordan		2	1		1		2	2	4
Alswaid					3		3	0	3
Qatar		2					0	2	2
Total	55	31	24	16	18	21	97	68	165
	86		40		39		165		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.5 Number of scholarship recipients in different categories, 2003

2003									
Scholarship Department & Cultural Foreign Relations									
Description	Education Degree						Total		
	Bachelor		Master		Doctor				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Biology	5	23	2	13	13	11	20	47	67
Botany		1					0	1	1
Engineering	22	3		4	1		23	7	30
Accounts & Finance							0	0	0
Management	48	11	17	7	4	1	69	19	88
Computer	19	2	4		1		24	2	26
Humanity	1			2			1	2	3
Science	5	3	1			2	6	5	11
Political Science	5		4				9	0	9
Education & Training	4	6	3	4	2	6	9	16	25
Tourism & Hospitality	1	1		1			1	2	3
Law	1	2	4	1	3		8	3	11
Media	2	4	1	1			3	5	8
Total	113	56	36	33	24	20	173	109	282
	169		69		44		282		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.6: Number of scholarship recipients in different countries, 2003

<table>
<tr><td colspan="10" align="center">2003</td></tr>
<tr><td colspan="10" align="center">Scholarship Department & Cultural Foreign Relations</td></tr>
<tr><td rowspan="3">Description</td><td colspan="6" align="center">Education Degree</td><td colspan="3" align="center" rowspan="2">Total</td></tr>
<tr><td colspan="2" align="center">Bachelor</td><td colspan="2" align="center">Master</td><td colspan="2" align="center">Doctor</td></tr>
<tr><td>Description</td><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Total</td></tr>
<tr><td>Canada</td><td>3</td><td>4</td><td></td><td>2</td><td>3</td><td>3</td><td>6</td><td>9</td><td>15</td></tr>
<tr><td>Australia</td><td>30</td><td>8</td><td>4</td><td>1</td><td></td><td>2</td><td>34</td><td>11</td><td>45</td></tr>
<tr><td>UAE</td><td>32</td><td>15</td><td>15</td><td>18</td><td>7</td><td>4</td><td>54</td><td>37</td><td>91</td></tr>
<tr><td>Ireland</td><td>5</td><td>9</td><td></td><td></td><td></td><td></td><td>5</td><td>9</td><td>14</td></tr>
<tr><td>France</td><td></td><td></td><td>1</td><td></td><td></td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Sweden</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td>0</td><td>1</td><td>1</td></tr>
<tr><td>Italy</td><td></td><td></td><td>1</td><td></td><td></td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Albania</td><td></td><td></td><td></td><td></td><td>6</td><td>2</td><td>6</td><td>2</td><td>8</td></tr>
<tr><td>USA</td><td>40</td><td>2</td><td>9</td><td>4</td><td>1</td><td>1</td><td>50</td><td>7</td><td>57</td></tr>
<tr><td>KSA</td><td></td><td>1</td><td></td><td>1</td><td>1</td><td></td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>New Zealand</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Bahrain</td><td>1</td><td>6</td><td></td><td>3</td><td></td><td></td><td>1</td><td>9</td><td>10</td></tr>
<tr><td>Egypt</td><td></td><td>5</td><td>5</td><td>3</td><td>4</td><td>1</td><td>9</td><td>9</td><td>18</td></tr>
<tr><td>Jordan</td><td></td><td>2</td><td></td><td></td><td>2</td><td>1</td><td>2</td><td>3</td><td>5</td></tr>
<tr><td>Alswaid</td><td></td><td></td><td></td><td></td><td>3</td><td>3</td><td>3</td><td>3</td><td>6</td></tr>
<tr><td>Kuwait</td><td>1</td><td>2</td><td>1</td><td></td><td></td><td></td><td>2</td><td>2</td><td>4</td></tr>
<tr><td>Pakistan</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td>0</td><td>1</td><td>1</td></tr>
<tr><td>Lebanon</td><td></td><td></td><td>1</td><td></td><td></td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td rowspan="2">Total</td><td>113</td><td>56</td><td>36</td><td>32</td><td>27</td><td>17</td><td>176</td><td>105</td><td>281</td></tr>
<tr><td colspan="2" align="center">169</td><td colspan="2" align="center">68</td><td colspan="2" align="center">44</td><td colspan="3" align="center">281</td></tr>
</table>

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.7 Number of scholarship recipients in different categories, 2004

2004									
Scholarship Department & Cultural Foreign Relations									
Description	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Biology	13	17		7	11	12	24	36	60
Botany	1						1	0	1
Engineering	37	5	6	4		1	43	10	53
Accounts & Finance							0	0	0
Management	64	5	26	15	4		94	20	114
Computer	18	4	6	2	1	1	25	7	32
Humanity		1		1	1		1	2	3
Science	1	6	4	1		1	5	8	13
Political Science	9		2				11	0	11
Training	6	5	17	12		1	23	18	41
Tourism & Hospitality							0	0	0
Law	5		6	2	1	2	12	4	16
Media	5	4		1		1	5	6	11
Total	159	47	67	45	18	19	244	111	355
	206		**112**		**37**		**355**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.8 Number of scholarship recipients in different countries, 2004

2004									
Scholarship Department & Cultural Foreign Relations									
Descrption	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Canada	13	5	4	4	5	4	22	13	35
Australia	40	9	22	9	2	2	64	20	84
UAE	36	7	13	12	2	4	51	23	74
Ireland	9	11					9	11	20
France	4	1	3	2			7	3	10
Kuwait	1	1					1	1	2
Italy				1	1		1	1	2
South Africa				1			0	1	1
Albania					4	3	4	3	7
USA	39	8	19	9	3	3	61	20	81
KSA	3	1					3	1	4
New Zealand	8	1	1		1		10	1	11
Bahrain		2		4			0	6	6
Egypt	5	1	3	2	1	2	9	5	14
Jordan			2	1			2	1	3
Qatar	1						1	0	1
Total	159	47	67	45	19	18	245	110	355
	206		**112**		**37**		**355**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.9 Number of scholarship recipients in different categories, 2005

2005									
Scholarship Department & Cultural Foreign Relations									
Description	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Biology	16	24	4	6	6	11	26	41	67
Botany				1	1		1	1	2
Engineering	65	5	11	8			76	13	89
Accounts & Finance	3						3	0	3
Management	104	16	26	14	4	3	134	33	167
Computer	35	6	6	2		1	41	9	50
Humanity		2	1				1	2	3
Science	3	1	2	3	1	1	6	5	11
Political Science	7	3	2	1			9	4	13
Education & Training	14	6	12	13	3	7	29	26	55
Tourism & Hospitality							0	0	0
Law	3	1	12		1	1	16	2	18
Media	4	2	1	2			5	4	9
Total	254	66	77	50	16	24	347	140	487
	320		**127**		**40**		**487**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.10 Number of scholarship recipients in different countries, 2005

Description	Education Degree						Total		
	Bachelor		Master		Doctor				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Canada	24	13	1	6	3	5	28	24	52
Australia	106	15	44	17	1	1	151	33	184
UAE	9	5	4	7	1	5	14	17	31
Ireland	2	2					2	2	4
France		4	1	1		1	1	6	7
Italy	2						2	0	2
Yemen	1						1	0	1
Albania	1				2	1	3	1	4
USA	98	11	23	14	5	3	126	28	154
New Zealand	8	5		3			8	8	16
Bahrain		3	1	1			1	4	5
Egypt		5		2		6	0	13	13
Jordan	3	2	1	1	3		7	3	10
Alswaid					1	2	1	2	3
Qatar		1					0	1	1
Total	254	66	75	52	16	24	345	142	487
	320		127		40		487		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.11 Number of scholarship recipients in different categories, 2006

<table>
<tr><th colspan="10">2006</th></tr>
<tr><th colspan="10">Scholarship Department & Cultural Foreign Relations</th></tr>
<tr><th rowspan="2">Description</th><th colspan="6">Education Degree</th><th colspan="3" rowspan="2">Total</th></tr>
<tr><th colspan="2">Bachelor</th><th colspan="2">Master</th><th colspan="2">Doctor</th></tr>
<tr><td>Description</td><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Total</td></tr>
<tr><td>Biology</td><td>21</td><td>33</td><td>2</td><td>5</td><td>6</td><td>7</td><td>29</td><td>45</td><td>74</td></tr>
<tr><td>Botany</td><td>2</td><td>3</td><td></td><td></td><td></td><td></td><td>2</td><td>3</td><td>5</td></tr>
<tr><td>Engineering</td><td>100</td><td>11</td><td>13</td><td></td><td></td><td></td><td>113</td><td>11</td><td>124</td></tr>
<tr><td>Accounts & Finance</td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>Management</td><td>153</td><td>30</td><td>43</td><td>19</td><td>5</td><td>3</td><td>201</td><td>52</td><td>253</td></tr>
<tr><td>Computer</td><td>36</td><td>14</td><td>12</td><td>5</td><td></td><td></td><td>48</td><td>19</td><td>67</td></tr>
<tr><td>Humanity</td><td></td><td>2</td><td>4</td><td>1</td><td></td><td></td><td>4</td><td>3</td><td>7</td></tr>
<tr><td>Science</td><td>5</td><td>2</td><td>1</td><td>2</td><td></td><td></td><td>6</td><td>4</td><td>10</td></tr>
<tr><td>Political Science</td><td>13</td><td>2</td><td>3</td><td>8</td><td>3</td><td></td><td>19</td><td>10</td><td>29</td></tr>
<tr><td>Education & Training</td><td>40</td><td>12</td><td>12</td><td>9</td><td>2</td><td>1</td><td>54</td><td>22</td><td>76</td></tr>
<tr><td>Tourism & Hospitality</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Law</td><td>3</td><td>3</td><td>9</td><td>2</td><td>3</td><td>1</td><td>15</td><td>6</td><td>21</td></tr>
<tr><td>Media</td><td>5</td><td>1</td><td>2</td><td>2</td><td></td><td>2</td><td>7</td><td>5</td><td>12</td></tr>
<tr><td rowspan="2">Total</td><td>379</td><td>113</td><td>101</td><td>53</td><td>19</td><td>14</td><td>499</td><td>180</td><td>679</td></tr>
<tr><td colspan="2">492</td><td colspan="2">154</td><td colspan="2">33</td><td colspan="3">679</td></tr>
</table>

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.12 Number of scholarship recipients in different countries, 2006

2006									
Scholarship Department & Cultural Foreign Relations									
Description	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Canada	33	17	3	1	2	3	38	21	59
Australia	122	31	46	20	4	1	172	52	224
UAE	26	6	11	12	3	2	40	20	60
Ireland	1		1				2	0	2
France	1	1	1	3			2	4	6
Syria	1	1				1	1	2	3
Kuwait		1					0	1	1
Albania	1		1		2	2	4	2	6
USA	160	19	39	9	1	2	200	30	230
Lebanon		2					0	2	2
New Zealand	10	9	1	2	1	1	12	12	24
Bahrain		2					0	2	2
Egypt	3	1	1	1	4		8	2	10
Jordan	7	3	2		1	2	10	5	15
Sweden					1		1	0	1
Qatar	10	23					10	23	33
Oman	1						1	0	1
Total	376	116	106	48	19	14	501	178	679
	492		**154**		**33**		**679**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.13 Number of scholarship recipients in different categories, 2007

2007									
Scholarship Department & Cultural Foreign Relations									
Description	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Biology	24	19	3	5	10	4	37	28	65
Botany		3					0	3	3
Engineering	158	10	4	2	1		163	12	175
Accounts & Finance	2						2	0	2
Management	216	27	39	14	5	6	260	47	307
Computer	38	6	4	2	1		43	8	51
Humanity	6	1					6	1	7
Science	12	2		1	1		13	3	16
Political Science	20	2	2	2	2	1	24	5	29
Training & Education	29	4	9	12	2	5	40	21	61
Tourism & Hospitality							0	0	0
Law	4	2	9	2	3		16	4	20
Media	5	6	4	3		1	9	10	19
Total	514	82	74	43	25	17	613	142	755
	596		**117**		**42**		**755**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.14 Number of scholarship recipients in different countries, 2007

<table>
<tr><td colspan="10" align="center">2007</td></tr>
<tr><td colspan="10" align="center">Scholarship Department & Cultural Foreign Relations</td></tr>
<tr><td rowspan="3">Description</td><td colspan="6" align="center">Education Degree</td><td colspan="3" rowspan="2" align="center">Total</td></tr>
<tr><td colspan="2" align="center">Bachelor</td><td colspan="2" align="center">Master</td><td colspan="2" align="center">Doctor</td></tr>
<tr><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Total</td></tr>
<tr><td>Description</td><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Male</td><td>Female</td><td>Total</td></tr>
<tr><td>Canada</td><td>31</td><td>10</td><td>1</td><td>1</td><td>2</td><td></td><td>34</td><td>11</td><td>45</td></tr>
<tr><td>Australia</td><td>194</td><td>20</td><td>28</td><td>13</td><td>1</td><td>3</td><td>223</td><td>36</td><td>259</td></tr>
<tr><td>UAE</td><td>37</td><td>10</td><td>13</td><td>3</td><td>6</td><td>4</td><td>56</td><td>17</td><td>73</td></tr>
<tr><td>Ireland</td><td>15</td><td>8</td><td></td><td></td><td></td><td></td><td>15</td><td>8</td><td>23</td></tr>
<tr><td>France</td><td>9</td><td>2</td><td>2</td><td>4</td><td></td><td></td><td>11</td><td>6</td><td>17</td></tr>
<tr><td>Syria</td><td>4</td><td>4</td><td></td><td>1</td><td></td><td></td><td>4</td><td>5</td><td>9</td></tr>
<tr><td>Italy</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Albania</td><td></td><td></td><td></td><td></td><td>2</td><td>3</td><td>2</td><td>3</td><td>5</td></tr>
<tr><td>USA</td><td>202</td><td>13</td><td>27</td><td>15</td><td>8</td><td>2</td><td>237</td><td>30</td><td>267</td></tr>
<tr><td>Kuwait</td><td>2</td><td></td><td></td><td></td><td></td><td></td><td>2</td><td>0</td><td>2</td></tr>
<tr><td>New Zealand</td><td>8</td><td>10</td><td>1</td><td>2</td><td>1</td><td></td><td>10</td><td>12</td><td>22</td></tr>
<tr><td>Bahrain</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td>0</td><td>1</td><td>1</td></tr>
<tr><td>Egypt</td><td>8</td><td>2</td><td>3</td><td>2</td><td>4</td><td>3</td><td>15</td><td>7</td><td>22</td></tr>
<tr><td>Jordan</td><td>2</td><td>1</td><td></td><td>1</td><td></td><td>1</td><td>2</td><td>3</td><td>5</td></tr>
<tr><td>Sweden</td><td></td><td></td><td></td><td></td><td>1</td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>South Korea</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>South Africa</td><td></td><td></td><td></td><td></td><td>1</td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Qatar</td><td></td><td>1</td><td></td><td></td><td></td><td></td><td>0</td><td>1</td><td>1</td></tr>
<tr><td rowspan="2">Total</td><td>514</td><td>82</td><td>75</td><td>42</td><td>26</td><td>16</td><td>615</td><td>140</td><td>755</td></tr>
<tr><td colspan="2" align="center">596</td><td colspan="2" align="center">117</td><td colspan="2" align="center">42</td><td colspan="3" align="center">755</td></tr>
</table>

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.15 Number of scholarship recipients in different categories, 2008

<table>
<tr><th colspan="10">2008</th></tr>
<tr><th colspan="10">Scholarship Department & Cultural Foreign Relations</th></tr>
<tr><th rowspan="3">Description</th><th colspan="6">Education Degree</th><th colspan="3" rowspan="2">Total</th></tr>
<tr><th colspan="2">Bachelor</th><th colspan="2">Master</th><th colspan="2">Doctor</th></tr>
<tr><th>Description</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th><th>Total</th></tr>
<tr><td>Biology</td><td>12</td><td>26</td><td>5</td><td>8</td><td>3</td><td>8</td><td>20</td><td>42</td><td>62</td></tr>
<tr><td>Botany</td><td></td><td>4</td><td></td><td>1</td><td></td><td></td><td>0</td><td>5</td><td>5</td></tr>
<tr><td>Engineering</td><td>169</td><td>18</td><td>3</td><td>1</td><td>3</td><td>2</td><td>175</td><td>21</td><td>196</td></tr>
<tr><td>Accounts & Finance</td><td>51</td><td>4</td><td></td><td>3</td><td></td><td></td><td>51</td><td>7</td><td>58</td></tr>
<tr><td>Management</td><td>180</td><td>24</td><td>25</td><td>15</td><td>5</td><td>4</td><td>210</td><td>43</td><td>253</td></tr>
<tr><td>Computer</td><td>36</td><td>2</td><td>3</td><td>4</td><td>1</td><td></td><td>40</td><td>6</td><td>46</td></tr>
<tr><td>Humanity</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Science</td><td>6</td><td>6</td><td></td><td>1</td><td>2</td><td></td><td>8</td><td>7</td><td>15</td></tr>
<tr><td>Political Science</td><td>19</td><td>5</td><td>1</td><td></td><td></td><td>1</td><td>20</td><td>6</td><td>26</td></tr>
<tr><td>Education & Training</td><td>14</td><td>7</td><td>6</td><td>5</td><td>2</td><td>4</td><td>22</td><td>16</td><td>38</td></tr>
<tr><td>Tourism & Hospitality</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Law</td><td>15</td><td></td><td>5</td><td>1</td><td></td><td></td><td>20</td><td>1</td><td>21</td></tr>
<tr><td>Media</td><td>12</td><td>4</td><td>3</td><td>3</td><td></td><td></td><td>15</td><td>7</td><td>22</td></tr>
<tr><td rowspan="2">Total</td><td>516</td><td>100</td><td>51</td><td>42</td><td>16</td><td>19</td><td>583</td><td>161</td><td>744</td></tr>
<tr><td colspan="2">616</td><td colspan="2">93</td><td colspan="2">35</td><td colspan="3">744</td></tr>
</table>

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.16 Number of scholarship recipients in different countries, 2008

<table>
<tr><th colspan="10">2008</th></tr>
<tr><th colspan="10">Scholarship Department & Cultural Foreign Relations</th></tr>
<tr><th rowspan="3">Description</th><th colspan="6">Education Degree</th><th colspan="3" rowspan="2">Total</th></tr>
<tr><th colspan="2">Bachelor</th><th colspan="2">Master</th><th colspan="2">Doctor</th></tr>
<tr><th>Description</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th><th>Total</th></tr>
<tr><td>Canada</td><td>23</td><td>10</td><td>2</td><td>3</td><td>2</td><td>2</td><td>27</td><td>15</td><td>42</td></tr>
<tr><td>Australia</td><td>177</td><td>33</td><td>19</td><td>12</td><td>5</td><td>3</td><td>201</td><td>48</td><td>249</td></tr>
<tr><td>UAE</td><td>41</td><td>7</td><td>11</td><td>8</td><td>3</td><td>2</td><td>55</td><td>17</td><td>72</td></tr>
<tr><td>Ireland</td><td>2</td><td>10</td><td>1</td><td></td><td></td><td></td><td>3</td><td>10</td><td>13</td></tr>
<tr><td>France</td><td>1</td><td>1</td><td>1</td><td></td><td></td><td></td><td>2</td><td>1</td><td>3</td></tr>
<tr><td>Syria</td><td>1</td><td>1</td><td></td><td></td><td></td><td></td><td>1</td><td>1</td><td>2</td></tr>
<tr><td>Italy</td><td>1</td><td>1</td><td>1</td><td></td><td></td><td>1</td><td>2</td><td>2</td><td>4</td></tr>
<tr><td>Albania</td><td>1</td><td>1</td><td></td><td></td><td></td><td>1</td><td>1</td><td>2</td><td>3</td></tr>
<tr><td>USA</td><td>258</td><td>27</td><td>15</td><td>15</td><td>5</td><td>5</td><td>278</td><td>47</td><td>325</td></tr>
<tr><td>KSA</td><td>2</td><td>1</td><td></td><td></td><td></td><td></td><td>2</td><td>1</td><td>3</td></tr>
<tr><td>New Zealand</td><td>4</td><td>6</td><td>1</td><td></td><td></td><td></td><td>5</td><td>6</td><td>11</td></tr>
<tr><td>Bahrain</td><td></td><td></td><td></td><td>1</td><td></td><td>1</td><td>0</td><td>2</td><td>2</td></tr>
<tr><td>Egypt</td><td>2</td><td>2</td><td></td><td>2</td><td></td><td>3</td><td>2</td><td>7</td><td>9</td></tr>
<tr><td>Jordan</td><td>1</td><td></td><td></td><td>1</td><td></td><td></td><td>1</td><td>1</td><td>2</td></tr>
<tr><td>Sweden</td><td></td><td></td><td></td><td></td><td>1</td><td>1</td><td>1</td><td>1</td><td>2</td></tr>
<tr><td>Qatar</td><td>2</td><td></td><td></td><td></td><td></td><td></td><td>2</td><td>0</td><td>2</td></tr>
<tr><td rowspan="2">Total</td><td>516</td><td>100</td><td>51</td><td>42</td><td>16</td><td>19</td><td>583</td><td>161</td><td>744</td></tr>
<tr><td colspan="2">616</td><td colspan="2">93</td><td colspan="2">35</td><td colspan="3">744</td></tr>
</table>

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.17 Number of scholarship recipients in different categories, 2009

Description	Education Degree						Total		
	Bachelor		**Master**		**Doctor**				
2009									
Scholarship Department & Cultural Foreign Relations									
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Biology	26	31	3	17	7	2	36	50	86
Botany	2	2					2	2	4
Engineering	278	18	8	2	3		289	20	309
Accounts & Finance	83	6	9	3	2		94	9	103
Management	227	37	57	25	20	10	304	72	376
Computer	40	8	4	3			44	11	55
Humanity	13	3		3	1	1	14	7	21
Science	4	4		4	2		6	8	14
Political Science	41	8	5	2	1	1	47	11	58
Education & Training	14	12	5	20	2	6	21	38	59
Tourism & Hospitality	3	2					3	2	5
Law	11	2	17	2	2		30	4	34
Media	8	8	6	1		1	14	10	24
Total	750	141	114	82	40	21	904	244	1148
	891		**196**		**61**		**1148**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.18 Number of scholarship recipients in different countries, 2009

	2009								
	Scholarship Department & Cultural Foreign Relations								
Description	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Canada	33	11	1	5	2	4	36	20	56
Australia	187	39	34	25	15	8	236	72	308
UAE	35	9	16	15	4	3	55	27	82
Ireland	13	16		3			13	19	32
France	3	1	2	2	1	3	6	6	12
Syria	3	2					3	2	5
Alyaban	11						11	0	11
Qatar	1	1		1			1	2	3
Albania		1	1			1	1	2	3
Romania		1					0	1	1
USA	452	49	54	26	12	6	518	81	599
KSA				1		1	0	2	2
Turkey		1					0	1	1
New Zealand	7	5	2	1		1	9	7	16
Bahrain				1			0	1	1
Egypt	2	2	3	2			5	4	9
Jordan	2	2	1				3	2	5
Greece		1					0	1	1
Sweden	0	1	0	0	0	0	0	1	1
Total	749	142	114	82	34	27	897	251	1148
	891		**196**		**61**		**1148**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.19 Number of scholarship recipients in different categories, 2010

2010									
Scholarship Department & Cultural Foreign Relations									
Description	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Biology	23	20		1	6	5	29	26	55
Botany	3		1	1			4	1	5
Engineering	211	19	5	3	2		218	22	240
Accounts & Finance	64	8	1	2			65	10	75
Management	98	16	24	22	2	4	124	42	166
Computer	23	4	3	2		1	26	7	33
Humanity	3						3	0	3
Science	5	1	2	1			7	2	9
Political Science	14	21	3	1			17	22	39
Education & Training	17	2	7	15			24	17	41
Tourism & Hospitality		1					0	1	1
Law	9	1	8	2	3	1	20	4	24
Media	3	6	2	7		1	5	14	19
Total	473	99	56	57	13	12	542	168	710
	572		**113**		**25**		**710**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.20 Number of scholarship recipients in different countries, 2010

Description									
2010									
Scholarship Department & Cultural Foreign Relations									
Description	**Education Degree**						**Total**		
	Bachelor		**Masters**		**Doctors**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Canada	29	12	1	2	1	2	31	16	47
Australia	55	16	7	13	3	1	65	30	95
UAE	23	9	13	12	5	1	41	22	63
Ireland	10	10		1			10	11	21
France	1	3	1	1	1		3	4	7
Syria	2	6					2	6	8
Alyaban	5	1	1				6	1	7
Malaysia			2				2	0	2
Albania	2	1			2	1	4	2	6
Oman		1					0	1	1
Lebanon				1			0	1	1
USA	341	24	26	22	4	2	371	48	419
KSA		1	1				1	1	2
New Zealand	8	2	3	4	1		12	6	18
China	2			1			2	1	3
Bahrain		2					0	2	2
Egypt	1	1					1	1	2
Jordan	1	3					1	3	4
Italy			1				1	0	1
Sweden						1	0	1	1
Total	480	92	56	57	17	8	553	157	710
	572		**113**		**25**		**710**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.21 Number of scholarship recipients in different categories, 2011

			2011						
Scholarship Department & Cultural Foreign Relations									
Description	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Biology	16	16	2	2	3	5	21	23	44
Engineering	99	3	5	1			104	4	108
Accounts & Finance	19	3	3	1			22	4	26
Management	33	7	7	3	2		42	10	52
Computer	9	1	1	3	1		11	4	15
Humanity	2	1					2	1	3
Science	4	6					4	6	10
Political Science	8	3	1	3		2	9	8	17
Education & Training	2	2	3	3	2	1	7	6	13
Law	7	3	1	1	2		10	4	14
Media	2	5	1	2	0	0	3	7	10
Total	201	50	24	19	10	8	235	77	312
	251		**43**		**18**		**312**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

Table 3.22 Number of scholarship recipients in different categories, 2012

2012									
Scholarship Department & Cultural Foreign Relations									
Description	**Education Degree**						**Total**		
	Bachelor		**Master**		**Doctor**				
Description	Male	Female	Male	Female	Male	Female	Male	Female	Total
Biology	15	16		3			15	19	34
Botany	2	3					2	3	5
Engineering	151	27	5	1			156	28	184
Accounts & Finance	35	3	5	3		1	40	7	47
Management	51	8	16	8	1	1	68	17	85
Computer	7	0	4	1			11	1	12
Humanity	2	1		1			2	2	4
Science	11	3			1		12	3	15
Political Science	21	4	2	1			23	5	28
Education & Training	4	1	1	3	3	3	8	7	15
Law	5	6	1	2			6	8	14
Media	3	2					3	2	5
Total	307	74	34	23	5	5	346	102	448
	381		**57**		**10**		**448**		

Source: Ministry of Presidential Affairs, Government of the United Arab Emirates (UAE)

APPENDIX M

Contingency table showing comparison of results before 2006 and after 2006

The appendix M presents the contingency table in which the column category is scholarship time (before 2006, after 2006) and the row category is a question`s response options. The experience before 2006 and after 2006 based on Chi-Square test and for each category under investigation; it appears that reintegration experience in terms of Timing of Return to Work, Level of Position on Return, Promotions since Scholarship. Technical Skills, Analytical and Critical Skills, Management Skills, Communication Skills, Cross-Cultural Understanding, Supportiveness for Diversity, Planning Skills, Chance of Achieving Career Goals, Opportunities from Employment Overseas, Increased Salary/Income, Motivation to Work, Confidence in my Abilities, Career Ambitions, Interest in Work, Work Satisfaction, and Personal Empowerment shows no significant difference before and after 2006.

No significant differences were also reported in relation to the selection process, countries of studies, nature of job in public sector departments when compared before and after 2006

The contingency tables are reported as follows in next page:

			Recoded Year Sel part A		up to 2001
Table 5.7 (M) Reintegration experience (re-coded) **Reintegration Experience (re-coded)**					
			Up to 2006	2006 onwards	up to 2001
How did you feel about your reintegration into the workplace?	Very negative	Count	6	0	6
		% within Recoded Year Sel part A	4.8%	0.0%	2.9%
	Somewhat negative	Count	11	18	29
		% within Recoded Year Sel part A	8.7%	22.5%	14.1%
	Natural	Count	22	21	43
		% within Recoded Yr Sel part A	17.5%	26.3%	20.9%
	Somewhat positive	Count	50	30	80
		% within Recoded Yr Sel part A	39.7%	37.5%	38.8%
	Very positive	Count	34	8	42
		% within Recoded Yr Sel part A	27.0%	10.0%	20.4%
	Invalid	Count	1	1	2
		% within Recoded Yr Sel part A	0.8%	1.3%	1.0%
	Missing	Count	2	2	4
		% within Recoded Yr Sel part A	1.6%	2.5%	1.9%
Total		Count	126	80	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.509(a)	6	0.003
Likelihood Ratio	22.066	6	0.001
Linear-by-linear Association	0.143	1	0.705
N of Valid Cases	206		

(a): 6 cells (42.9%) have expected count less than 5. The minimum expected count is .59

Table 5.3 (M) Return to former workplace (re-coded)

Return to Former Workplace (re-coded)					
			Recoded Yr Sel part A		Total
			up to 2001	2001 onwards	up to 2012
Did you return to your former workplace?	No	Count	8	5	13
		% within Recoded Yr Sel part A	6.3%	6.3%	6.3%
	Yes	Count	117	75	192
		% within Recoded Yr Sel part A	92.9%	93.8%	93.2%
	Missing	Count	1	0	1
		% within Recoded Yr Sel part A	0.8%	0.0%	0.5%
Total		Count	126	80	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**Df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	.640(a)	2	0.726
Likelihood Ratio	0.988	2	0.610
Linear-by-linear Association	0.632	1	0.427
N of Valid Cases	206		

(a): 2 cells (33.3%) have expected count less than 5. The minimum expected count is .39.

Table 5.3 (M) Return to former workplace (re-coded)

Return to Former Workplace (re-coded)					
			Recoded Yr Sel part A		**Total**
			up to 2006	**2006 onwards**	**up to 2012**
Did you return to your former workplace?	No	Count	2	5	7
		% within Recoded Yr Sel part A	1.7%	5.5%	3.4%
	Yes	Count	113	86	199
		% within Recoded Yr Sel part A	98.3%	94.5%	96.6%
	Missing	Count	0	0	0
		% within Recoded Yr Sel part A	0.0%	0.0%	0.0%
Total		Count	115	91	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**Df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	.601(a)	2	0.703
Likelihood Ratio	0.921	2	0.598
Linear-by-linear Association	0.622	1	0.387

		N of Valid Cases	206		

(a): 2 cells (33.3%) have expected count less than 5. The minimum expected count is .39.

Table 5.4 (M) Level of position on return

Level of Position on Return					
			Recoded Yr Sel part A		Total
			up to 2006	2006 onwards	up to 2012
If **YES** was that position lower/same/higher?	Lower	Count	2	3	5
		% within Recoded Yr Sel part A	1.9%	2.9%	2.4%
	Same	Count	53	48	101
		% within Recoded Yr Sel part A	50.4%	47.5%	49.0%
	Higher	Count	44	41	85
		% within Recoded Yr Sel part A	41.9%	40.6%	41.3%
	Invalid		1	1	2
			0.9%	**0.9%**	1.0%
	Missing		5	8	13
			4.8%	8.0%	6.3%
Total		Count	105	101	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.265(a)	4	0.792
Likelihood Ratio	1.886	4	0.685
Linear-by-linear Association	0.039	1	0.827
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .59.

Table 5.10 (M) Promotions since scholarship

Promotions since scholarship			Recoded Yr Sel part A		Total
			up to 2006	2006 onwards	up to 2012Total
How many times promoted since return?	None	Count	32	37	69
		% within Recoded Yr Sel part A	33.3%	33.6%	33.5%
	1	Count	24	31	55
		% within Recoded Yr Sel part A	25%	28.2%	26.7%
	2	Count	20	16	36
		% within Recoded Yr Sel part A	20.8%	14.5%	17.5%
	3	Count	13	17	30
		% within Recoded Yr Sel part A	**13.5%**	**15.4%**	14.6%
	4 or more	Count	3	6	9
		% within Recoded Yr Sel part A	3.1%	5.4%	4.4%
	Missing	Count	4	3	7
		% within Recoded Yr Sel part A	**4.2%**	**2.8%**	3.4%
Total		Count	96	110	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.865(a)	5	0.021
Likelihood Ratio	14.968	5	0.006
Linear-by-linear Association	1.998	1	0.132
N of Valid Cases	206		

(a): 3 cells (25.0%) have expected count less than 5. The minimum expected count is 2.07.

Table 5.11 (M) Technical skills

Technical Skills					
			Recoded Yr Sel part A		Total
			up to 2001	2001 onwards	up to 2012
Technical Skills	Improved a little	Count	11	23	34
		% within Recoded Yr Sel part A	11.8%	20.4%	16.5%
	Somewhat improved	Count	23	21	44
		% within Recoded Yr Sel part A	24.8%	18.5%	21.4%
	Very much improved	Count	54	61	115
		% within Recoded Yr Sel part A	58.1%	54.0%	55.8%
	Missing	Count	5	8	13
		% within Recoded Yr Sel part A	**5.4%**	**7.1%**	6.3%
Total		Count	93	113	206
		% within Recoded Yr Sel part A	100%	100%	100%

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.417(a)	3	0.265
Likelihood Ratio	3.987	3	0.220
Linear-by-linear Association	0.598	1	0.376
N of Valid Cases	206		

(a): 3 cells (37.5%) have expected count less than 5. The minimum expected count is .30.

Table 5.12 (M) Analytical and critical skills

Analytical and critical skills					
			Recoded Yr Sel part A		Total up to 2012
			up to 2001	2001 onwards	
Analytical and critical skills	Improved a little	Count	10	13	23
		% within Recoded Yr Sel part A	9.0%	13.7%	11.2%
	Somewhat improved	Count	18	11	29
		% within Recoded Yr Sel part A	16.2%	11.6%	14.1%
	Very much improved	Count	68	60	128
		% within Recoded Yr Sel part A	61.3%	63.1%	62.1%
	Missing	Count	15	11	26
		% within Recoded Yr Sel part A	13.5%	11.6%	12.6%
Total		Count	111	95	206
		% within Recoded Yr Sel part A	100%	100.0%	100.0%

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.852(a)	3	0.472
Likelihood Ratio	3.187	3	0.326
Linear-by-linear Association	0.916	1	0.342
N of Valid Cases	206		

(a): 3 cells (37.5%) have expected count less than 5. The minimum expected count is .59.

Table 5.13 (M) Management skills

| Management skills | | | Recoded Yr Sel part A | | Total |
			up to 2001	2001 onwards	up to 2012
Management skills	Improved a little	Count	12	15	27
		% within Recoded Yr Sel part A	11.8%	14.4%	13.1%
	Somewhat improved	Count	26	23	49
		% within Recoded Yr Sel part A	25.5%	22.1%	23.8%
	Very much improved	Count	62	65	127
		% within Recoded Yr Sel part A	61.0%	62.5%	61.6%
	Missing	Count	2	1	3
		% within Recoded Yr Sel part A	2%	0.9%	1.5%
Total		Count	102	104	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	1.119(a)	5	0.847
Likelihood Ratio	1.986	5	0.735
Linear-by-linear Association	0.628	1	0.319
N of Valid Cases	206		

(a): 5 cells (51.1%) have expected count less than 5. The minimum expected count is .27.

Table 5.14 (M) Communication skills

Communication skills					
			Recoded Yr Sel part A		**Total**
			up to 2001	**2001 onwards**	**up to 2012**
Communication skills	No change	Count	0	2	2
		% within Recoded Yr Sel part A	0%	1.9%	0.9%
	Improved a little	Count	4	5	9
		% within Recoded Yr Sel part A	3.8%	4.8%	4.4%
	Somewhat improved	Count	33	36	69
		% within Recoded Yr Sel part A	32.1%	33.9%	33.5%
	Very much improved	Count	65	60	125
		% within Recoded Yr Sel part A	63.1%	58.3%	60.7%
	Missing	Count	1	0	1
		% within Recoded Yr Sel part A	0.9%	0%	0.5%
Total		Count	103	103	206
		% within Recoded Yr Sel part A	**100%**	**100%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	2.781(a)	4	0.467
Likelihood Ratio	3.534	4	0.412
Linear-by-linear Association	0.506	1	0.461
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .27.

Table 5.15 (M) Cross-cultural understanding

Cross-cultural understanding					
			Recoded Yr Sel part A		Total up to 2012
			up to 2001	2001 onwards	
Cross-cultural understanding	Improved a little	Count	4	5	9
		% within Recoded Yr Sel part A	3.7%	5.1%	4.4%
	Somewhat improved	Count	34	38	72
		% within Recoded Yr Sel part A	31.8%	38.3%	34.9%
	Very much improved	Count	67	56	123
		% within Recoded Yr Sel part A	62.6%	56.6%	59.7%
	Missing	Count	2	0	2
		% within Recoded Yr Sel part A	1.9%	0%	0.9%
Total		Count	107	99	206
		% within Recoded Yr Sel part A	100%	100%	**100%**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.619(a)	3	0.572
Likelihood Ratio	1.721	3	0.575
Linear-by-linear Association	0.401	1	0.419
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .59.

Table 5.17 (M) Planning skills

Planning Skills			Recoded Yr Sel part A		Total
			up to 2001	2001 onwards	up to 2012
Planning skills	Improved a little	Count	6	8	14
		% within Recoded Yr Sel part A	5.7%	8.0%	6.8%
	Somewhat improved	Count	48	46	94
		% within Recoded Yr Sel part A	45.3%	46.0%	45.6%
	Very much improved	Count	51	46	97
		% within Recoded Yr Sel part A	48.1%	46.0%	47.1%
	Missing	Count	1	0	1
		% within Recoded Yr Sel part A	0.9%	0%	0.5%
Total		Count	106	100	206
		% within Recoded Yr Sel part A	**100%**	**100%**	**100.0%**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.621(a)	3	0.597
Likelihood Ratio	1.842	3	0.519
Linear-by-linear Association	0.501	1	0.412
N of Valid Cases	206		

(a): 4 cells (33.7%) have expected count less than 5. The minimum expected count is .28.

Table 5.19 (M) Chance of achieving career goals

Chance of achieving career goals					
			Recoded Yr Sel part A		**Total**
			up to 2001	**2001 onwards**	**up to 2012**
Future chance of achieving my career goals	Decreased a lot	Count	0	1	1
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
	Decreased somewhat	Count	5	4	9
		% within Recoded Yr Sel part A	5.1%	3.7%	4.4%
	No change	Count	52	55	107
		% within Recoded Yr Sel part A	52.3%	51.4%	51.9%
	Increased somewhat	Count	41	45	86
		% within Recoded Yr Sel part A	41.4%	42.1%	41.7%
	Increased a lot	Count	1	1	2
		% within Recoded Yr Sel part A	**1.0%**	**0.9%**	1.0%
	Missing	Count	0	1	1
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
Total		Count	99	107	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	3.273(a)	5	0.621
Likelihood Ratio	3.542	5	0.512
Linear-by-linear Association	2.198	1	0.101
N of Valid Cases	206		

(a): 6 cells (55.1%) have expected count less than 5. The minimum expected count is .27.

Table 5.20 Opportunities for employment overseas

Opportunities for Employment Overseas					
			Recoded Yr Sel part A		Total
			up to 2001	2001 onwards	up to 2012
Future chance of opportunities for employment overseas	Decreased a lot	Count	0	1	1
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
	Decreased somewhat	Count	0	1	1
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
	No change	Count	23	21	44
		% within Recoded Yr Sel part A	23.3%	19.6%	21.4%
	Increased somewhat	Count	54	60	114
		% within Recoded Yr Sel part A	54.5%	56.1%	55.3%
	Increased a lot	Count	19	23	42
		% within Recoded Yr Sel part A	19.2%	21.5%	20.4%
	Missing	Count	3	1	4
		% within Recoded Yr Sel part A	3.0%	0.9%	0.5%
Total		Count	99	107	206
		% within Recoded Yr Sel part A	100.0%	100.0%	100.0%

Chi -Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.968a)	6	0.033
Likelihood Ratio	12.519	6	0.032
Linear-by-linear Association	9.108	1	0.002
N of Valid Cases	206		

(a): 7 cells (53.3%) have expected count less than 5. The minimum expected count is .30.

Table 5.21 (M) Increased salary/personal income

Increased Salary/Personal Income					
			Recoded Yr Sel part A		Total
			up to 2001	2001 onwards	up to 2012
Future chance of increased salary or personal income	Decreased a lot	Count	0	1	1
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
	No change	Count	6	8	14
		% within Recoded Yr Sel part A	6.1%	7.4%	6.8%
	Increased somewhat	Count	59	64	123
		% within Recoded Yr Sel part A	60.2%	59.2%	59.7%
	Increased a lot	Count	33	34	67
		% within Recoded Yr Sel part A	33.7%	31.5%	32.5%
	Missing	Count	0	1	1
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
Total		Count	98	108	206
		% within Recoded Yr Sel part A	100.0%	100.0%	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.106(a)	4	0.312
Likelihood Ratio	4.782	4	0.298
Linear-by-linear Association	2.513	1	0.099
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .30.

Table 5.22 (M) Personal outcomes

Personal outcomes					
			Recoded Yr Sel part A		**Total**
			up to 2001	**2001 onwards**	**up to 2012**
My motivation to work	Decreased a lot	Count	1	1	2
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	1.1%	0.9%	1.0%
	Decreased somewhat	Count	1	1	2
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	1.1%	0.9%	1.0%
	No change	Count	4	5	9
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	4.3%	4.5%	4.4%
	Increased somewhat	Count	23	31	54
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	24.5%	27.7%	26.2%
	Increased a lot	Count	65	74	139
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	69.1%	66.1%	67.5%
Total		Count	94	112	206
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	7.417(a)	4	0.115
Likelihood Ratio	7.273	4	0.122
Linear-by-linear Association	0.943	1	0.332
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .59.

Table 5.23 (M) Confidence in abilities

Confidence in abilities					
			Recoded Yr Sel part A		**Total**
			up to 2001	**2001 onwards**	**up to 2012**
Confidence in my abilities	Decreased a lot	Count	0	1	1
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
	No change	Count	0	1	1
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
	Increased somewhat	Count	26	30	56
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	26.5%	27.8%	27.2%
	Increased a lot	Count	72	76	148
		% within motivation			100.0%

		to work			
		% within Recoded Yr Sel part A	73.5%	70.4%	71.8%
Total		Count	98	108	206
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	**100%**	**100%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	.915(a)	3	0.822
Likelihood Ratio	1.478	3	0.687
Linear-by-linear Association	0.463	1	0.496
N of Valid Cases	206		

(a): 5 cells (50.0%) have expected count less than 5. The minimum expected count is .59.

Table 5.24 (M) Career ambitions

Career ambitions					
			Recoded Yr Sel part A		Total
			up to 2001	2001 onwards	
Career ambitions	Decreased a lot	Count	0	1	1
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
	Decreased somewhat	Count	0	1	1
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
	No change	Count	5	6	11
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	5.2%	5.5%	5.3%
	Increased somewhat	Count	30	34	64
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	30.9%	31.2%	31.1%
	Increased a lot	Count	62	65	127
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	63.9%	31.2%	61.7%
	Invalid	Count	0	1	1
		% within motivation			100.0%

		to work			
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
	Missing	Count	0	1	1
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
Total		Count	97	109	206
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	7.086(a)	6	0.313
Likelihood Ratio	7.665	6	0.264
Linear-by-linear Association	0.579	1	0.447
N of Valid Cases	206		

(a): 9 cells (64.3%) have expected count less than 5. The minimum expected count is .30.

Table 5.25 (M) Interest in work

Interest in Work					
			Recoded Yr Sel part A		**Total**
			up to 2001	**2001 onwards**	
Interest in my work	Decreased a lot	Count	1	2	3
		% within Recoded Yr Sel part A	0.9%	2.1%	1.5%
	Decreased somewhat	Count	1	1	2
		% within Recoded Yr Sel part A	0.9%	0.9%	1.0%
	No change	Count	4	6	10
		% within Recoded Yr Sel part A	4.0%	6.3%	4.9%
	Increased somewhat	Count	34	38	72
		% within Recoded Yr Sel part A	34.3%	39.9%	35.0%
	Increased a lot	Count	61	57	118
		% within Recoded Yr Sel part A	61.6%	59.5%	57.3%
	Missing	Count	0	1	1
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
Total		Count	101	105	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.126(a)	5	0.498
Likelihood Ratio	4.987	5	0.386
Linear-by-linear Association	0.432	1	0.437
N of Valid Cases	206		

(a): 7 cells (58.3%) have expected count less than 5. The minimum expected count is .30.

Table 5.26 (M) Work satisfaction

Work Satisfaction					
			Recoded Yr Sel part A		Total
			up to 2001	2001 onwards	
Satisfaction with my work	Decreased a lot	Count	2	0	2
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	2.0%	0%	1.0%
	Decreased somewhat	Count	2	2	4
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	2.0%	2.1%	1.9%
	No change	Count	5	3	8
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	5.0%	3.1%	3.9%
	Increased somewhat	Count	41	44	85
		% within motivation			100.0%

		to work			
		% within Recoded Yr Sel part A	41.4%	46.2%	41.3%
	Increased a lot	Count	51	55	106
		% within motivation to work			100.0%
		% within Recoded Yr Sel part A	51.5%	57.8%	51.5%
	Missing	Count	0	1	1
		% within Recoded Yr Sel part A	0%	0.9%	0.5%
Total		Count	101	105	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	**Df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	5.219(a)	5	0.321
Likelihood Ratio	5.989	5	0.298
Linear-by-linear Association	2.021	1	0.103
N of Valid Cases	206		

(a): 7 cells (58.3%) have expected count less than 5. The minimum expected count is .30.

Table 5.27 (M) Personal empowerment

Personal empowerment					
			Recoded Yr Sel part A		Total
			up to 2001	2001 onwards	
Do you believe your Australian Scholarship has empowered you personally?	No	Count	3	2	5
		% within Recoded Yr Sel part A	2.8%	2.0%	2.4%
	Yes	Count	101	97	198
		% within Recoded Yr Sel part A	95.3	97.0%	96.1%
		Count	2	1	3
		% within Recoded Yr Sel part A	1.8%	1.0%	1.5%
Total		Count	106	100	206
		% within Recoded Yr Sel part A	**100.0%**	**100.0%**	**100.0%**

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.524(a)	2	0.467
Likelihood Ratio	2.355	2	0.308
Linear-by-linear Association	1.289	1	0.256
N of Valid Cases	206		

(a): 4 cells (66.7%) have expected count less than 5. The minimum expected count is .89.