

**An Investigation of Emirati Student Recruitment and  
Retention in Nursing Education, and the Experience of  
Nursing Educational Leaders**

استكشاف العوامل المحيطة في استقطاب الطلاب الإماراتيين الى تعلم  
التمريض، والخبرة من القيادات التعليمية

**By,**

**Briliya Devadas, MSN, MA, RN, RM,**

**A thesis submitted in fulfilment**

**of the requirements for the degree of**

**DOCTOR OF PHILOSOPHY IN EDUCATION**

**at**

**The British University in Dubai**

**April, 2015**



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## ABSTRACT IN ENGLISH

Nursing started in the Emirates with the arrival of expatriate nurses in the later part of the nineteenth century, but fifty years on though, nursing education in the country is still in its infancy. The purpose of this study is to investigate factors surrounding poor Emirati student recruitment and retention within the nursing programme(s) in the Abu Dhabi Emirate, and the experience of nursing education leaders in dealing with this issue. A review of the literature, both regionally and globally, identifies several factors as influencing this phenomenon, but there has been no study, published until date, from the UAE. Within a mixed methodology approach, a sequential explanatory mixed methods research design was used to collect data from 140 Emirati students at different levels of the nursing program, at the only College of Health Sciences, in the Emirate. Questionnaires, semi- structured interviews and related documents analyses were used to collect information for the purpose of this thesis. Unstructured interviews were also conducted with select nursing leaders in the country to explore their experiences. Quantitative analysis revealed that overall participants perceived the Emirati society as holding a positive image of nursing, though a majority of them indicated that nursing as a profession, would be a third or last choice of career for them. Inferential analysis on the reasons to choose or not choose nursing, revealed an opportunity to work as part of the team; and as a stepping stone to other professions as significant reasons, versus perceived program difficulty level, and perceived unpleasant tasks. Thematic analysis of interviews were categorized as: - 1) Personal interest; 2) Parental support; 3) Professional awareness; 4) Perceived barriers; 5) Potential benefits, and 6) Policies at the local and national levels. Nursing leaders from different spheres of the profession had different experiences and responsibilities, and tackled the problem from different perspectives. The study has several implications for nursing education and policy in the United Arab Emirates and the region.

## ABSTRACT IN ARABIC

بدأت مهنة التمريض في دولة الإمارات مع وصول الممرضات الوافدات في الجزء الأخير من القرن التاسع عشر، ولكن على الرغم من ذلك و بعد مرور خمسين عاما على ذلك، لا يزال تعليم التمريض في البلاد في مهده. تهدف هذه الدراسة الى استكشاف العوامل المحيطة بضعف انتساب الطلاب الإماراتيين في برامج التمريض المحلية في البلاد، بالإضافة الى دراسة الطرق المتبعة في التعامل مع هذه القضية من قبل الرواد و القادة في تعليم التمريض. و من خلال مراجعة البحوث المنشورة إقليميا وعالميا، وجد الكثير من العوامل التي لها تأثير مباشر على هذه الظاهرة، ولكن لا يوجد أي دراسة حتى الآن نشرت في دولة الإمارات العربية المتحدة تدرس هذا الموضوع. وفي إطار نهج منهجية مختلطة، تم استخدام تصميم متسلسل وتوضيحي للبحوث المتداخلة في هذه الدراسة. حيث تم جمع البيانات من 140 طالب من الطلبة الإماراتيين على مستويات مختلفة من برنامج التمريض في كلية العلوم الصحية الوحيدة في الإمارة. واستخدمت الاستبيانات والمقابلات شبه المهيكلية والوثائق ذات الصلة لجمع المعلومات لغرض هذه الأطروحة. وأجريت مجموعة ثانية من المقابلات المتعمقة مع الرواد و القادة الذين تروكوا بصماتهم في التمريض في البلاد لاستكشاف تجاربهم. وكشف التحليل الكمي أن المشاركين عموما يشيرون إلى أن المجتمع الإماراتي ينظر بصورة إيجابية لمهنة التمريض، على الرغم من أن الأغلبية منهم أشارت إلى أن التمريض كمهنة، سيكون الخيار الثالث أو الأخير من المهن التي يفضلون دراستها. و من خلال التحليل الاستدلالي على أسباب الاختيار أو عدم الاختيار لمهنة التمريض، كانت النتائج تدل الى أن العمل كجزء من فريق، وكنقطة انطلاق لمهن أخرى كانت من أهم الأسباب لاختيار مهنة التمريض، و في المقابل الانطباع السائد عن صعوبة مستوى البرامج الدراسية، والمهام الغير سارة المتصورة كانت من أهم الاسباب لعدم اختيار هذه المهنة. وصنف التحليل الموضوعي من المقابلات على النحو التالي: (1 - المصلحة الشخصية، 2) دعم الوالدين، 3) الوعي المهني، 4) الصعوبات المتصورة، 5) الفوائد المحتملة، و6) السياسات على المستويات المحلية والوطنية. وكانت العينة من الرواد و القادة في التمريض من مختلف مجالات المهنة، و كانوا من ذوي الخبرات والمسؤوليات المختلفة، و كانوا يتعاملون ويعالجون المشكلة من زوايا مختلفة. لهذه الدراسة آثار عديدة على تعليم التمريض وعلى السياسات التعليمية لهذه المهنة في دولة الإمارات العربية المتحدة والمنطقة.

## DEDICATION

First and foremost, I would like dedicate this thesis to my parents – Victoria and Devadas. Being professional nurses themselves, it was their dream that their daughter would one day attain a PhD degree and contribute to the nursing profession. The successful completion of this thesis would not have been possible without my mother's prayers and my father's pep talks. You, my mother, are the biggest influence and role model in my life, and I owe all my life's successes to your blessings. You, my father, always believed that I could achieve anything that I set my mind to, and I am glad that I could finally complete this thesis as you always believed I would.

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## LIST OF ABBREVIATIONS

### ABBREVIATION

AACN – American Association of Colleges of Nursing

ANA – American Nursing Association

AND – Associate Nursing Degree

CAA – Commission of Advanced Accreditation

ENA – Emirates nursing association

ECSSR – Emirates Centre for Strategic Studies and Research

FDON – Federal Department of Nursing, UAE

GCC – Gulf Cooperation Council

HAAD – Health Authority Abu Dhabi

HCT – Higher colleges of Technology

IAT – Institute of Applied Technology

ICN – International council of Nurses

IRB – Institutional Review Board

ISER – Institute for Social and Economic Research

NMC – Nursing and Midwifery Council

MOH – Ministry of Health

MOHESR – Ministry of Higher Education and Scientific Research

NURS model– Nursing Universal Retention and Success Model

NLN – National League for Nursing

OBSSR - Office of the Behavioural and Social Sciences Research, UK

PBUH – Peace Be Upon Him (Prophet Mohamed)

RAND Corporation – Research and Development Corporation

RN – Registered Nurse

SEHA – Health Services Provider

SPSS – Statistical Package for Social Sciences

UAE – United Arab Emirates

WHO – World Health Organization

WICHE – Western Interstate Commission for Higher Education

## **CHAPTER ONE: INTRODUCTION**

Nursing today is a dynamic profession, constantly evolving itself to meet the health care needs of the society to which it caters. It is one of the largest healthcare professions in the world, with professionals working in a myriad of healthcare settings, such as hospitals, clinics, primary health care centres, schools, and colleges. A distinct profession grounded on a growing body of knowledge that governs its professional practice, nursing maintains a unique role that recognizes autonomy, accountability and responsibility as critical concepts in its scope of practice. While for some the path to becoming a nurse and entering the nursing profession is straightforward, rewarding and fulfilling, for others it is standing at the career crossroads of life where the road to nursing requires guidance. Nursing education is never constant and throughout its history, nursing programmes have been a direct reflection of social, political, and economic trends. Paradoxically, the profession these days is at its strongest in power, while at the same time reaching a state of virtual extinction, due to dwindling numbers within its taskforce (Latimer 2005).

Significant global challenges in the area of workforce imbalances, decreased supply and increased demand of nurses have resulted in negative impacts affecting health care systems around the world. Oulton (2006, p.34S), in his report “The Global Nursing Shortage: An Overview of Issues and Actions” for the International Council of Nurses (ICN), defines the current shortage “as an imbalance between demand for employment and the available supply”. Recently, both decreased supply and increased demand have contributed to the recruitment crisis, with societal factors directly or indirectly contributing to the phenomenon such as increased patient care acuity, a shift to ambulatory care from hospital admissions, an aging population, new and re-emerging infectious diseases, and globalization. According to the



International Council of Nurses (ICN) position statement on “Nurse Retention and Migration” (2007, p. 3), reasons for the decreased supply of nurses also include “an increase in various other career opportunities for women and a poor image of nursing as a career”.

The United Arab Emirates, since its unification in 1971, has developed at a very remarkable pace with modernization in oil, tourism and education, followed closely by a need for better health care services. The nursing profession started in the UAE with the arrival of expatriate nurses in the early 1960s (El-Haddad, 2006). Fifty years on, though, nursing education in the country is still in its infancy. Educational reform in nursing education is the need of the hour to advance the profession from the diploma level to the baccalaureate degree, and to provide a solution to the nursing shortage in schools and hospitals (Wollin & Fairweather, 2012). With only 3% of the nursing workforce being Emirati locals, the country relies heavily on an expatriate workforce to meet the society’s nursing health care needs, but this is not an appropriate strategy from a political and socio-cultural perspective. In the UAE, according to the Health Authority Abu Dhabi’s Statistics (2011), by 2021 an estimated 5,900 more nurses will be required in the Emirate, and if present turnover rates continue this would translate into an annual recruitment of approximately 1,600 nurses.

Leaders of the UAE consider education as a key element in the social and economic development of the country and therefore free accessible education (K through 16) is provided to all its citizens. This commitment has led to a dramatic rise in the literacy rate and increasing educational attainments. Higher education in the United Arab Emirates has progressed, since the nation’s unification in 1971, at a remarkable pace with technological innovations and globalization impacts creating rippling effects that have swept across the field and its importance is reflected in Article 17 of the UAE constitution which states that, “Education is a

fundamental factor for the progress of the society” (2010, p. 10), and one key strategy in the UAE Government Strategy (2011-2013) is ensuring world class health care to its citizens and residents. Quality nursing education is necessary to equipping its largest section of health care providers to rise to the challenge and providing optimal care to society.

There are many challenges to nursing education, with the first and foremost being a shortage in nurses’ recruitment and retention in the profession. The World Health Organization (2006) has stressed that the critical workforce shortage is severe enough to start impacting the delivery of essential nursing care. Leaders in nursing education striving to be change agents and contribute to the field need to be aware of the multifaceted issues involved. Their leadership is enacted within multifaceted dimensions of students in the classroom, with faculty members at meetings, on a local level within the organization, at a national level influenced by government agencies, and on an international platform (Horton-Deutsch et al. 2011). Cooper (2008) argues that the nursing shortage today requires leaders in nursing who will find innovative strategies to meet nursing education needs without compromising quality and patient safety.

## **1.1 Background**

Historically, nursing was not always recognized as a profession. There are records from the mid to late eighteenth century indicating that nurses were often uneducated, undesirable women hired from the lowest classes in society (Brook & Kleine-Kracht, 1983; D’Antonio, 2004; Kalisch & Kalisch, 2004). In those days, nursing was considered an inferior occupation (Kalisch & Kalisch, 2004, p.24). Nursing as an occupation began in the Victorian Era in the UK, and its negative image persisted. The landmark work of Kalisch and Kalisch (1987) provides compelling evidence that the media often portrayed nurses as being inferior, less academically and competently equipped, and morally corrupt. Florence Nightingale

contributed much in upgrading the status of the nursing profession, and it was her initiative that brought education, discipline, and good character referrals - essential attributes to being a nurse in the beginning of the nineteenth century in the Western world.

Even though throughout the twentieth century there have been regular series of nursing shortages, the present one has been characterized as being very much unlike those (Goodin, 2003). The current nursing shortage has been described by many people and organizations, as being critical, unprecedented and serious (Goodin, 2003; Sigma Theta Tau International, 2006; Sochalski, 2002). Looking ahead, the International Council of Nurses (ICN) report by Oulton (2006) forecasts that 50% of Canada's nurses will retire within the next 15 years and that by 2025, Denmark will require 22,000 nurses. In the United States, government estimates project that by 2020, 36% of nursing positions will become vacant. To reverse the shortage and not just fill the gap, researchers estimate that there is a need to graduate at least 30% more nurses annually (Allan & Aldebron, 2008).

The nursing curriculum today has undergone tremendous changes from its humble beginnings in 1850 when the first nursing schools opened in the UK. Giddens and Brady (2007) report on this evolution of nursing curriculum and cite contributing factors like the shift from an industrial age to an information age and global changes in the health care delivery system. By the late 1940s, Tyler's curriculum model, which focused on prescribed curriculum development criteria such as measurable objectives (NLN, 2003), was the framework that nurses used in their educational process. This framework, which at first was thought to be effective in lending structure and shape to the body of knowledge that was nursing, later proved to be a means for content saturation (Giddens & Brady, 2007).

By 2001, the National League for Nursing (NLN) recognized the limitations and in their position statement (National League for Nursing, 2003, p.2) “challenged faculty to think in new ways, integrate research findings into their approaches to teaching and evaluating students, and consider different curriculum models” like cultural congruent models. Responding to these and other factors such as globalisation, the global nursing shortage, technological revolution and the changing health care environment, nurse educators have begun to develop innovative, interactive and student centred strategies to deal with the new generation (Candela et al., 2006; Diekelmann et al, 2005; Ironside, 2003; Stanley & Dougherty, 2010).

In the Middle Eastern region, the development of the nursing workforce is at various stages of progress, with Yemen having as few as 0.65 nurses and Qatar having 4.94 nurses per 1000 population. But these statistics alone fail to present a complete picture, for while Jordan, Qatar and the UAE seem to have relatively similar number of nurses per 1000 at 3.24, 4.94 and 4.18 respectively, it should be noted that in Jordan only 6% of the work force is foreign, while in Qatar 94% of the nurses and in the UAE 97% of the nursing workforce is comprised of expatriates (WHO, 2006). Humanitarian organizations like the UAE Red Crescent Society have been active in the UAE since 1983, but did little to contribute to the growth of the nursing profession in the region.

The United Arab Emirates is situated in the gulf region, along the tip of the Arabian Peninsula. At the end of the British occupation in 1970, a federation was formed among neighbouring states and in 1971 the UAE became a sovereign nation (Abdulla, 2005). It is comprised of the seven Emirates of Abu Dhabi, Dubai, Sharjah, Ajman, Ras Al Khaimah, Umm Al Quwain and Fujairah. The educational system is composed of three stages: six years of primary education,

three years of middle school and three years of secondary education. This is followed by higher education in the various public and private universities that is provided in the UAE. The Ministry of Education and Scientific Research (MOHESR) is the federal authority that regulates all public and privately-run higher education institutions in the country.

In the health care sector, nursing education seeks to provide the theoretical background and technical skill competency required of nurses to meet these educational demands. In the 1970s, Institutes of Nursing in the various Emirates, backed by the Ministry of Health, offered the diploma programme in nursing, and nursing education in the Emirate of Abu Dhabi began with the first nursing school in 1974 (Kronfol & Athique, 1986). Since the 1990s, various schools of nursing affiliated with universities or government agencies have for short periods provided the baccalaureate degree in nursing programme, an example being the Institute of Nursing in Abu Dhabi which was dissolved to give way to the nursing programme in the Higher Colleges of Technology in 2004, which was subsequently closed in 2009. Currently, the Fatima College of Health Sciences in Abu Dhabi, opened in 2006, is offering the nursing degree to its students (Wollin & Fairweather, 2012).

The Federal Department of Nursing in the UAE Ministry of Health (MOH) had set one of their goals for the year 2011 as, “to encourage more UAE nationals to join the nursing and the midwifery profession” (Annual Report, 2011, p. 4). At the end of the year, however, they were able to report only “339 Emirati nurses working in the MOH facilities/districts in the UAE” and the establishment of “an Emirati Nurse Representative group to discuss issues relating to enhancing the image of nursing in the community” (p. 5). In the UAE, as with other higher education programmes, there is an import of foreign curricula in the field of nursing education, an example being the American system which was used in the Higher Colleges of Technology

from 2004 to 2009 and the Australian nursing curriculum currently being used in the Fatima College of Health Sciences (Wollin & Fairweather, 2012). There is a growing number of women in the higher education system in the UAE in recent years but an overdependence on expatriate nurses, coupled with common misunderstandings regarding the role of a nurse, lingering perceptions of nurses being the handmaidens of doctors, low educational levels and limited knowledge regarding the scope of practice of nurses, resulting in only 3% of the local population taking up the profession as a career choice (Wollin & Fairweather, 2012). Nursing's image is closely tied to its professional role and identity which differs based on social and cultural factors.

The UAE Nursing and Midwifery Council (NMC) was established in 2010 to provide a platform to develop strategies and implement a national plan of action for strengthening the education of nurses and midwives in the nation. The Council cites low wages, low status and limited career progression as reasons for the shortage of nurses in the UAE. Dr. Fatima Al Rifai, the Director of the Ministry of Health's Federal Department of Nursing and Secretary of the new Council, said the "shortage of nurses and midwives - which is a global phenomenon - was compounded in the UAE by the perceived low status of the profession and she advocated for the development of unified, internationally standardized scopes of practice" (Underwood, 2010).

There are currently four universities offering an entry-level baccalaureate programme in nursing in the UAE, three of them government supported and one private. They are Sharjah University, the Higher Colleges of Technology (HCT), the Fatima College of Health Sciences, and the private Ras Al Khaimah Medical and Health Sciences University. These programmes

have all been introduced within the last decade and recruitment and retention among Emiratis has always been a challenge, according to the UAE NMC Education Strategy 2013.

Within the Emirate of Abu Dhabi, there is currently only one College of Health Sciences offering the baccalaureate degree in nursing, and students entering the college complete a pathway of one foundational year followed by a three year degree in their area of specialization – either nursing or pharmacy, or medical imaging, or radiology, or the paramedics program. During the foundation year, relatively more Emirati students join the College, but following the first year, they either discontinue this programme in favour of another programme in another university, or choose one of the other specializations excluding nursing. Very few Emirati students enter into the nursing programme(s) at the college.

The UAE Ministry of State for Federal National Council Affairs (2008), in their report on ‘Women in the UAE: A Portrait of Progress’ typifies UAE’s achievement by the, ‘evolution and growing prominence of Emirati women as partners and contributors in this remarkable nation-building process’. According to the report,

*Women, who account for 49.3 percent of the national population, are today at the forefront of the workforce in the UAE in both the government sector as well as a growing number in the private sector. Aided by the government’s commitment to empower women and provide them with equal opportunities, the status of women within the UAE has flourished in parallel with the country’s growth. (p.1)*

Within the college of Health Sciences therefore, at the end of the recruitment process, and after one year of exhausting college resources as well as student personal time, it is frustrating to bear witness to poor Emirati numbers within the nursing baccalaureate degree programme(s). Several studies both in the West, and from within the Middle Eastern region have discussed

this shortage in nursing education, and yet until date no one has researched this problem within the context of the United Arab Emirates.

The UAE Nursing Midwifery council (NMC) presented six strategic priorities in their 2013 education strategy report, to expand nursing and midwifery in the UAE. Recommendations supporting Emirati students within the nursing programme(s) included,

***Strategic Goal One:*** Increase the number of Emirati women and men enrolled in and graduating from nursing and midwifery education programmes in the UAE.

***Strategic Goal Two:*** Increase the total number of graduates from UAE nursing and midwifery programmes.

***Strategic Goal Three:*** Expand programme offerings so that five types of qualifications are available and offered within institutes of higher education. Programmes will include a) baccalaureate degree for entry level, b) Bridging programme from diploma to bachelors, c) post RN specialization programmes, d) master's degree for advanced practice and/or expanded roles in clinical, education or management, and e) doctoral programmes.

(UAE NMC Education Strategy, 2013, p. 6)

The later three strategic goals related to providing a culturally congruent curriculum with current educational technology, ensuring qualified nursing faculty, and establishing a system for international programme(s) accreditation as its aims.

The 'Expected Outcomes' to realize Strategic Goal One include: "1) The number of Emirati women and men choosing nursing and midwifery as a career option will be increased by 25% year over year; and 2) the number of Emirati women and men graduating from UAE nursing and midwifery programmes will be increased by 15% year over year" (UAE NMC 2013, p. 28). The UAE NMC council realized that even though nursing education in the Emirate of Abu Dhabi began in 1974 with the establishment of the first school of nursing, to date no studies



have been published on the perception of the nursing profession in the UAE, or the issues surrounding poor recruitment and retention of national students in the nursing programme(s) in the country.

The council developed strategies to fulfil the goals. For ‘Strategic Goal One’ these include “Identifying barriers to the selection of nursing and midwifery as career options by Emiratis and developing effective strategies to reverse this trend; and increasing access to nursing and midwifery education for UAE Nationals, with appropriate funding and support to substantially increase the number of Emirati Nationals in the profession”. Selected action plans to achieve the strategy of identifying barriers are, “To conduct a scientific study evaluating factors influencing choice of nursing and midwifery as a career option; and to identify strategies to increase recruitment and retention using findings from studies” (UAE NMC 2013, p. 28). This has led to the conceptualization of my research thesis and its urgent purpose concerning nursing in the UAE.

## **1.2 Purpose and Statement of the Problem**

The purpose of this thesis is to investigate factors surrounding Emirati student recruitment and retention into the local nursing programmes in the Abu Dhabi Emirate, and the experience of nursing education leaders in dealing with this issue. In human resources management, the term ‘recruitment’ refers to the process of attracting people for a place within an organization, and plays an important role in securing an effective workforce, while ‘selection’ refers to the process of shifting through the applicant database and choosing candidates to fill a position (Rees & French 2010). Concerning the local nursing programme(s) in the Abu Dhabi Emirate, poor student numbers would necessitate ‘attracting’ Emirati students to the nursing health care sector, and hence the term ‘recruitment’ is more appropriately used throughout the study. An

extensive review of the literature, both regionally and globally, identifies several factors influencing this phenomenon, but there has been no study published to date from the UAE.

Being an inaugural study in the UAE, in the Abu Dhabi Emirate, and within nursing education, this study will focus on creating an initial database of student profile characteristics and investigate the factors influencing recruitment and retention among Emirati students within the nursing programme(s), including ascertaining the experiences of nursing leaders in dealing with this issue. Research questions in mixed methods studies need to incorporate both the quantitative and qualitative aspects of the study to narrow and focus the purpose statements (Creswell, 2009). A need to investigate and describe the situation in the Abu Dhabi Emirates requires a quantitative analysis using a post-positivist worldview, while a desire to explore the myriad factors related to pursuing a career in nursing in the UAE necessitates the use of a qualitative dimension using a social constructivist lens.

My assumption, based on a review of similar studies from other countries in the region and internationally, is that societal perception regarding the nursing profession as a factor in the recruitment and retention of students, and is likely to be a factor in the UAE as well. To investigate my assumption and those arising from the literature, I identified the following three research questions that guide the study:

1. What is the profile of the Emirati student within the nursing programme(s) in the Abu Dhabi Emirate?
2. What are the factors influencing Emirati student recruitment and retention within the nursing programme(s)?
3. What are the nursing educational leaders' experiences and strategies related to Emirati student recruitment and retention, within the nursing programme(s)?

A review of literature identifies student profiles as one indicator of student recruitment within the nursing programme(s) (Jeffreys, 2014), and the lack of prior studies on Emirati student recruitment and retention in nursing programme(s) in the UAE necessitates its inclusion as one of the research questions. Similarly, extensive literature on the subject globally, and in the region, suggests a myriad of factors influencing the nursing student on the threshold of choosing a career in the nursing profession. The United Arab Emirates is unique in its rapid development in all sectors of society over the last forty years, including advances in education and employment for its female citizens, where a vast majority of the students are first generation college students with the potential to break down traditional boundaries imposed on them (Abdulla, 2005). It is the objective of this study to investigate what factors uniquely influence them in their decision making process.

Nursing leaders in the UAE are at the forefront of this crisis and yet there is no study to date on the challenges they face, milestones achieved, and suggested recommendations for future direction, which is the objective of the third research question in exploring their experiences in this study. Creswell (1994, p. 13) notes that at a more applied level, “strategies of inquiry should provide direction for procedures in a research design”. Good quantitative research focuses on describing and comparing variables to establish causal relationships, while qualitative studies explore issues in greater depth to gain an understanding of the different perspectives involved. For the investigation and exploration of Emirati student recruitment and retention in the nursing programme(s) in Abu Dhabi, including factors influencing career choice selection, the lack of prior research on the topic suggests the need for a descriptive study to first establish baseline data on the issue.

Then, in order to gain a more in-depth understanding of the factors surrounding the issue and to identify steps that could possibly reverse the trend, an interpretative dimension will need to be combined with the quantitative part of the study. According to Creswell (1994), knowledge can be claimed through a “scientific method” or an “alternative process” involving a set of assumptions, one of the latter being socially constructed knowledge claims. This study will therefore be approached from a post positivist paradigm to ascertain the quantitative dimensions, and a social constructivist worldview to investigate in-depth the societal factors influencing a career in nursing in the Emirate (Creswell, 2012). The post positivist tradition maintains that claims of knowledge cannot be ‘positive’ when dealing with humans but holds a deterministic view regarding causal effects, while in social constructivism, “individuals seek understanding of the world in which they live and work” (Creswell, 1994).

The ideas for social constructivism arise from Lincoln and Guba’s *Naturalistic Inquiry* (1985) and more recent authors (e.g., Crotty, 1998; Lincoln and Guba, 1982; Neuman, 2000; Schwandt, 2000). In social constructivism, meanings vary, originating from complex views of participants regarding the phenomenon under study. A mixed methods design can enable clarity in understanding of the problem by integrating the quantitative section and the opinions from the qualitative aspect (Creswell 2009), to provide better rich data on the issue of Emirati student recruitment and retention within the nursing programme(s) in the UAE, and thus Creswell’s (2012) steps to conducting a mixed methods study are used as a guide to inform this study.

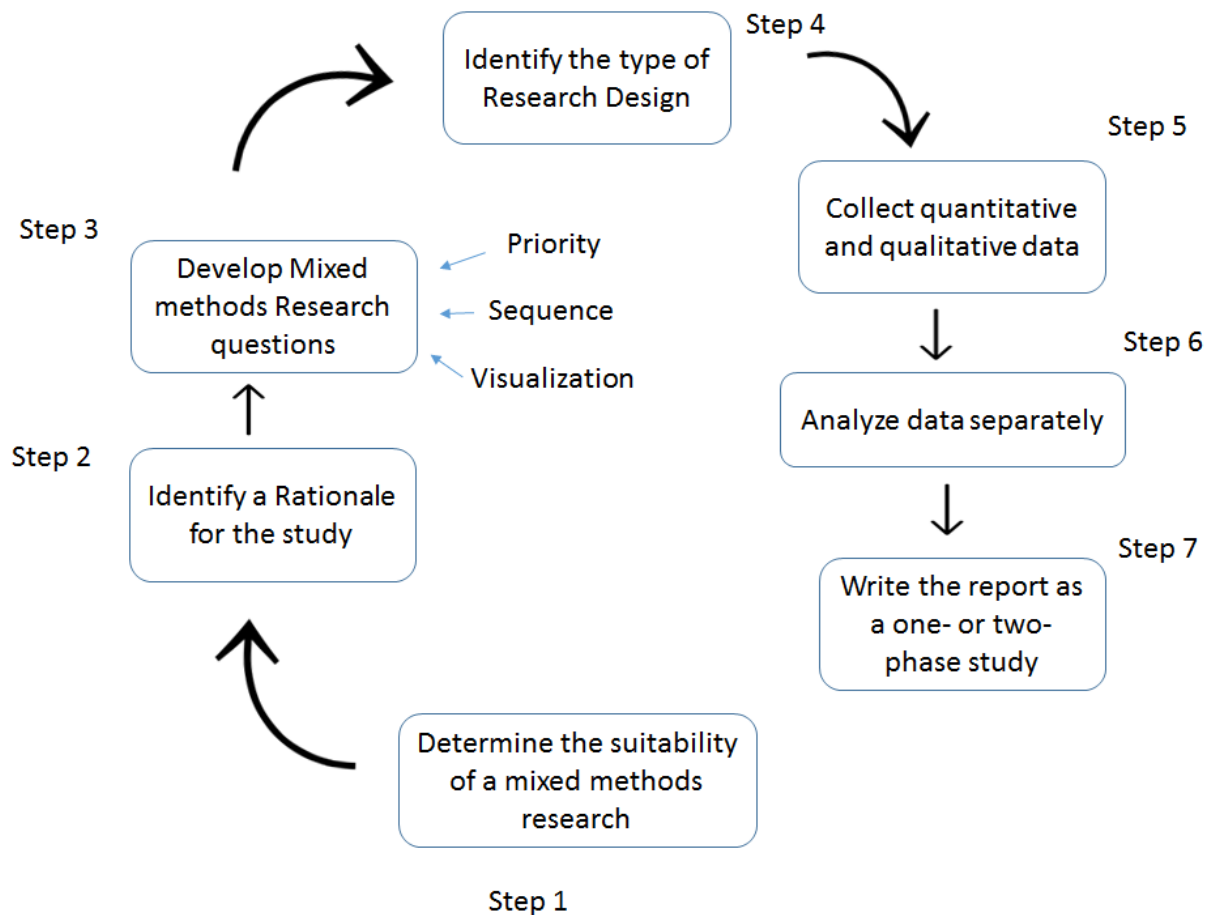


Figure 1: Creswell (2012, p. 555) Steps in the process of conducting a mixed methods study

### 1.3 Scope and Significance of the Study

By seeking answers to questions about Emirati student recruitment and retention in nursing education and the experience of nursing educational leaders in the region, I expect to contribute to the general literature in nursing education, to the issues surrounding the nursing shortage in the UAE, the Middle East region, and the international literature. I expect this contribution can provide an understanding of what local student feelings are on nursing as a profession, and identify some of the factors contributing to the issue of low Emirati recruitment and retention in the nursing programme(s), paving way for future strategies aimed at resolving this issue. My research topic is significant for four reasons. Firstly, no previous researcher has investigated Emirati student recruitment and retention in the nursing programme(s) in the UAE. There have

been other similar studies done in the Middle East in Bahrain (Eman et al. 2012), in Jordan (Safadi et al., 2011), in Iran (Varaei et al., 2012) and in Oman (Shukri et al., 2012), but none in the UAE.

Secondly, this subject is of particular interest to national policy makers and stakeholders in the country, given the current UAE health care climate of rapid evolution to meet high quality standards, and the crisis of few Emiratis in the nursing workforce to lead the change. Thirdly, this topic is timely because there are poor numbers of current Emirati students in the nursing programme(s), which serves to heighten the nursing shortage crisis in the near future unless solutions are found to identify the issue and develop strategies for a sustainable and committed future workforce. And fourthly, the paucity of literature on Emirati student recruitment and retention also highlights the lack of published information on commonly held local stereotypes of nursing, and would be very useful in understanding how these affect students' career choice in their selection of nursing as a career.

## **1.4 Overview of Chapters**

The contents of this chapter introduced the primary focus of the investigation - Emirati student recruitment and retention in the nursing programme(s), and the factors associated with nursing as a career choice, including the experience of nursing education leaders in the Emirate. Chapter 2 is an extensive literature review on the subject, including a section on the theoretical framework guiding this study and relevant fields of research in nursing education. Chapter 3 consists of a description of the research approach and the methodology that includes site and participant selection, data collection methods, ethical considerations, and research conduct. Chapter 4 presents an analysis of data and discussion of the findings. In Chapter 5, a summary of the findings is presented, including discussions, conclusions, implications for leaders in

nursing education, practice, and policy in Abu Dhabi, contributions to the field of mixed methods research, limitations and recommendations for further study.

## **CHAPTER TWO: REVIEW OF LITERATURE**

This literature review addresses the current shortage in the nursing profession, issues surrounding student recruitment and retention in nursing education, and the role of nursing leaders, regarding this crisis, in the profession. This chapter has two main sections: a presentation and discussion of the theoretical framework guiding the study, and a review of the relevant bodies of literature. In the second section of the chapter, topics of relevance to the study have been presented. The nature and status of the nursing profession including its historical development through the ages have been described briefly, to gain an appreciation of the societal and political influences which have shaped the growth of the profession, globally and in the region. The current global nursing shortage facing the profession today is then presented, to direct attention to the impending crisis in the global and the local market for skilled professionals, and to highlight a similar situation in the United Arab Emirates.

This is followed by a subsection on the attitudes towards nursing profession as a career choice both in the West and the Middle East region, with a focus on how different factors influence the career choice trajectory in different countries of the world. Student recruitment and retention in nursing education is presented next, with a global and regional review of the challenges faced including successful strategies adopted, to recruit more students into the profession. And finally a review of the impact of nursing leaders has been presented to determine their role in the recruitment and retention process, towards addressing the issue of nursing workforce shortage in the region. The aim of this literature review is to provide support and rationale for the mixed methods study, whose purpose is to investigate factors surrounding Emirati student recruitment and retention into the local nursing programme(s) in the country, and the experience of nursing education leaders in dealing with this issue.



Topics relevant to the study include discussions on the historical development and status of the nursing profession, the current nursing shortage, the nursing profession as a career choice, student recruitment and retention in nursing education, and the impact of nursing educational leaders. To locate the required literature, an exhaustive search was conducted in MEDLINE, CINAHL, Academic Search Premier, ERIC, Proquest, Education Research Complete and Professional Development Collection. The chapter concludes with a summary of the key points in the topics.

## **2.1 Theoretical Framework**

This section includes a discussion of Jeffreys' Nursing Universal Retention and Success model (NURS), followed by a review of transformational leadership in issues of student recruitment and retention in education, and finally the mixed methods paradigm of post positivism and social constructivism as a theoretical lens to investigate the multiple perspectives underlying the issue has been included, to gain an understanding of its application to the research study.

Research studies optimally draw upon one or more theoretical frameworks to inform all phases of the study. Within a mixed methods study there is opportunity for integration of varied theoretical perspectives. In congruence with the objectives of the study, this section presents the theoretical underpinnings that have guided this study and includes Jeffreys' (2014) Nursing Universal Retention and Success model (NURS), Bass' and Riggo's (2006) Transformational Leadership model, and Creswell's (2012) Research Paradigms in Mixed Methods Research.

### **2.1.1 Jeffreys' (2014) Nursing Universal Retention and Success model (NURS)**

Even though successful recruitment and retention of the nursing student is a universally desired outcome, the phenomenon remains elusive and challenging the world over. Jeffreys (2004) believes that students within the nursing discipline have distinctive characteristics that separate them from other professions and necessitates the development of a uniquely suited model. She developed the Nursing Undergraduate Retention and Success (NURS) to examine the wide range of factors that influence retention among nursing students in order to guide administrators and educators identify at-risk students and develop strategies towards effective recruitment and retention. “Academic outcomes interact with psychological outcomes whereby good academic performance results in retention only when accompanied by positive psychological outcomes for the nursing program and profession” (Jeffreys, 2004, p.11).

A central aspect of Jeffreys' model is the placement of the professional integration factors at the centre of the model. Faculty led behaviours that facilitate professional integration for students include ‘nursing faculty advisement and helpfulness, involvement in professional groups, encouragement from peers, professional events, peer mentoring-tutoring, and enhancement programs’ (Jeffreys' 2004). After several years of exploring and examining the multi-layered factors surrounding this issue, Jeffreys' (2014) refined the model and called it the “Jeffreys' Nursing Universal Retention and Success Model” (NURS), to provide nurse educators with an organizing framework to optimize student outcomes. According to the model, successful student recruitment and retention into a nursing program is based on an interplay between student profile characteristics, student affective factors, academic factors, environmental factors, academic outcomes, psychological outcomes, societal surrounding factors, and professional integration factors.

The model can be appropriately applied to the Emirati nursing student in the UAE, who is faced with all of these factors while contemplating a professional career as a nurse in the country (see Figure 2 below).

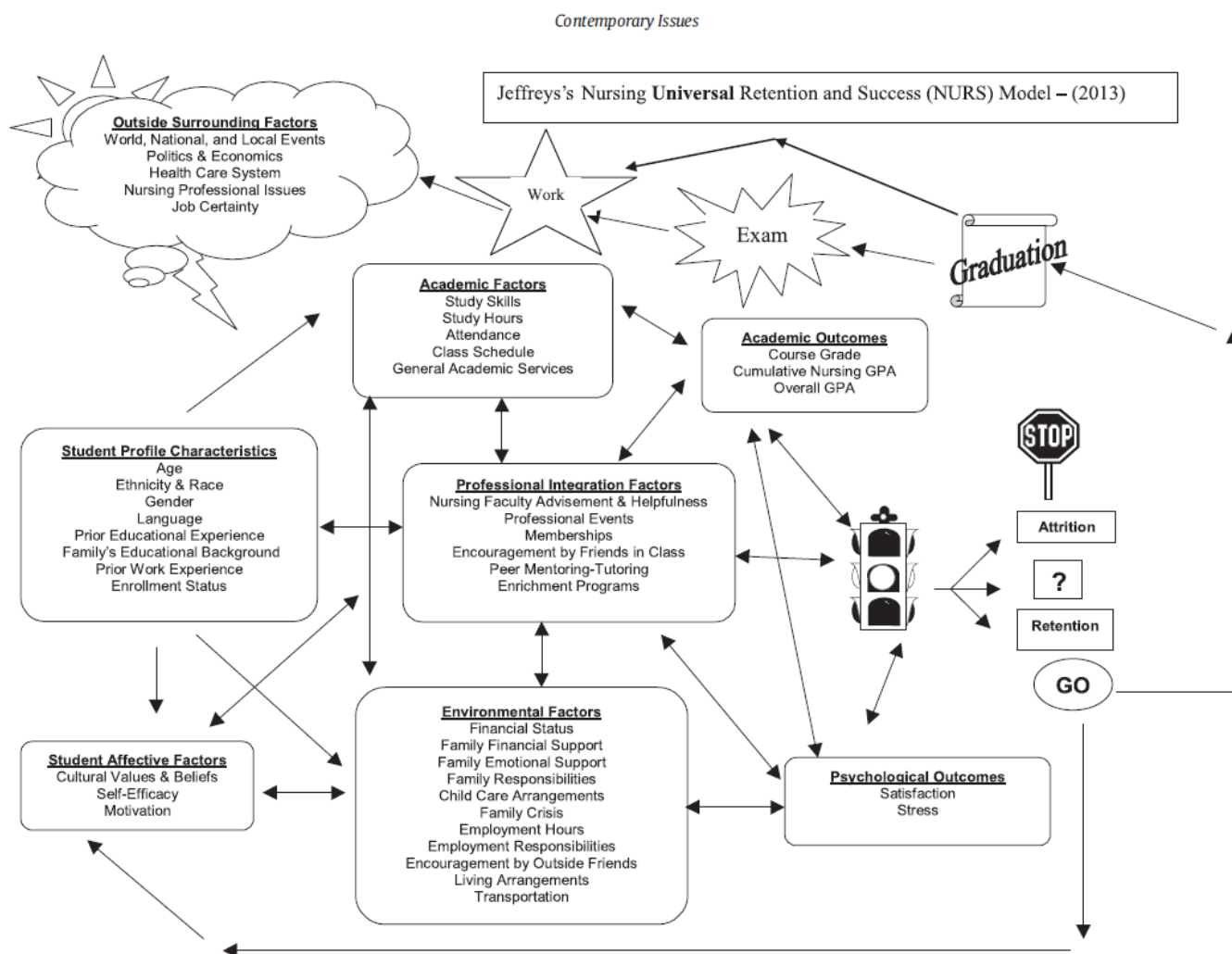


Figure 2: Jeffreys' (2014) Nursing Universal Retention and Success (NURS) Model

Jeffreys (2014) explains that student profile characteristics include age, ethnicity, race, and heritage, gender and sexual identity, first language, prior educational experience, family's educational background, prior work experience, and enrolment status. The intention is to identify influencing factors categorizing the student as a member of an under-represented

group, non-traditional, or first generation college student. According to Jeffreys (2014), a non-traditional student would be one who meets one or more of the following criteria: a) is older than 25 years; b) studying in a part-time mode; c) male; d) a member of the minority community; e) having children; f) entering the program from another different pathway; and g) having prior exposure to the health care field.

Student affective factors would include their attitudes, values and beliefs regarding the nursing program, including societal cultural beliefs and the motivation to succeed. Jeffreys (2014) explains that students enter nursing education with prior values and beliefs that guide thinking, decisions making and actions within all aspects of life and is an important area of focus in student recruitment and retention. While academic factors and positive psychological outcomes have an implications for student retention, societal surrounding factors related to the uncertain political and economic conditions that are unique to a country and which vary over time are equally important.

Jeffreys (2014) argues that the nurse educator/leader has a significant role to play in the professional integration factors. He explains that faculty advisements, memberships in professional organizations, and peer and faculty mentoring have the desired potential to academically integrate the student in a nursing program. English (2008) proposes that where only schools need to be revolutionized, expert leaders need to step in and guide organizations towards “accreditation compliance and national standards” (p. 203), but where the structuring and functioning of the schools is inadequate in a number of ways, the function of effective leadership is transformative, that is, striving for broader social change at all levels of the organization.

Jeffreys' (2014) NURS model has been widely used in studies examining recruitment and retention within the nursing profession. McDonough (2012) used the model in a quantitative dimension to examine student recruitment strategies in the baccalaureate degree program while Hammack (2003) also used the model in a quantitative investigation of the role of nurse administrators in the recruitment and retention of minority students. Wilson (2013) applied the NURS model quantitatively to investigate emotional intelligence and its effect on nursing student retention, while Cooper (2012) examined student achievement and curriculum in a nursing program college within the framework of the NURS model using descriptive and inferential means. Interestingly (Arthur 2009) used the model in her mixed methods study of leadership factors, retention strategies, and retention rates in the associate degree nursing programs. The current study is a mixed methods exploration of the factors influencing the Emirati student towards recruitment and retention within the nursing programme(s) and thus Jeffreys' (2014) NURS model was found to be an appropriate model for the study.

### **2.1.2 Bass and Riggo's (2006) Transformational Leadership Model**

The phenomenon of leadership is rooted in humanistic psychology especially the works of Carl Rogers (1961) and Abraham Maslow (1968). Humanistic psychologists believe that people are basically good, desiring to be helpful to others and their self-awareness as a key feature in their desire to achieve self-actualization (Rathus, 2003). Burns (1978) first developed the concept of transforming leadership in his research on political leaders and Bass and Steidlmeier (1999) later expanded on that term by using the word "transformational" instead of "transforming". In transformational leadership "leaders and followers raise one another to higher levels of motivation and morality" (Burns, 1978, p. 20). High standards of performance and accomplishment inspire followers to reach their greatest potential (Bass). Developing

relationship is central to the concept of transformational leadership by motivating and inspiring others to reach a common goal (Bass, 1985; Burns, 1978).

According to Burns (1978), a transactional leader interacts with others by bargaining for the exchange of valued services. Bass (1985, p. 121) explains that “the leader and follower agree on what the follower needs to do to be rewarded or to avoid punishment”. Contingent rewards could take the form of praise, bonuses, promotions, public recognition, stipends or honors.

The theory was further developed by Bass and Riggo (2006) in to “The Full Range Leadership Model” which includes the essential components of transformational leadership, where Bass (1999, p. 6) argues that there is a current need for leaders to be more transformational if they seek to maintain effectiveness. He describes authentic transformational leadership as, “the leader moving the follower beyond immediate self-interests through the four components of idealized influence, inspirational motivation, intellectual stimulation or individualized consideration” (see Figure 3).

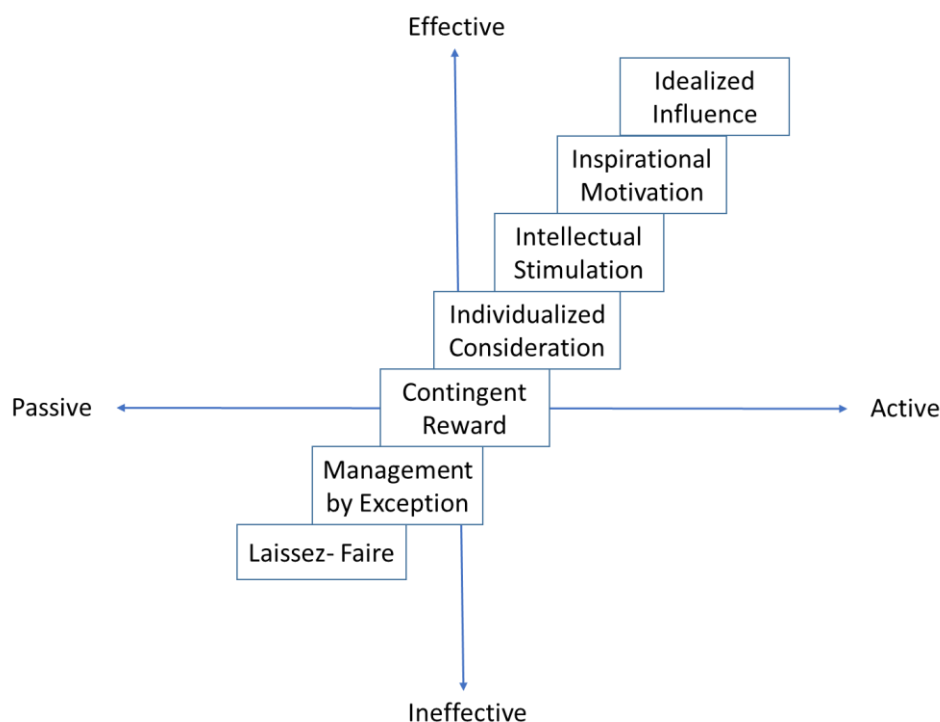


Figure 3: Bass and Riggo (2006) Full Range of Leadership Model

Nursing education in the UAE has recruitment and retention issues, and the full range of leadership characteristics is necessary to combat this crisis. Nursing leaders in the UAE could use contingent rewards like stipends and bonuses to entice more Emiratis into the profession, while the “idealized influence” component of authentic transformational leadership can lead to the creation of a suitable organizational culture with continuous striving for perseverance until the goal is achieved, and provide a vision for proactive adaptive change (Huston, 2008). Inspirational motivation can influence mentoring and networking within the organization, provide recognition and rewards for the followers (Bass & Steidlmeier, 1999), and build on the currency of trust. When the authentic transformational leader pays individual consideration to the followers in the organization, the result is open channels of communication, acceptance of advice from experts and an open attitude. Finally, intellectual stimulation brings about empowered followers who share responsibility for innovation and rise to meet the multifaceted challenges facing nursing education in the country.

Within the college of nursing transformational leadership can contribute to positive outcomes for faculty and students. In her review of literature, Pounder (2006) suggested that transformational leadership abilities among college faculty related to better classroom instruction and were associated with positive student attitudes, achievement, extra effort, and student satisfaction. A study conducted by Waugh (2007) using a phenomenological approach to explore whether characteristics of transformational leadership reflected a decreased rate of employee turnover and increased nursing retention rates in the adult critical care area at two critical care facilities, adopted Bass and Steidlmeier (1999) model of transformational leadership to examine retention issues in nursing practice.

In his mixed methods study of leadership factors and student retention, in associate degree nursing programs in the United States, among forty-nine ADN directors, Arthur (2009) used the model of transformational leadership and found that the most frequently reported behaviors related to enabling others to act. A standard multiple regression was conducted to predict student retention rates from scores on the five leadership practices. Data analysis, in Arthur's (2009) study, found no statistically significant relationship but qualitative data identified several themes regarding the use of strategies to enhance student success including selective admission criteria, academic assistance, remediation, faculty-student interaction, and college resources.

It is interesting to note that there was no statistically significant result when first investigating the problem through the quantitative dimension, while the qualitative findings also seem to find no significance to the 'student affective factors' as explained by Jeffreys' as significant in successful student recruitment and retention in his NURS model. Taking this into consideration, in this study, the factors influencing the Emirati student making a career choice in nursing in Abu Dhabi will be investigated, to gain an in-depth understanding into a hitherto uninvestigated problem.

### **2.1.3 Research Paradigms in Mixed Methods**

In qualitative and quantitative research methods, a philosophical approach is usually aligned with post positivism underpinning quantitative methods, and social constructivism being the foundation for qualitative research methods. The positivist concept followed by the post-positivist philosophy (or logical positivism) of science, developed in the nineteenth century to expand on the knowledge base. The post positivist paradigm makes the assumption that there are facts and principles to be discovered and investigated, and that they are not dependent on



any historical or social context. However, an important criticism of the post-positivist approach is that it does not provide the means to observe human beings and their behaviours in an in-depth way and recognizes that we cannot be truly 'positive' about claims of knowledge (Creswell 2012). The paradigm yields useful but limited data that only provides a basic view of the subject being investigated.

During the 1970s, post-positivism began to give way for social constructivism to gain increasing credence as an approach for nursing research, and Beck (2000) notes that, because the nursing profession is entwined with people's experiences, social constructivism as a research method is best suited to the investigation of subjects important to practice, education and research in nursing. This philosophy accepts the need to develop a similar understanding of social situations and activities, and pursue the same constructed shared meanings and interpretations as the subjects of the research.

Philosophically oriented writers have long debated whether mixing of paradigms was possible within mixed methods research. Recently Guba and Lincoln (2005) acknowledged that elements of paradigms may be 'blended together in a study'. This "delinking of the paradigms suggested that many different research methods could be linked to certain paradigms", according to Johnson & Onwuegbuzie (2004). In 2007, Creswell suggested that multiple paradigms could be related to different phases of a research design, thus re-linking paradigms to research designs. An example he provides is particularly appropriate for my study,

*A mixed methods study that begins with a quantitative survey phase reflects an initial post positivist leaning, but, in the next qualitative phase of focus groups (or interviews), the researcher shifts to a constructivist paradigm. Relinking paradigms and designs makes sense.*

(Creswell, 2012, p. 275)

According to Creswell (2007), post positivism as a philosophy determines outcomes and is intended to establish causal relationships between variables. Post positivism as a terminology came after positivism in the nineteenth century, originating with Aristotle, John Locke, August Comte and Emmanuel Kant in earlier centuries, according to Mertens (2005), and challenged the notion of an “absolute truth” according to Creswell (2007). According to Mertens (2005),

*Positivism may be applied to the social world on the assumption that "the social world can be studied in the same way as the natural world, that there is a method for studying the social world that is value free, and that explanations of a causal nature can be provided."* (Mertens 2005, in Mackenzie & Knipe, 2006, p.8)

Fillman (2015) conducted a quantitative study among undergraduate nursing students and undecided students in the United States on their career interest and perceptions of the nursing profession. Results indicated a significant difference between the two groups in terms of career interest, Fillman explained that the difference could be because of the “lack of career readiness” among the undecided students. A mixed methods approach towards the problem with the inclusion of a qualitative dimension using semi-structured interviews would have added further pertinent information that could have been used towards recruitment and retention strategies aimed at this particular group of students in that university.

Another recent quantitative study by Degazon et al. (2015) was conducted among American and Israeli students regarding their perceptions of nursing. Results showed that the American students held higher perceptions of the nursing profession than their counterparts, though both groups did not perceive nursing as an ideal career choice for themselves. Again, this comparative study could have benefited from a mixed methods approach including a qualitative dimension to gain a better understanding of the differences in results.

As a separate theoretical approach, constructivism developed with roots in developmental and cognitive psychology, involving key figures such as Bruner (1990), and Vygotsky (1978). Young and Collin (2003, p.377) explain that the approach “points to the historical and cultural location of that construction”. They also explain that in social constructivism, “knowledge is historically and culturally specific, and is both a pre-condition for thought and a form of social action.” This is clear from the works of Vygotsky (1978) and Bruner (1990) who demonstrate that active participation is involved in the knowledge acquisition process. Social constructivism consists of three main branches: cognitive constructivism, social constructivism and radical constructivism (Young & Collin, 2003). While cognitive constructivists stress the importance of one mental reality and radical constructivists emphasize an experiential reality, social constructivists view reality in a socially constructed manner.

Cohen et al. (2002) take the view that the world of social sciences has radically changed and Creswell (2012) similarly observes that lately in health sciences research, “‘multi-methods’ is used to convey studies in which both forms of data are gathered” (p. 273). In examples of situations such as women scientists in careers, or women seeking independent careers over traditional jobs, where an interpretive approach with flexible interviewing is appropriate, a social constructivist framework providing a more holistic view of the issues under investigation is increasingly being used. In the nursing profession, many recent studies on nurses’ perceptions regarding their chosen profession have been conducted, and a review of their theoretical frameworks demonstrates that several have used the social constructivist approach (e.g., Spahr, 2012; Spouse 2000).

Spahr (2012) qualitatively studied the perception of male nurses in the profession and argued that, based on the ontological assumption that the only true reality is that which is perceived

by the participants according to Creswell (2007, p.17), the social constructivist approach is most suitable in exploring student views or attitudes. Among nursing students in a program in England, Spouse (2000) qualitatively conducted a study on pre-registration students' images of nursing using a constructivist framework combining phenomenology and ethnography to investigate the topic. She concludes that nursing still continues to be looked at as a female-oriented profession, but her study failed to uncover the factors responsible for this observation. A descriptive dimension to both these studies would have further added to the knowledge base on what is the percentage of males in nursing in the profession and select factors related to them.

From a social constructivist perspective, knowledge construction occurs from “the outside in”, and “assesses the parts that other approaches cannot access”, according to Cohen et al. (2002, P. 407), and is therefore, a suitable framework for exploring the construction of meaning between the agency of student learner in nursing, and the societal structures that surround it. The paradigm is clearly shifting from a single level approach towards a multi-level focus in the nursing profession and its challenges. Given these rationales and research practices, a study on Emirati student recruitment and retention in the nursing profession, and societal views influencing a career choice in nursing, is appropriately situated within the framework of mixed methods research.

## **2.2 Review of Literature**

In this second section of the chapter, bodies of relevant literature are presented to gain an understanding of the historical development and current status of the nursing profession, the current acute nursing shortage, nursing as a career choice, student recruitment and retention within nursing, and the role of nursing leaders in dealing with this challenge.

### **2.2.1 The Historical Development of the Nursing Profession**

Nursing has existed since the beginning of time, with the evolution of the nursing profession being intricately connected to historical influences throughout the ages (Attewell, 2012; Grypma, 2010; Kozier et al., 2008; McDonald, 2001). During the Victorian Era in the UK, women were considered inferior to men, and were not allowed higher education or employment on par with them. Being at home and taking care of the family gradually relegated the task of nursing the sick to them (Kalisch & Kalisch, 1987). Since those humble beginnings in the 1860s, nursing has grown and advanced significantly, along with the technological and medical advances of the times, to meet the complex health care challenges in the world today.

Nursing slowly became a respectable occupation but was still not considered a profession. As the need grew for more community-based nurses, military nurses and nurses in the hospitals, training was initiated in the United States, and a number of nursing schools opened to meet the demand, and nursing education started to strengthen and diversify, reflecting the increasing needs in practice. Contextual changes in society have always influenced the nursing profession, examples being the Depression and World War II which changed home care nursing (1870s to late 1930s) to hospital based nursing (after World War II), and another pertinent example being the shortage of nurses in the civilian hospitals during both the World Wars when a large number of nurses were asked to join the military (Brook & Kleine-Kracht, 1983; Kalisch & Kalisch, 2004).

The nursing profession evolved differently in each country, varying, for example, in Australia (Godden, 2008), Canada (Strong-Boag, 1991), Iceland (Bjornsdottir, 2007), Brazil (De Alcantara, 1953), and Saudi Arabia (FitzGerald, 2011) where changes in population

demographics, consumer demands, technology and economics have all influenced how the health care sector has developed. Nursing is an art and a science, according to Daniels (2004) where the manifested art in the caring and compassionate provision of care cannot stand without the scientific knowledge base that validates nursing actions. This aspect of its being an art (Erickson et al., 2007; Margaret, 2011; Rhodes et al., 2011,) and a science (De Veer, 2011; Matoney et al., 2011; Susan, 2012) is essential to this study, as the way it is viewed is influenced by local culture.

In the Gulf region, after the emergence of Islam, nursing developed slowly, according to Al-Rifai (1996, in El-Haddad 2006). The first practising nurse in Islam, according to many Islamic scholars, is Rufaidah Al-Islamiah. Al-Rifai (1996, in El-Haddad 2006) recounts on the history of nursing in the GCC, that when the Prophet Mohammad (PBUH) went with his followers to fight the first battle against their enemies, a group of Muslim women, including Rufaidah, participated by providing moral support and looking after their wounded soldiers. After they won the battle, Rufaidah continued to provide her services to sick people in her community and erected her tent near the Prophet's mosque. Rufaidah believed that nursing was an art required by people during days of peace and war. After her death, other Muslim women continued her passion by nursing the sick, by accompanying men into war, and looking after their wounded. History has recorded names of other Muslim women who worked alongside Rufaidah such as Nusaibat Bint Ka'ab (El – Haddad 2006).

Today, professional nursing organizations speak authoritatively about the real conditions of the nursing profession. According to the American Association of Colleges of Nursing (AACN) (2004), contemporary professional nursing is multi-dimensional and multi-faceted. Nursing is

a highly skilled competency-laden profession, and nurses are extensively schooled in health sciences with backgrounds in psychology and sociology. Currently, the Baccalaureate degree in nursing (BSN) is the “primary pathway” to professional nursing practice. These educational realities and goals reflect the “increasing complexity of today’s health care environment as well as the increasing number of nurses needed to care for those who are ill”(AACN Fact Sheet, 2004).

The creation of the Federation of the UAE in December 1971 was soon followed by the establishment of all federal and government ministries, including the Ministry of Health (MOH), and the subsequent development of healthcare services in the country. El- Haddad (2006) notes that 1992 was a very important year in the history of nursing in the UAE, as the MOH established the Federal Department of Nursing by ministerial decree to develop and manage nursing services in the country. In order to develop and regulate the nursing profession, the Federal Department of Nursing adopted nursing Emiratization - a program developed by the UAE government to employ UAE citizens more, and depend less on foreign expatriates - as one of its goals, as evident in one of its strategic objectives “to accelerate development opportunities for Emirati nurses and optimize opportunities for Emirati citizens to join the nursing profession” (FDON 2011). But the visions of the FDON remain, till today, unachieved.

In 2001, a small group of Emirati pioneer nurses successfully strived to establish the Emirates Nursing Association (ENA) representing a milestone in the history of nursing in the country. The ENA was established under legislation by the Ministry of Labour and Social Affairs, which approved its Articles of Association, in January 2003. This was followed by the recent election of the ENA’s Executive Board in March 2004. A team of consultants from the International

Council of Nurses (ICN) established the readiness of the ENA for membership in ICN in 2004 (El- Haddad, 2006).

To further the profession in the country, the UAE Nursing and Midwifery Council was established by Cabinet Decree in 2009 to

*Regulate the nursing and midwifery professions, promote and advance nursing and midwifery services and protect and promote the health and safety of the public based on the highest standards. (UAE NMC establishment Cabinet Decree number 10, 2009)*

The Council addresses this by unifying standards for nursing and midwifery with the ultimate goal of protecting the health of the public with consistently high quality nursing and midwifery services. But to date, a vast expatriate nursing population caters to the nursing care needs in the country. Emiratis are underrepresented in every sector of public life in the UAE, and the situation is same concerning nursing in the country. With the growing complexities in health care demographics amid heightened national security concerns, it is imperative that Emiratis take the reins of their own health care into their own hands and address factors impeding their recruitment and retention into nursing programmes in the country by exploring options and providing suggestions for future change in the country.

### **2.2.2 The Current Nursing Shortage**

Florence Nightingale is heralded as being the founder of modern nursing in the West, by developing the first formal training program for nurses in 1860 (Kozier et al., 2008). Since then, several nurses have set their footprints in history, and nursing, along with the healthcare landscape, has changed significantly over the years. Many positive outcomes have been realized such as improved patient care outcomes and lower mortality rates, and yet many challenges have also surfaced and are still faced by the profession in the 21st century (Donley,



2005; Manojlovich et al., 2008). These include key issues in nursing education (Thorne, 2006), with an acute current challenge being the issue of a global nursing workforce shortage (Potter & Perry, 2013). Elgie (2007) argues that cycles of nursing shortage have continued throughout the 20th century, but Buerhaus et al. (2005) warns that the current cycle is likely to be prolonged owing to changing population demographics.

Several studies from Western countries serve to highlight the current nursing shortage crisis. In the US, where qualitative interviews were conducted among practising nurses by Oulton (2006, p. 350), it was found that nurses are leaving the profession because of “a lack of continuing education opportunities, lack of professional development avenues, job stress and a general feeling of being undervalued”. Buerhaus et al. (2008) caution that though the nursing shortage has temporarily eased due to the global recession, with part-timers taking full time jobs and ‘greying’ members of the workforce delaying their retirements for economic reasons, the shortage of registered nurses in the US is projected to grow to 250,000 by the year 2025. Looking ahead, the International Council of Nurses (ICN) report by Oulton (2006) forecasts that 50% of Canada’s nurses will retire within the next 15 years, and that by 2025 Denmark will require 22,000 nurses. In the United States, government estimates project that by 2020, 36% of nursing positions will become vacant. Several key authors have also studied the nursing shortage cycle from an international perspective with similar results (e.g., Aiken, 2008; Buerhaus, 2008; Jeffreys, 2007).

The United Arab Emirates has come a long way since the early beginnings of pearling, fishing, simple agriculture, and nomadic life. The nation’s wise leadership has used the financial profits from oil revenues since the 1960s in order to develop the UAE’s strong infrastructure. There has been a reactive, rather than a proactive, response to the rapidly developing situation through

a “quick-fix” solution of buying educational models and expertise, along with graduating workplace ready employees. Kirk (2010) identifies several implementation constraints as a result of the employed strategy, first and foremost being poor English proficiency levels among the local population. In the field of education, there are very few Emiratis in leadership positions and this lack of local talent has resulted in a migration of teaching personnel, mostly from the surrounding Arab countries who lack the culturally relevant identity required in their positions.

The UAE is in a dynamic state of modernization striving to establish itself as a global hub while still maintaining its cultural identity. However, solutions to global issues, including nursing shortages, have to be tackled taking in account all sociocultural factors, such as a lack of instructive resources in Arabic, a lack of local role models, a lack of peer and family support for nursing as a career choice, and cultural restrictions preventing health care related tasks being carried out by strangers. The religious beliefs, affluent lifestyle, and practice of “paying” for required services from expatriates from other countries are also not conducive to recruitment and retention in the nursing profession from within the local Emirati population (El-Haddad, 2006) and building up a local capacity.

In the Abu Dhabi Emirate, as with higher education programs in other Emirates, there is an importation of foreign curricula in the field of nursing education, and a lack of local talent that has led to the recruitment of skilled workforce, especially expert academics, from mostly Western and other Arab countries, as well as from Asia, to assess, deliver and evaluate the nursing curriculum for the students. There is a growing number of women in the higher education system in the UAE in recent years, but an overdependence on expatriate nurses, coupled with common misunderstandings regarding the role of a nurse and lingering

perceptions of nurses being the handmaiden of doctors, have hampered their recruitment in the profession.

Currently, education in the UAE is being re-evaluated and re-examined to improve its adaptability and accurately reflect changing trends in the global arena. This has been formalized by the Abu Dhabi Educational Council policy to recruit 90% of teachers in the national schools from the local population by 2020 (Kirk, 2010). This has been accomplished partly by the generous national funding and support from the nation's leaders which has contributed to the sense of security in its citizens. Nursing education, which falls under the jurisdiction of MOHESR in the UAE, needs to fulfil one key strategy among a range of UAE Government Strategies (2011-2013) to ensure world class health care for its citizens and residents. In recent years, Wollin and Fairweather (2012) note that providing locally educated, bachelor degree nurses fluent in Arabic has been recognized as a sustainable alternative producing an emerging necessity to improve recruitment and retention among the local students in the nursing program.

Several studies in the Middle East suggest a strong influence of local perceptions regarding the image of nursing on the recruitment and retention of individuals into the profession (e.g., Al-Kandari & Ajao, 1998; Eman et al., 2012; Hassan et al. 2012). A similar scenario is seen in the UAE where only three percent of all nurses in the country are Emirati (Underwood, 2010). The school of nursing in Abu Dhabi was founded in 2006 as a result of an agreement between an Australian University and the Abu Dhabi Education Council (ADEC) to provide baccalaureate level nursing education as a move towards modernizing existing health services, in keeping with international best practices.

### 2.2.3 Emirati Youth in the United Arab Emirates

In the United Arab Emirates, since the 1970s rulers of the nation have embarked on ambitious strategies aimed at diversification away from the petroleum industry, which involved providing alternative career paths for their youth into leading roles in new sectors across all levels of the society. The UAE National Strategy Vision 2021 (2010) asserts that

*Ambitious and responsible Emiratis will successfully carve out their future, actively engaging in an evolving socio-economic environment... In their professional lives they will prove that the route to success lies through personal commitment, dedication, and a strong work ethic. Satisfaction and motivation will reward their self-reliance and initiative; their appetite for risk-taking will be fuelled by a vigorous entrepreneurial spirit ... [it envisions a] diversified and flexible knowledge-based economy will be powered by skilled Emiratis and strengthened by world-class talent to ensure long-term prosperity in the UAE. (pp. 2, 4, 14)*

Jones (2011, p. 20) recently conducted a salient scoping quantitative study for the Al Qasimi foundation in Ras Al Khaimah to ascertain the career goals and aspirations of the Emirati youth, and these have served to provide a baseline for comparison away from popular stereotypes of UAE nationals as “lacking a strong work ethic, the motivation to achieve, a sense of civic responsibility, and a number of other attitudes seen as important for national development”, in large part because of their eligibility for social benefits provided by the government. These assumptions are discussed by Al-Waqfi and Forstenlechner (2010) in their research on stereotypes in the UAE by the expatriate labour market.

In his study concerning economic, social, and political attitudes in the Ras Al Khaimah Emirate comparing Emirati and non-Emirati youth (n= 62), regarding their choice of career, and the reasons behind the choices, Jones (2011) found in economic attitudes that most young Emiratis are interested in public sector careers. Over fifty percent of the study participants chose careers

such as “government,” “police,” or “military” as their top preferences when given a choice of seven sector options, including government, education, military, police, private business, government business, entrepreneurship, and non-profit organization. Twenty-three percent of the Emiratis in the study selected government while another thirty-two percent selected military or police related careers (Jones 2011), compared to the non-Emiratis where the majority selected private sector careers.

When asked to comment on their career preferences, Emirati responses demonstrated a priority given to degree qualifications rather than the career itself, similar to the non-Emirati responses. Jones (2011) suggests that unlike non-Emiratis where the influencing factors were internal such as personal likes and dislikes regarding a profession, for the Emiratis the factors could be external and related to exams and qualifications. But he is quick to add that for Emirati youth, another factor could be lack of exposure to different occupations and professions when compared to non-Emirati youth who all had expatriate parents working in various levels and careers in Ras Al Khaimah.

Concerning priorities for jobs for both groups in the study, the study found that Emiratis were “more picky” in their choice of career, and the greatest difference in their responses from their non-Emirati counterparts related to how much more they valued “contributing to UAE society”, followed by a preference for the “same-gender work environment” and also “respect from friends.” Interestingly, Jones (2011) found that a survey item, “Hard work doesn’t generally bring success—it’s more a matter of luck and connections,” garnered more significance among Emirati youth than did another survey item, “In the long run, hard work usually brings success,” and the group also significantly disagreed with the survey item, “It is humiliating to receive

money without working for it”, implying their agreement with the extent of social welfare provided in the UAE for Emirati citizens (Jones, 2011).

Regarding societal attitudes, Jones (2011) found that “Emiratis reported significantly more favourable attitudes toward the role of science and technology in society” (p. 16). Other societal attitudes related to their significant disagreement with the statement that “young Emiratis should be allowed to do as they please without interference from their parents” and regarding the independence that women enjoy, Emiratis significantly agreed with the statement, “It’s more important for a woman to have a family than pursue a career”. Surprisingly, in the demographic distribution of his study, Jones (2011) fails to mention what percentage of the sample were female Emirati. Not surprisingly, Emiratis demonstrated that among values that should be encouraged in the UAE, obedience, love for country and religious faith had the most significance. Politically, Jones (2011) study shows that Emiratis are significantly more interested in local politics and federal politics in the UAE than in politics in the Middle East region, and while non- Emiratis in the study sample felt that business people should have more influence in society, Emiratis felt that popularly elected representatives (such as members of the Federal National Council) should have more influence in the political arena.

Jones’ (2011) study has several implications for the Emirati student exploring career options. Though the study did not specifically target the health care sector, and Emirati youth’s thoughts on a career in the health sciences and medical field were not investigated, the study still sets a trend for the kind of careers that Emiratis youth might be interested in and nursing educational leaders could use these criteria to make the nursing profession as a career choice more attractive for the local student population in the country.

#### **2.2.4 The Nursing Profession as a Career Choice**

Several quantitative studies from the West show that nursing students in their pre-entry, freshman or sophomore years perceive nursing as a caring, noble profession, while final year students and registered practicing nurses perceive it as a more complex subject. Sand-Jecklin and Schaffer (2006) conducted a quantitative study using a descriptive inventory in the US among 85 second year nursing students, demonstrating that nursing students themselves have positive perceptions regarding the profession which strengthened following first year clinical placements, but they report a poor societal perception among the students regarding the nursing profession.

In Canada, Grainger and Bolan (2005) conducted a quantitative study using questionnaires to compare perceptions between first year and fourth year nursing students, and observe that first year students view nursing as idyllic and nurses as kind, compassionate people in an exciting career, who feel good about their jobs, while fourth year students are more realistic and knowledgeable about the various roles that nurses perform, after having significantly more classroom and clinical experience. While both groups overall held positive images of nursing, the fourth year students felt less strongly that nursing was valued as a profession.

Another descriptive comparative study conducted by Cowin and Johnson (2011) among first year nursing students in a large Australian university found overall positive perceptions, but small variations based on age, gender, country of birth, method of programme entry and previous experience in health care were observed, suggesting that mature, multicultural students with previous experience in health care had more realistic perceptions about the profession, which could have implications for retention within the programme(s) for nursing.

Attitudes related to nursing and choosing nursing as a career vary significantly between the Western world and the East, including the Middle East. There are also several qualitative studies from the West (e.g., Mooney et al., 2008; Seago, 2006) examining the nursing profession as a caring profession and nursing as a noble vocation, while similar studies conducted the Far Eastern using structured interviews in Hong Kong (e.g., Foong et al., 1999), and interviews in the Middle East (e.g., Al-Kandari & Ajao, 1998; Hassan et al. 2012) demonstrate the image of nursing as poor, an undesirable choice of profession, being non-respectable and with low status. Two prominent recruitment and retention barriers, identified in a study conducted in Kuwait by Al Kandari and Ajao (1998), include a lack of social support and awareness regarding nursing as a profession.

Furthermore, in Prater and McEwen's (2006) descriptive report conducted among nursing students in the US, most students in the program entered the profession with a desire to help others. While, Buehaus et al. (2005) found that among registered nurses in the US after analysing the effect of the "Johnson and Johnson National Campaign for Nursing's Future (2004)" information or advice from a nurse served as a positive influencing factor for recruitment and retention among teenagers more often than when they only had access to guidance counsellors. In England, Beck (2000) conducted a qualitative study among 27 nursing students finding the emergence of seven themes for choosing nursing as a profession: an intense desire to help others, reaping benefits as nurses themselves while providing care, prior experience in helping their families and loved ones, exposure of family and relatives in the health care profession, observing nurses in action, lack of satisfaction with their current choice of career, and, finally for some, not being able to get into their first choice in another profession. These themes have been considered as variables in the development of the questionnaire for this study.



Interestingly and in contrast, a later study conducted in 2004 by Brodie et al. using a mixed methodology approach among nursing students in two British universities found that many students in the program are surprised but not overwhelmed by the academic rigor expected of them. However, their experiences served to confirm both society's and their own image of nursing being an underpaid, overworked profession lacking respect and including low morale, indicating a discord between the realities of nursing and dramatic media portrayal, suggesting a change in perception among students during the course of the program. The current study takes this contrast into consideration, choosing to collect quantitative and qualitative information from students at different levels of the program: pre-entry, undergraduate and bridging levels.

In the Middle East also, there are disappointing views regarding nursing as a career choice. A study in Qatar by Okasha and Ziady (2001), involving a self-administered questionnaire, found that even though people joined the profession out of an interest in medical services and the humanitarian nature of nursing, the presence of male patients and colleagues in the workplace and the long working hours continue to contribute to a negative community attitude toward the profession. In another study involving interviews among nursing students in Kuwait, Al-Kandari and Ajao (1998) concluded that nursing is perceived as a non-respectable and low status profession in the country with factors contributing to poor retention including social pressure, poor staffing welfare and academic problems. Only 19% of the 330 sample surveyed indicated that they might choose nursing as a career. Similarly, a cross-sectional descriptive study among nursing students in Jordan by Safadi et al. (2011, p. 421) demonstrated that student perceptions changed over the duration of the four year study program from "lay altruistic beliefs to theoretical-medical technological views denoting a theory- practice gap".

Abualrub (2007) describes the situation in Jordan in depth, explaining that there are three types of forces responsible for the nursing shortage in Jordan which is representative of the situation in the entire Middle East: organizational factors, social and cultural factors, and economic factors. Organizational factors include slow salary increases for those in the profession, a decrease in the number of students selecting nursing as a career choice, a shortage in qualified nursing faculty and unattractive work conditions. Poor working conditions include high patient care loads, limited autonomy in the work area and conflicts within the members of the interdisciplinary team, mostly with physicians.

According to Abualrub, relevant societal and cultural factors include the underpayment of nurses reflective of the low societal status of nursing, the outdated and yet clearly persisting view that nursing is “a woman’s job” and involved in “unclean duties”, and families continuing to disapprove of nursing as a profession suitable for their daughters. And lastly, he found the presence of economic forces manifested by the acute shortage of nursing schools in the region to meet society’s health care needs, which is reflective of the low (if any) federal government budget, private and public investments and charitable philanthropic funds allocated to nursing education to meet the demands.

While many quantitative and qualitative studies have investigated and explored the perception of the nursing profession among students within the programme(s), very few had adopted a mixed methods approach in researching the problem. Interestingly, a study in Bahrain conducted recently by Eman et al. (2012) involved the usage of a triangulation research design engaging quantitative and qualitative data collection methods to study the situation in the small gulf island. Data was obtained through self-reporting questionnaires and group interviews

collected during the nursing programme. Qualitative data was analysed using Colaizzi's methodology and quantitative data was analysed using SPSS Version 17. Results indicated that while participants perceived nursing as caring, helping people, and a humanitarian job, the profession was also considered to be a tough job and not well accepted socially with cultural issues impacting negatively the values attached to nursing as a career choice. Eman et al. (2012, p. 81) provided as a rationale their adoption of a mixed methods approach that “no published work on the perceptions of student nurses from Bahrain have been undertaken previously”. The situation is similar concerning the nursing profession, including students in nursing education in the UAE, and hence both the quantitative and qualitative strategies of inquiry have been adopted as being appropriate for this study.

The majority of people in the Middle East in general, and the UAE in particular, are Muslim so religious and political factors also play a part in the attitudes towards nursing in the region (Crabtree, 2008; Faqir, 1997; Gallant, 2008). Two decades ago, El- Sanabary (1993) found that in Islamic countries an occupation had to be culturally appropriate to be considered suitable for women, but questions why the medical profession has enjoyed a high participation while nursing has suffered poor participation among the female population in Muslim countries and observes that though culturally appropriate, other factors like “prestige, class-association, general reputation, and potential moral social risks” (p. 1331) are involved. While similar cultural beliefs and religious traditions in the UAE are assumed in this study, no published literature exists to date relating to Emirati nursing students' perception regarding the nursing profession as a career choice. Even though the UAE is ahead of other Gulf countries in technological advancements, women's education, and career opportunities for women, there is an urgent need for in-depth exploration of nursing career perceptions to improve recruitment and retention into the nursing program, and address the nursing shortage in the country.

### **2.2.5 Student Recruitment and Retention Factors in Nursing Education**

Nursing education is never constant and throughout its history nursing programs have been a direct reflection of social, political, and economic trends and issues. To reverse the shortage and not just fill the gap in the US, researchers estimate that there is a need to graduate at least 30% more nurses annually (Allan & Aldebron, 2008). Aiken (2008) identifies several factors that are responsible for the present nursing shortages in the US, with a key factor being poor policies related to retention and recruitment. It is evident that students enter universities with prior societal perceptions regarding various career choices, and these have a telling influence on their decision to choose or reject nursing as an option.

Nursing's image is closely tied to its professional role and identity and differs internationally based on social and cultural factors. Hereford (2005) qualitatively explored the effect of media portrayal on the image of nursing, concluding that fictional images of nursing has an impact on perceptions that the public maintain about the profession. To entice more individuals into nursing programs, a positive image may need to be projected by nursing schools and the local community. A paucity of literature on the local perception of nursing though, hinders an appreciation regarding the subject and is thus one of the research questions in this study.

Strategies to recruit more students into the nursing profession have been tackled in many studies. Internationally, Peters (2010) quantitatively analysed the effect of remedial education on nursing student success in the nursing program in Indiana, and found only capability in mathematics to have a statistically significant predictive power. However, a later qualitative study using student interviews by McDonough (2012) in the US notes that the formulation of a pre-nursing course and a holistic nursing program, positively combated unexpected program

rigor, active learning, conflicting obligations, student-faculty relationships, and thereby had the potential to increase the number of pre-nursing students entering the nursing program, increase the retention rate, and increase student success in meeting their professional goals.

Sabio (2014) suggests the inclusion of associate degree programs as a pre-baccalaureate entry point into the profession to remove situational barriers such as the high cost of the baccalaureate program, and to balance other personal and professional commitments. Other studies have alluded to successful recruitment and retention factors, such as institutional factors (Yateman, 2004), interpersonal and intrapersonal management of academic and environmental factors (Butters, 2003), a need for emotional intelligence (Wilson, 2013), and exposure to nurse role models, mentors and the hospital environment (Stroup, 2013), as positively contributing towards increasing numbers within the nursing program.

Challenges in nursing education in other countries such as Malaysia (Barnett, 2010), the US (Goodin, 2003), China (Yun et al., 2010), Singapore (Arthur, 2008), Japan (Turale, 2009), and Thailand (Turale et al., 2010) have identified several areas for change and significant improvement with the first and foremost being a global shortage in nurses as a result of attrition and low retention in the profession. Concerning the changing demographics in nursing resulting from the crisis, Campinha-Bacota et al. (2006) argue that cultural competence is emerging as the health care profession's answer to the changing multicultural, multiracial and multilingual needs of the global population today. This equips health care organizations, agencies and systems with the cultural know-how to meet unique multicultural minority population needs which are different from the "dominant or mainstream culture" (Cuellar et al., 2008).

Immigration, globalization and culturally diverse populations have made a culturally sensitive nursing curriculum critical in these times of need (Campinha-Bacota, 2006), requiring a liberal system of education, including the study of a second language, to facilitate the promotion of an appreciation for cultural diversity (AACN, 2005). This raises the hitherto unanswered question of a culturally appropriate comfortable climate within the schools of nursing in the UAE, and is another facet of the multifactorial phenomenon surrounding its nursing profession.

Concerning the image of nursing as a profession, Mebrouk (2008) conducted a study in Saudi Arabia and found that poor media portrayal, in particular that of nurses in Egyptian movies, as promiscuous or alcoholic was a strong influence on society's perception of nurses and nursing. However, her study also showed that participants gained personal identity from Islamic values, for example, inclusion of words from the Holy Qur'an consciously used in combination with other conventional interventions to guide their practice. Varaei et al. (2012) conducted a descriptive survey among Iranian nurses, finding that the presence of a family member working in a hospital had the greatest impact on the establishment of a nurse's professional image. On the contextualization of nursing education in Israel, Birenbaum-Carmeli (2007) explains that from 1996-2004 competing interests of Jewish Israelis and Israeli Palestinians, immigrant adaptations and economic fluctuations have led to recruitment and retention of nursing student cohorts from different socio-economic demographic statuses, indicating that demand for nursing education corresponds to local societal changes.

It is appropriate that policies related to the nursing profession and nursing education are also reviewed. Hanley and Falk (2007) found that the nursing shortage, which was once considered a "nursing issue", has now emerged as a "public policy problem" because of access to health care services implications, and, while incrementalism is the primary model for change, the

current crisis requires a major policy analysis and reform. Buchan (2002) reports that the crisis of nursing shortage is now firmly on the policy agenda and that policy initiatives are underway in four main areas: improving retention; broadening the recruitment and retention base; attracting returners back into the profession; and importing nurses from other countries. In Buchan and Calman's (2006) report, "*On the global shortage of registered nurses - an overview of issues and actions*", for the International Council of Nurses, they suggest a policy intervention framework which includes four components: "Workforce planning, recruitment and retention, deployment and performance, and utilization and skill mix" (p. 6).

A fact sheet by the AACN (2012) identifies several strategies to address the nursing shortage, including the following: partnerships between nursing schools and private agencies, like military hospitals to increase student capacity; making the baccalaureate degree mandatory for all new nurses; authorising capitalisation grants for nursing schools; subsidizing nursing faculty salaries; reimbursing nurses for their advanced education in exchange for work commitment; flexible scheduling for staff to attend classes; and more public funding for increasing nursing school capacity. A five year campaign by Johnson and Johnson in 2002 and again extended in 2007 (Buchan and Calman 2006), involves a multimedia initiative to promote careers in nursing and improve nursing's image through television commercials, a recruitment and retention video, a website and related brochures. Survey findings after the initial campaign indicated high levels of awareness of the campaign among nurses (59%), nursing students (79%), and chief nursing officers (98%)

Historically, several conservative Muslim writers have sanctioned nursing and social work as culturally and religiously appropriate, but contrast this with ideal Islamic values of the virtues of motherhood and, most importantly, the dangers of women working (El-Sanabary, 1993),

leading to contradictory and confusing messages in society. Accounts of Muslim women who have nursed the sick during times of war in Islamic history have been viewed as “unavoidable emergency war time practices” alone (p. 1336), and a history of nursing education developing from vocational education programs has also hampered its perception in society. In Saudi Arabia, the issue of low perception regarding the nursing profession was observed where findings demonstrated that both parents and students were equivocal in recognizing the need for local nurses who would be able to provide culturally sensitive care based on Islamic principles, but both parties were similarly stubborn in rejecting nursing as a suitable choice for themselves and their children based on the low societal image of nursing, the long working hours and contact with the opposite sex.

Gender segregation is another Islamic principle that is strictly adhered to in many Middle East societies, where principles of justice, brotherhood, and a dynamic balance of rights and obligations, important to Islamic values and nursing practices, result in an intertwining of professional and personal identities, demonstrating an Islamic influence on the societal perception of the nursing profession (Mebrouk, 2008). In the UAE, in an interview in the *Khaleej Times* (2010) Dr. Fathima Al Rifai, Director of Nursing for the Emirates Federal Department of Nursing, acknowledged that changing the public perception of the profession was challenging, and explained that nursing in the country is still considered an occupation fit only for females, subservient to the physician’s role, with some perceiving it to be a vocation rather than a profession, and therefore not requiring competitive economic benefits. But to date the only evidence on the perception of the nursing profession in the UAE, or the issues surrounding poor recruitment and retention of students in the nursing program, is anecdotal. Since the participants in the present study belong to the Islamic faith, it is necessary that Islamic



factors are taken into consideration while exploring the influences on perceptions affecting student's choice of nursing as a profession.

Buchan and Calman (2006) reports that a high level of international consultation involving diverse stakeholders at the ICN quadrennial congress in 2005 led to the identification of five global priority areas for policy intervention. These include “Macroeconomics and health sector funding policies; Workforce policy and planning, including regulation; Positive practice environments and organizational performance; Retention and recruitment, addressing in-country maldistribution and out-migration; and Nursing leadership” (p. 9). In the UAE, the Nursing and Midwifery Council developed the scope of practice for nurses working in the UAE (2011) and the educational standard for nurses (2013), but failed to specify specific strategies to entice Emiratis into the nursing profession. It is evident that policy options need to be multifaceted and involve collaboration between multiple stakeholders, like schools of nursing and hospitals in the region with country specific implications for the country.

The UAE is different from other Gulf nations in that there have been tremendous developments in all sectors of life during the last four decades. However, educational reforms and growth have not matched this national political and economic gain. The vast majority of young women in higher education today are first generation college students and it is very likely that their mothers are less educated than their fathers because Emirati men had access to education and diverse employment opportunities well before their female counterparts (Abdulla, 2005). In the UAE, the Ministry of Higher Education and Scientific Research was established in 1992 to regulate and accredit all higher education institutions and programs, both private and public.

### **2.2.6 Role of Nursing Educational Leaders**

Scheckel (2009) notes that, “a constant theme throughout all of the changes in nursing education has been the presence of nursing leaders who diligently investigated the state of nursing education and advocated for reforms to improve the quality of nursing education” (p. 55). There are several challenges in the area of nursing education and Cooper (2008) stresses that the nursing shortage today calls for nurse leaders who will find innovative strategies to meet nursing education needs without compromising on quality and patient safety. According to Feldman and Greenberg (2005, p. 11), “nurses lead patients, families, groups, communities, committees, and organizations” – all highly challenging and demanding, and therefore the need for effective nursing leadership is critical.

Concerning nursing leadership in clinical practice, Tracey and Nicholl (2006) demonstrate that mentoring is appropriate for novice nurses, and networking is emerging as ideal for progression through all career stages to support nurse leaders in their role. Owens and Patton (2003) similarly argue that effective mentorship among nurses can help build effective nursing leaders to meet the current challenges facing nursing education. However, Samier (1999) cautions that current rates of rotation and downsizing have made it nearly impossible for mentoring relationships to develop. Daly, Speedy and Jackson (2004) believe that leadership in professional situations is influenced by a diverse range of factors including personalities, psychological make-up and the situational context in which leadership is manifest. Huston (2008) lists several nurse leader competencies for 2020, including “ a global perspective, technological skills, expert decision-making skills, ability to create organizational structures, ability to appropriately intervene in political processes, team building skills, ability to balance authenticity, and being challenges” (p. 905).

In an article on the need for resilience in nursing leaders, Allison (2012) describes a scenario of “ budget cuts, pink slips, workforce reductions, school closures, changes in teacher and administrator evaluation processes and accountability”(p.79) in store for current nursing leaders. In a study involving multigenerational workplace issues and their implications for nursing leadership, Stanley (2010) reports that each generation has their own set of values, expectations of their leaders and the work environment and therefore dealing with them requires flexibility on the part of the nursing leader. In a study conducted by Horton-Deutsch et al. (2011) among nursing faculty leaders on what it is like to become a nurse leader, “ being thrust into leadership roles, taking risks and facing challenges”(p. 222) were some of the themes that emerged.

The nursing profession in Singapore has yet to reach its required target of qualified nurses at the different levels. Arthur (2008) has succinctly described their current challenges as creating new programs, developing a research agenda in an environment where there are only a few PhD holders resulting in minimal research output, managing faculty who are not familiar with the university system, and altering the climate where diploma nurses are the norm. Turale, Ito, Murakami and Nakao (2009) conducted a study to understand nursing scholarship in Japan, concluding that Japanese scholars required “ improved English proficiency levels, national and international collaboration with other nurses, political and assertive skills to take control of nursing education and be more involved in research collaborations and international publications” (p. 166) .

Yet another study by Turale, Klunklin and Chontawan (2010) explored similar perspectives among nurse scholars in Thailand finding that visionary leadership, resource sharing among universities, and scholarships to study abroad were major indicators for growth, while high

teaching loads, minimum research publications, lack of mentorship and lack of consensus related to entry nurse practices were some of the barriers to scholarship. Andrew (2008) calls for nursing leaders to hold on to these opportunities and inspire innovation in these changing times. A number of studies have examined the challenges facing nursing leaders today, including multi-generational workplace issues and their implications for nursing leadership (Stanley 2010).

Nurse educators have multifaceted influential dimensions to deal with where their leadership can be enacted: in their experiences with students in the classroom (Horton-Deutsch et al. 2011; Starck et al., 1999); with faculty members at a meeting (Upenieks, 2002); on a local level within the organization (Brady-Schwartz, 2005; Laschinger et al., 2009; Ulrich et al., 2007; Upenieks, 2003); or on national and international platforms (Sofarelli & Brown, 1998; Horton-Deutsch, Young & Nelson, 2010). A look at challenges in nursing education leadership in other developing countries has identified several areas for change and significant improvements in the field, with the first and foremost being a global shortage in nurses' attrition and retention in the profession (Antony et al., 2005; Balogh-Robinson, 2012; Mahoney, 2001; Schmidt et al., 2003; Starck et al., 1999; Stechmiller, 2002; Stott, 2004).

Kirk (2010) explains that the UAE has responded to the situation by the "quick-fix" solution of buying educational models and expertise it requires. The UAE government has also recognized the need for capacity building of leaders in every field, in line with the vision of the Ministry of Education to promote enduring, sustainable development in the community (Macpherson, Kachelhoffer & Nemr, 2007). In a study among Emirati males to gain insight into contributing factors in post-secondary education, Daleure (2011) concluded that "perceived support from parents and siblings, student's own dream of continuing education

and the existence of high quality post-secondary education institutions” (p. 49), were all significant factors in retention and further professional growth.

Several studies have supported the transformational style of nursing leadership as a key factor in the recruitment and retention of nurses and nursing students within the profession (Cadman & Brewer, 2001; Greene & Puetzer, 2002; Ribelin, 2003; Thyer, 2003; Upenieks, 2003; Vitello-Cicciu, 2003). Starck, Warner and Kotarba (1999, p. 265), conducted a qualitative study among deans of graduate nursing schools to examine how they were approaching leadership issues and found emerging themes to suggest that leaders in nursing education needed to view matters from different perspectives, akin to wearing “trifocal eyeglasses” where participants described the need to assume roles of “Consensus Builder, Risk Taker and Interactive Empowerer” in order to meet these challenges.

Springer (2012) describes an 8 year journey of changing the culture and climate of a school of nursing from one of dissatisfaction and distrust to one of high employee satisfaction and trust, using transformational change to improve organizational culture and climate in a school of nursing. She argues that during times of shortages, academic leaders need to be aware of the culture and climate in schools of nursing, as this affects employees, systems, and processes and students, and if the culture becomes problematic, transformational leadership is essential to create change. The 8 year period is reflective of the extensive time period that would be required to create change within an organization or society. There is a paucity of literature concerning nursing leaders in the UAE, the unique challenges and experiences faced by them, and the strategies that they adopt to deal with the issues. And hence it is the intention of this study to explore their experiences, possibly strategies and recommend directions for future change.

## **2.3 Chapter Summary**

In conclusion, this literature review helps in shaping the argument for the study. As the study seeks to investigate the profile of the Emirati nursing student, the factors surrounding Emirati student recruitment and retention within the nursing programmes in the Emirate, and explore the experiences of nursing leaders in the country, the appropriate models of Jeffreys' (2014) Nursing Universal Retention and Success model (NURS) and Bass and Riggo's (2006) Transformational Leadership model have been presented and discussed in this chapter. Adoption of both the descriptive / inferential strategies, as well as the interpretative strategy would lead to gaining of rich knowledge regarding the problem and therefore Creswell's (2012) recommendation of 'delinking' and relinking of Research Paradigms in Mixed Methods Research, by appropriating both the post positivist and social constructivist have been chosen as the research paradigms in this study.

In the second section of the chapter, the history of development of nursing, both globally and regionally, have been presented to gain an understanding of its growth through the centuries, while a discussion on the current nursing shortage and the urgent need for more local nurses to join the profession have been highlighted to set the stage for the study. Within this arena of urgency, the factors influencing poor student numbers entering the nursing programmes are multifactorial, and in part determined by the student choosing a professional career in nursing, and thus the rationale for this study in exploring this problem within the UAE context.

### **CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY**

The previous chapter identified gaps in the existing literature and relevant research questions for the study of Emirati student recruitment and retention in the nursing programme in Abu Dhabi. This chapter locates the study within the appropriate research paradigm, and justifies the selection of the methodology, including its design, data collection instruments and procedures for the research. Both quantitative and qualitative data are useful to understand the issue of Emirati student recruitment and retention and the experiences of nursing leaders in dealing with this issue. After an overview of research paradigms (Creswell, 2012), the Research Approach section explains the selection of the post positivist paradigm for the quantitative aspect and the selection of the social constructivist paradigm for the qualitative aspect of the study is presented, with a discussion of the sequential explanatory nested research design as suitable for this study. In this study, a mixed methods approach, using both quantitative and qualitative data will jointly provide rich and complementary data for a more in-depth understanding of the context and participants in this study.

This chapter includes two main sections, with the first section being on the research approach and the second on research methodology, as well as an overview of the data analysis methods adopted. A description of the data collection methods used is followed by a section on data analysis procedures which describes how the quantitative and qualitative analysis was undertaken, and how the two types of data were integrated for interpretation. In the last section a discussion of how the ethical conduct of research was ensured including the researcher's bias has been presented.

### 3.1 Research Approach

*Research paradigms are distinguished by “how researchers make claims about what knowledge is (ontology), how researchers obtain knowledge (epistemology), what values go into it (axiology), how we write about it (rhetoric) and the process for studying it (methodology).” (Creswell, 2003, p. 6)*

According to Polit and Beck (2006, p. 288), “the phenomenon in which researchers are interested in, must be translated into concepts, that can be measured, observed or recorded” and for this to occur, valid and reliable methods need to be selected or developed for collecting information, though the authors are also quick to note that this is one of the most difficult steps in the research process. While quantitative studies employing stringent sampling techniques and valid questionnaires would be helpful in obtaining data to initiate change for future improvement purposes, they shape individual perceptions of a problem, their conceptualization of potential problems and their understanding of experiences (Polit & Beck 2006). But according to Glesne (2006, p. 4), “qualitative research methods are used to understand phenomena from the perspectives of those involved, to contextualize issues in their particular socio-cultural-political milieu, and sometimes to transform or change social conditions” where interviews are a common qualitative self-report technique by its usefulness in the fact that a great amount of information can be ascertained just by questioning people about it (Polit & Beck, 2006).

Teddlie and Tashakkori (2009) explain that by the end of the eighteenth century there arose the fundamental belief that all humans are universally equal and strictly rational, and research was performed with the objective of mankind’s betterment. Themes emerging through such methods help researchers understand processes, provide detailed information about settings or



context, and give importance to the voices of research participants that provide a depth of understanding of the phenomenon under study. In the inferential paradigm, the goal is to gather explanatory information and examine relationships among variables, which when measured produce data that can be analysed statistically. Data procured through such means have the potential to provide measurable evidence, to help establish (probable) cause and effect, to facilitate replication and generalization to a population including comparison between groups, and to provide insight into the magnitude of the challenges at hand (Creswell et al., 2010).

Opposed to this was the interpretative paradigm as its focus is on the contexts and meaning of human lives and experiences. These opposing views led to the difference in schools of thought between the quantitative– positivist position and the qualitative-constructivist in social science research. Creswell (2012) notes that since the 1930s researchers in social sciences were collecting multiple methods of data. In 1973, Sieber (p. 536, in Creswell 2012) suggested the “integration” of more than one research technique within a single study. Since 1979, “triangulation,” a term initially from the naval sciences to pinpoint an object’s exact location by referring to other points, was applied to research enabling investigators to improve upon their strategies of enquiry by combining different types of information about the same phenomenon. Creswell (2012) explains that the three points of the triangle were the types of the data and the phenomenon, providing a blending of information that would enable the strengths of the one type of data set to neutralise the weaknesses of the other.

According to the Office of the Behavioural and Social Sciences Research (OBSSR, Creswell et al. 2010), there is a growing need for methodological diversity reflecting the complex nature of the issues emerging in health sciences research. Creswell et al. (2010, p.4) describes mixed methodology as a research approach focusing on

*... research questions that call for real-life contextual understandings, multi-level perspectives, and cultural influences; employing rigorous quantitative research assessing the magnitude and frequency of constructs, and rigorous qualitative research exploring the meaning and understanding of constructs; whilst framing the investigation within philosophical and theoretical positions.*

According to Greene (2007), in mixed methodologies there is a bridging of philosophical positions such as post-positivist and social constructivist worldviews, pragmatic perspectives, and transformative perspectives. Creswell (2012) further explains that mixed methods research is not merely collecting two ‘strands’ of data – qualitative and quantitative - but a ‘mixing’ of data essential to a mixed methods study.

Teddlie and Tashakkori (2010) also add that the emergence of the mixed methods research was due to the need for a ‘convergence’ of results. In mixed methodology, the assumption is that researchers, in order to understand the social and health world, gather evidence based on the nature of the question, bearing in mind that social inquiry is aimed toward various sources and many levels that influence a given problem (e.g., organizations, family, and individual). Mixed methods inquiry, then, involves the intentional collection of both quantitative and qualitative data and the combination of the strengths of each to combat their individual weaknesses, producing the best answer to the research questions formulated.

Mixed methods research, then, is an appropriate design when both quantitative and qualitative data together provide richer data than either type by itself. It is used to build on the strengths of both types of data. Quantitative data provide descriptive and inferential statistics that serve to explain the frequency of occurrence of a particular phenomenon, but numbers by themselves are inadequate to provide an explanation or understanding and meaning of multiple perspectives, and qualitative data collected through interpretive means further provides a

complex multi-layered view of a research situation. Creswell (2012) further argues that a mixed methods study is conducted when the intention is to “provide an alternative perspective” in the study, with the different sources of information providing a “condensed” as well as a “detailed” view of the problem.

Regarding the integration of worldviews, Teddlie and Tashakkori (2010) note the changing trend from the early “incompatibility issue” between those who lobbied for either the quantitative or the qualitative method, to the later “compatibility thesis” between both groups, contending that a combination of both methods was appropriate in many settings. Pragmatism as a worldview, allows the researcher to use “whatever works” towards a particular problem under study, but its focus is on “actions, and consequences” towards “finding solutions to problems”, rather than on antecedent conditions, such as in post positivism or social constructivism (Creswell 2003, p. 11).

In the post positivist deterministic philosophy there is a need to investigate the causal relationship of variables to the outcome, and in the social constructivist perspective, the goal is to explore the participant’s view of the situation being studied leading to understanding and meaning construction. Thus the subject under study and the specific context is central to the research process. Also in social constructivism, researchers recognise that their interpretation is shaped by their own background and position themselves within the study to acknowledge the interpretation of data from personal and cultural experience. Thus both the post positivist and the social constructivist worldviews have been adopted as being suitable research paradigms for this study.

According to Bryman (2006), there are sixteen reasons for choosing a mixed methods approach over any one method, most of which are relevant to this study and listed below:

- triangulation for mutual collaboration,
- offsetting of the strengths of one approach to remedy the weakness of the other,
- completeness of the data collected regarding the area of inquiry,
- a sense of process obtained qualitatively to explain the account of social structures obtained quantitatively,
- catering to different research questions,
- for explanation especially in the face of unexpected or contrasting results,
- to assist in purposive sample selection,
- to increase credibility of findings,
- to broaden understanding of relationships contextually,
- for illustration,
- for improving the usefulness of findings to practitioners with an applied focus,
- for quantitative confirmation of a qualitatively generated theory within a single project,
- to include a diversity of views from different perspectives, and
- for enhancement or building upon of previously generated quantitative and qualitative findings.

These are valid concerning the Emirati student choosing the nursing profession in the region and to help promote the recruitment and retention of students into the nursing programme(s).

In research concerning social sciences, as in the nursing discipline, the inherent social phenomena are so complex that more than one data collection method is necessary to study

these complexities. A key decision in choosing a mixed methods approach, according to Creswell and Clark (2010), is determining the level of interaction between the quantitative and the qualitative strands, the priority of the different data strands, the timing of data collection using the different data collection methods, and the point of interface where the mixing and integration of all the information occurs. Creswell (2012) describes different designs, including a “+” or “→” notation system, to visualize the process, and portray the procedure in mixed methods research process. The + indicates a simultaneous or concurrent collection of data, while → indicates a sequential collection of quantitative or qualitative data, with an addition of an “upper case” indicating priority to one set of data.

Creswell and Clark (2012) describe six types of mixed methods designs commonly used in educational research. They are the convergent parallel design, the explanatory sequential design, the exploratory sequential design, the embedded design, the transformative design, and the multiphase design. The purpose in a convergent design is the simultaneous collection of both quantitative and qualitative data together for merging of data, followed by analysis and understanding of the problem, while in a sequential design the investigator collects both sets of data in a sequential manner in two phases, either quantitative followed by the qualitative or qualitative followed by the quantitative, followed by an analysis of each phase leading to the results which are then integrated for further understanding of the problem. According to Creswell (2012), the first four designs are basic designs, while the last two are more complex.

While in a concurrent design, it is intended that the integration of both types of data would strengthen the generalizability of the quantitative data within the rich context of the qualitative data. In this study the sequential design is used as an initial quantitative data collection of Emirati student profiles and factors related to recruitment and retention in the nursing program

which then forms a database on a topic where prior research has not been done. Data gained in this phase will be expanded upon by the qualitative phase of the study. Both the quantitative and the qualitative data have equal priority in this study, where “priority” refers to the emphasis the researcher places on any one data set.

In the sequential research design, the researcher would again need to decide on where the data collection would be conducted through exploratory or explanatory means. In exploratory sequential research design, the investigator collects qualitative data in the first phase, followed by the collection of quantitative data. This type of data collection is usually done for exploration of phenomenon, identification of themes, or designing an instrument and subsequently testing it, according to Creswell (2012). In the explanatory sequential research design, a first phase of quantitative data collection is followed by a second phase of qualitative collection of data, the intention being that the former would present a general picture of the research problem while the latter would refine and add to the initial picture through a more detailed rich description.

### **3.1.1 Explanatory Sequential Mixed Methods Design**

Creswell (2012) recommends that researchers in mixed methods ask pertinent questions before selection of the research design, including the priority given to the collection of quantitative and qualitative data, the sequence of data collection, the method of analysis, and the point of ‘mix’ between the quantitative and qualitative data collected. Onwuegbuzie and Collins (2007) also note that most mixed methods studies make distinctions in their design by including the time orientation dimension, and suggest a concurrent or sequential method of data collection. The sequential research design is used when the two forms of data collected are related (Creswell 2003) and involves collection of data in two stages, where one set of data builds on the other set of data.

Further within the sequential mode of data collection, data can be collected through explanatory or exploratory means and for the purpose of this study, since one of the rationales for the mixed methodology is data development, the explanatory sequential design has been adopted due to its appropriateness in obtaining more complete information related to the problem under study, as discussed by Creswell (2012) (Figure 4).

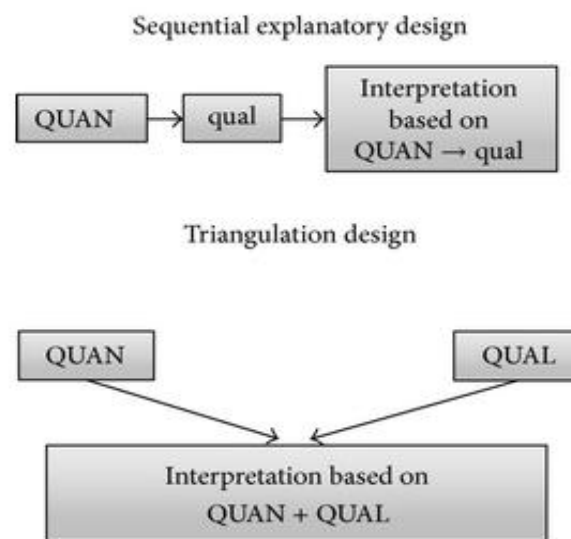


Figure 4: Creswell and Clark (2007) Sequential Explanatory Mixed Methods Design

In this type of research design, the two data sets are collected sequentially in two phases, whereby one data set follows and informs the other. According to Creswell (2012), in this type of research design quantitative data is collected first followed by the collection of qualitative data that helps explain or elaborate on the quantitative results. He explains that the rationale behind this type of research design is that the initial quantitative results would provide a general database for the research problem, but a more in-depth analysis would be facilitated by the qualitative data set which would expand upon the initial quantitative picture by exploring a few samples in more detail. Creswell (2012) argues that this type of research design has the

advantage of clear quantitative and qualitative parts, which is an advantage while designing and conducting the study. Figure 5, is an illustrative overview of the research design used in this study.

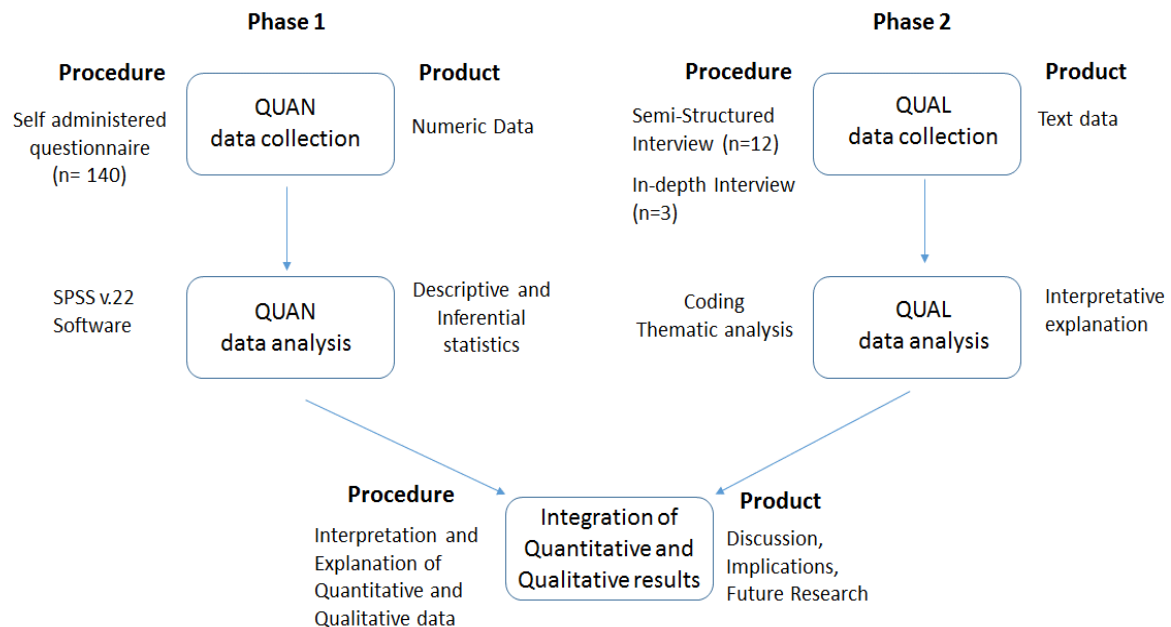


Figure 5: An Illustrative Overview of the Study's Research Design

### 3.2 Research Methodology

The methodology section first discusses the subsection of site and participant selection as the context of the study followed by the collection of data for analysis and interpretation. The second sub-section of the methodology discusses the data collection methods that include a self-administered questionnaire, document analysis, semi-structured interviews and in-depth interviews. The third section explains how ethical considerations were dealt with, and the fourth section discusses the limitations of this thesis. Table 5 identifies the approaches to align the research questions with the methods. Although designed to accomplish different goals, Patton (2002) explains that both research methodologies are complementary and can be combined effectively.



### 3.2.1 Site and Participant Selection

According to Onwuegbuzie and Collins (2007), sampling is an essential step in the research process as it helps to inform the quality of interpretation made by the researchers that stem from the underlying results. In both quantitative and qualitative studies, a crucial step in the process is when researchers decide the number of participants to select (i.e., sample size) and decide on how to select those sample members (i.e., sampling scheme). Onwuegbuzie and Collins (2007, p.283), argue that,

*Quantitative researchers tend to make “statistical” generalizations, which involve generalizing findings and inferences from a representative statistical sample to the population from which the sample was drawn. In contrast, many qualitative researchers, tend to make “analytic” generalizations, which are “applied to wider theory on the basis of how selected cases ‘fit’ with general constructs” (Curtis et al., 2000, p. 1002).*

The choice of sampling strategy selection is different in qualitative research from quantitative research and based on a specific population. In qualitative research the sample may include a broader scope of participants to examine the research question and ascertain whether outliers or extreme cases require selection, according to Creswell (2012). Onwuegbuzie and Collins (2007) observe that many researchers using mixed methods research use the non-random sampling scheme regardless of the study objectives, goals, and purpose or research question. They suggest that the type of sampling scheme should depend on the objective of the study, for example, if the goal is to generalize the findings then a ‘random’ sampling scheme is most appropriate, but where the goal is to obtain insights into a particular phenomenon or individuals

or events, the investigator should choose a purposive sampling scheme to gain maximum understanding regarding the research problem.

Data for this study was collected from students studying at a College of Health sciences in Abu Dhabi, having initial program accreditation from the Ministry of Higher Education for Scientific Research (MOHESR), and institutional accreditation from the UAE Commission of Advanced Accreditation (CAA). This college is the only one of its kind in the Abu Dhabi Emirate, offering baccalaureate degree Health Science related programs in Nursing, Pharmacy, Paramedics, Medical Imaging and Radiology to the community. Established in 2006, the College aims to meet the United Arab Emirates' growing need for skilled healthcare professionals. The College presently offers the Bachelor of Science in nursing degree along with other diploma and higher diploma courses.

The purpose of the program in the Al Rowdah Academy is to support entry into desired diploma and degree courses in IAT. These students are at the threshold of forming their career choices, and as such are an important source of information for the current study. Subjects for the study were recruited from a college of Health Sciences in Abu Dhabi. The college has campuses in Abu Dhabi, Al Ain, Ajman, Al Gharbia and Morocco, but the nursing program is only being offered at the Abu Dhabi and Al ain campuses, therefore only subjects from those two campuses participated in the study. A second set of in-depth interviews were conducted with select nursing leaders to illicit their experiences in dealing with the research problem

The relationship between the quantitative and the qualitative samples will be nested in design, as according to Onwuegbuzie and Collins (2007), "a nested relationship implies that sample members selected for one phase of the study will represent a subset of those participating in

other facets of the investigation” (p.292). Therefore, the subjects of the questionnaire data collection method included all Emirati pre-entry, undergraduate and bridging students in the nursing program, while the subjects of the semi-structured interviews in the second phase include a subset of twelve students from those who had participated in the questionnaire data collection. In this study the convenient purposive sampling scheme has been adopted for the quantitative and the qualitative data collection because of the availability of only one College of Health Sciences in the Emirate, and because the purpose of the study is to investigate and understand the research problem of factors surrounding Emirati student recruitment and retention in the nursing program.

For the second set of in-depth interviews, politically important purposive sampling scheme is adopted to purposefully select nursing leaders who would share their experiences in dealing with the issue of poor Emirati student numbers in the nursing programme(s). Thus the subjects of this thesis are all pre-entry Emirati students studying in the College of Health Science, including all undergraduate and bridging Emirati students in the nursing program. Emirati students at different levels of the program included, pre-entry (80 students), undergraduates (48 students), and bridging students (12 students), making a total of 140 participants. This sample size is adequate for small population sizes, as according to Brace, Kemp and Snelgar (2000), for a statistical test to be administered an acceptable size must be at least 100 participants. Thus, all participating students were selected using a convenient sampling technique as this is the only college in the Emirate of Abu Dhabi offering a nursing degree, and these are the only Emirati students in the program, and the total sample size for the questionnaire data collection for this study  $n = 140$ .

According to Polit and Beck (2006, p. 273), “sample size in qualitative interviews is usually determined based on informational needs” and is approximately ten or until data saturation occurs”. Guest, Bunce and Johnson (2006, in Onwuegbuzie and Collins 2007) similarly suggest a sample size of 10-12 participants for data collection through interviews. Following the quantitative data analysis of the questionnaires, semi structured interviews were conducted with the volunteer students to explore further reasons for their career choices towards the nursing profession. The various stakeholders at the different levels of the country concerning nursing education include the UAE Nursing and Midwifery Council (UAE NMC) at the national level, the Health Care Provider (SEHA) at the Emirate level, and the College of Health Sciences at the local level.

Nursing leaders for the second round of in-depth interviews, were selected from their respective organization websites, and then contacted through telephone to make an appointment for an interview. It was initially planned to interview six nursing leaders (a minimum of two from each organization), but interviews were finally conducted with only three nursing leaders because of their time constraints and researcher’s time availability for data-gathering. The subject selection is summarized in the table below as shown.

<b>Data Collection Method</b>	<b>Students</b>			<b>Nursing Leaders</b>	<b>Total</b>
	<b>Pre-entry</b>	<b>Under Graduate</b>	<b>Bridging</b>		
Questionnaire	80	48	12		140
Semi structured Interviews	4	6	2		12
In-depth Interviews				3	3

Table 1: Sample Size Distribution in this Study

### **3.2.2 Data Collection Methods**

According to Creswell (2012), methods of data collection in quantitative research include the use of instruments, such as questionnaires, closed-ended interviews and closed ended observations. Documents including numeric scores such as those related to census and attendance records are also included within its domain. In qualitative research, methods of data collection include open-ended interviews, open-ended questions on questionnaires, open ended observations, documents such as policy documents and visual materials. In this study, quantitative data from Emirati students to establish student profiles and ascertain influencing factors related to their career choices in the nursing programme(s) will be collected using questionnaires, followed by the collection of qualitative data using semi-structured and in-depth interviews. Related policy documents will also be analysed to establish credibility of the information collected.

In a similar study conducted in Bahrain, related to perception of the nursing profession among students within the program by Eman et al. (2012), a triangulation research design using quantitative and qualitative data collection methods was used. Data were obtained through self-reporting questionnaires and focus groups collected during their nursing programme. In this study self-administered questionnaires generating results for the quantitative section of the study were also used, but individual semi-structured interviews were found to be more appropriate instead of focus groups, because interview participants were at different levels in the program, allowing the researcher to better control and guide the direction of the interview based on the interview guide, and the intention to gather rich data with anecdotal examples without potential interferences from other participants.

This section describes the selection and design of data collection instruments beginning with the questionnaire, and followed by the semi-structured interview guide for students, the in-depth interview guide for nurse leaders and ending with the design for document analysis.

## **Questionnaire**

The questionnaire is a data collection method used in the quantitative aspect of the mixed methods approach of the empirical study. Taylor, Kermode and Roberts (1998) maintain that in the quantitative dimension, questionnaires, in view of their anonymity encourage candid responses when compared to interviews where participants might feel the need to divulge ‘socially appropriate’ answers to questions asked. Another advantage in administering questionnaires is the ease with which they can be tested for reliability and validity. The questionnaire was designed after an extensive literature review of studies using this approach to research the problem of student recruitment and retention in nursing education.

An analysis of questionnaire results then informed the preparation of the semi-structured interview guide, and a scrutiny of documents at the local, regional and national level related to the issue. Questionnaires are a good way to gather primary research but they should be clear and easy for the respondent to understand. The questionnaire has three sections including a demographic data collection section, the Porter Nursing Image scale, and a personal goal instrument career choice scale. According to Jeffreys (2012), today nursing students represent greater variability in terms of age, gender, ethnicity and race, prior educational experience, prior work experience, family's educational background, and enrollment status than ever before. These factors have been taken into consideration during the formulation of the demographic data section of the questionnaire for this study, and consists of the above

information that would be collected from the students in congruence with the NURS model, to determine the Emirati student profile.

As the inclusion criteria only included Emirati students, the ethnicity was not included as part of the demographic data section. The demographic data in the questionnaire distributed included the student's age, sex, level in the program, selection of major in high school, parent's educational and occupational experience, any previous health care related experience, any family members in the health care profession, and the area they live in (see Appendix A).

The second section of the questionnaire includes the Porter Nursing Image scale which was developed by Porter and Porter (1991), and consists of 30 matched-pair bipolar items aimed to ascertain the participant's perception of the societal image of nursing. Measurement of the scale is done by using a 7 point- semantic differential scale with lower scores reflecting more positive images. According to Osgood (1969), semantic differential scales help the participant voice their evaluation, potency and activity level regarding a particular object or phenomenon in a verbal dimension, and is particularly useful in assessing concepts in the affective dimension like attitude and feelings. The scaled question, involved in semantic differential scale falls between an open and closed question. Participants are asked to pick an answer, but they are given a scale to use in their responses to guide them.

The Porter Nursing Image Scale has been used in several studies to ascertain the perception of the nursing image, originally by Porter and Porter in 1991:

*To describe the self-image of nurses working in a hospital setting and to determine whether there are differences in self-image between beginning and expert nurses,*

*between caregivers and non-caregivers, between nurses with different levels of education, and between full-time and part-time nurses. (p. 210)*

More recently, Takase (2006) used the scale to determine nurses' perception of the image of nurses held by the public and nurses' perception of their actual roles, and Wallace (2007) used the scale for a convenience sample of associate degree nursing students to measure their perception of the public image of nursing.

The third section of the questionnaire includes a personal goal instrument where participants were asked four questions. The two closed ended questions elicited whether, if they had a choice, they would choose nursing as a career to pursue, and whether it would be a first, second or third choice of career. Pre-entry students had the opportunity to declare whether they would choose or reject nursing, and those currently in the nursing program were asked to respond about whether they plan to continue in the profession, thereby eliciting quantitative information on their recruitment and retention behaviour. The two open ended questions gave an opportunity for them to elaborate on the reasons for their choice.

Since only the second section of the questionnaire had established reliability and validity (Porter & Porter 1991), a pilot study was conducted with 25 undergraduate students to test the draft questionnaire in its entirety for face and content validity. Participants were informed about the nature of the study and gave consent to be involved. Student feedback revealed that two words in the Porter Nursing Image scale were found to be difficult to comprehend because of their developing English language proficiency levels. Therefore, the word 'timid' was revised to 'not bold' (the negative of the matched pair at the other end of the spectrum), and 'intuitive' to 'not logical' (again the same word from the other end of the spectrum, prefixed with a 'not',



to suggest its opposite meaning). It was noted that participants took 15 – 20 minutes to complete the questionnaire. (See Appendix A).

### **Document Analysis**

The document analysis method is an important source of information for the qualitative aspects of the study. According to Stake (1995, p. 68), “documents are mostly records of activities that the researcher is interested in but did not get the chance to observe taking into consideration that the recorder may be more expert than the researcher”. Document analysis is commonly combined with other qualitative research methods for triangulation purposes (Bowen 2009). According to Patton (2002), triangulation guards the researcher against possible bias that a study’s findings are simply an artifact of a single method, a single source, or a single investigator’s bias.

Bowen (2009) lists five specific functions of documentary materials including firstly, that they provide data on the research problem from within the context in which the research participants operate. This allows for bearing witness to past events by providing “background information as well as historical insight” (p. 30). Secondly, it can provide information which can lead the researcher to probe further during the interview phase. Thirdly, a thorough document analysis can provide supplementary research data that would add to the knowledge base. Fourthly, Bowen (2009) suggests that documents can provide a means for tracking changes and development in the subject matter across the different drafts of the document, enabling the researcher to ascertain when changes occurred, and, finally, a fifth purpose would be a means to verify findings or corroborate evidence from other sources.

The inclusion of a data collection method is usually done after careful perusal of its advantages and limitations and its suitability to the study. Bowen (2009) describes the advantages of using documents as follows: an efficient way to select data rather than collect data; the easy availability of documents; its cost effectiveness in only evaluating already garnered data; its lack of “unobtrusiveness” or “no reactivity” as it is just a piece of paper; its stability, making it suitable for repeated review; its exactness in the details; and coverage in the extent of content covered. But Bowen (2009) also cautions that sometimes documents can be incomplete, might not be retrievable due to deliberate actions, or might be biased from the perspective of the author.

Glesne (2006, p. 65), suggests that in order “to understand a phenomenon, you need to know its history”. According to Krippendorff (1980), five questions relating to which documents were analysed; why were they chosen; from what population were they drawn; what is the background and context; what are the boundaries of the analysis; and what are the targets of the inferences - must be addressed in every content analysis. In this study, as the research question intended to investigate the issue of the Emirati student within the nursing programme(s), in the college of Health Sciences, at the Abu Dhabi emirate; documents relating to students and the college were included at the college level.

After completing their program, graduates working within the Emirate of Abu Dhabi get recruited in one of the SEHA hospitals and come under the licensure regulations of the health authority Abu Dhabi (HAAD). So at the Abu Dhabi emirate level, policies related to SEHA and HAAD were included for analysis. At the next national level, Governmental policies related to the health care sector, to the nursing profession, and to Emiratization within the nursing sector in the country could affect all health care related entities down to the grass root

college of Health Sciences level. Also at the national level, the UAE Nursing and Midwifery council (UAE NMC) provided strategic direction and guidelines for the nursing profession in the country. Therefore documents related to nursing education and practice from the UAE NMC, and documents related to healthcare and higher education from the Government, were included for analysis in this study.

In this study, documents were first collected from the participant site and included college related organizational documents: the Student College Handbook, the College policy and Procedures Handbook and the FCHS strategic plan. Documents collected at the Emirate level includes those in the public domain such as the SEHA annual report, the Health authority (HAAD) annual report and the HAAD professional qualifications document. At the national level, the UAE Nursing and Midwifery Council (UAE NMC) has published four documents – the UAE Nursing Education standards, the UAE Nursing Education strategy, the UAE annual reports, and the UAE Nurses Scope of Practice (for clinically practising nurses) – were collected. Additionally in the national realm of Government related documents – the UAE Labour laws document, and the UAE Government strategy were also included, and content analysis was used to glean and interpret data relating to the research problem in this study.

Documents can be qualitatively analysed by first ‘counting’ the textual elements which provides a means for identifying, organizing, indexing and retrieving the information, followed by ‘consideration of the literal words’ including the manner in which they have been presented. Key words pertaining to each level were thus identified from related literature, and were used in the analysis. At the college level, key words included – ‘Emirati’, ‘Emiratization’, ‘nursing’, ‘recruitment’, ‘retention’, ‘stipend’, ‘advising’, and ‘counselling’. At the Abu Dhabi Emirate

level, keywords chosen were slightly modified and included – ‘Emirati Nurse’, ‘government benefits’, and ‘Emiratization’.

At the National Level, key words were again selected based on a broader perspective considering the broader target audiences, and included – ‘Higher Education’, ‘nursing workforce’, ‘Health care’, and ‘Emiratization’. After the words were identified, the context surrounding the words were read and reread to gain an understanding of the context within which it was documented and then compared with the other quantitative and qualitative findings for triangulation and strengthening of information interpreted.

### **Semi-Structured Interviews**

Interviews are a common qualitative self-report technique and their usefulness lies in the great amount of information that can be collected just by questioning people about a topic (Polit & Beck, 2006). According to Patton (2002, p.53), “kinds of questions include experience/behaviour questions, opinion/value questions, feeling questions, knowledge questions, sensory questions and background / demographic questions”. Kvale and Brinkmann (2006) observe that for data saturation, interview questions should include thematic and dynamic dimensions (p.131). Therefore, Emirati students at different levels of the program were invited to participate in a semi-structured interviews to further explore the factors influencing their attitudes towards the nursing profession (see Appendix B for the attached interview guide).

According to Polit and Beck (2006), non-structured interviews are used when the authors do not have a preconceived view of the research problem, whereas semi-structured interviews are conducted when the researcher already has a preliminary knowledge of the problem from related literature or from quantitative findings. The semi-structured interview guide for this study was finalized after analysing the results from the questionnaires. Concerning the sequence

of questioning, Patton (2002)) suggests that interviewees should be involved in the interview as soon as possible by asking facts first followed by controversial matters, to interspace fact-based questions throughout the interview preventing disengagement, to ask questions about the present before enquiring about the past or future, and at the end to allow participants to add any other details they would like to share.

Accordingly, the interview guide for this proposed study consisted of two sections. The first consists of questions about the participant's experience of being a student in health care in the UAE. This was followed by a follow up question— asking the interviewee to share examples that would illustrate their statement, in accordance with Patton's (2002) argument that probing deepens the response to a question and increases the richness of the data being obtained. The third question asked the participant to give their opinion about society's views regarding the nursing profession in Abu Dhabi.

The next section introduced more controversial topics, allowing for the interviewer to “funnel” the questions. Question 4 asked about challenges faced by Emirati nurses practicing the nursing profession in the country and sociocultural factors responsible for the perception of nursing in the country. Finally, the researcher concluded by asking whether there was anything else that the participant would like to comment on or add. The interview guide was pilot tested with a bridging nursing student who was briefed about the nature of the study and gave consent. The participant was later given the opportunity to review the transcript but did not make any changes. The information gathered as a result of the pilot study is not included in the interview results. All interviews were tape recorded with permission, and were then transcribed in detail.

## **Unstructured Interviews**

An expert is one who has expert knowledge and is experienced in using this knowledge. Patricia Benner (1982) describes a nursing expert as someone who uses intuitiveness born of experience in addition to principles and rules in guiding her action, who has a rich background experience and is highly proficient in performance. In line with the above criteria, experienced nurses currently holding leadership positions in the field of nursing in the UAE were recruited for the study. According to Polit and Beck (2006), non-structured interviews are used when the authors do not have a preconceived view of the research problem. Onwuegbuzie and Collins (2007) explain that the goal in a mixed method research, in addition to others, “is to predict, to add to the knowledge base, to generate new ideas, inform constituencies, and have an organizational, institutional and societal impact”( p. 284).

According to Ajjawi and Higgs (2007), interviews serve to explore and gather narratives; they help in establishing conversational relationships and allow for participant storytelling, and while semi-structured interviews are useful particularly for the novice researcher because they provide an interview guide covering all the areas to be discussed, open- ended unstructured interviews questions allow for increased flexibility in responses. In the unstructured interview process, the interviewer and respondents engage in a formal interview, with the interviewer having a clear plan in mind concerning the focus and goal of the interview, and thereby helping to guide the discussion as needed. In this study the interviewer developed rapport with the participants, getting them to express themselves and their line of work, in their own way. Guiding questions would therefore be open-ended allowing freedom for the informants' responses.

In order to understand the experiences of nursing leaders in the UAE, and suggest possible strategies relating to Emirati student recruitment and retention into the nursing profession, in-depth unstructured interviews were conducted with three nursing leaders from different nursing and nursing related organizations in the Emirate. In order to acquire this information, the interviewer focused on the challenges faced in the field of nursing education especially towards recruitment and retention of Emirati students, the essential leadership qualities and strategies that work best to influence societal views regarding the nursing profession.

The availability of policies at the local and national levels to increase public awareness and influence student attitudes leading to an increase in influx of Emirati students within the nursing profession would also be a point of discussion. According to Riessman (1993), in narrative in-depth interviews, it is often the validity of the analysis that is taken into question. He suggests four criteria for assessing validation: persuasiveness, correspondence, coherence and pragmatic use and is evident from the results of the study. The loosely structured interview guide follows Patton's (2002) sequence of questioning (described above), interspaced with probing techniques to further reveal information to guide the interview.

### **3.2.3 Data Analysis**

For the analysis of the quantitative data, the researcher created a database to store the results from the questionnaire. The Statistical Package for Social Sciences (SPSS) 22.0 was used to conduct statistical analyses as it was assumed that the statistical package would be essential for interpreting the data in order to answer the research questions formulated in this study, which are:

1. What is the profile of the Emirati student within the nursing programme(s) in the Abu Dhabi Emirate?
2. What are the factors influencing Emirati student recruitment and retention within the nursing programme(s)?
3. What are the nursing educational leaders' experiences and strategies related to Emirati student recruitment and retention, within the nursing programme(s)?

The researcher used descriptive and inferential statistics to report the responses from the questionnaire and answer the first two research questions. The demographic data was used to portray the Emirati student within the health sciences program and was analysed using descriptive statistics analysis. The calculation of the mean and percentage frequencies identified the characteristic profile of the Emirati student within the nursing programme(s) in the College of Health Sciences. In interpreting the student perception of nursing image using the Porter Nursing Image scale, descriptive statistics was initially used, and then principal component analysis was performed to identify the factors that resulted in maximum variance among the population. In the third section of the questionnaire, descriptive statistics and chi square analysis were used on the two open ended questions, regarding reasons to 'choose' or 'not choose' nursing.

For the analysis of the qualitative sections of the study, the responses from the interviews and data from the documents were qualitatively analysed and categorised into themes. The interviews from the students and nursing leaders were summarized and emerging themes presented. Table 2 summarizes the approaches to align the research questions with the methods. Although designed to accomplish different goals, Patton (2002) explains that both quantitative



and qualitative research methodologies are complementary, and can be combined effectively to seek answers for the research problem, as in this study.

For the qualitative section of the study, thematic analysis was carried out according to the constant comparative method. In this process information is taken from data collection and compared with the domains that were identified when looking at the ideas, concepts, and statements (relationships of the concepts) of each theory (Creswell, 1998). Domains identified in this manner were coded. This comparison was also guided by the study's research questions.

Tesch (1990) suggests eight steps to use as a guide to coding data: (a) to start with reading through the complete data carefully, then writing down ideas as they come to mind; (b) second to pick one document and ask, 'What is this about? What is its underlying meaning?', while continuing to write thoughts in the margin; (c) then, after perusing through several documents, to make a list of all topics, cluster similar topics, and then forming them into columns that might be grouped as major ideas, unique ideas, and leftovers; (d) to then take this list and go back to the data, to abbreviate the ideas as codes, to write the codes next to the corresponding segments in the transcripts, to check for emerging themes and codes; (e) to make a final decision on the abbreviations and alphabetize these codes; (f) to then assemble the material as belonging to each theme together and perform a preliminary analysis; and, (g) finally to recode the existing data if necessary.

In this study, qualitative analysis was done in a manner similar to Tesch (1990). The interviews were first transcribed, then all the transcripts were read and re-read to get a sense of the information. Notes were made in the margins of each transcript, and key phrases underlined to form ideas. These were then compared through each transcript and emerging themes identified.

Research Phase	Research Question (RQ)	Participants	Type of Data collection	Instruments used	Data Obtained	Data Analysis Technique
I	RQ 1. What is the profile of the Emirati student within the nursing programme(s) in the Emirate?	Pre-entry, undergraduate and bridging students	QUANT	Questionnaire	Demographic data Nursing Image perception	Mean, frequencies, Principal component analysis,
I  II	RQ 2. What are the factors influencing Emirati student Recruitment and Retention within the nursing programme(s)?	Pre-entry, undergraduate and bridging students	QUAN  QUAL	Questionnaire  Semi structured Interviews  Document Analysis	Career choice and reasons to choose/not choose nursing  Reasons to choose/not choose nursing  Policies related to Emirati recruitment and Retention	Mean, chi square analysis  Thematic analysis  Content Analysis
II	RQ 3. What are the Nursing Educational Leaders' experiences and strategies related to Emirati student Recruitment and Retention, within the nursing programme(s)?	Select Nursing Leaders	QUAL	In-depth interviews	Their experiences, possible strategies towards the problem	Thematic Analysis

Table 2: Summary of Study Phases Aligned with Research Questions

### 3.3 Ethical Considerations

There is a very low risk in this study since all nursing students and selected nursing leaders are only being investigated about their views regarding factors related to recruitment and retention in the nursing program. Ethical approval for the study was obtained from the British University in Dubai based on the university's guidelines for ethics in educational research. The ethical

approval stage at the research site took about six months to procure because of other administrative reasons more urgent to the college. For purposes of confidentiality and anonymity, no identifiers were requested on the questionnaire.

After procuring the ethical approval from the institutional review board at the College of Health Sciences, 160 questionnaires (see Appendix A) were prepared including participation information sheets regarding the research topic (see Appendix C). In addition, a consent form was also included along with the questionnaire. The consent form (Appendix D) explained the purpose of the study, the approach used, and their rights as a participant including the right to withdraw from the study at any time without consequences, as well as contact information of the researcher and supervisor. The participants were also given a copy of the consent form to retain. As soon as the questionnaires were analysed and the interviews were transcribed, they were kept in a locked cabinet to which only the researcher had access. The completed transcripts were sent to the interviewees for checking and then locked away in the drawer by the researcher for safe keeping.

### **3.4 Researcher Role**

The researcher is the sole investigator for the entire duration of this study. In this study, the research was conducted in a college where the researcher has been teaching nursing students from Abu Dhabi for the past 6 years. The researcher has frustratingly witnessed first-hand the recruitment and retention issues faced by the college and was interested in investigating the myriad of factors surrounding these problems with a view of further exploring it and integrating the wealth of experiences towards future recommendations that can be assimilated at the institutional, local and national level to attract students to the nursing profession.

Glesne (2006) argues that the researcher plays two roles in a study including a qualitative one: researcher as researcher and researcher as learner. The researcher's role includes data gathering through "interviews, reading, observation, and data analysis". The primary instrument for data collection and analysis in this type of research is the researcher herself. Data collected through inanimate inventory, questionnaire, or machines are mediated through this human instrument, the researcher (p. 19).

In a learner's role, the researcher includes a sense of self from the beginning of the study. When the investigator acknowledges and considers her own self bias and pre-disposition throughout the study, she becomes "a curious student who comes to learn from and with research participants" (Glesne. 2006). Glesne further describes the researcher in a qualitative study as "a good listener" eager to learn from the participants instead of approaching the interviews as "an expert". This appropriately positions the investigator open to new thoughts and ways of looking at the data. Glesne (1999) also points out that in considering validity issues, it is important not only to recognize the researcher's expertise in regard to the study, but also their "subjective relationship to the research topic" (p. 17). In qualitative research, bias is not controlled in an attempt to keep it out of the study, but as Glesne (1999) states:

*When you monitor your subjectivity, you increase your awareness of the ways it might distort, but you also increase your awareness of its virtuous capacity. You learn more about your own values, attitudes, beliefs, interests, and needs. You learn that your subjectivity is the basis for the story that you are able to tell. It is the strength on which you build. It makes you who you are as a person and as a researcher, equipping you with the perspectives and insights that shape all that you do as researcher, from the selection of the topic clear through to the emphasis you make in your writing. Seen as virtuous, subjectivity is something to capitalize on rather than to exorcise. (p. 109).*

### **3.5 Validity of the study**

Wittgenstein (1953) notes that bias is understood as inseparable from the individual researcher, as the phenomenon under study is always filtered through the subjective understandings of the individual conducting the study. Lincoln and Guba (2000) are also of the view that in qualitative research studies the researcher is required to critically reflect on the self as an instrument, because such studies demand that the researcher use self-interrogation regarding the way in which the research efforts are shaped. In order to strengthen the validity and creditability of information received, the researcher drew on diverse strategies of inquiry such as questionnaires and interviews to prevent relying on only one data source. Gibbs (2007) suggests checking the transcripts with the original transcription to prevent mistakes and this was done in this study. A conflict of interest declaration was signed as part of the process for securing access to the study participants at the college (appendix G). Researcher bias was unavoidable during the data interpretation stage as researcher drew on personal background experience to view and interpret the information using a socio-constructivist lens.

A number of strategies were used to increase validity and reliability in the study. Creswell and Miller (2000) suggest the use of triangulating the data obtained from both the quantitative and qualitative phases, using member checks, providing rich thick description, acknowledging researcher bias, presenting a negative case study for different perspectives, spending prolonged time in the field, peer debriefing, and using an external auditor to strengthen the validity of information gathered. In this study, the findings were triangulated by integrating results from the questionnaire, the semi-structured interviews with the select student participants, the unstructured interviews with the nursing educational leaders, and the document analysis. The emerging themes from the interviews were checked with the participants for confirming the credibility of the information, and narrative accounts with thick in-depth description have been

provided. Peer debriefing was used during the development of the study, including regular mentoring sessions with my Director of Studies. Feedback was received from my University of Birmingham advisor towards the completion of the thesis to enhance the overall validity of my study.

### **3.6 Chapter Summary**

In this chapter, the research approach and research methodology adopted in this study have been described in detail, including the reasons that guided the researcher towards the selection of a mixed methods research design, the sampling techniques used, the data collection methods included, the results of the pilot study, ethical considerations, the researcher's role in the study, and how validity was managed.

## **CHAPTER FOUR: RESULTS AND FINDINGS**

In this chapter data collected follows the mixed-methods research design that combined both quantitative and qualitative methods was used. As discussed in Chapter Three, the research was completed in two phases so that data from the first phase could inform the work completed in the second phase, which would then be expanded and elaborated upon. During the qualitative part of the study, the researcher used semi-structured interviews to understand and expand on the recruitment and retention factors. The researcher also interviewed selected nursing leaders on their experiences, including possible strategies to combat this nursing program problem.

In the first section of the chapter, the phase I quantitative results have been presented to identify the demographic characteristics of the Emirati student studying at the Health Sciences College in the Emirate. This section also presents results related to the public perception of nurses and the reasons behind their decisions to pursue or not pursue a career in nursing. In the second section, the phase II qualitative results have been presented to include themes that have emerged following semi-structured interviews with selected students from the questionnaire population, and in-depth interview findings from selected nursing leaders.

### **4.1 Quantitative Findings: Phase 1**

For the quantitative phase of the study, all Emirati pre-entry students, and all Emirati undergraduate and bridging students within the nursing programme were recruited. In the first phase, the researcher used the questionnaire consisting of three sections: demographic data, the Porter Nursing Image scale, and the Personal Goal Instrument to collect the data. Specifically, in the first phase of the study, quantitative measures were used to determine the profile of the Emirati

student studying in the College of Health Sciences. This initial part of the research also examined the factors surrounding Emirati student career choices and factors involved in their recruitment and retention in the nursing program. The return rate was 100% with 140 students completing the questionnaire. The questionnaire was administered to all students in their classrooms by the researcher, and the filled in questionnaires were collected after a period of 20 minutes. Overall, based on student admission records, 160 questionnaires were prepared and administered. Questionnaires were collected from all Emirati students at different levels of the program, pre-entry (80 students), undergraduates (48 students), and bridging students (12 students), making a total of 140 participants.

#### **4.1.1 Research Question 1**

##### **1. What is the profile of the Emirati student within the nursing programme(s) in the Abu Dhabi Emirate?**

The results of the demographic data have been presented below to describe student characteristics. Within the demographic variables, data sought included age, sex of the student, marital status, level in the program, major in high school, and place of residence in the Emirate, and have been represented in the following cohorts. All the participants in the study were females (100 %).

The majority of the students in the population were traditional students in the 18-24 year age group (88.6%) (Table 3). Students in the United Arab Emirates typically complete 12 years of schooling and then continue with higher education at one of the public or private universities in the country. The reason for the majority of participants being in this age group could be attributed to the differences in the population distribution between the pre-entry, undergraduate and bridging students. All students in a particular yearly intake at the college enroll in the pre-entry first year level. At the end of the first year, they make their respective career choices and



then enter into the second year. So the 18-24 year age group is a reflection of the ages of participating Emirati students in the pre-entry and undergraduate levels of the nursing program in the college (Table 3).

<b>Age of the Participants</b>	<b>Frequency</b>	<b>Percentage</b>
<b>18-24 years</b>	124	88.6
<b>25-34 years</b>	10	7.1
<b>35-44 years</b>	6	4.3
<b>Total</b>	140	100.0

Table 3: Age of Participants in the Study

This finding is similar to a study conducted by Al-Kandari and Lew (2005) among Kuwaiti female high school students, where the participants were all between 14 – 20 years and unmarried, and another study by Eman et al. (2012) among Bahraini nursing students where the majority was female (87%), in the 18-20 year age group. But a study conducted by McCann et al. (2010) among nursing students in Australia showed that the 18% of the participants were male, and 20% were older than 30 years. “Students today include traditional college-age learners, and first-time adult learners”, according to Hallmark et al. (2014, p. 348, in Jeffreys’, 2014).

As indicated in the Table 4 below, participants in the study belonged to three levels in the program, the pre-entry, under graduate and bridging levels. The majority of the students belonged to the pre-entry level. Bridging students relate to those students who had previously completed a diploma level in nursing or related subjects and were currently undergoing a bridging program to bring themselves up to the baccalaureate level.

<b>Participant Program Level</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Pre-entry level</b>	80	57.1
<b>Undergraduate level</b>	48	34.3
<b>Bridging level</b>	12	8.6
<b>Total</b>	140	100.0

Table 4: Participants' level in the program

Table 5 illustrates that the majority of students in the college have completed a science major in high school before entering it. It is interesting to note also that 23.6% of the participants enter a program in Health Sciences with no prior background in the sciences. This affects their ability to make a smooth transition into a rigorous science program.

<b>Major Selection</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Science</b>	106	75.7
<b>Arts</b>	33	23.6
<b>Commerce</b>	1	0.7
<b>Total</b>	140	100.0

Table 5: Participants' Selection of Major in High School

A majority of the students who participated in the study (47.9%) lived in the mainland suburbs near the College (see Table 6). In Osaka and Ziady's (2001) study conducted in Qatar, the majority of students came from the urban areas. But the majority of these participants live in the suburbs (47.9%) compared to the Abu Dhabi island city center / island (32.9%), but it could be explained that the College is located in the suburbs and therefore there are more students from the adjacent surrounding areas. This close proximity could have been a deciding factor in their choice of higher education in the college.

<b>Participant area of Residence</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Abu Dhabi island</b>	46	32.9
<b>Suburbs on the Mainland</b>	67	47.9
<b>Al Ain</b>	24	17.1
<b>Western Region</b>	3	2.1
<b>Total</b>	140	100.0

Table 6: Participants' Area of Residence

Results of the study indicate that (42.1 %) of the participants' fathers had a higher degree educational level, followed by (15%) who had an undergraduate degree educational level, while among the mothers of the study participants, a lesser percentage had a postgraduate degree (17%), compared with those who had an undergraduate degree (19.3%)(see Table 7). At the other end of the spectrum, some participants also had parents who were uneducated as can be seen in Table 7 with fathers at (11.4%) and mothers at (13.6%).

<b>Participants' Parent's Educational Level</b>	<b>Father</b>		<b>Mother</b>	
	<b>Frequency</b>	<b>Percentage</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Not educated</b>	16	11.4	19	13.6
<b>Primary school</b>	10	7.1	20	14.3
<b>Secondary school</b>	34	24.3	50	35.7
<b>Undergraduate degree</b>	21	15.0	27	19.3
<b>Postgraduate degree</b>	59	42.1	24	17.1
<b>Total</b>	140	100.0	140	100.0

Table 7: Participants' Parent's Educational Level

A study conducted by Law and Arthur (2003) among nursing students in Hong Kong showed that the majority of parents (fathers and mothers) of the respondents were primary school

graduates (43.6% and 50.9%, respectively). This is dissimilar to the findings in my thesis which shows that the majority of parents are secondary school graduates. This also varies from Okasha and Ziady's (2001) study where the majority of parents were illiterate or just able to read and write. The fast pace of the economic and industrial revolution in the UAE that started forty years ago could be responsible for the first generation of graduates in the UAE (Kirk 2010).

It is evident from results in Table 8, that most participants had parents in non-health related professions or occupations with fathers at (96.4%) and mothers at (95.7%). One limitation of the questionnaire not identified during the piloting stage was the inclusion of an option for participants with parents who did not work. Nnadi-Okolo (1990) suggests that during self-administration of the questionnaire, if the participant has a question requiring clarification, the person administering the questionnaire can explain the question but not answer it. During the administration of the questionnaire in this study, students were offered an alternative to select the non-health related option, as it was more important to document results of parents being in the health care profession including nursing.

<b>Participants' Parent's Occupational Status</b>	<b>Father</b>		<b>Mother</b>	
	<b>Frequency</b>	<b>Percentage</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Nursing</b>	2	1.4	3	2.1
<b>Other health care related professions</b>	3	2.1	3	2.1
<b>Non-health care related professions</b>	135	96.4	134	95.7
<b>Total</b>	140	100.0	140	100.0

Table 8: Participants' Parent's Occupational Status

Concerning the occupational status, none of the respondent's parents in a study conducted by Law and Arthur (2003) in Hong Kong, were in nursing or other health related professions, while from among my participants 3.5% had fathers in the nursing or other health related category, and 4.2% had mothers in the nursing or other health related professions. Jabeen (2010) conducted a study relating to attitudes towards career women's roles in the UAE, finding that parents' higher educational and occupational levels contributed to positive attitude formation towards women in career roles.

The majority of the participants in the study (43.65%) reported an annual socio-economic income of greater than 100,000 AED. Tong (2010) published a report on the 'Wages Structure in the United Arab Emirates' for the Institute for Social & Economic Research (ISER) at Zayed University, reporting that,

*Geographically, workers' salaries differ significantly from some emirates to others. The Emirate of Dubai has the highest annual salaries on average (52K), followed by the Emirates of Abu Dhabi (42K) and Sharjah (30K). The Emirate of Ras Al Khaimah has by far the lowest salaries on average (13K). The difference between the highest and lowest pay is striking for such a small country. The other three northern emirates, Ajman, Umm El Quawain, and Fujairah, have similar salary levels ranging from 18K to 20K in 2008, and their differences are not statistically significant. (p. 5)*

This report included both the Emirati and the expatriate population with a reported average for Abu Dhabi at 42,000AED. A combination of the last two scale intervals demonstrate that 57.2% (43.6%+ 13.6%) of the participants' earned more than the Emirate's average in terms of monthly income, as can be seen in Table 9. Law and Arthur (2003) associated family income with the intention to pursue nursing as a career among students in Hong Kong and found that as the family income increased, the choice to take up nursing as a career decreased.

<b>Participants' Socio-Economic Status (per month)</b>	<b>Frequency</b>	<b>Percentage</b>
<b>less than 10,000 AED</b>	15	10.7
<b>10,000 - 50,000 AED</b>	45	32.1
<b>50,000 - 100,000 AED</b>	19	13.6
<b>greater than 100,000 AED</b>	61	43.6
<b>Total</b>	140	100.0

Table 9: Participants' Socio-Economic Status

The majority of participants in the study (86%) have seen a nurse in action prior to entering the College of Health Sciences for their higher educational degree, as presented in Table 10, while Table 11 shows that 9% of the participants have worked, 20% have volunteered and worked, and 32% have only volunteered in a health care facility prior to entering the college. A large percentage of the population (56.4%) have no prior personal experience in health care before joining the Health Sciences College.

<b>Seeing a Nurse in Action Before</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Yes</b>	121	86.4
<b>No</b>	19	13.6
<b>Total</b>	140	100.0

Table 10: Seeing a Nurse in Action Prior to Entering the College

Nursing as a profession is not an entirely new concept for the participants, as Table 12 demonstrates; 10.7% of the participants have one or more family members are in a healthcare profession when compared to 45% of the participants who do not have family members in the health care profession.

<b>Participant's Prior Experience In Health Care</b>	<b>Frequency</b>	<b>Percentage</b>
<b>No</b>	79	56.4
<b>Only volunteer</b>	32	22.9
<b>Volunteered and worked</b>	20	14.3
<b>Only worked</b>	9	6.4
<b>Total</b>	140	100.0

Table 11: Participant's Prior Experience in the Healthcare Sector

Interestingly, a small percentage (5%) of participants had one or both parents as nurses. But this percentage falls quite short in comparison to a study by Sand-Jecklin (2006), conducted among first year nursing students in the United States. In her study, 78% of the students reported having worked in the health care industry, or having a close family member who worked in health care, although it is not clear in what capacity, that is, as volunteers or in full-time paid positions.

<b>Family Members in Health Care</b>	<b>Frequency</b>	<b>Percentage</b>
<b>No One</b>	63	45.0
<b>One Or Both Parents Is/Are In Healthcare</b>	15	10.7
<b>One Or Both Parents Is/ Are A Nurse</b>	7	5.0
<b>Other Relatives In Healthcare</b>	55	39.3
<b>Total</b>	140	100.0

Table 12: Family Members working in the Healthcare Sector

Thus, in summary, as can be seen from the tables above, the majority of the students in the population sample are traditional students, being females (100%), in the 18-24 year age group

(88.6%), pre-entry students (57.1%) who had taken science as a major in high school (75.7%), and lives in the suburbs of Abu Dhabi (47.9). Similar studies among nursing students in Qatar (Okasha & Ziady, 2001) and Jordan (Safadi et al., 2011) also show similar student characteristics in terms of demographic variables. But a study conducted by McCann et al. (2010) among nursing students in Australia showed that the 18% of the participants were male, 20% were older than 30 years, and 82 % lived in the metropolitan area.

Several experts (Dapremont 2013; Yateman, 2004; Stroup, 2013) have stressed that to solve the nursing shortage, one of the important interventions is to “prime the pipeline” (Goodin, 2003), meaning recruit more students into the nursing profession, and the changing nature of the nursing profession suggests that more non-traditional students are entering programs of nursing. According to Jeffreys (2014), it is crucial to ascertain whether the nursing student:

- a) Represents the profile of a student traditionally (historically) enrolled in nursing, or*
- b) may be categorized as a member of an under-represented group, nontraditional, and/or first generation college student. (p. 2)*

A nontraditional would be one who meets one or more of the following criteria: a) is older than 25 years; b) studying in a part-time mode; c) male; d) a member of the minority community; e) has children; f) is entering the program from a different pathway; and g) has prior exposure to the health care field. According to Jeffreys (2014) nontraditional students and first generation college (post-secondary education) students have difficulty making career decisions. For first generation college students, mismatched expectations of the college academic and social experience pose challenges to academic achievement, and recruitment and retention. In addition, social isolation (or the feelings of not belonging) among nontraditional and first generation college students are also reported as factors adversely influencing recruitment, retention and success across all levels of nursing education.



The pre-entry Emirati student in the College of Health Sciences is traditional with respect to being female and between the ages of 18 – 24, but is also nontraditional in terms of some of them following a different educational pathway into the program, for example an art major in high school, and a first generation college student. The educational status of participant parents shows that 42.8% of the fathers and 63.6% of the mothers of the participants are only educated up to the higher secondary level or less. The bridging Emirati student is more nontraditional in terms of being  $\geq 24$  years of age, marital status being married, having children, currently working, studying in a part-time mode, and entering the program through a different educational pathway, for example completing a diploma nursing program first and currently pursuing a bridging baccalaureate degree in nursing.

#### **4.1.2 Research Question 2**

##### **2. What are the factors influencing Emirati student recruitment and retention within the nursing programme(s)?**

The answer to this research question was quantitatively elicited using the rest of the questionnaire. The College of Health Sciences in the study was formed in 2006 through an agreement between the Institute of Applied Technology (IAT) and an Australian University. Being a relatively new college in the Emirate, this question was included in the questionnaire to find out the means through which students gained awareness of the college and the programs on offer at its campuses. It was also envisioned that this could be further used as a strategy for information dispersion related to increased student recruitment and retention in the country. Participants reported that the first source of information was their family, relatives and friends (34.3%). The college website was the second most widely used source of information about the college (Table 13).

<b>Sources of Information pertaining to the college of Health Sciences</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Website</b>	34	24.3
<b>Newspaper</b>	14	10
<b>Friends/ relatives/family</b>	48	34.3
<b>College open house day</b>	17	12.1
<b>Career fairs in schools</b>	20	14.3
<b>Advertisements in malls</b>	2	1.4
<b>Participation in Health camps</b>	5	3.6
<b>Current students in the college</b>	35	25
<b>Other nurses</b>	16	11.4
<b>Local hospitals</b>	10	7.1
<b>College in the neighborhood</b>	17	12.1

Table 13: Sources of Information Pertaining to the College of Health Sciences

Students in the UAE are technologically savvy and constantly in communication with friends and peer groups, providing a valuable point of contact with future nursing students that needs to be tapped into for recruitment and retention strategies. College fairs in the schools (14.3%) are another third important information source, while the college open house day, and the college being in the same neighborhood as potential nursing students, and are also important factors (12.1%) in awareness of the college. Advertisements in malls (1.4%) and participation in health camps (3.6%) were the last sources of information for Emirati students making a career decision in nursing.

These results are different from those reported by Al- Khandari (2005) among Kuwaiti students who reported that hospital visits were the primary source of information for students regarding

the nursing profession (35%), followed by television (27%), journals (18%), friends and school (9%), and the radio (2%). Dapremont (2013) reviewed minority recruitment and retention models that were implemented in the United States, concluding that multiple strategies include, but are not limited to, “reality based clinical exposure”, “advanced clinical placements for high school students”, “community partnerships”, and “faculty role modelling and mentorship outside the college walls”, that had the potential for improving student success in the nursing programs.

### **Factors related to societal image of Nurses and the Nursing Profession**

Participants completed a 7-point Likert scale to rate the 30 matched-pair bipolar items on the Porter Nursing Image Scale (1991). Data were analyzed using SPSS, version 22.0. For data input, responses were scaled based on ‘1’ as very positive, ‘2’ as quite positive, ‘3’ as slightly positive, ‘4’ as neutral, ‘5’ as slightly negative, ‘6’ as quite negative and ‘7’ as very negative. Thus low scores (1 – 3) indicated high agreement and a positive public perception of nursing, and high scores (5 – 7) indicated low agreement and a negative public perception of nursing within the factors. The means and standard deviation of each of the 30 matched-pair bipolar items is shown in Table 14.

Data indicated that overall participants perceived Emirati society as holding a positive image of nursing, with 24 (out of 30) of the mean scores being 2 and 3, signifying “quite positive” and “slightly positive” views regarding nurses. Participants perceived UAE society viewing nurses as being quite active ( $\bar{x} = 2.67$ ,  $SD = 1.64$ ), quite powerful ( $\bar{x} = 2.67$ ,  $SD = 1.40$ ), quite influential ( $\bar{x} = 2.92$ ,  $SD = 1.32$ ), quite professional ( $\bar{x} = 2.62$ ,  $SD = 1.46$ ), quite scientific ( $\bar{x} = 2.43$ ,  $SD = 1.46$ ), quite intelligent ( $\bar{x} = 2.60$ ,  $SD = 1.30$ ), quite sympathetic ( $\bar{x} = 2.98$ ,  $SD = 1.34$ ), quite respectable ( $\bar{x} = 2.58$ ,  $SD = 1.49$ ), quite compassionate ( $\bar{x} = 2.94$ ,  $SD = 1.40$ ),

quite cheerful ( $\bar{x} = 2.88$ ,  $SD = 1.24$ ), quite friendly ( $\bar{x} = 2.67$ ,  $SD = 1.64$ ), quite logical ( $\bar{x} = 2.72$ ,  $SD = 1.37$ ), quite neat ( $\bar{x} = 2.92$ ,  $SD = 1.48$ ), and quite rational ( $\bar{x} = 2.95$ ,  $SD = 1.45$ ) .

<b>Variable</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>Active</b>	2.67	1.64
<b>Powerful</b>	2.67	1.40
<b>Influential</b>	2.92	1.34
<b>Professional</b>	2.62	1.46
<b>Scientific</b>	2.43	1.46
<b>Intelligent</b>	2.60	1.30
<b>Bold</b>	4.45	1.52
<b>Strong</b>	3.80	1.74
<b>Confident</b>	3.79	1.64
<b>Leader</b>	4.82	1.72
<b>Independent</b>	3.38	1.57
<b>Outgoing</b>	3.51	1.51
<b>Dominant</b>	4.13	1.60
<b>Sympathetic</b>	2.98	1.34
<b>Warm</b>	4.30	1.69
<b>Respectable</b>	2.58	1.49
<b>Responsible</b>	3.62	1.86
<b>Compassionate</b>	2.94	1.40
<b>Caring</b>	3.62	1.90
<b>Patient</b>	3.67	1.85
<b>Cheerful</b>	2.88	1.24
<b>Friendly</b>	2.26	1.30
<b>Compromising</b>	3.40	1.20
<b>Controlled</b>	4.54	1.82
<b>Logical</b>	2.72	1.37
<b>Competent</b>	4.24	1.54
<b>Organized</b>	3.70	1.72
<b>Neat</b>	2.92	1.48
<b>Logical</b>	3.56	1.68
<b>Rational</b>	2.95	1.45

Table 14: Participants' Perceptions of the Societal Image of Nursing

But they were also perceived as being only slightly strong ( $\bar{x} = 3.80$ ,  $SD = 1.74$ ), slightly confident ( $\bar{x} = 3.79$ ,  $SD = 1.64$ ), slightly independent ( $\bar{x} = 3.38$ ,  $SD = 1.57$ ), slightly outgoing ( $\bar{x} = 3.51$ ,  $SD = 1.51$ ), slightly responsible ( $\bar{x} = 3.62$ ,  $SD = 1.86$ ), slightly caring ( $\bar{x} = 3.62$ ,  $SD = 1.90$ ), slightly patient ( $\bar{x} = 3.67$ ,  $SD = 1.85$ ), slightly organized ( $\bar{x} = 3.70$ ,  $SD = 1.72$ ), and slightly logical ( $\bar{x} = 3.56$ ,  $SD = 1.68$ ). Six of the variables held a mean score of '4' meaning neutral views, indicating that participants rated the public perception of nurses as being neutral in areas of being bold, leaders, dominant, warm, controlled, and competent.

Wallace (2007) conducted a similar study in the United States and similarly observed that nursing students perceived that society views nurses in an overall positive image. Only one adjective on the Porter Nursing Image scale – 'Emotional/controlled' - was scored negatively. A study conducted by Cowin and Johnson (2011) among first year nursing students in a large university in Australia resulted in overall positive perceptions regarding the nursing profession, but small variations based on age, gender, country of birth, method of program entry and previous experience in health care were observed, suggesting that mature, multicultural students with previous experience in health care had more realistic perceptions about the profession, which could have implications for retention in the program for nursing.

In Saudi Arabia, the issue of low perception regarding the nursing profession had been observed by El-Hamid as early as 1992 in a study collecting questionnaire data from both university students and their parents in an attempt to identify reasons for not choosing nursing as a career. Findings showed that both parents and students were similar in recognizing the value of nurses and the need for local nurses who would be able to provide culture sensitive care, according to Islamic principles, but both parties were equivocal in declining nursing as a

suitable choice for themselves and their children, based on the societal image of nursing, the long working hours and the contact with the opposite sex.

### Factor Analysis

A factor analysis was applied to the Porter Nursing Image scale to reduce the number of items descriptive of nurses to a more manageable number. Principal Component factor analysis with Varimax Rotation (Rummel, 1970) was performed on data from the Porter Nursing Image Scale for accessing perceptions of the public image of nursing.

Variables	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	8.188	27.294	27.294
2	5.909	19.696	46.990
3	1.522	5.075	52.064
4	1.336	4.453	56.517
5	1.120	3.734	60.252
6	1.018	3.394	63.646
7	.945	3.149	66.794
8	.940	3.132	69.926
9	.873	2.910	72.836
10	.791	2.636	75.472
11	.714	2.381	77.854
12	.665	2.215	80.069
13	.611	2.036	82.105
14	.564	1.880	83.985
15	.530	1.767	85.752
16	.507	1.691	87.443
17	.468	1.562	89.004
18	.412	1.372	90.376
19	.372	1.241	91.617
20	.328	1.095	92.712
21	.317	1.058	93.770
22	.293	.978	94.748
23	.275	.916	95.664
24	.265	.883	96.547
25	.223	.744	97.291
26	.200	.666	97.957
27	.181	.605	98.562
28	.177	.591	99.153
29	.141	.470	99.623
30	.113	.377	100.000

Table 15: Initial Eigenvalues with Variance and Cumulative percentages for the Porter Nursing Image Scale

The factor analysis yielded a 6-factor solution for participants' perceptions of the public image of nursing. Table 15 reports the factor analysis of data from the Porter nursing image scale regarding perceptions of the public image of nursing by Emirati students in the College of Health Sciences. The results of the factor analysis relating to perceptions of the public image of nursing served to reduce the number of items for further comparison. A scree plot of the analysis shows that 6 components best captured the meaning of all terms grouped into that variable, as seen in Figure 6.

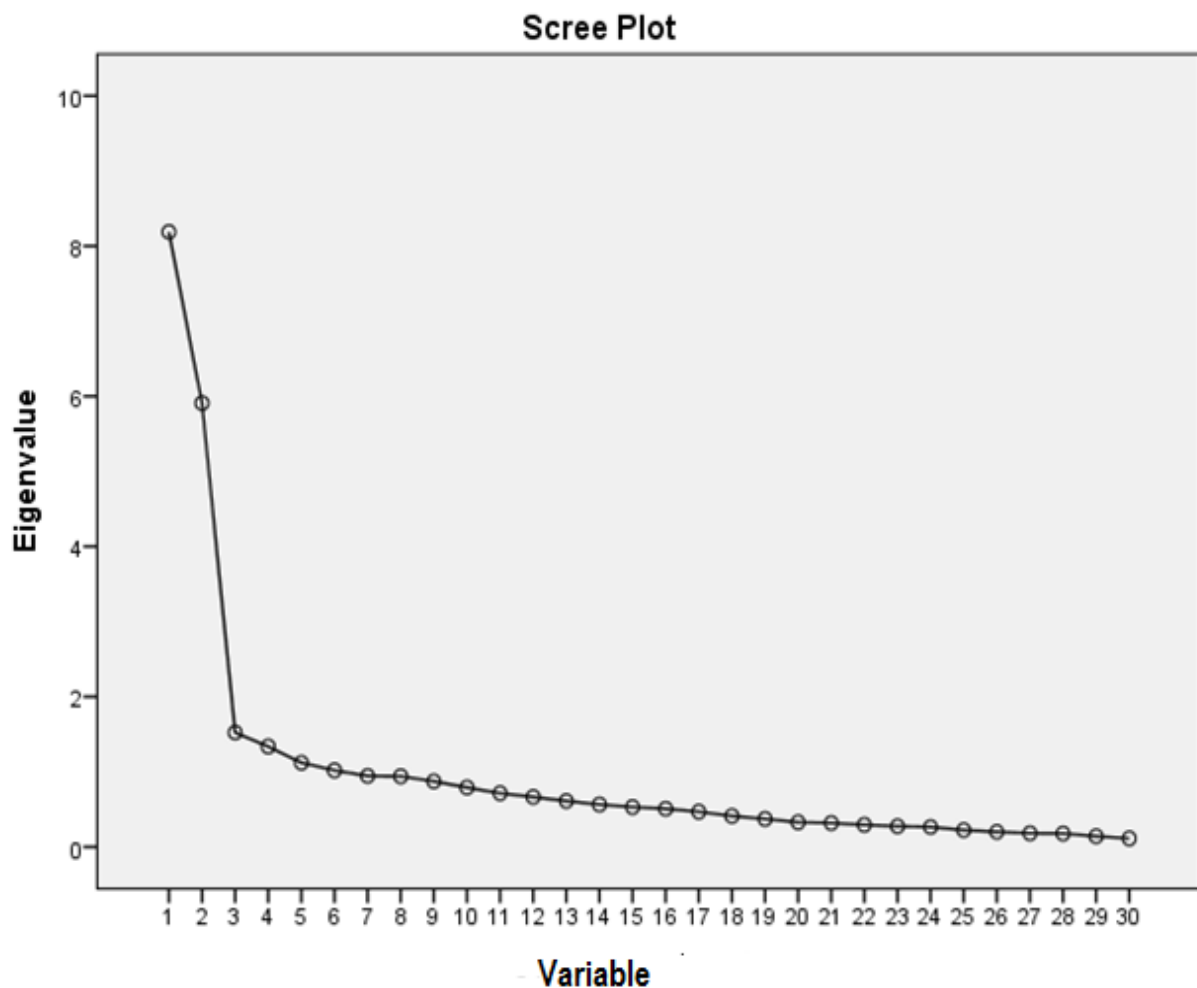


Figure 6: Scree Plot of the Principal Component Analysis

Table 16 is a rotated matrix of the participant's perception of the public image of nursing showing the six components that collectively describe the participants' perception of the public image of nursing in the Emirate of Abu Dhabi.

**Rotated Matrix<sup>a</sup>**

	Component					
	1	2	3	4	5	6
Bold/Timid	*.599	-.071	-.323	-.026	-.241	-.171
Strong/Weak	*.735	.055	-.196	-.083	.265	.092
Confident/Uncertain	*.742	.241	-.212	-.136	-.042	-.090
Dominant/Submissive	*.541	-.205	-.188	.071	.491	-.046
Warm/Indifferent	*.639	-.187	-.073	-.124	-.314	-.016
Responsible/Non-responsible	*.749	-.068	.132	.022	-.122	-.011
Caring/Non-caring	*.790	-.083	.015	-.092	-.098	.196
Patient/Hasty	*.854	-.103	.024	-.037	.024	.033
Organized/Non-prepared	*.850	.114	-.008	.001	-.063	-.053
Logical/Not logical	*.813	.186	.007	-.041	-.026	-.171
Active/Passive	-.079	.340	.107	.137	.490	.508
Powerful/Weak	-.013	*.724	-.008	.121	.007	.443
Influential/ Ineffective	-.041	*.689	.035	.065	.111	.090
Professional/Technical	-.047	*.775	.168	-.117	.056	.253
Intelligent/Dumb	-.005	*.798	.043	.298	.025	.079
sympathetic/ Insensitive	-.084	*.601	.068	.377	.197	-.224
Respectful/Discourteous	.074	*.753	.071	-.163	.119	.307
Compassionate/Cold	-.014	*.696	.101	.324	.162	.024
Rational/Unreasonable	.048	.446	*.635	.193	-.049	.011
Independent/Dependent	-.201	.201	-.024	*.719	.088	.112
Controlled/Emotional	.344	-.235	-.095	-.125	*-.753	.013
Leader/Follower	.304	-.242	*-.601	.244	-.161	.054
Outgoing/Reserved	-.489	.171	-.046	.241	-.119	*.509
Cheerful/Gloomy	.025	.335	.468	.432	.008	.310
Friendly/Cold	.180	.460	.321	.170	.041	.450
Compromising/Rigid	-.205	.269	.370	.458	.320	.120
Logical/Illogical	-.022	.709	.198	-.034	.025	-.004
Competent/Inefficient	.500	-.153	.263	.006	-.043	-.394
Neat/Sloppy	-.062	.545	.372	.146	-.175	-.095

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.<sup>a</sup>

a. 6 components extracted.

Table 16: Rotated Matrix of Participant' Perception of the Public Image of Nursing



Factor 1: Caring/Competent. This factor has eleven terms. The concept relates to nurses being caring individuals who are strong, confident, dominant, warm, responsible, caring, patient, organized, logical and competent in their care. This factor accounted for 27.29 % of the total variation.

Factor 2: Intelligent. This factor has nine terms. The concept relates to nurses being powerful, influential, professional, intelligent, sympathetic, compassionate, neat, logical and respectful. This factor accounted for 19.7 % of the total variation.

Factor 3: Rational. This factor has three terms. The terms relate to nurses as being rational, leaders and active. This factor accounted for 5.075 % of the total variation.

Factor 4: Independent. This factor also has two terms. The terms relate to nurses as being independent in their practice and compromising/ flexible in their care. This factor accounted for 4.45 % of the variation.

Factor 5: Emotional. This factor relates to nurses being emotional beings and not controlled in their delivery of care. This factor accounted for 3.73 % of the total variation.

Factor 6: Social. The three terms in this factor relates to nurses as being outgoing, cheerful and friendly. This factor accounted for 3.39 % of the total variation.

All of the six factors derived from the principal component analysis were labeled based on the terms included in the factor. It was difficult to label some of these factors as they were more

arbitrary than precise due to the overlap in their meanings. Collectively, the six factors explained about 63% of the variance found in the data collected.

### **Reasons to “choose” or “not choose” nursing as a professional career**

The third section of the questionnaire related to participants answering the question - If they were to choose would they choose nursing as a first, second or third career choice; and what were some of the reasons for their choice? Among the 140 participants who responded, the majority of participants indicated that nursing was/would be a third choice (see Table 17).

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid first choice	43	30.7	30.7	30.7
Second choice	30	21.4	21.4	52.1
third choice	67	47.9	47.9	100.0
Total	140	100.0	100.0	

Table 17: Nursing as a Career Choice among the Participants

This finding is in contrast to a study conducted by Al-Mohmoud (2013) in Saudi Arabia among first year nursing students where 60% of the students reported that nursing was their first choice. The difference in results could be attributed to their population sample consisting of diploma, higher diploma and baccalaureate level students, with both male and female students. But Al-Kandari and Ajao (1998) interviewed nursing students in Kuwait who reported that nursing is perceived as a non-respectable and low status profession in the country and only 19% of the 330 samples surveyed indicated that they might choose nursing as a first choice of career.

An inferential analysis using independent-sample 't' test was conducted to compare career choice decisions among students with a science major in high school compared with an arts major. There was a significant difference in the means and deviations between the two independent variables: science at ( $\bar{x} = 2.27$ ,  $SD = 0.88$ ) and arts at ( $\bar{x} = 1.82$ ,  $SD = 0.77$ ). A significant difference was also found between the two groups using independent-sample 't' test resulting in  $t(137) = 2.674$ ,  $p = 0.008$ . Parental educational level was another significant factor in choosing a career in nursing. Using the independent-sample 't' test it was found that participants whose fathers had an undergraduate degree were more likely to choose nursing as a career choice than participants whose fathers had only completed a primary level education ( $t(29) = 2.187$ ,  $p = 0.03$ ) or were not educated at all ( $t(39) = 2.298$ ,  $p = 0.02$ ). Similarly, using the independent-sample 't' test among participants' mothers who had an higher educational degree versus those who had completed only primary school a significance, resulting in the  $t(42) = 2.70$ ,  $p = 0.01$  level. .

### **Influential people in the participant's career choice decision**

One of the questions in the questionnaire related to influential people who could affect the participant's choice of career, according to the participant. Participants could tick as many of the person choice options as they thought were relevant in their career decision. For the majority of the participants in the study the most influential person was their mother, followed by the father, then a friend, and then their sister. According to the participants, the in-laws were the least influential people concerning a career in the nursing profession.

(Table 18)

<b>Influential People in Participants' Career Choice Decision</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Father</b>	69	49.3
<b>Mother</b>	80	57.1
<b>Sister</b>	43	30.7
<b>Brother</b>	20	14.3
<b>Aunt</b>	13	9.3
<b>Uncle</b>	9	6.4
<b>Cousin</b>	17	12.1
<b>Neighbor</b>	10	7.1
<b>Friend</b>	54	38.6
<b>Husband</b>	14	10
<b>In-laws</b>	2	1.4
<b>Others</b>	21	15

Table 18: Influential People in the Participants' Career Choice Decision

### **Reasons to Choose Nursing**

Participants indicated several reasons to choose a career in nursing in the questionnaire. The most frequently cited reason to choose a career in nursing was to help others, followed by the desire to give care and comfort for the sick. A third reason to choose nursing was to serve the community. More reasons included a desire to work as part of the team and an opportunity to meet new people. Some participants (27.9%) reported that a career in nursing would give them respect in community and still more participants (22.9%) suggested that other reasons affected their choice (Table 19).

<b>Participants' Reasons to choose Nursing as a Career</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Help Others</b>	122	87.1
<b>Give care and Comfort to the sick</b>	78	55.7
<b>Job Security</b>	21	15
<b>Get High Salary</b>	34	24.3
<b>Serve the Community</b>	74	52.9
<b>Meet New People</b>	33	23.6
<b>Work as Part of the Team</b>	37	26.4
<b>Study Science</b>	29	20.7
<b>Higher Career Pathway</b>	18	12.9
<b>Stepping stone to Other Professions</b>	11	7.9
<b>Get visa for Family</b>	12	8.6
<b>Respect from Community</b>	39	27.9
<b>Others</b>	32	22.9

Table 19: Participants' Reasons to Choose Nursing as a Career

### **Reasons to Not Choose Nursing**

Participants also reported several reasons that were influential in their decision to not take up nursing as a career. Sixty percent of the participants identified night duties as a common reason, followed by 47.8% of the participants who did not like working on holidays. Twenty nine percent of the participants ticked off unpleasant tasks as being a major determinant, while 28.6% listed parental disapproval as an important factor, followed by 22.1% who identified program difficulty as an influencing factor as well (Table 20)

<b>Participants' Reasons to not choose Nursing as a Career</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Parental Disapproval</b>	40	28.6
<b>Difficult Program</b>	31	22.1
<b>High cost of Education</b>	15	10.7
<b>Low Status Occupation</b>	22	15.7
<b>Unpleasant Task</b>	41	29.3
<b>Working with the Opposite Gender</b>	33	23.6
<b>Night shifts</b>	84	60
<b>Working on Holidays</b>	67	47.8
<b>Poor Media Portrayal</b>	25	17.8
<b>Lack of Leadership Roles</b>	27	19.3
<b>Lack of Community role Models</b>	21	15
<b>Others</b>	25	17.9

Table 20: Participants' Reasons to Not Choose Nursing as a Career

A chi square analysis was done to determine any association between reasons “to choose” or “not choose nursing” as a career choice. From among several reasons depicted in the literature such as an ability to help others, an opportunity to give care for the sick, an opportunity to serve the community, an opportunity to work as part of the team, as a stepping stone to other professions, and an opportunity to meet new people, the inferential chi square analysis resulted in statistical significance only for the reasons of an opportunity to work as part of the team  $X^2 (3, N = 140) = 8.284, p < .05$  and as a stepping stone to other professions  $X^2 (3, N = 140) = 10.025, p < .05$ .

Similarly, concerning reasons to “not choose nursing”, from among several reasons gleaned from the literature such as parental disapproval, perceived high cost of the program, perceived difficult program to study, perceived low status of the professions, perceived unpleasant tasks, perceived poor media portrayal and perceived lack of leadership roles, chi square analysis resulted in perceived program difficulty level  $X^2 (6, N = 140) = 13.203, p < .05$ , and perceived unpleasant tasks  $X^2 (3, N = 140) = 8.880, p < .05$  as statistically significant.

### **Need for follow-up Explanation**

While the quantitative phase of the study served to illustrate the profile of the Emirati student within the nursing programme(s) in the college of Health Sciences, the factors influencing recruitment and retention within the programme(s) required further exploration. The overall positive public perception of nursing in the Abu Dhabi Emirate, revealed through use of the Porter Nursing Image scale among the participants, was similar to results obtained by Shukri et al. (2012), among nursing students in Oman, but contrary to Okasha and Ziady’s (2001) study among nursing students in Qatar, while Eman et al. (2012)’s study among nursing students in Bahrain revealed that cultural and social issues played a role in nursing as a career choice.

Several factors seem to influence ‘choosing’ nursing as a career choice, with some being similar to the literature reviewed – to help others, and a desire to give care and comfort to the sick, while others were surprisingly different – an opportunity to meet new people, to work as part of the team and get respect in the community. Among factors influencing students to ‘not choose’ nursing, the most frequently cited reasons of working night duties, working on holidays, and performing unpleasant tasks, were also somewhat dissimilar to literature

reviewed where findings reveal working with the male gender, low status of the occupation (Osaka and Ziady 2001) and low salary (Abualrub 2007) as being other significant reasons.

Schvaneveldt et al (2005) conducted a study on generational and cultural changes in family life in the UAE, comparing mothers and daughters, and revealed findings to suggest that in a rapidly evolving Islamic population like the UAE, mothers provide role models that may be in conflict with their daughter's experiences in the modern world. The descriptive analysis of influential people in this study revealed mothers, followed by fathers as being significant in influencing the participants' career choices. Could this be one reason for the results obtained above? Are there other factors contributing to the recruitment and retention of Emirati students within the nursing program? What are the nursing educational leaders in the UAE experiences in combating this problem? The aim of the follow up qualitative component of this study is to provide a further exploration and investigation to this multifaceted research problem.

## **4.2 Qualitative Findings: Phase 2**

For the qualitative part of the research study, twelve students from the pre-entry, undergraduate and bridging levels participated in a semi-structured interview. The semi-structured interviews were conducted in a neutral place of the student's choice, like an empty classroom or in some cases an empty tutorial room. Within the college, the only criterion was that students had to be Emirati and for the undergraduate and bridging levels, only the nursing program was included. A second round of in-depth qualitative interviews were also conducted with three selected nursing leaders from different nursing-related organizations in the country. The list of questions used in the interviews is included in Appendix B.



## Demographic Characteristics of the Sample

Table 21 lists the number of interview participants according to their level of study in the program at pre-entry, undergraduate and bridging levels. Participants in the interview were selected across all levels for generalizability, and all 12 participants were female and Emirati. As can be seen from the table, the pre-entry and undergraduate students who participated in the study were unmarried and not working, while the bridging students were both married with children and working. The latter were pursuing their education in part time mode. Representativeness is a qualitative parameter which is most concerned with the proper design of the sample explaining the phenomena as comprehensively as possible, focusing on specific meanings according to Patton (2002).

Level of study in the program	Number of Interview participants	Marital status	Working status
Pre-entry Level	4	unmarried	Not working
Undergraduate Level – year 2	4	unmarried	Not working
Undergraduate Level – year 3	2	unmarried	Not working
Bridging Level	2	married	Working

Table 21: Interview Participants' Demographic Variables

### 4.2.1 Research Question 2

**What are the factors influencing Emirati student recruitment and retention within the nursing programme(s)?**

In order to gain a better understanding of the results obtained from the questionnaire, one-to-one semi-structured interviews were conducted with twelve of the participants who had completed the questionnaire. A qualitative analysis of data served to better understand the factors influencing the recruitment and retention of Emiratis into the nursing program, and

subsequently into the profession. For this study, the researcher chose participants who were representative of the student body at the College of Health Sciences. An expression of interest was announced at the return of the questionnaire, and 12 students (four from the pre-entry group, six from the under graduate group and two from the bridging group) expressed willingness to participate further in an interview session. The semi-structured interviews were held, each lasting about 20 – 30 minutes, until the researcher reached saturation in the variety of information received. Patton (2002) explains that saturation is when the researcher no longer hears or sees new information from the participants. The researcher audio taped all of the interviews and later transcribed them verbatim. The transcripts were checked with the participants for content accuracy.

The analysis of the transcripts involved several important steps. Initially, the researcher made notes in the right and left margins of the all transcripts. The notes were then reviewed to select the key ideas. The researcher then compared the notes in the margins and the ideas across all the transcripts. This led to emerging themes and the transcripts were checked again to ascertain that all notes were accounted for, and to identify anecdotal quotes that would enrich and provide evidence for the themes. This methodology follows Patton's (2002) and Tesch (1990) recommendation that transcripts of this type should be evaluated a number of times to ensure that the information contained therein is interpreted accurately.

Some of the notes scribbled in the margin included: father changed mind, uncle's influence, negative emotion, interest in sciences, working father, military sponsor, nursing: hard profession, IT: easy, helping others, job security, barrier: tiredness, wearing uniform pants, role model, stipend benefits, advertisements, second generation Emirati student, subservient role, changing perceptions, career days, change in UAE, heard from sister, working parents, no shift

duty for locals, living nearby the college, less information in the media, and higher salaries. Patton (2002) recommends the constant comparative data analysis method for grouping items. In this way, the researcher can use different perspectives to look at the issues. For this study, constant comparative data analysis was done in two phases. First the researcher examined the data and made notes, which were then cross compared across all the transcripts, and categorized into the following six themes:

- 1) Personal interest
- 2) Parental support
- 3) Professional awareness
- 4) Perceived barriers
- 5) Potential benefits
- 6) Policies at the local and national levels.

The themes were titled thus to provide a sense of the type of information that was included in that section. “Personal interest” relates to the participants’ own reasons for choosing or not choosing nursing as a professional career, while “Parental support” discusses the participants’ parents’ significant role in the career decision making process. It also identifies other family members and their influencing role to a lesser extent. In the third theme on “professional awareness” the participants’ awareness related to the college and the programs on offer, specifically the nursing programs, and their awareness related to the role of the nurse in the community are presented.

“Perceived barriers” reveals the barriers felt by the participants and her family, as expressed by the participant, as dissuading her from taking up nursing as a profession. “Potential benefits” explores the different benefits available for Emirati nurses studying and practicing the

profession in the UAE, and the participants' awareness of these benefits, and finally "policies at the local and national levels" is an exploration and identification of the underlying policies that are guiding the student's decision making process. Each theme has been presented accompanied by supportive evidence from the transcribed interviews and personal reflections. The quoted materials are representative of the overall data upon which the interpretation is based.

### **1. Personal Interest**

The first theme identified in the data was that participants entered the College with various reasons of personal interest. Pre-entry students, particularly, had an excited note in their experiences of being in the college.

*I feel happy to be in Fatima College because I come here to help sick people.*

(Pre-entry student no: 1)

*I like science, I like to help people. My grandmother is sick and I take care of her and help her.*

(Pre-entry student no: 2)

*This college is an amazing experience. We learn so much information.*

(Pre-entry student no: 3)

Contrastingly, undergraduate nursing students who have been in the nursing program for a couple of years had a more realistic note in their comments. Their experiences were also diverse, and differed among individuals. Some undergraduate students continued to hold enthusiastic feelings regarding their choice of career such as these below.

*Me, I'm proud of me... yes, I'm proud to be a nurse.* (Undergraduate student no: 1)

*I gain more knowledge about the diseases, and how to use new equipment and the action of the medications.* (Undergraduate student no: 2)

While others were more lukewarm in their response,

*I feel like its ok to study nursing but I am not very excited...*

(Undergraduate student no: 3)

One participant remarked that she was here because she couldn't get into the medicine program. Price (2011) reported in her dissertation using narratives - to explore the experience of choosing nursing as a career, that "a central plot in the participants' stories was that the choice of nursing as a career did not occur outside of the consideration of medicine" (p. 150).

*First I wanted to study medicine but there was no chance because the UAE university was full , I mean the application for medicine, so I looked for something that is more close to medicine , which is nursing... and if I want to complete to medicine it will be a great help for me.* (Undergraduate student no: 4)

And still others voiced an initial discontent which gradually changed upon embarking in the program.

*When I entered this major I did not like it.... Then I entered the hospital and the teacher attract us about nursing.* (Undergraduate student no: 2)

Interestingly, a bridging interviewee indicated a sense of achievement in her choice of nursing as a career.

*In the beginning, my father and uncles said this is not our tradition and our culture, I convinced them to continue.* (Bridging student no: 1)

These findings are similar to other international studies gleaned from the literature. Researchers have found that nursing students in their pre-entry or freshman years perceive nursing as a caring, noble, idyllic profession, while final year students and registered practicing nurses perceive a more complex picture. Sand-Jecklin and Schaffer (2006) conducted a study in the US among 85 second year nursing students, reporting findings that nursing students themselves have positive perceptions regarding the profession which strengthened following first year clinical placements.

Prater and McEwen (2006) report in a descriptive study conducted among nursing students in the US, that most students in the program entered the profession with a desire to help others. Additionally, Buehaus et al. (2005) conducted a study in the US among registered nurses to analyze the effect of the “Johnson and Johnson National Campaign for Nursing’s Future (2004)”, and concluded that for recruitment and retention purposes, information or advice from a nurse served as a positive influencing factor, and although teenagers had more access to guidance counselors than nurses, when they talked to nurses, the nursing profession was highly recommended.

In Canada, Grainger and Bolan (2005) compared perceptions between first year and fourth year nursing students and observed that first year students view nursing as idyllic and nurses as kind, compassionate people in an exciting career who feel good about their jobs, while fourth year students are more realistically knowledgeable about the various roles that nurses perform, after having significantly more classroom and clinical experiences. Interestingly, a study conducted in 2004 by Brodie et al. using mixed methodology among nursing students in two British universities showed that many students in the program were surprised, but not overwhelmed,

by the academic rigor expected of them, but their experiences indicated a discord between the realities of nursing and dramatic media portrayal and suggested a change in perception in the student body during the course of the program. In the Gulf region, a study among Bahraini students by Eman et al. (2012) found that 84% of the participants indicated that they entered nursing on the basis of nursing being a caring profession and an opportunity to help other people.

## **2. Parental Support**

The second theme identified was the continuing support from parents and other family members. When enquiring whether their family supported their decision, and which family member was the most supportive, students irrespective of their levels in the programs, frequently reported their mothers to be the first and most supportive,

*My mother is proud of me. She motivate me to study nursing.*

*My mother is very supportive. She wants me to become a nurse. At home I have first-aid books and if someone (sister) has a cut, my mother will call me to come and help.*

*My mother gave me her permission before she died, and now my sister said that nobody should trouble me.*

*In the beginning my father was accepting the profession, then he changed his mind...my mother asked my dad- what happened?*

*My mother is telling her friends in the social parties that my daughter is a nurse, and she is working in the hospital and she can help you if you need anything.*

And then responses about their fathers,

*My father, he doesn't care...*

*My father...he just asks my mother. She says ok...he is ok.*

Other family members also played a role in the decision making process as is seen in some of the examples below,

*I hear about nursing from my sister and her friends because they entered before me.*

*His brother... my uncle, tell my father that it will be late outside and there is other male patients that she will have to give care, this is not our tradition and culture.*

Interestingly, one participant remarked on how her brother advised her to take up nursing. He is a doctor and had advised her to do so.

*My brother is a doctor. He gave me brochure and told me to join this college.*

One unexpected finding that has emerged from the analysis of the transcripts was the relationship between parental occupation and their support for a profession like nursing. Interviewees who were enthusiastic and excited, and reported positive parental support, frequently had parents who were working in white collar jobs.

*My mother... she is working... in bank.*

*My father is a lawyer...*

*My father... he is working as a police, in the police station.*

*My father is in business...*



Another interesting finding was that not all siblings in a family were in the healthcare industry. Participants commonly reported being the first in their families to join nursing and often being the only one (among other siblings) to take up nursing as a career.

*My sister studies business...*

*One of my brothers is in America studying for Police, and the other is in ADNOC [an oil corporation].*

*My younger sister is studying engineering...*

Schvaneveldt et al. (2005, p.77) conducted a study in the UAE comparing mothers and daughters, regarding generational and cultural changes in their family life and observed that the Emirati family “represented a profile of generations struggling to adapt in an oil rich nation that is being pulled between values from the West, technological advances in every facet of life, and deeply held beliefs that stem from Islam.” This is true of information collected from my participants as well.

*They say in our culture that we will not get married because of this (choosing nursing as a career), but thinking is changing now. Young men also have more sense...their parents are the problem. The old ones... my mother is OK, because they have seen before and now.*

*My mother is not very old... only 37 years old. If they are very old... they will not support because they think women should not be where they touch men.*

### 3. Professional Unawareness

Most of the participants interviewed admitted not having much of an idea regarding the nursing profession before joining the program, and having family members and relatives unaware of what they are doing. The examples below serve to illustrate the paucity of information that students faced when making a decision regarding their choice of career.

*Before I came into nursing I thought that nurses help patients and give medicines...I did not know that they can teach also.*

*Actually, still... the idea about nursing... it is not clear among local families.*

*My mother, she went to the hospital and talked to the nurses... before I joined here.*

*No, I don't know any Emirati nurse working in the hospital.*

And one student even confessed that she made the choice to take up nursing without consulting her family.

*Actually... till now...my family don't know that I chose nursing. I told them that I am in Health Sciences – pharmacy.*

But participants also agreed that in the past couple of years awareness has been growing among the local community.

*I told my cousins... and they have come and visited the college during the Nurses' day program.*

*Once I saw one interview by Dr... [Management], about the college on the TV.*

*They came to my high school...and even I asked them a question about the college.*

And, as one participant working as a nurse said,

*Local patients are inspired to deal with local nurses. Co-workers see that nurses work the most. All safety checks in the hospitals are conducted by nurses. Nurses help the most in hospital accreditation.*

(Bridging student no: 1)

#### **4. Perceived Barriers**

The fourth theme that emerged was the various barriers that participants felt negatively influenced their decision and their family's support to take up nursing as a career. Some participants revealed popular societal views that they felt still lingered among the Emirati population. Representative examples are given below.

*A nurse is just a helper...You will not get good salary. As a nurse you will touch other men. Nurses go home late, and they don't have time to prepare food. They will be very tired.*

*My father said that his brother, my uncle said that nurses work late outside during night shift and this is not our tradition and culture.*

*They see nurses wearing uniform like pants/trousers, while doctors can wear the Abaya, and over that the lab coat.*

*Nursing is tough.*

*Doctors give instructions and nurses do it.*

*Nursing has no name, like Doctor has Dr.*

*Females, after 10pm, not allowed to go out.*

*Nursing is hard work and it is difficult to do.*

These findings are similar to those received through the questionnaires where a significant reason for not choosing nursing was because it is perceived as a difficult job and that it involves performing unpleasant tasks. Nursing has always been subject to the socio-cultural, economic and political conditions of the society it operates in. A recent triangulation study involving mixed methodology of Bahraini nursing students by Eman, Seanus and Edgar (2012), affirm that nursing is considered a tough job with cultural issues impacting its societal acceptance. And, in like manner, Abualrub (2007) found in Jordan that pertaining societal and cultural factors include the outdated and yet clearly persisting view that nursing was “a woman’s job” and involved “unclean duties”.

About twenty years ago, El- Sanabary (1993) also found that in Islamic countries an occupation had to be culturally appropriate to be considered suitable for women. He argues that the nursing profession, though culturally appropriate, had other factors like “prestige, class-association, general reputation, and potential moral social risks” (p. 1331) involved. Historically, several conservative Muslim writers have sanctioned nursing and social work as culturally and religiously appropriate, but contrast these views with ideal Islamic values, virtues of motherhood, and most importantly, dangers of women working (El-Sanabary, 1993), leaving confusing messages in society. Accounts of Muslim women who have nursed the sick during

times of war in Islamic history have been recounted as “unavoidable emergency war time practices” alone (p. 1336). While Nelson (2004) in a report on UAE women at work explains that,

*...a peculiarity of the UAE society is that certain occupations, outside of the usual gender biases, are considered inappropriate or undesirable for Emiratis and, in some cases, more so for women. For example, Emiratis shun personal service occupations, such as many of those in the hotel industry, waiting tables and hairdressing. Also, nursing, a traditionally 'female occupation', is not favored among Emirati women.*

Centre for Labor Market Research & Information (2004)

And yet other participants portrayed a somewhat different picture regarding the changing perception of the nursing profession within the Emirates.

*If my husband, tomorrow, will be from the military, then he will know, because in the military hospital half of the workers are locals and they know that locals work.*

*Local nurses are promoted faster, within six months even, based on capability. Doctors may have 2000 aed more because of working 24 hour shifts, but salaries for local nurses do not differ so much from doctors.*

*Two days ago, at the parent-teacher's meeting for my kid, when I told them that I was a nurse, they admired me and said, “that's why your daughter is like this (the admirers were an American and two local ladies).*

## 5. Potential Benefits

A fifth theme to emerge from the data collected related to potential benefits that participants perceived they would receive as a result of their choice to choose nursing as a career in the UAE.

*As you know there are not many locals in this major and if the local enter here, there will be lots of offers for her. And because of this I am adapting to this and I like it a lot really.*

*After graduation – more salaries... than other nurses.*

*When I joined they told me that I can choose morning shift duty only.*

The particular participant was not able to substantiate her claim with written statements regarding the shift duty, but she had a document for job security.

*We signed a contract with Tawteen and they will provide for us work after immediately graduating.*

The Abu Dhabi Tawteen Council (ADTC) is a government agency that was established in December 2005 through the vision of the UAE President, HH Sheikh Khalifa bin Zayed Al Nahyan. And another similar testimony from another participant is the following,

*When we study we will get monthly and yearly stipend, and when we graduate they will give us work.*

Yet another student revealed that she would have an opportunity to serve her country.

*When I finish, I will go back to General Headquarters Military (GHQ).*

These results are similar to data obtained and analyzed through the questionnaire where a significant reasons to choose nursing as a career was that nursing would be a first step in the professional ladder.

## **6. Policies at the Local and National Level**

A final component evident from the data collected was the role that policies played at the local and national levels in directing students to choose a career in nursing.

### **Institutional Policies related to Academic Progress**

In one negative illustration, one student shared that she did not particularly like nursing and did not want to choose nursing as a career, but was left with little choice based on the college student handbook which stipulated that students with a cumulative grade point average (CGPA) of 2.0 were left with only Nursing as a choice of major, as opposed to Pharmacy which required a CGPA of 3.3, Physiotherapy which required 2.5, Radiography and Medical Imaging which required 2.5, and the paramedic program which allowed students with a GPA of 2.5 to enroll in the program (College Student Handbook, 2013, pp. 20–23).

*I am not very excited because, I didn't choose nursing... because of my low GPA I had to take it... if I can I would have choose Pharmacy.*

This particular participant had applied to the General Headquarters of the UAE armed forces (GHQ), and was asked to join in the health sciences program at this college with a view that she would finish her education and use her particular skill set in the military hospital in the Emirate. Al-Mahmoud (2013) conducted a recent study recently among first year nursing students in Saudi Arabia regarding their motivations to enter nursing, and found that students

with low GPA scores perceived a high GPA as important in helping them realize their choice of professional career. The College student Handbook provides details relating to tuition fees for Non-National students, implying free education or nil tuition fees for Emirati students within the program (pg. 28).

### **Policies at the National Level**

An exhaustive search on the internet of UAE government websites, including the Health Authority Abu Dhabi (HAAD), Abu Dhabi Health Services (SEHA), and UAE NMC webpage, for policies related to “Nursing Education”, “Emiratization of nurses” and “Benefits for Emirati students within the nursing program”, did not provide much information on the topic under investigation. The HAAD Healthcare Regulator Policy Manual (2012) lists one of their strategic priorities for the years 2009–2014 as “to increase Emiratization in the health care sector”, but fails to provide detailed specific action plans that would guide them towards achieving their target.

Similarly, the SEHA Annual Report (2012) identifies as one of their achievements the formation of an Emiratization committee, to discuss Emiratization initiatives and the establishment of an Emirati Nurse database, but has yet to give details of what has been accomplished since then through this committee. Only one document from the UAE Nursing and Midwifery council (NMC) – the Education Strategy Report (2013) - provides details on short and long term strategies envisioned to provide a solution, for the issue of poor nursing workforce shortage, and poor recruitment and retention in the Emirati population with their ‘Strategic Goal One’ being “to increase the number of Emirati women and men enrolled in and graduating from nursing and midwifery education programs (p. 28)”.



Concerning benefits provided during the period of study in terms of scholarship and stipends, no written policy has been found relating to actual figures and eligibility criteria. While interviewing participants related information on the amount of stipend provided to them, but generally displayed a poor awareness regarding the subject. If they were not the recipients of the stipend, they did not know much about it.

*Here in the college they give monthly 4000 dirhams, based on GPA.*

(Pre-entry student)

When probed further on whether this student was given any documentation to confirm the amount, she replied in the negative, stating that this was what was verbally conveyed to her. The same student continued,

*They also give prizes at the end of each year.*

When questioned on whether she had received any amount, she shook her head, saying that this was what she had heard from other students in their senior years.

Another student gave a slightly different version,

*During the pre-entry year they give everyone 4000 dirhams, and then from second year onwards they pay you based on the GPA. If your GPA was 4, they would even give you 5000. If it was 2, then they will give you 2000, like this.... And yearly they will give 15,000 – 20,000. When we are studying Tawteen council will give through the college, and when we will work then SEHA will give.*

The Report Abu Dhabi (2013) details that the Abu Dhabi Tawteen Council (ADTC) has spearheaded government efforts to entice more Emiratis into employment, “by contributing to

the cost of training or providing a stipend to participating students”. An undergraduate student remarked that she and her sister were the only ones in her family to receive a stipend, and that her sibling in another university did not enjoy the same privileges.

*No, just me, because I am nursing student, not everybody can get it, me and my sister studying nursing... but other my sister studying engineering which is high profession but she is not getting anything. So the Government, I think, if I am going to complete my studies, they will actually pay my all fees to go outside and complete my study.*

Two participants interviewed shared that they did not receive any stipend, and thus were not aware of more details related to an amount. But both participants confessed that their GPA was less than 2.0, and this could be the reason they were not recipients of any benefits, but they both knew of others in the program receiving stipends.

A participant with the military GHQ remarked that there was a general sense that choosing nursing was the right patriotic decision to make.

*When I came to join in the GHQ, they said, that the Sheikh had said, that if they had any female students wanting to join in medicine, to tell them that the country needs more nurses, and if students do join nursing, then they would be rewarded.*

Again, when asked whether she had received any confirmation in writing, the participant replied, no.

One participant currently working while pursuing her bridging degree reported that government hospitals are also providing more benefits for local students.

*They [the hospital management] told me that if I want to continue studying then they will support me... and if I have classes then I have free day, I don't have to go to work...if I have exams I can have two weeks leave to study... and all this has started recently, in the last five years.*

Another government initiative to entice Emiratis into the nursing profession and secure employment opportunities for them, was to permit them to be employed in government hospitals without sitting for the Nursing Licensure exam that is currently mandatory for all expatriate nurses in the country.

Provision of scholarships and stipends for local Emirati students is intended to be an enticement for students to enter and remain in the program. This lack of consistency in awareness among participants is an area of concern in the UAE government's initiative to tackle this issue. Stasz et al. (2007), in a RAND corporation report on Qatar, explains that scholarships are available for local students in demand professions like nursing and aviation. This is similar to experiences shared by participants in this study.

Nagel (1984, cited in Fowler 2004) defines policy analysis as, "the evaluation of alternative government policies or decisions, in order to arrive at the best policy or decision, in light of given goals, constraints, and conditions" (p.18). Abualrub (2007) describes the situation in Jordan in depth, explaining that the presence of economic forces is manifested by the acute shortage of nursing schools available in the region to meet society's health care needs, which is reflective of the low (if any) federal government budget, private and public investments and charitable philanthropic funds allocated to nursing education to meet the demands. In response to the nursing shortage in Jordan, he lists several strategies to tackle the challenge, including

the rallying of nursing councils and associations to exercise their active political leadership, lobbying for government funds to expand nursing schools and create nursing scholarships, and improving the status of the profession.

### **Review of Alternative Options from the Literature**

A report by Sharon Bailey (2003), a policy associate with the Western Interstate Commission for Higher Education (WICHE), discusses additional strategies that could be implemented, such as collaborative and strategic partnerships between universities and hospitals where nursing staff from the hospitals are admitted into nursing programs while continuing to work. This would increase student capacity in the universities and provide the necessary qualification and skill at the baccalaureate level to equip hospital nurses to provide quality nursing care. Yet another strategy would be to take advantage of the impact of distance learning, through video conferencing, CD-ROMS and the internet, which would be beneficial in engaging students and increasing enrollments at all levels (WICHE 2003). The use of technology-enhanced teaching-learning strategies would pave the way for a change in traditional thinking and challenge the relationship between academic institutions and students.

Accelerated programs are another alternative that have been steadily increasing over the last ten years as a strategy against the nursing shortage, according to the report by WICHE (2003). The programs build on previous learning experiences, allowing for “fast-tracking” of nursing graduates into the profession. These programs reach out to new student populations, are attractive to second-career seekers and valued by employers, as they bring both the necessary qualification and appropriate skill mix to the organization. Following recruitment, the issue of retention could also be tackled through a number of strategies, such as increasing activities for students from minority or disadvantaged populations like those that enhance pre-entry

preparation, study skills, critical thinking, career coaching and test-taking strategies. Workshops addressing written and oral communication skills, note-taking and socialization would also contribute to retention within the nursing program.

#### **4.2.2 Research Question 3**

### **3. What are the nursing educational leaders' experiences and strategies related to Emirati student recruitment and retention, within the nursing programme(s)?**

For the second round of the in-depth interviews, nursing leaders were selected from different nursing related organizations working in association with the nursing program in the College of Health Sciences, and have a vested interest in the successful development of the profession in the country. It was initially planned to interview six nursing leaders (a minimum of two from each organization), but interviews were finally conducted with only three nursing leaders because of their time constraints and researcher's time availability for data-gathering. The first nursing leader who was interviewed was an Associate Professor, teaching at a University in Ras al Khaimah, who was also a member of the Emiratization sub-committee of the United Arab Emirates Nursing and Midwifery Council (UAE NMC). The UAE NMC website declares that

*'The UAE NMC Committee for Emiratization was established by the UAE Nursing and Midwifery Council to promote Emiratization of Nursing and Midwifery. The Committee is responsible for recommending and implementing strategies for the expansion of Emiratization in Nursing and Midwifery in the country.'*

The second nursing leader is a senior nursing educator working in Al Ain hospital, which is a major hospital in Al Ain in the SEHA health care system. This nursing leader is one key staff

member in the SEHA system, involved in the smooth transition of students into practicing nurses in hospitals in the Emirate. SEHA is also involved in creating awareness among high schools and providing benefits for college level students. The website maintains that

*The establishment of SEHA is part of the Government of Abu Dhabi's healthcare sector reform initiatives and represents another step in the realization of His Highness Sheikh Khalifa Bin Zayed Al Nahyan, President of the UAE's vision to provide the people of the UAE with the best healthcare facilities in the world, locally.*

The third nursing leader interviewed towards eliciting experiences and strategies related to Emirati nursing education is the Head of the nursing program in the College of Health Sciences. The Head of the nursing programme(s) is a senior academician and nursing professor with close to 25 years of leadership experience as a senior executive in the health, education, welfare, employment, workforce development and economic development sectors, who is currently working on an off-shore assignment as the Australian University representative in the UAE.

Findings from the in-depth interviews demonstrates that nursing leaders from different spheres of the profession had different experiences and responsibilities towards the common issue of poor Emirati student recruitment and retention in the nursing profession in general, and the nursing program specifically, and tackled the problem from different perspectives.

### **Representative from the UAE Nursing and Midwifery Council**

The UAE Nursing and Midwifery Council was established by Cabinet Decree in 2009 to “regulate the nursing and midwifery professions, promote and advance nursing and midwifery services and protect and promote the health and safety of the public based on the highest

standards” (UAE NMC establishment Cabinet Decree number 10, 2009). Concerning nursing education in the country, the website states that the UAE NMC Council develops and issues national guidelines to prioritize the investments and focus of nursing programs, including standards in the UAE”. The Council places top priority on Emiratization of the nursing profession by increasing the number of Emirati women and men practicing in, and leading the nursing profession in the country.

The representative participant from the UAE NMC shared her experiences of starting in the year 2010 with a paucity of existing data regarding local nurses in the UAE.

*The first thing we had to do was to set task forces for Research and Emiratization.*

In 2011, the UAE NMC commenced its second meeting in June, which led to the formation of the national strategy for nursing and midwifery education, the UAE NMC website, and the UAE NMC Research Center. Just five months later, the Emiratization strategy, the goals of nursing and midwifery education, the standards for registration and licensing, and the UAE NMC Council Research Center were established (Annual Report, Ministry of Health, 2011).

*Following this several senior experienced nurse educators were invited to brain storm and come up with strategies to promote nursing among the local population.*

The participant was able to provide a chronological sequence of events which led to the present active involvement of the Council in the area of local student recruitment and retention in the nursing profession.

*Some of the strategies suggested were... to target high school students, especially those in the science majors, in local schools... to look at how we can retain them...to target boys' schools...*

All the strategies identified above are congruent with similar literature in the field. But retrospectively, in the last five years, only the strategy of targeting high school students has been achieved, as interviews with student participants in the previous section confirmed. The UAE NMC Educational Strategy Report (2013) also reports that the current student profile in the nursing profession was predominantly female and were underrepresented by Emirati students.

*I was involved with a group responsible for archiving the data from the various hospitals on the statistics of local nurses employed in the public and private sector.*

The Federal Department of Nursing Annual Report (2011) also notes that the Research Center for the UAE NMC was established in 2010 with an initial task being to conduct a background needs assessment to assess the current status of the nursing in the country.

When questioned about the role of nursing leaders in the community, the participant mentioned that the image profile of nursing needs to be improved. As an UAE NMC example, she explained that,

*...the President of the UAE NMC council was none other than Her Royal Highness, Princess Haya Bint Al Hussein, wife of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice – President and Prime Minister of the UAE and Ruler of Dubai.*

The current most urgent need she suggested,

*...was advanced practice roles for nurses, higher specialization within the nursing program, more clear job descriptions and career pathway visibility, in the hospitals... because local students would be attracted to the 'advanced specialty roles.*



### **Representative from the Abu Dhabi Health Services (SEHA)**

The second nursing leader interviewed was from the Abu Dhabi Health care services. One of the SEHA strategies is the increase Emiratisation across all human resource sectors.

The representative shared that,

*A memorandum had been signed with Fatima College and Abu Dhabi Tawteen Council for sponsoring 133 students in clinical fields.*

This confirms the stipend that student interviewees had reported in the previous section of the thesis results. This also confirms sponsorship for local students as well as employment opportunities in the local market. Since SEHA is a government agency, graduating students will be recruited into the public sector, further ensuring competitive salaries and benefits. The representative continued,

*Also the new Muhakat program focuses on promoting healthcare careers to students at high schools and first- year colleges and universities. Students spend a day shadowing doctors, nurses, and allied healthcare employees. So far, 97 students have been taken through this program (SEHA annual Report 2012).*

This is suggestive of their marketing strategies to entice more Emirati locals into the nursing program, but none of the students interviewed or policies reviewed by the investigator, provided any details or knowledge regarding this initiative in the local community. An article in the *Al Bawaba* business newspaper (2012) speaks about role shadowing to gain knowledge or skill regarding a particular topic.

SEHA has been targeting schools and universities to attract and train UAE nationals into the healthcare sector. Results from the questionnaire demonstrated that 79% of the students

surveyed had never had direct experience or exposure in the health care field before coming to the College of Health Sciences, and this initiative is timely in helping young locals to better understand the contribution of healthcare professionals in making people's lives better. It will introduce the profession of healthcare to young Emiratis wanting to make a positive difference to the nation's future, and would be an initial first step towards a rewarding career in healthcare.

### **Head of the Nursing Program at the College**

The third participant was directly in contact with local students on a daily basis, and was able to provide valuable information regarding her experiences of being a nurse education leader in the Emirate. Her responses have been categorized into 1) Experiences; 2) Barriers and Benefits; and 3) Roles.

Some of her experiences related to the current status and perception of nursing in the country she reported as,

*The UAE is different from other countries in that there are no designated advanced roles for nurses yet, like the independent nurse practitioner roles, with the perception of the role of nursing just emerging in the country. Nurse Leaders still hold only very traditional roles like – Head of School of Nursing, or the Director of Nursing in the Hospitals, and nurses are not seen in any other varied roles.*

Another observation was regarding the current areas of nursing care needs in the country.

*Aged care nursing and community care nursing specialties are still underdeveloped in the country, and in many homes servants provide basic daily care to the elderly in the homes. When these elderly get admitted in the hospitals, and nurses care for them, there*

*is a tendency among the local families to view nurses as servants because of their provision of daily care for the patients.*

She shared one graduate local nurse as having a recent bad experience in the hospital.

*The local nurse was willing to provide perineal toileting for an elderly local woman, but was not allowed to do so because she was a local, and was asked to get somebody else to do the job.*

The anecdote provided by the participant shows that acceptance is still in developmental stages and not yet achieved, on both sides: on the side of the local nurse to provide culturally congruent sensitive care, and on the part of the care recipient to accept the local nurse's care. This is contrary to findings reported by El-Hamid (1992) in Saudi Arabia, where he found that both parents and students had similar views in recognizing the need for local nurses who would be able to provide culture sensitive care according to Islamic principles, but shied away from making a decision in nursing career choice themselves.

When asked if she knew of any perceptual barriers that the profession was facing in the Emirates, the representative reported that,

*The medicine community was paternalistic in nature, and the constant reference to 'sister' this and that, was demoting the nurse to a less than professional level.*

A reference to this concern was also observed in the earlier section on 'perceived barriers', where an interviewee shared that "Nurses had no names, like doctors had Dr." In terms of benefits the representative noted that,

*Graduate nurses earn more than some other professions, so that is a positive thing."*

*“In my talks with some very traditional conservative people, they have shared that they understand that a nurse is a very qualified person. Change in perception is slow but sure. The perceptions that we see in the UAE today have persisted in the West as well, and it took much more time to change. Here the change is faster. When you look at the parallels of where we are, with the West, so much has changed in the last 30 years.*

The participant also described the academic robustness of the nursing programme(s) at the College,

*The baccalaureate degree nursing program at the College of Health Sciences is recognized by the Ministry of Higher Education and Scientific Research (MOHESR), and has received accreditation from the Commission of Academic Accreditation. Its curriculum is also borrowed from the Australian University curriculum, and customized to suit local health care needs and priorities. Our students have a benchmarked certificate and they can work anywhere they want.*

Concerning the role of the Nurse Leader towards the issue of poor Emirati recruitment and retention, the representative explained that community awareness and marketing were two huge roles.

*In the past couple of years more marketing and campaigning has been happening in the schools and rural areas around the Emirate. Quarterly camps like the ‘Emirates skills for Life’ at the college, and representation at local health exhibitions in the Emirate have all been investments to recruit more Emirati student numbers. The increase in student numbers now (this year and the last) is a result of this marketing strategy. The Nursing council has just agreed a multimillion dirham package to*

*broadcast, recruit and market nursing...two weeks ago when I went to the council meeting, they announced it.*

A five year campaign by Johnson and Johnson in 2002 and again extended in 2007, involved a similar multimedia initiative to promote careers in nursing and improve nursing's image through television commercials, a recruitment and retention video, a website and related brochures. Survey findings after the initial campaign indicated high levels of awareness of the campaign among "nurses (59%), nursing students (79%), and chief nursing officers (98%). In the UAE, with the support of the president of the UAE NMC Council, financial constraints would not be a barrier in the recruitment and retention efforts among the nationals.

It was difficult to get an appointment with the representative, simply because she was often not there in the College. A constant representative at the SEHA board, the UAE NMC Council and at HAAD meetings, this nurse leader is at the forefront of the policy making regarding nurses in the country. In 2005, Buchan and Calman produced a report, "On the global shortage of registered nurses-an overview of issues and actions", for the International Council of Nurses. They suggested a policy intervention framework which includes four components: "Workforce planning, Recruitment and retention, Deployment and performance, and Utilization and skill mix". Drawing on evidence from research done in many countries, they suggested that the components of the framework should be interdependent with effective leadership and stakeholder involvement, and that the policy interventions be appropriate to country, context and objectives.

From an Australian perspective, Lumby (2007) reports that, "nurses have lobbied hard to encourage the Federal government to increase funding for more undergraduate nursing places"

(p. 16). In the United States, the fact sheet by the AACN (2012) presents several strategies to address the nursing shortage, including: partnerships between nursing schools and private agencies, like military hospitals, to increase student capacity; making the baccalaureate degree mandatory for all new nurses; authorizing capitation grants for nursing schools; subsidizing nursing faculty salaries; reimbursing nurses for their advanced education in exchange for work commitment; flexible scheduling for staff to attend classes; and more public funding for increasing nursing school capacity.

In Jordan, in response to the acute nursing shortage Abualrub (2007) lists several strategies to tackle the challenge. They include the rallying of nursing councils and associations to exercise their active political leadership, lobbying for government funds to expand nursing schools, creating nursing scholarships, and improving the status of the profession. Stringent action against negative stereotyping of nurses by the media needs to be enforced. Abualrub (2007) suggests that male nursing needed to be developed to serve the dual purpose of increasing student capacity and graduating nurses who would not have family restrictions towards night shifts, but the issue of local culture deterring males from attending to females still remained to be tackled. Yet another strategy involved nursing faculty “sharing their stories” through the media to attract students into the profession.

A strong closing remark by the representative nurse leader attested to her faith and advocacy in the current nursing students themselves, to be instruments of change and influence among themselves.

*As young Emirati women become nurses, and they become more mature, and they become mothers, and they influence their families, it will change markedly the climate in the UAE. So its family influence, and it's the voice of more and more Emirati nurses*

*that talk, and as they come into leadership roles and some of it is time, and all of the foundations are here for that.*

### **4.2.3 Document Analysis**

This section reports on the following two categories of documents: academic documents at the institutional (college) level, and documents related to nursing in the UAE at the Emirate and the National levels. Institutional documents that were collected for analysis include the Student College Handbook, the College policy and Procedures Handbook and the college strategic plan document. Documents collected at the Emirate level in the public domain included the SEHA Annual Report and the Health authority (HAAD) Annual Report.

At the national level, the UAE Nursing and Midwifery Council (UAE NMC) has published several documents, the UAE Nursing Education Strategy, the UAE Nursing Education Standards, the UAE nurses code of conduct and the UAE Nurses Scope of Practice (for clinically practicing nurses). The council has also published its annual report for the year 2011, 2012 and 2013. Content analysis was used to glean and interpret data relating to the research problem in this study. According to Bowen (2009), document analysis “involves skimming (superficial examination), reading (thorough examination), and interpretation” (p. 32). In the process of content analysis, information was organized into categories related to the research questions of the study and reviewed to identify meaningful and relevant passages of text or other data.

### **College Level Documents**

To ensure rigor in the documents analyzed, documents need to be assessed for completeness, in the sense of being comprehensive or selective. It should also be ascertained whether the

documents are balanced or contain details from only select areas. The College Student Handbook at the site of subject selection is a comprehensive document in English that includes all the major areas of the college mission and values, the nursing programme(s) structure, the student role and responsibilities, and policies related to admission, attendance, exams, and appeals, transfer of credits, grading system, and dealing with behavioral misconduct. The policies and procedure manual of the college is another comprehensive document detailing the college strategic framework, the institutional organization, governance and leadership, and the academic program. A third document that was analyzed at the college level was the strategic plan documents. The document gives an overview of the vision and mission of the college, and details the goals and objectives for the year 2014 – 2018.

In comparison with other student handbooks from nursing colleges in the West, and another non-nursing university in the UAE, it was observed that the document could be more student friendly with important details like student advising and counselling in the beginning pages of the document. Also, since for a majority of the students English was not a first language, graphics spaced throughout the document would have served to break the monotony of the words on the pages. Interestingly tuition fee details for non-national students were listed, implying that national students received their education free of cost. Important pertinent details related to college licensure and program accreditation was not covered in the document, and information related to stipends and governmental benefits for local students, was also not found within its pages.

In the policies and procedures manual, disappointingly, the word “Emiratization” was not listed even once in the document, the word “national” in relation to “national students” was only mentioned once as one of the terms of reference for the senior management committee to



approve “national” priority and student recruitment strategies for the college, and the word “local” in the context of local students was not mentioned at all in the text. Interestingly the document includes reference to a recruitment committee with members from the student support services, the registrar, the counselling department and members of the faculty, but its purpose is vague: “the Recruitment Committee is responsible to develop and implement (as authorized) recruitment plans and activities” and does not seem to attach more priority to the Emirati youth in the country.

The college strategic plan document was a seven page document serving as a guide, for the strategic plan development of the individual departments within the college. In congruence with the analysis of the previous documents, a count on the frequency of use of the words – ‘National’, Emirati and ‘Local’ – referring to the Emirati local students, revealed that none of the three words were used in the document. The word ‘Emiratization’ though featured once in the overall college goal as seen below,

*The College is committed to growing and expanding recruitment of high-quality faculty, students, and staff; facilitating research and scholarship; enhancing service to communities, embracing Emiratization and strengthening support for alumni and students. (p. 1)*

The word ‘recruitment’ is used three times in the document, and the word ‘retention’ used only once. Together as ‘recruitment and retention’, they occur once and their usage was related in general to ‘enhancing the diversity of the academic community - faculty, staff and students (p. 5).’ A sense of priority, on Emirati student recruitment and retention within the college, was not evident from the general strategic plan of the Health Sciences College. But it was interesting to note the college strategic plans on increasing research and scholarship among faculty and students, enhancing student learning experiences including experiential training,

developing more resources in the college, and enhancing brand awareness in the local community through the media and other forms of communications. The document did not have any special consideration for the nursing programme(s) in the college, facing the issue of poor Emirati numbers both in the college, and in the broader UAE community.

### **Emirate Level Documents**

At the level of the Emirate, documents collected in the public domain include the SEHA annual report (2012) and the Health authority (HAAD) annual report (2012).

*The Health Authority - Abu Dhabi was established by Law No. 1 of (2007) concerning the establishment of the Health Authority - Abu Dhabi; HAAD's purposes are defined in Article 1 (clauses 1 and 2) of Law No. 1 (2007), which are to achieve the highest standards in health, curative, preventive and medicinal services and health insurance and to advance these in the health sector; and to follow-up and monitor the operations of the health sector to achieve an exemplary standard in provision of health, curative, preventive and medicinal services and health insurance (p. III)*

There is no mention of anything related to Emiratization or the role of the local health care workforce in realizing this purpose within the HAAD report.

The SEHA annual report (2012) is a report of the SEHA health care delivery in the Abu Dhabi Emirate, which presents clinical performance, operational performance, and financial performances in the hospitals that come under the SEHA system. Though they identify several areas where the Emiratization policy is active, there is no specific report from the nursing field. In their statistics they report that 18.6% of UAE nationals occupy predominantly non-clinical positions within the SEHA health care system. The Human Resources Department report that

target positions have been identified for possible Emiratization, and that Emiratization exceeded the overall target of 19% in that department. One of their priority areas under “Learning growth and Infrastructure” is to “develop national leadership and support Emiratization” (p. 35).

The document reports that SEHA is ambitious in realizing an aggressive Emiratization program aimed at bringing more Emiratis into the healthcare sector, and report that their 2012 statistics of 18.6% of the Emirati workforce is an increase from the previous year of 16.8%. But the document has not looked at the area of graduating Emirati nursing students from the college of Health Sciences and their role in the health care delivery system, in the Emirate and the country. A final general note, not targeting the nursing population specifically, can be seen in their proposal (p. 32) to improve their Emirati workforce by working closely with the education sector, in line with their Emiratization strategy in their journey towards pursuing excellence in healthcare delivery.

### **National Level Documents**

At the national level, the UAE Nursing and Midwifery Council (UAE NMC) has published several documents relating to nursing in the country: the UAE NMC code of conduct for practicing nurses; the UAE NMC Nursing Education strategy; the UAE NMC Nurses’ Scope of Practice (for clinically practicing nurses); the UAE NMC Nursing Education standards; and the annual reports from 2011, 2012 and 2013. Both the UAE NMC code of conduct document and the UAE scope of practice documents relate to nurses practicing in the clinical areas of the hospital, but does not mention the words ”Emirati”, “local” or “National” even once. But the code of conduct document has a section on the image of nursing, where it assumes that the nurse and midwife shall:

- *Uphold and promote the positive image of the nursing and midwifery professions to maintain and enhance public confidence. This applies to conduct in the real world and online social networking.*
- *Identify and report situations that harm the image of nursing and midwifery professions.*
- *Participate in creating a positive practice environment. (p. 11)*

The “scope of practice” document details competency standards for accountability, ethical and legal practice, promotion of health care, leadership and management, professional development and enhancement of the profession, all put in place to promote the professional image of nursing within the Emirate. The UAE Nursing Education Standard manual provides standards for nursing graduates, the nursing curriculum, the organization, the faculty, and also provides standards for admission and retention within the nursing programme(s) in the country. The standards outline the need to:

- *Have a transparent admission and selection process that aligns with governmental strategy.*
- *Have a system and policy in place that takes into account different entry points of students, recognition of their prior learning, experience and progression options toward higher education goals.*
- *Have entry requirements that meet national criteria for higher education institutions including, but not limited to, completion of secondary school education. (p. 18)*

Interestingly, in addition to the above, the standards mention one of the criteria for successful admission as a “demonstration of the will to serve in the nursing and midwifery professions and a demonstration of the motivation to seek and master new knowledge independently” (p. 18). This is an ambitious standard considering the status of the profession in the country, but the standard does not elaborate on how this standard would be measured. Concerning retention standards, the document assumes that

- *Schools have student retention policies and systems in place.*
- *Incentive programs are in place to support retention in nursing programs addressing such concerns as family and work responsibilities, the need for part time study and other variables.*
- *Retention programs are evaluated on a regular basis to determine the effectiveness of retention strategies; modifications are made accordingly*

(p. 19)

When the UAE NMC Education standard was compared with the College Student Handbook (Table 22), it could be seen that while recruitment policies were more obvious, retention policies were not very evident within its pages. The recruitment policies also do not target key influential people like parents, as was found in the study findings, there is no provision for career day and open house days to include tours to nearby hospitals, to compensate for their lack of prior exposure and professional unawareness, there are also no child care facilities for the married working non-traditional students, as identified by Jeffreys (2014), and there is no mention of program rigor, to allay fears of program difficulty as the quantitative study findings found.

The UAE NMC Educational Strategy (2012) has proposed a future roadmap for the growth and success of the nursing profession in the country. The document is comprehensive and provides clear direction for accomplishing the objectives, one of which is to “outline approaches to recruit and retain Emirati Nationals in the nursing and midwifery workforce” (p. 10). The strategy is ambitious as can be seen in its plan to,

*Prioritize the expansion of Emirati nationals in nursing and midwifery and recommend plans to achieve ambitious goals for recruiting and retaining them as clinical experts, organizational leaders, educators and researchers. (p. 12) Recommendations for cultural competency, embedded in curriculum are also considered, to ensure the unique aspects of Emirati health-seeking traditions and behaviors. (p. 12)*

Regarding the current status of the profession in the country, the document reported that the baccalaureate degree was the entry level for nursing and midwifery education in the country. It also reported a predominantly female student population in nursing programs in the country and stressed the need to recruit more Emiratis and men into the profession. These findings are similar to those obtained in the current study. Strategic goals for nursing and midwifery education in the UAE were formulated and the strategy of “conducting a scientific study to evaluate factors influencing choice of nursing and midwifery as a career option in the country” (p. 28) was used to form the underlying rationale for this study for achieving the expected outcome of increasing the number of Emirati women and men choosing nursing as a career option in the nation.

<b>UAE NMC standards</b>	<b>College of Nursing Student Handbook</b>
<b>Regarding Student recruitment within the nursing programme(s)</b>	
<i>Have a transparent admission and selection process that aligns with governmental strategy.</i>	<ul style="list-style-type: none"> <li>• <i>The college of Health Sciences aims to meet the United Arab Emirates' growing need for skilled healthcare professionals(p. 6)</i></li> </ul>
<i>Have a system and policy in place that takes into account different entry points of students, recognition of their prior learning, experience and progression options toward higher education goals.</i>	<ul style="list-style-type: none"> <li>• <i>Students are admitted to the specialty program based on the criteria of their program choice, their percentage in the high school, study stream (Science, Arts, etc.), CGPA after finishing the common year (36 Credit hours), and the availability of seats (p. 19)</i></li> <li>• <i>FCHS students desiring transfer to other FCHS Degree Programs will ensure all entry requirements of the desired Degree Program are met.(p. 23)</i></li> <li>• <i>All transfer students are required to meet the admission requirements of the program and provide full detailed transcripts and course descriptions stamped by their previous institute.(p. 23)</i></li> </ul>
<i>Have entry requirements that meet national criteria, example - completion of secondary school education.</i>	<ul style="list-style-type: none"> <li>• <i>A student who has completed her secondary education and has an official transcript may apply to be admitted to the college(p. 18)</i></li> </ul>
<b>Regarding Student recruitment within the nursing programme(s)</b>	
<i>Schools have student retention policies and systems in place.</i>	<ul style="list-style-type: none"> <li>- Not mentioned in the handbook</li> </ul>
<i>Incentive programs are in place to address such concerns as family and work responsibilities, the need for part time study and other variables.</i>	<ul style="list-style-type: none"> <li>- There is a deferred exam policy and absenteeism policy for compassionate circumstances</li> <li>- Advising and counselling services are offered and mentioned.</li> </ul>
<i>Retention programs are evaluated on a regular basis to determine the effectiveness of retention strategies; modifications are made accordingly</i>	<ul style="list-style-type: none"> <li>- Not mentioned</li> </ul>

Table 22: Comparison of Recruitment and Retention Policies at the National and Local Levels

### **4.3 Integrated Results**

Data was collected through questionnaires, semi-structured interviews and in-depth interviews for several reasons. Greene, Carcelli and Grahah (1989) list five rationales for using mixed design in research, including triangulation, complementarity, development, initiation and expansion. Two of the above five rationales - triangulation and complementarity - support the adoption of mixing qualitative and quantitative data in this study. Triangulation relates to use of “convergence and corroboration of results from different methods studying the same phenomenon” according to Johnson and Christensen (2004, in Johnson and Onwuegbuzie 2004). The intention in triangulation was to use questionnaires and interview results along with an analysis of the policies to increase the credibility of the results.

In complementarity, the rationale was for “the investigator to seek elaboration, enhancement, illustration, and clarification of the results from one method with results from the other method” (p. 439). The data obtained from the interviews helped expand the understanding of the information collected from the questionnaire by asking participants to elaborate on their ideas. When examining both the quantitative and the qualitative data collected from all parts of the study, several findings can be extracted and meanings ascertained. The Emirati nursing student in the College of Health Sciences in the pre-entry and under graduate level is traditional in terms of her age, sex, marital status and non-working status, while still non-traditional in terms of being a first generation college student, studying in a language other than her first language, and sometimes completing her secondary education through a different route than usual in nursing educational programme(s).

The bridging student, on the other hand, is more non-traditional, in terms of being older than 25 years, studying in a part time mode, working and being married, likely with children, in



addition to the similar reasons of the pre-entry population in terms of being a first generation college student, studying in a language other than the first language, and sometimes completing her secondary education through a different route than usual in nursing educational programme(s). According to Jeffreys' (2014) NURS model,

*Post-licensure nursing students (e.g., RN-BS, master's level, advance, practice, and doctoral level) who completed entry-level programs as "non-traditional" students (as defined above) and passed entry-level licensing exams may also be considered "non-traditional" students within the NURS (2013) model.*

Both the questionnaire and the interviews demonstrate that parents and siblings, especially a sister were all influential people for the student considering a career in the nursing profession. The majority of the students reported that nursing would be a third or last choice of career for them, and both quantitative and qualitative factors for the choice selected perceived personal barriers such as dealing with unpleasant tasks in nursing and program difficulty, while barriers from the family included stereotyped factors such as working night shifts, working on weekends, working with the opposite gender, wearing pants in the workplace and the probability of not finding husbands. It was interesting to note that students in the program were more knowledgeable about current changing workplace practices but were still bound to the familial traditions of UAE society. The role of the nursing education leader in this situation is one of mentoring and being a role model (Jeffreys, 2014).

An inferential analysis using independent sample 't' test was conducted to compare career choice decisions among students with a science major in high school compared with an arts major. There was a significant difference in the means and deviations between the two independent variables, and a significance was also found between the two groups using

independent sample 't' test. Parental educational level was another significant factor in choosing a career in nursing. Using the independent sample 't' test it was found that participants whose fathers had an undergraduate degree were more likely to choose nursing as a career choice than participants whose fathers had only completed a primary level education or were not educated at all. Similarly, using the independent sample 't' test a significance was noted among participants' mothers who had an higher educational degree versus those who had completed only primary school a significance.

The reasons to choose nursing that were obtained as a result of the inferential analysis of the questionnaire included a desire to work as part of a team and as a stepping stone to other professions. Literature from similar studies in other countries found that a desire to help others and care for the sick are the most reported reasons. The qualitative interviews served to expand on this information – students understood that nursing was working in the hospital and working together with others. They chose the nursing profession because of a desire to serve in the military, serve their country, partake of the generous benefits offered by the UAE government, or pursue their higher studies. The Porter Nursing Image Scale shows that students perceived the public image of nursing profession as being positive, and similar options were also voiced during the interviews.

The document analysis served to support both the quantitative and qualitative findings of the study. Not many nursing specific documents were available at the local, Emirate and the National levels in the country. Among the documents analysed, those specific to nursing education and targeted towards Emiratization were only found at the National UAE Nursing and Midwifery Council level. At the Abu Dhabi Emirate level, documents analysed were more general by including other related professions of the health care sector. At the local college

level, documents analysed had most of the required components, but were not presented in an Emirati nursing student friendly manner and did not have details related to program accreditation. The results have been summarized below in table 23.

Research Questions	Quantitative Methods		Qualitative methods	
	Questionnaire	Document analysis	Semi structured Interviews	Unstructured Interviews
Emirati student Profile in the nursing Programme(s) in Abu Dhabi	<ul style="list-style-type: none"> <li>100% females</li> <li>Mostly pre-entry and undergraduate - traditional</li> <li>18 – 24years</li> <li>Unmarried</li> <li>Not working</li> <li>Science Major</li> <li>Mostly Bridging nontraditional</li> <li>Not studying in 1<sup>st</sup> language</li> <li>Entry thro. different study pathway</li> <li>Sometimes 1<sup>st</sup> generation college students</li> </ul>	<ul style="list-style-type: none"> <li>Females only college policy</li> <li>Admissions given with high school results</li> <li>Only baccalaureate pathway</li> </ul>	<ul style="list-style-type: none"> <li>Pre-entry and undergraduate students mostly traditional</li> <li>Bridging students - nontraditional</li> </ul>	
Factors influencing Emirati student recruitment and retention within the nursing program	<ul style="list-style-type: none"> <li>Parent's Educational and occupational level</li> <li>Mother is most influential person</li> <li>Information regarding the college and programs is obtained mainly through family and friends, college website</li> <li>Perception of nursing image – overall positive in the UAE</li> </ul>	<ul style="list-style-type: none"> <li>Higher education pathway to Masters offered</li> </ul>	<ul style="list-style-type: none"> <li>Parent's educational and occupational level</li> <li>Mother is 1<sup>st</sup> influential person</li> <li>Information through family and friends</li> <li>Perception of nursing changing- older generation: negative; younger</li> </ul>	

	<ul style="list-style-type: none"> <li>▪ Nursing as a career choice – 3<sup>rd</sup> /Last</li> <li>▪ Reasons – to choose nursing – to be a part of the team, and as a stepping stone to higher education</li> <li>▪ Reasons – to not choose nursing– Program difficulty, and perceived unpleasant tasks</li> <li>▪ Lack of Prior exposure to health care</li> </ul>	<ul style="list-style-type: none"> <li>▪ <math>GPA \leq 2</math> - only career choice left - nursing</li> </ul>	<p>generation: positive</p> <ul style="list-style-type: none"> <li>▪ Reasons to choose - Continue higher education, serve the country, more govt. benefits, low GPA</li> <li>▪ Reasons to not choose nursing – program rigor, family disapproval, lack of name like Dr.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Muhakat program for role shadowing in hospitals</li> </ul>
Nursing Educational Leaders experiences and strategies towards Emirati recruitment and retention		<ul style="list-style-type: none"> <li>▪ MOU between Tawteen and college of Health Sciences</li> <li>▪ SEHA in plans to improve coordination with college of Health Sciences</li> <li>▪ UAE NMC has standards and strategies document on their website</li> <li>▪ Princess Haya al Maktoum is president of the UAE NMC council</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants reveal going back to military hospital after completing the nursing program</li> <li>▪ Participants revealed nursing awareness gained through career days in schools</li> </ul>	<ul style="list-style-type: none"> <li>▪ Collaboration between hospitals, colleges and government agencies</li> <li>▪ Setting up task force for Emiratization</li> <li>▪ Role Modeling</li> <li>▪ Need for more advertisements and campaigning</li> <li>▪ Setting up of standards and nursing education strategies</li> <li>▪ Improving image of nursing</li> <li>▪ Investing in career days and college open house day.</li> </ul>

Table 23: Integrated Results of the Study

## **4.4 Chapter Summary**

This chapter reported and interpreted results pertaining to the three research questions formulated at the beginning of the study. Following a mixed methods approach, data was collected using both quantitative and qualitative methods, and results were analyzed using descriptive, inferential and interpretive means.

The purpose of this study was to investigate factors surrounding Emirati student recruitment and retention in the nursing program, and the experience of nursing leaders in dealing with this issue. Descriptive findings suggest that the majority of the students within the population are traditional students, are female (100%), in the 15-24 year age group (88.6%), are unmarried (91.4%), and are pre-entry students (57.1%), who had taken science as a major in high school (75.7%), and lived in the suburbs of Abu Dhabi (47.9%). Eighty-six% of the participants in my study had only seen a nurse in action, and 79% had never had direct experience in the health care industry before coming to the College of Health Sciences. Only 15% of students had their father/mother working in the healthcare field while 55% had relatives working in the healthcare field.

A principal component analysis was performed to ascertain participants' perception of societal image of nursing. Data indicated that overall participants perceived Emirati society as holding a positive image of nursing, with 24 (out of 30) of the mean scores being 2 and 3, signifying 'quite positive' and 'slightly positive' views regarding nurses. Six of the variables held a mean score of '4' meaning neutral views, indicating that participants rated nurses as neutral in areas of being bold, being leaders, being dominant, being warm, being controlled, and being

competent. Among the 140 participants who responded, the majority of participants indicated that nursing was a third choice.

An inferential analysis using independent-sample 't' test was conducted to compare career choice decisions among students with a science major in high school compared with an arts major. There was a significant difference in the means and deviations between the two independent variables: science at ( $\bar{x} = 2.27$ ,  $SD = 0.88$ ) and arts at ( $\bar{x} = 1.82$ ,  $SD = 0.77$ ). A significant difference was also found between the two groups using independent-sample 't' test resulting in the  $t(137) = 2.674$ ,  $p = 0.008$ . Parental educational level was another significant factor in choosing a career in nursing. Using the independent-sample 't' test it was found that participants whose fathers had an undergraduate degree were more likely to choose nursing as a career choice than participants whose fathers had only completed a primary level education ( $t(29) = 2.187$ ,  $p = 0.03$ ) or were not educated at all ( $t(39) = 2.298$ ,  $p = 0.02$ ). Similarly, using the independent-sample 't' test, a significance was noted among participants' mothers who had an higher educational degree versus those who had completed only primary school, resulting in the  $t(42) = 2.70$ ,  $p = 0.01$  level. .

A chi square analysis was done to determine any association between reasons 'to choose' or 'not choose nursing', and nursing as a career choice. The analysis had statistical significance only for the following reasons: an opportunity to work as part of the team  $X^2(3, N = 140) = 8.284$ ,  $p < .05$ ; and as a stepping stone to other professions  $X^2(3, N = 140) = 10.025$ ,  $p < .05$ . Similarly, concerning reasons to 'not choose nursing', chi square analysis found perceived program difficulty level  $X^2(6, N = 140) = 13.203$ ,  $p < .05$  and perceived unpleasant tasks  $X^2(3, N = 140) = 8.880$ ,  $p < .05$  as statistically significant.

A qualitative analysis of data served to better understand the factors influencing that recruitment and retention of Emiratis into the nursing program, and subsequently into the profession. The reasons behind the decision to choose or not choose nursing were categorized as: 1) Personal interest; 2) Parental support; 3) Professional awareness; 4) Perceived barriers; 5) Potential benefits, and 6) Policies at the local and national levels. Qualitative exploration of nurse leaders' experiences found that nursing leaders from different spheres of the profession had different experiences and responsibilities, and tackled the problem from different perspectives. Concerning the role of the nurse leader towards the issue of poor Emirati recruitment and retention, the representatives interviewed shared that community awareness and marketing were two significant roles. It was envisioned that nursing students themselves would, in time, grow to be instruments of change and influence among themselves, their families, and their societies, in congruence with the ideals of transformational leadership for the nursing profession in the UAE.

An analysis of related documents served to support both the quantitative and qualitative findings of the study. Not many nursing specific documents were available at the local, Emirate and the National levels in the country. Among the documents analyzed, those specific to nursing education and targeted towards Emiratization were only found at the National UAE Nursing and Midwifery Council level. At the Abu Dhabi Emirate level, documents analyzed were more general by including other related professions of the health care sector. At the local college level, documents analyzed had most of the required components, but were not presented in an Emirati nursing student friendly manner and did not have details related to college licensure or program accreditation.

## **CHAPTER FIVE: DISCUSSIONS, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS**

The nursing profession is facing an acute nursing workforce shortage internationally and nurses have become a scarce commodity. The situation is similar in the UAE, where to date only a few Emirati nurses have graduated to meet the health care of the country, and thus recruitment and retention of local Emirati students in the nursing programmes in Abu Dhabi is an urgent need. The UAE, being unique in its dynamic economic growth and development in all sectors of the society, while continuing to enjoy the culture and traditions of its predominantly Arab Islamic conventions, is placed in a singular position where factors influencing student recruitment and retention in the nursing program, and into a career of a nurse as a profession is not immediately apparent and involves multiple perspectives. Nurse leaders in the Emirate striving to build the nursing workforce in the nation are facing an uphill battle in dealing with this impending crisis.

The purpose of this thesis was to investigate factors surrounding Emirati student recruitment and retention into the local nursing programmes in the country, and the experience of nursing education leaders in dealing with this issue. An extensive review of the literature, both regionally and globally, identifies several factors that are influencing this phenomenon, but there has been no study published to date from the UAE. A need to investigate and describe the situation in the Emirates required a quantitative analysis using a post positivist worldview, while a desire to explore the myriad factors related to pursuing a career in nursing, in the UAE, necessitated the use of a qualitative dimension using a social constructivist lens.

Three research questions were formulated to tackle this issue in the UAE and are as follows:



1. What is the profile of the Emirati student within the nursing programme(s) in the Abu Dhabi Emirate?
2. What are the factors influencing Emirati student recruitment and retention within the nursing programme(s)?
3. What are the nursing educational leaders' experiences and strategies related to Emirati student recruitment and retention, within the nursing programme(s)?

A review of literature identified student profiles as one indicator of student recruitment and retention in nursing programs (Jeffreys, 2014), and the lack of prior studies on Emirati student recruitment and retention in the nursing program in the UAE necessitated its inclusion as one of the research questions. It was the objective of this study to investigate what factors uniquely influenced Emirati students in their decision making process towards choosing a career in nursing. Nursing leaders in the UAE are at the forefront of this crisis and yet there is not yet study conducted on their experiences and suggested recommendations for future direction. The third research question was formulated with the intention of exploring their experiences in this study. Thus in this study, an exploration through the use of questionnaires, individual semi-structured interviews, and document analysis on Emirati students, regarding factors influencing their choice of subject major selection and subsequent recruitment and retention in the nursing program at the college has been undertaken. Findings from in-depth unstructured interviews with nursing leaders regarding their experience in dealing with this issue, including possible strategies have also been included.

The first section of the chapter includes findings that were obtained as a result of the quantitative and qualitative analyses. The second section is a discussion of the findings with related findings from the literature in order to compare them and identify similarities and

differences between results obtained in this study with those done elsewhere. The third section of the chapter is a discussion of the implications of the study in the areas of nursing education, nursing practice and nursing policy. The thesis concludes with recommendations for future research and limitations.

## **5.1 Findings of the Study**

This research study was conducted in two phases. In phase 1, a quantitative analysis of Emirati nursing student profiles found that the majority of the students in the population sample were traditional students: females (100%), in the 15-24 year age group (88.6%), unmarried (91.4%), not working (91%) and pre-entry students (57.1%), who had taken science as a major in high school (75.7%), and lived in the suburbs of Abu Dhabi (47.9). Demographic statistics showed that 86% of the participants in the study had only seen a nurse in action, and 79% had never had any direct experience in the health care field before coming to the College of Health Sciences. Only 15% of students had their father/ mother working in the healthcare field while 55% had relatives working in the healthcare field.

Study findings indicate that (42.1 %) of the participants' fathers had a higher degree educational level, followed by (15%) who had an undergraduate degree educational level, while among the mothers of the study participants, a lesser percentage had a postgraduate degree (17%), compared with those who had an undergraduate degree (19.3%). At the other end of the spectrum, some participants also had parents who were uneducated with fathers at (11.4%) and mothers at (13.6%). An inferential analysis using independent-sample 't' test conducted to compare career choice decisions among students with a science major in high school compared with an arts major revealed a significant difference in the means and deviations between the two independent variables: science at ( $\bar{x} = 2.27$ ,  $SD = 0.88$ ) and arts at

( $\bar{x} = 1.82$ ,  $SD = 0.77$ ). A significant difference was also found between the two groups using independent-sample 't' test resulting in the  $t(137) = 2.674$ ,  $p = 0.008$  level

Parental educational level was another significant factor in choosing a career in nursing. Using the independent-sample 't' test it was found that participants whose fathers had an undergraduate degree were more likely to choose nursing as a career choice than participants whose fathers had only completed a primary level education ( $t(29) = 2.187$ ,  $p = 0.03$ ) or were not educated at all ( $t(39) = 2.298$ ,  $p = 0.02$ ). Similarly, using the independent-sample 't' test, a significance was noted among participants' mothers who had an higher educational degree versus those who had completed only primary school, resulting in the  $t(42) = 2.70$ ,  $p = 0.01$  level.

The Porter Nursing Image Scale was used to ascertain participants' perceptions of societal images of nursing. Data indicated that overall participants perceived the Emirati society as holding a positive image of nursing, with 24 (out of 30) of the mean scores being 2 and 3, signifying 'quite positive' and 'slightly positive' views regarding nurses. Six of the variables held a mean score of '4' meaning neutral views, indicating that participants rated the public perception of nurses as being neutral in areas of being bold, being leaders, being dominant, being warm, being controlled, and being competent. Principal component analysis demonstrated that the variables could be reduced to six components - caring, intelligent, rational, independent, emotional and social - and accounted for 63% of the variance in the study.

Among the 140 participants who responded, the majority of participants (47.9%) indicated that choosing a career in nursing was/would be a third choice for them. A chi square analysis was

done to determine any association between reasons ‘to choose’ or ‘not choose nursing’, and nursing as a career choice. The inferential chi square analysis revealed statistical significance for the following reasons to choose nursing as a career - an opportunity to work as part of a team  $X^2(3, N = 140) = 8.284, p < .05$  and as a stepping stone to other professions  $X^2(3, N = 140) = 10.025, p < .05$ . Similarly, concerning reasons for ‘not choose nursing’, chi square analysis found only two reasons: perceived program difficulty level  $X^2(6, N = 140) = 13.203, p < .05$ , and perceived unpleasant tasks  $X^2(3, N = 140) = 8.880, p < .05$  as being statistically significant.

In Phase II of the study, qualitative analysis of data served to better understand the factors influencing that recruitment and retention of Emiratis in the nursing program, and subsequently into the profession. The reasons behind the decision to choose or not choose nursing were categorized as: 1) Personal interest; 2) Parental support; 3) Professional awareness; 4) Perceived barriers; 5) Potential benefits, and 6) Policies at the local and national levels. Qualitative exploration of nurse leaders’ experiences found that nursing leaders from different spheres of the profession had different experiences and responsibilities, and tackled the problem from different perspectives. Concerning the role of the Nurse Leader towards the issue of poor Emirati recruitment and retention, the representatives interviewed reported that community awareness and marketing were two significant roles. One of the leaders envisioned that nursing students themselves would, in time, grow to be instruments of change and influence among themselves, their families, and their societies, in congruence with the ideals of transformational leadership for the nursing profession in the UAE.

The document analysis served to support both the quantitative and qualitative findings of the study. Not many nursing specific documents were available at the local, Emirate and the

National levels in the country. Among the documents analyzed, those specific to nursing education and targeted towards Emiratization were only found at the National UAE Nursing and Midwifery Council level. At the Abu Dhabi Emirate level, documents analyzed were more general by including other related professions of the health care sector. At the local college level, documents analyzed had most of the required components, but were not presented in an Emirati nursing student friendly manner and did not have details related to college licensure or program accreditation.

## **5.2 Discussion of the Findings**

Recruitment and retention of students in nursing programmes have always been a priority concern of nurse educators worldwide, according to Jeffreys' (2014). In his NURS model, he explains that student profile characteristics, student affective factors, academic factors, environmental factors, and professional integration factors are all significant in the recruitment and retention of the nursing student in a nursing program. Using these as sub-headings, this section presents the findings of the study for discussion along with related literature to bring some perspective on the Emirati student in the nursing program in the Abu Dhabi Emirate.

### **Student Profile Characteristics**

Jeffreys' (2014) suggests that the profile characteristics of students in a program is a crucial factor in recruitment and retention. According to him,

*Student profile characteristics describe characteristics prior to beginning a nursing course and include age; ethnicity, race, and heritage; gender and sexual identity; first language; prior educational experience; family's educational background; prior work experience; and enrollment status. (p. 2)*

Most of the Emirati students in the study entering the College of Health Sciences were traditional high school graduates, but they were also first generation college students in some cases, and were non-traditional by studying in a language that was not their first language. Bridging students were more non-traditional by being married, working, having children, studying in a part-time mode and by not studying in their native language.

This finding is similar to other studies in the region. Osaka (2001) conducted a similar quantitative study among Qatari nursing students and found that the majority of the undergraduate students were between the ages of 18 and 35, and unmarried (77.2%). A look at their parents' level of education showed that a half of their fathers and three-fifths of their mothers were illiterate or just able to read and write, indicating that they were first generation college students as well. According to Seidman (2007, in Jeffreys', 2014), nontraditional students and first generation college students have lower recruitment and retention rates. Concerning first generation college students, Jeffreys' (2014) adds that,

*mismatched expectations of the college academic and social experience, especially during the first six weeks of transition to post-secondary education, pose challenges to persistence, motivation, self-efficacy, academic achievement, and retention, and includes social isolation (or the feelings of not belonging) among nontraditional and first generation college students as reported factors adversely influencing retention and success across all levels of education. (p.2)*

He recommends that nursing educators should develop “proactive, transitional and ongoing strategies to capitalize on student strengths, prevent deficits and improve weaknesses”, among this group of non-traditional and first generation college student population (p.3).

Another study quantitatively conducted by Safadi et al. (2011) in Jordan found that first year nursing students in the study had a mean age of 21 years, but also interestingly reports that 26% were male students among their nursing population. A similar study, using mixed methods by Eman et al. (2012) in Bahrain found that the first cohort of nursing students in their program in 2006 included 5 males and 33 females. In the college where the study was conducted, the student handbook is clear that “admissions are open to females only” (p. 21). But Abu Al Rub (2007) discusses strategies for the nursing shortage in Jordan, and suggests that enrollment of male students in the nursing program would help increase numbers within the profession. He argues that as one of the cultural reasons associated with the nursing shortage in the region was family disapproval to working the night shift, the inclusion of male nurses in the profession could provide a possible solution to low rates of participation.

Male students in the program, though, would still require further additional awareness, motivation, familial and governmental support to enter an up-to-now female dominant career in the UAE. A qualitative dissertation by Larocco (2004) conducted in Boston among male nurses, on “Policies and practices that influence recruitment and retention of men in nursing” found that males in the profession frequently chose other careers before settling on a career in nursing, and admitted to a lack of awareness regarding the profession before entering the program. Motivation to enter and stay in the program were related to job security and financial benefits, but since entering the profession, participants in the study reported that they now believe that nursing is a “genderless profession”.

## **Student Affective Factors**

According to Jeffreys' (2014) model,

*Student affective factors are students' attitudes, values, and beliefs about learning and their ability to learn and perform the necessary tasks required for course and program success, including cultural values and beliefs (CVB), self-efficacy and motivation.*

(p. 3)

Jeffreys' (2014) explains that students entering the College of Health Sciences come with a value system embedded in tradition that consciously and unconsciously guide their thinking, decisions making processes, and actions within the college and in all aspects of professional and social life. Mismatched cultural congruence could create stress and lead to low satisfaction levels, which could be further compounded by poor academic performance, decreased motivation, and thoughts towards attrition, while on the other hand, a cultural match could positively influence persistence, motivation, and retention in the college and to a greater extent recruitment in the nursing program (Jeffreys', 2014). Bourgeois (2014), in her quantitative dissertation on, "The relationship of nursing career perception congruence and perceived social support on Hispanic Middle School Female Nursing Career Choice", reports that "there was a significant positive relationship between nursing career choice and nursing career perception congruence, and a positive significant relationship between perceived social support and nursing career choice" (p. 82).

Price (2011), in her qualitative dissertation on "The experience of choosing nursing as a career," presents a paradigm shift in comprehending career choice as a "virtuous plot to one of social positioning". She explains that her participants reported career choices as being initially



plotted around a traditional and stereotypical understanding of nursing that later progressed to a meaning of career choice in relation to one's position in the social world. Career choices were decided in relation to the participants' desire for autonomy, respect and quality of life. Factors such as lifestyle, salary and social status were also considered. Price (2011) presents career choice as a complex consideration of social positioning, fraught with hopes, dreams, doubts and tensions, where "the participants' perceptions and expectations in relation to their future nursing careers were influenced by a historical and stereotypical understanding of nursing; an image that remains prevalent in society" (p. 149).

In his study related to the career attitudes of the Emirati youth, Jones (2011) found that Emirati students are "picky career choosers" when it comes to choosing a career and value a profession offering money, rewards for creativity and initiative, prestige, and opportunities to solve problems. In this current study using a mixed methods approach, related to Emirati student recruitment and retention in the nursing programs, although study participants in the quantitative phase reported that the public perception of nursing in the Emirate was overall favourable, while being neutral in areas of nurses and the nursing profession being bold dominant leaders in society, they also reported that nursing as a choice of career would be a third or last choice of career for them. On further qualitative exploration participants reported personal interest in studying sciences and in higher studies, but also that the influential role of family members, some of whom were not supportive towards a career choice in nursing, had a strong impact on their decisions.

A qualitative study conducted by Latimer (2005) regarding differing perceptions among levels of the nursing profession, also similarly found that nursing students in their first year were very positive and excited about their self-image and choice of nursing as a professional career.

Second-year students, though, were more negative about their sense of self and described a feeling of confusion with regard to the roles and responsibilities of the nurse. And finally, students in their fourth year described experiencing low self-esteem and had negative feelings about nursing, but were positive about their future in the profession. In this study among Emirati students in the College of Health Sciences, similar differences can be found in the quotes of the students from their interviews about differing levels in the nursing program under the third theme of professional unawareness where pre-entry students expressed a lack of awareness regarding the program, its rigour, and roles and the responsibilities of nurses, before entering the program, while bridging students expressed a more realistic experience.

Cockrell (2002) conducted a quantitative study among pre-nursing students regarding their perceptions of the nursing profession and reported that pre-nursing students are unclear in their understanding of the nursing profession. She suggests that direct experiences with the healthcare professions would have an impact on students' decision making regarding choosing a career in the nursing profession. She concluded that most pre-nursing students recognized the need for career information about nursing, and the majority of students were willing to enrol in an 'Introduction to Nursing' course even if for no academic credit. She recommends that universities consider the provision of such courses as an effective recruiting tool for nursing programmes to assist currently enrolled pre-nursing students to solidify their career choices. Concerning sources of information and influence, findings from the present study conducted among Emirati students demonstrate that the first source of information about the nursing program was their family, followed by relatives and friends (34.3%). The college website was a second most widely used source of information about the college. The mother in the family was the most frequently cited influential figure, followed by the father and then a sister.

Along the same vein, a quantitative study by Rewers (2007) in the United States reported marketing items most frequently identified by student respondents as being “very influential” in their career decision and included: other (19.3%), contact by students (15.6%), nursing program brochure (13.8%), contact by alumni (11.0%), and college bulletin (10.1%). The items contained in the “other category” which students most frequently and consistently identified as their “1st” and “most influential” choices, included: relatives/friends, previous healthcare experience, personal interest, and personal/family illness. A large proportion, 61.4% of the students, felt that their mother was the most influential person in their career decision. The second most influential person was father (55%), followed by friend (49.5%). This finding seems to be similar to other countries as well, as a quantitative study in Singapore by Tan-Kuick (2012) conducted among post-secondary students to ascertain factors related to a career choice in nursing also reports that ability, optimism, nursing image, parents’ image of nursing and peers’ image of nursing, play a significant role in influencing students’ preference for nursing education as their choice for tertiary education.

In the current study, among Emirati students, significant reasons to “choose nursing” related to an opportunity to work as part of the team, and as a stepping stone to other professions, while reasons to “not choose nursing” demonstrate that there is a perceived program difficulty and a perception of unpleasant tasks as being statistically significant. A comparison using a quantitative study conducted in the United States, by Grainger and Bolan (2005) among undergraduate nursing students found that first year students had a more “idyllic” view of nursing where kind and compassionate nurses in an exciting career felt good about what they were doing, while fourth year students related feeling “less enamored” with their choice of profession and shared a feeling of dissonance between what they learned, what they valued and what they were seeing. Jones’ (2011) study among Emirati youth in the UAE, found that

Emirati youth were more motivated by external factors such as exams and qualifications than by personal interests, and this could be a factor in their “not choosing” the nursing profession because of its “perceived program difficulty”.

These reasons are also contrary to a quantitative study conducted by Rodgers (2013) among high school students where most students felt that “making a difference is the main reason they wish to enter the nursing field”. The reason for the difference could be attributed to the study being conducted among high school students who might have been displaying a “virtuous concept of nursing” as explained by Price (2011), or that the study was conducted in the United States where social, cultural and political factors are different from the UAE. Another quantitative study, chosen for cross comparison, was undertaken by Al-Khandari and Lew (2005) among high school students in Kuwait where participants reported that a probable reason to choose nursing as a career would be because it was a “nice profession”. Yet many participants responded that they would not in reality choose nursing because “they do not like nursing”, it was physically exhausting and “it required contact with men”. The high school students in the study might have been echoing traditional familial sentiments in their choice of career in nursing, having not entered the profession themselves.

### **Academic and Environmental Factors**

According to Jeffreys’ (2014), “academic factors include personal study skills, study hours, attendance, class schedule, and general academic services” (p. 3). In the current study relating to Emirati students’ reasons for not choosing a nursing career, participants reported that perceived program difficulty was one factor. A quantitative study conducted by McDonough (2012) relating to promoting student retention within the programme similarly found that academic and non-academic factors contributed to poor retention such as unexpected program

rigor, active learning, conflicting obligations, and faulty student-faculty relationships. Related to program rigor, participants identified lack of study, time- management, and test-taking skills, along with poor medical terminology as four common reasons for failure in the program. Within the Gulf region, a study by Al-Mahmoud (2013) among first year nursing students in Saudi Arabia found that students considered the heavy workload, the rigorous theoretical component of the programme, and the difficulty of studying in the English language, as important contributing factors leading to student dropout. Jeffreys (2014) identifies environmental factors as those,

*external to the academic process that may influence students' academic performance and retention and include financial status, family financial support, family emotional support, family responsibilities, childcare arrangements, family crisis, employment hours, employment responsibilities, encouragement by outside friends, living arrangements, and transportation. (p. 5)*

For the Emirati students in the present study the environmental factors were not a pressing concern as their family socio economic status was sound, the majority of the students were unmarried and therefore did not have childcare responsibilities, and they lived closer to the college (the suburban parts of the Abu Dhabi mainland). Qualitative analysis of the interviews conducted among nursing students found that participants received stipends and benefits from the Government meant to serve as a source of encouragement to entice and retain them in the nursing program.

A qualitative study by Yateman (2004) among bridging students found that prior educational experience was a motivating factor in recruitment and retention for further studies, as students

in that category were aware of the academic rigours involved and were prepared for the same. A sense of determination and hard-won achievement could also be perceived through their experiences during the interview sessions. Yateman (2004) also identified an institutional source of support as being the faculty members in the educational facility, and related it to the open door policy of the undergraduate coordinator who was facilitating and inviting, as reported by the participants in her study. Her participants also reported that interactive experiences with the staff nurses in the hospitals during clinical placements as being helpful. A similar situation exists for bridging students in the current study as they are able to manage their work/family and study roles to successfully pursue the program. One undergraduate participant described how her perception changed after going on clinical placements.

### **Professional Integration Factors**

According to Jeffreys (2014),

*Professional integration factors are factors that enhance students' interaction with the social system of the college environment within the context of professional socialization and career development. These include nursing faculty advisement and helpfulness, professional events, memberships in professional organizations, encouragement by friends in class, peer mentoring and tutoring, and enrichment programs. (p.5)*

The student handbook of the college of health sciences mentions the role of the academic advisor before registration, for counselling and for advice in cases of appeals, and the counselling services that are available in the college, but none of the participants in the study mentioned these services as guiding them to a career in the nursing profession. It could be because for students in the college there are other sources of information regarding the nursing program. Participants in the interview, though, did mention the career day in their high schools

and the college open house day, both of which are hosted and prepared by the student support services division of the college, as being opportunities to tell others about the nursing programs on offer.

Jeffreys (2014) notes that a lack of professional integration increases the risk of dropout and limits recruitment, and proposes that for both undergraduate and graduate students, whether traditional or non-traditional, the role of the academic nursing faculty leader was probably of paramount importance. According to him, nursing education leaders are the most important initiators because they have the expertise for peer mentoring and tutoring. He argues that nurse educators should recognize that professional integration “is a multidimensional process that incorporates cognitive, affective, and practical dimensions” (p. 5). A study on transformational leadership in the associate degree program by Arthur (2009), also found that the use of several strategies to enhance associate degree student success can be pursued such as a selective admission criteria with academic assistance including remediation, faculty-student interaction, and other college resources.

The current study on factors influencing Emirati student recruitment and retention in the nursing program, demonstrates that perceived program difficulty is one reason to not choose the nursing profession, and the nursing program at the college of Health Sciences was imported from an Australian Nursing curriculum, according to one of the nursing leaders interviewed. Cultural competence is yet another answer to the health care profession striving to meet the multicultural, multiracial and multilingual needs of the global population today. One way to promote cultural congruence is to actively engage cultural competence in nursing faculty and nursing students throughout all aspects of the program. The in-depth interviews with the select

nursing leaders in the study showed that there was good collaboration and support between the local nursing organizations and the college of Health Sciences in the Abu Dhabi.

### **Nursing Educational Leadership in the United Arab Emirates**

According to Horton-Deutsch et al. (2011), “academic nursing leaders, are one component of a well prepared faculty, required to achieve and sustain excellent educational programs” (p. 222). Leaders in nursing education striving to be change agents and contribute to the field need to be aware of the multifaceted issues involved. In the UAE, in a study conducted among eleven high-school level team leaders, Dada (2011) concludes that the nature of leadership and the hierarchy present in educational organizations is one barrier to the implementation of the program and its ability to be sustained over time. He maintains that “relationship building held the biggest payoff in problem solving and development” (p.222). Much along the same lines, Goleman (2002, in West-Burnham, 2009, p.71) remarks that, “whether an organization withers or flourishes depends to a remarkable extent on the leaders’ effectiveness in the primal emotional dimension”.

Jones (2007) believes that in situations where change is rampant, the organization that is flexible and open to change will survive. System transformation is directly related to the transformation of personal relationships, according to West-Burnham (2009), a consultant in education leadership, and he believes that effective leadership is the most significant of a range of complex variables that determine success in schools. He notes that, “many variables cannot be controlled directly; of those that can, leadership is easily the most controllable, and the one with the greatest potential impact and leverage” (p. 2).



The Emirates Center for Strategic Studies and Research (ECSSR) in Abu Dhabi, in a featured article on its website, calls the UAE leadership model, “a model of Constructive Engagement with the Nation” (Al Awadhi, 2012), based on the premise that “if the leadership is more interactive and responsive to the people, it will be capable of achieving its goal.” This has been accomplished partly by the generous national funding and support from the Nation’s leaders which has contributed to the sense of security in its citizens. But Al Awadhi cautions against the view that the materialistic dimension alone is sufficient for positive interaction and stresses palpable social, psychological and economic effects among the society’s members. He describes the relationship between the ruler and the people as a model of unique social contract based on a sense of belonging and harmony. A similar attitude is needed among nursing educational leaders in the profession in the UAE. English (2008) proposes that where only schools need to be revolutionized, expert leaders need to step in and guide towards “accreditation compliance and national standards” (p. 203).

Quantitative findings from the current study on Emirati students’ public perception of nursing image found the public perceiving a neutral image of nurses in areas of being bold, being influential, and being leaders. The select nursing leaders who were interviewed were also non-Emiratis – one of them being Jordanian, the second participant Indian and the third nursing leader being Australian, all practicing leadership within the sphere of nursing education in the Emirate. A qualitative study was done among Iranian nurse leaders by Varaei et al. (2012) to ascertain their assertiveness qualities and found that themes related to “task generation”, “assertiveness behaviour”, and “executive agents” as well as religious beliefs also played a fundamental role in their nursing leadership behaviour.

The National League for nursing (2006) recognized the importance of nursing education for the future development of internationally qualified clinicians, educators, researchers and administrators, and developed a model of excellence in nursing education to prepare nurses to a very high calibre. The model consists of eight core elements with components and subcomponents that are required for achieving and sustaining this excellence in nursing education. They are as follows,

- 1. Clear Program Standards and Hallmarks that raise Expectations*
- 2. Qualified students*
- 3. Well prepared Educational Administrators*
- 4. Evidence-Based Programs and Teaching/ Evaluation Methods*
- 5. Quality and Adequate Resources*
- 6. Student-centred, Interactive, Innovative Programs and curricula*
- 7. Recognition of experts, and*
- 8. Well-prepared faculty (NLN 2006)*

Qualified students are essential for the growth of the profession, and according to the Nursing League for nursing (2006), this qualification needs to be apparent from the criteria set forth for admission until the student meets mandatory graduation standards. Well prepared educational administrators are essential to handle the varied operations in an organization, and quality resources like library and technological support work together towards the excellence model. The programs and the curricula need to be pedagogically sound, include latest research practices, meet stakeholder's expectations, hospital demands for quality, and set clear competencies for each level and role that nurses assume after graduation (NLN 2006). Clear program standards and hallmarks based on the benchmarking process, best practice guidelines and accreditation

procedures required for achieving recognition in the delivery of internationally sound, and up-to-date nursing curricula are all added practices that can contribute to recruitment and retention among Emirati students in to the profession.

The three nursing leaders interviewed related that currently statistics were being collected to establish a baseline data for nurses and the nursing profession in the country, while a second nursing leader related that steps were in place to attract more Emiratis into the nursing programs through the use of stipends and role shadowing in the hospitals. A third nursing leader highlighted the collaboration among nursing agencies and organization including hospitals, and the need for role modeling, advertisements and campaigning to gain more awareness, as summarized in Table 20 below. The International Council for Nurses (ICN), in conjugation with its sister organization, the Florence Nightingale International Foundation (FNIF), have identified a framework for policy interventions that could be applied to the nursing shortage in the UAE (2005).

The overall framework consists of four components, including: workforce planning, recruitment and retention, deployment and performance, and utilization with the appropriate skill mix. These components along with related interventions would be interdependent, functioning under effective leadership and stakeholder involvement and could promote recruitment and retention efforts in the Emirate, as seen in Table 20.

<b>Component</b>	<b>Interventions</b>	<b>Requirements</b>
Workforce planning	<ul style="list-style-type: none"> <li>Needs Assessment, based on Hospital statistics and surveys</li> <li>Integrated planning with stakeholders at national, emirate-wise and local levels</li> <li>Linking with the Education Sector- nursing schools.</li> </ul>	<ul style="list-style-type: none"> <li>Up-to-date statistics</li> <li>Linkage to the overall health services planning</li> <li>Labor market behavior patterns of nurses</li> </ul>

Recruitment and Retention into the profession	<ul style="list-style-type: none"> <li>Recruitment from “traditional” sources such as local high school girls, through incentives, such as-government funded scholarship; and mass media awareness-improving awareness regarding the nursing program</li> <li>Recruitment from “new” sources-such as males; local Bedouin minority population; diploma holders-to fast track them, via accelerated programs, into baccalaureate degree holders; working mothers-through flexible part-time weekend programs; potential students from faraway places-through distance education; military personnel from military hospitals-for refresher courses and skill updates</li> <li>Retention of nursing students- through mentoring, by nursing faculty using authentic transformative leadership skills; study skills workshops; peer support programs; career counseling and guidance</li> <li>Retention of graduate nurses-through reimbursement of their advanced education in exchange for work commitment; positive practice environments; professional development opportunities; competitive salary scales; creation of magnet hospitals</li> <li>Attract back returners - through re-evaluation of skills and providing flexible working options</li> </ul>	<ul style="list-style-type: none"> <li>Career growth ladder and financial/ emotional rewards need to be made more explicit in the general mass media</li> <li>Better liaison between hospitals and nursing schools</li> <li>Improving internal disposition through non-pay initiatives</li> <li>Provide for flexible working models</li> <li>Attention to safe working conditions</li> <li>Promote nurses’ involvement in autonomy and decision making</li> </ul>
Deployment and Performance	<ul style="list-style-type: none"> <li>Internationally-accredited programs taught through a culturally sensitive curriculum;</li> <li>Graduates assessed through internationally valid exams - modified for the UAE environment</li> <li>Graduate outcomes satisfy UAE nursing standards</li> </ul>	<ul style="list-style-type: none"> <li>Effective use of available resources on limited budget</li> <li>Regular benchmarking with national and international standards</li> <li>Data on recruitment, graduation and internship programs</li> </ul>
Utilization and Skill Mix	<ul style="list-style-type: none"> <li>Regulatory and Legislative infrastructure leading to policy decisions regarding-qualified/unqualified job description; impact of volunteers and patient relatives</li> </ul>	<ul style="list-style-type: none"> <li>Need for amendments to make nurses more effective – such as prescriptive authority for nurses, with added amendments for pay and career pathways</li> </ul>

Table 23: Study Results as Interventions to Combat the Nursing Shortage in Abu Dhabi, UAE (applying the ICN policy interventions frame)

Thus transformational nursing leadership in the field of education in the UAE could ultimately lead to excellence in nursing education by achieving these subcomponents and thereby facilitating an increase in Emirati numbers into the nursing profession. According to the National League for Nursing (NLN), a well-prepared nursing faculty teaching a culturally congruent nursing program leading to the accomplishment of a student-centred, innovative, customized curriculum with flexible working options would include the following:

- ✓ mentoring and advising of new students;
- ✓ implementation of evidence-based teaching including best practice guidelines suited to the health care needs of the UAE people;
- ✓ recruiting, retaining and graduating qualified students through identification and attraction of both traditional and non-traditional students;
- ✓ advancing the profession and building an accredited nursing program leading to recognition in the UAE community while promoting the nursing image; and
- ✓ promoting a culturally suitable transformational organizational culture.

These are all possible strategies towards combating the issue of Emirati student recruitment and retention in the nursing program in Abu Dhabi.

### **5.3 Limitations of the Study**

Limitations of the study relate to it being conducted only among female Emirati students studying in Fatima College of Health Sciences, and living in Abu Dhabi, UAE, as there are no male students currently enrolled at the college. Emirati students living outside the Abu Dhabi Emirate, and expatriate students living in Abu Dhabi or elsewhere, and pursuing a nursing degree, are outside the scope of the study, therefore the results cannot be generalized to other

populations. Time and program duration constraints, especially in the time taken to obtain permission from the research study site, limited the study sample population to only one Emirate, the Abu Dhabi Emirate, and the participants to only those studying within one college in the Abu Dhabi Emirate.

The Emirati students' career choice in healthcare, and the factors influencing their recruitment and retention in the nursing programme(s), are the focus of the study and their knowledge or skills related to being in the profession are not a focus of the study. Students currently in the programme(s) at Fatima College of Health Sciences, or who recently graduated, are within the focus criteria of the study, and those who graduated from other programmes running previously in the Emirate, for example, the diploma nursing programmes of the Institutes of Nursing are outside the scope of the study.

For the qualitative aspect of the study, though representativeness was achieved from the different program levels within the college, only twelve students volunteered to be interviewed necessitating a purposive convenience sampling strategy including all twelve students, and limiting the use of other purposive sampling techniques like extreme cases sampling strategies. The limitation here was that participants in the sample consisted of students who willingly responded to the invitation to contribute to the qualitative portion of the study. It is possible, therefore, that the volunteers' opinions could have differed in some way from those who did not volunteer to participate. This may have limitations in the overall holistic picture of factors related to recruitment and retention. The relatively small number of nursing leaders who participated in the study was also a limiting factor, and was a result of their demanding work schedules.

## **5.4 Conclusions of the Study**

The results of this study have added to the paucity of literature regarding recruitment and retention issues in nursing education in the UAE. Several factors significantly influenced the Emirati student in her decision to choose a career in nursing, including prior program major and fathers' and mother's educational and occupational level. The most influential people were the student's mother, followed by the father and then a sister, while friends also played an important role. The student's public image of nursing was overall positive, and did not negatively influence the choice of a nursing career, but students refrained from selecting a career in nursing based on perceived program difficulty and perceived having to deal with unpleasant tasks. A qualitative exploration found that more family members influenced the Emirati student's decision-making-process to smaller extents, and the various initiatives like the Abu Dhabi Tawteen Council and Muhakat program at the governmental level, and the career day, open house day and Emirate skills for life camp, at the college level, were also successful options for attracting Emirati students into the College.

While personal interest remained one important intrinsic motivating factor, an extrinsic motivation to derive meaning from a career in nursing – like serve one's country, work in the public sector like the military, and pursue more higher studies - were all positive factors influencing the decision making process towards a career in the nursing profession. Alternatively, an unawareness relating to the varied roles and responsibilities of a nurse, perceived barriers both from personal experiences and from family members' perceptions, and lack of clarity in the information available regarding policies related to governmental benefits for Emiratis joining the profession, are factors influencing the Emirati student to disregard a career in nursing.

Nursing education leaders play an important transforming role both within the college environment and outside in the UAE community. They have been instrumental in setting up the UAE Nursing and Midwifery Council, have promoted collaboration with international universities like the Australian university, brought internationally benchmarked curriculum to the Emirate, provided a database for the existing Emirati nursing population, created partnership with the existing governmental agencies to provide stipends and other benefits, and liaised between college and the hospitals to provide a smooth transition for the graduate students, all in the past decade alone, as the qualitative unstructured interviews with select nursing leaders revealed.

Leaders within the college have also strived to collaborate with the hospitals and nursing organizations to further market and campaign for recruitment, and engage in academic partnership with clinical practice. Still there are “miles to go” for the growth and development of the nursing profession in the country - there are no Emirati nursing education leaders at the current time to lead the nursing education forward, and serve as a role model for the UAE people. In addition, more advising, and counselling is required in high schools and pre-entry levels to appropriately guide students based on their interest and motivation into the nursing profession.

Implications and recommendations for nursing education, practice and policy have been discussed in the next section. It is hoped that the results of this study will help nursing education leaders and educators to gain a deeper awareness of the many factors influencing the Emirati nursing student with differing perspectives, and strive for change both within the college and outside in the surrounding community. With culturally congruent change in nursing policy and



practices, this will set the path for more Emirati nurses to be recruited and retained in the profession.

## **5.5 Implications of the Study**

In the UAE, a focus on the current nursing shortage and an emphasis on recruitment and retention issues have required an examination and exploration of factors influencing the Emirati individual from choosing or rejecting the nursing profession. This study has implications for nursing education, practice and policy.

### **5.5.1 Nursing Education**

The study findings are relevant for Emirati student recruitment and retention practices in the nursing program in the Emirate of Abu Dhabi today. This was the first study to investigate pre-entry, undergraduate and bridging Emirati student profiles in the College of Health Sciences and in the nursing program. This was also the first study to investigate through a mixed methods approach, the factors influencing Emirati nursing student recruitment and retention and explore the experiences of nursing educational leaders related to the issue of Emirati nursing student recruitment and retention in the UAE. Non-traditional students are an essential component in contributing to the growth of the profession, and support measures including recruitment campaigns need to be in place to recruit and retain this vulnerable subset of the nursing population. First generation college students are also an important subset of the Emirati nursing student population, and need more support, advising, mentoring, counselling and guidance in their career trajectory.

Administrators in the college of Health Sciences could utilize findings from this study, since it provides important information about the different types of students within the college

population who would be receptive to a career in nursing. Recruitment in colleges need to target this important student population, earlier (middle school) and more effectively through multifaceted approaches. Increasing a positive perception towards the nursing career involves early education about all the exciting options and opportunities that a nursing career has to offer. Marketing and campaigning strategies in the colleges, need to be disseminated at the community at large, to target whole families (i.e. parents, teachers, friends, guidance counsellors, and community leaders) to foster the important social support component, and include possible tours to the clinical facility for exposure.

The social media can be used to project Emirati nurses as serving the country, working in the public sector and recruited by government agencies and sectors like the military. A more positive image of nursing, including attractive traits like boldness, being influential and being leaders need to be displayed in the public eye. Different strategies including shadowing a nurse, nursing career workshops, and more summer camp experiences need to be introduced to middle school students to join nursing as a career. Marketing campaigns like ‘The day in the life of a nurse in the UAE’ need to be invested in to further showcase the profession and entice more youth into a career in the healing/helping profession. Advanced speciality programs in nursing need to be developed to further promote the image of nursing, raise its status and better serve the health care needs of the UAE community.

### **5.5.2 Nursing Practice**

This study has several implications for nursing practice as well. The results provided by this study have direct implications for human resources practices in nursing, specifically in the methods we use to recruit nurses into the profession. Currently, several prominent health human resources planning frameworks and policy documents outline the need to increase

nursing recruitment and enrolment as a strategy to address the current nursing shortage. New models of staffing and clinical rotation need to be explored to create more flexibility for the Emirati nurse preparing to join the nursing workforce in the country. More Emirati males need to be attracted to the profession to balance the work load.

Career choice often occurs within the realms of social networks and relationships. Students need this added opportunity to interact with and speak to nurses during the process of considering nursing as a career. Thus recruitment strategies may need to extend beyond mere marketing and explore ways to engage potential Emirati students to real nurses in a variety of health fairs and career exhibition settings. There is a need for community access to a variety of nursing roles that could assist with career guidance and choice for students interested in science and/or health professions. Career fairs/ health exhibitions with practicing nurses from a variety of health care settings and practice specializations would be yet another strategy to increase awareness among the Emirati youth. School nurses could also provide a source of information both formal and informal regarding the roles and responsibilities of nurses and nursing in the community.

In the United Arab Emirates, public awareness related to the many different career options, the compensation packages for their work, the potential for further career advancement in the profession, and the existence of advanced clinical and leadership roles within the profession, needs to be promoted if many more Emiratis are projected to enter the profession. Emirati nurses who serve in the health care sector will be able to think critically and problem solve based on their cultural background and will enhance the quality of care for the people in their community, paving the way for world class healthcare for the UAE citizens as per the UAE Government strategy (2011 – 2013).

### **5.5.3 Nursing Policy**

Several strategies can be identified for promoting nursing education and practice, and require congruent policy changes in order to implement them. Professional nursing organizations like the UAE Nursing and Midwifery Council should update and maintain currency in policies regarding how nursing and nurses are portrayed and presented, for the students, their families, and community in the UAE public arena. Professional nursing associations may also need to provide direction, support and advocacy with respect to the roles and responsibilities of the nurse.

There is a need to campaign for promoting a positive image of nursing in all facets of the UAE society and hold to account anyone portraying a false image. One recruitment strategy currently being practiced is to have a dedicated financial plan to pay search engines to ensure that positive nursing related websites appear more prominently and frequently in the internet search engines (Price, 2011). This is yet another strategy that could be appropriate in the UAE context as students today are technologically savvy as well.

Nursing schools, hospitals, high schools and non-governmental nursing organizations need to become partners in a collaborative effort to increase knowledge and awareness of the nursing career pathway, and policy related to that collaboration need to be formulated for mutual benefits - for securing Emirati students from the schools into the nursing programme(s)s, who will upon graduation go on to get recruited into the various health care facilities and hospitals in the Emirate, in turn stemming, combating and slowly but surely reversing, the acute nursing shortage facing the United Arab Emirates today.

## **5.6 Contribution to Mixed Methods Literature**

This study supports the use of the follow-up explanation model to explain the variances obtained from the descriptive and inferential analysis of the questionnaire. The profile of the Emirati student within the nursing programme(s) and the factors influencing her recruitment and retention were initially elicited quantitatively, but the qualitative dimension provided more explanation on the reasons behind the commonly cited factors and contributed to more insight on the unique contextual motivators and constraints surrounding the Emirati student entering the nursing profession in the Abu Dhabi Emirate. This level of understanding would not have been possible without a mixed methods approach to research.

Having only one study site to collect participant information, the nested sequential mixed methods design proved invaluable in obtaining a detailed in-depth picture about the problem being investigated. The use of document analysis also further served to triangulate and strengthen the evidence obtained both from the questionnaires and the semi-structured interviews. The experiences of the nursing educational leaders explored through unstructured interviews also presented a more complete picture of their experiences and possible strategies geared towards the nursing profession in Abu Dhabi.

The integrated results served to present the findings in a seamless order aiding in better clarity of the multiple perspectives. The quantitative findings alone would have merely generated a list of reasons for Emirati students in the Emirate of Abu Dhabi to ‘choose’ or ‘not choose’ nursing, but with the integration of both the quantitative and qualitative findings, an explanation for the results was also possible, thereby facilitating a more culturally sensitive increase in awareness and recruitment strategies, in the near future, aimed towards the Emirati youth in the UAE.

## **5.7 Recommendations for Future Research**

The following recommendations for further research are made as a result of the findings of this study:

In the United Arab Emirates:-

1. This study could be replicated using larger samples from within the different levels of the program, especially for the qualitative aspects of the study.
2. A replication of the study using mixed methods approach could be undertaken in the other Emirates of Sharjah and Ras Al Khaimah, to ascertain factors influencing Emirati students deciding on a nursing career in those Emirates.
3. A comparison study between a replicated study in that manner and this current study would reveal similar and dissimilar factors across all the Emirates, with broader policy implications for the nursing profession in the UAE.
4. Also, as the nursing profession is still developing in the country, it would be interesting to note the changes in findings if a follow up study were to be done five years hence.
5. From continued research and development originating from this germinal study, additional mixed-method studies involving a transformative strategy of inquiry are recommended, to help clarify best practice guidelines for transformational leaders in nursing in the UAE.
6. A similar study using mixed methods approach to investigate factors related to Emirati graduate nurse recruitment and retention within the local hospitals in the country, is also recommended.

In the other Middle Eastern Regions:-

1. Though several studies on the perception of the nursing profession have been undertaken in other countries in the region, except for the study by Eman et al (2012) in Bahrain, no other country in the published domain has approached this problem using

a mixed methods approach, and even in the case of Bahrain, the role of nursing leaders in this area was not assessed. There is therefore scope for replication of this study in the other nearby countries in the region.

## **5.8 Original Contribution of this Study**

Prior to this research, several studies, both globally (Mooney et al., 2008; Seago, 2006) and in the Middle East (e.g., Al-Kandari & Ajao, 1998; Hassan et al. 2012), have contributed to the developing knowledge of factors surrounding student recruitment and retention in nursing education. There have been similar studies from Bahrain (Eman et al. 2012), from Jordan (Safadi et al., 2011), from Iran (Varaei et al., 2012) and from Oman (Shukri et al., 2012), but none from the UAE. By seeking answers to questions about Emirati student recruitment and retention in nursing education, and the experience of nursing educational leaders in the region, this study contributes to the growing literature in nursing education, to the issues surrounding nursing shortage in the Abu Dhabi Emirate, UAE, the Middle East region, and the international literature.

Investigation in this area has created awareness towards understanding what Emirati student feelings are on nursing as a profession, and some of the factors contributing to the issue of low Emirati recruitment and retention in the nursing programme(s) in the country. This study contributes to the information that national policy makers and stakeholders in the country could use, to customize their campaigning and recruitment strategies, given the current UAE health care climate of rapid evolution to meet high quality standards, and the crisis of only very few Emiratis in the nursing workforce to lead the change.

The study also contributes to the paucity of existing published literature on Emirati student recruitment and retention, and also shows evidence of generational influence on the commonly

held local stereotypes of nursing by the Emirati public, and could be useful in appreciating how this influences students' career choice in their selection of nursing as a career. In a final context, this study also contributes to the field of leadership in nursing education in the UAE, by documenting narrative personal accounts of the relentless efforts of nursing leaders at different political levels within the country, striving for continued change and sustained growth of the nursing profession in the Abu Dhabi Emirate in particular, and the UAE at large.

## **5.9 A Final Word**

As a nurse educator working within the College of Health Sciences in the Abu Dhabi Emirate, personal experiences played a huge role in prompting an investigation into this aspect of nursing education. As a nurse researcher, I have also personally gained a deeper understanding of the myriad factors that interplay and influence the Emirati student standing at the career crossroads of life and choosing a profession in the nursing discipline. And lastly, as a nurse leader currently working in the UAE, findings of the study has implication potential for the transformational capacity building process of the nursing workforce in the UAE, and it was exciting to have played a small part in the dynamic process.



## References

- Abdulla, F. (2005). *Emirati women: Conceptions of Education and Employment*, PhD thesis, The University of Arizona
- AbuAlRub, R., Khalifa, M. & Habbib, M. (2007). Workplace Violence among Iraqi Hospital Nurses. *Journal of Nursing Scholarship*, vol. 39(3), pp. 281 - 288
- Aiken, L. (2008). Economics of nursing. *Policy, Politics and Nursing Practice*, vol. 9, pp. 73-79
- Ajjawi, R & Higgs, J. (2007). Using hermeneutic phenomenology to investigate how experienced practitioners learn to communicate clinical reasoning. *The Qualitative Report*, vol. 12 (4), pp. 612-638
- Al-Awadi, A. (2012). The UAE leadership: a model of constructive engagement with the nation. The Emirates Center for Strategic Studies and Research [online] 17 January. [Accessed 13 March 2012]. Available at: [http://www.ecssr.ac.ae/ECSSR/print/ft.jsp?lang=en&ftId=/FeatureTopic/Abdullah\\_AlAwadh/FeatureTopic\\_1496.xml](http://www.ecssr.ac.ae/ECSSR/print/ft.jsp?lang=en&ftId=/FeatureTopic/Abdullah_AlAwadh/FeatureTopic_1496.xml)
- Al-Kandari, F. & Ajao, E. (1998). Recruitment and Retention of nursing students in Kuwait. *International Journal of Nursing Studies*, vol. 35, pp. 245-251
- Al-Kandari, F. & Lew, I. (2005). Kuwaiti high school students' perception of nursing as a profession: Implications for nursing education and practice. *Journal of Nursing Education*, vol. 44, pp. 533–540.
- Al-Mahmoud, S. (2013). The commitment of Saudi nursing students to nursing as a profession and as a career. *Life Sciences Journal*, 10(3), pp. 591 – 603
- Al-Waqfi, M. & Forstenlechner, E. (2010). Stereotyping of citizens in an expatriate-dominated labour market. *Employee Relations*, vol. 32(4), pp. 364 - 381
- Allen, J. & Aldebron J. (2008). A systematic assessment of strategies to address the nursing faculty shortage, US. *Nursing Outlook*, vol. 56, pp. 286-297
- Allison, E. (2012). The resilient leader, *Educational Leadership*, pp. 79-82
- American Association of Colleges of Nursing. (2004). Survey on vacant faculty positions (unpublished data). Washington, DC: American Association of Colleges of Nursing [online]. [Accessed 10 Aug 2014]. Available at <http://www.aacn.nche.edu/publications/white-papers/faculty-shortages>
- American Association of Colleges of Nursing (AACN). (2005). New data confirms shortage of nursing school faculty hinders efforts to address the nation's nursing shortage. [online]. [Accessed 16 June 2012]. Available at <http://www.aacn.nche.edu/Media/NewsReleases/2005/Enrollments05.html>

American Association of Colleges of Nursing. AACN. (2008). The Essentials of Baccalaureate Education for Professional Nursing Practise [online]. [Accessed 16 June 2012]. Available at <http://www.aacn.nche.edu/education-resources/BaccEssentials08.pdf>

American Association of Colleges of Nursing (2012). *Nursing shortage fact sheet*. United States [online]. [Accessed 10 April 2014]. <http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-shortage>

Andrews, M. M. (2008). Global leadership in transcultural practice, education and research. *Contemporary Nurse*, vol. 28(1-2), pp. 13-16

Anthony, K., Standing, S. & Glick, J. (2005). Leadership and nurse retention: the pivotal role of nurse managers. *Journal of Nursing Administration*, vol. 35(3), pp. 146-155

Arthur, D. (2008). Singapore nursing: poised for growth and leadership in the region. *Nursing and Health Sciences*, vol. 10, pp. 167-168

Arthur, J. (2009). *A study of leadership factors, retention strategies, and retention rates in associate degree nursing programs*. EdD thesis. University of North Carolina

Attewell, A. (2011). Throwing light on Florence Nightingale-of lamps and lanterns. *International History of Nursing Journal*, vol. 7(3), pp. 94-97

Balogh-Robinson, R. (2012). The crisis in leadership in the context of the nursing shortage and the increasing prevalence of nursing unions. *Journal of Healthcare Leadership*, vol. 4, pp. 127 - 139

Barnett, T., Namasivayam, P. & Narudin, A. (2010). A critical review of the nursing shortage in Malaysia. *International Nurse Review*, vol. 57(1), pp. 32-9.

Bass, B. M., & Riggio, R. (2006). *Transformational leadership* (2nd ed.), Mahwah, NJ: Lawrence Erlbaum.

Bass, B. M. & Steidlmeier, P. (1999). Ethics, character and transformational leadership behavior. *Leadership Quarterly, summer*, vol. 10(2), pp. 181-218

Beck, C. (2000). The experience of choosing nursing as a career. *Journal of Nursing Education*, vol. 39 (7), pp. 320–322

Benner, P. (1982). From novice to expert. *American Journal of Nursing*, 82(3), 402-407

Birenbaum-Carmeli, D. (2007). Contextualizing nurse education in Israel: socio-demography, labor market dynamics and professional training. *Contemporary Nurse*, vol. 24, pp. 117- 127.

Bjornsdottir, K. (2007). The construction of a profession: a study of the history of nursing in Iceland. *Nursing Inquiry*, vol. 3(1), pp. 13-22

Bowen, Glenn A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, vol. 9(2), pp. 27-40.

- Bourgeois, K. (2014). *The relationship of nursing career perception congruence and Perceived social support on Hispanic middle school female nursing career choice*. EdD thesis, The City University of New York
- Brodie, D., Andrews, A., Andrews, J., Thomas, G. Wong, J. Rixon, L. (2004). Perceptions of nursing: confirmation, change and the student experience. *International Journal of Nursing Studies*, vol. 31, pp. 721–733
- Brooks, J. A., & Kleine-Kracht, A. E. (1983). *Evolution of a definition of nursing*. Advances in Nursing Science, vol. 5, pp. 51-85.
- Brace, N., Kemp, R. & Snelgar, R. (2000). *SPSS for Psychologists*. New York: Routledge
- Brady-Schwartz, D. (2005). Further evidence on the Magnet Recognition program: implications for nursing leaders. *Journal of Nursing Administration*, vol.35, pp. 397–403
- Bruner, J. (1990). *Acts of Meaning*. Cambridge, MA: Harvard University Press
- Bryman, A. (2006). Integrating Quantitative and Qualitative Research: How is it done? *Qualitative Research*, 6, 97-113.
- Buchan, J. (2002). Global nursing shortages. *British Medical Journal*, pp. 751-2
- Buchan, J. & Calman, L. (2006). The Global Shortage of Registered Nurses: An Overview of Issues and Actions. *International Council of Nurses*, Geneva. [online]. [Accessed 10 April 2014]. <http://www.icn.ch/global/shortage.pdf>
- Buerhaus, P., Donelan, K., Ulrich, B., Kirby, L., Norman, L. & Dittus, R. (2005). Registered nurses perception of nursing. *Nursing Economics*, vol. 23(3), pp. 110-118.
- Buehaus, P., Donelan, K., DesRoches, C., Dittus, R. & Dutwin, D. (2008). Public perceptions of nursing careers: the influence of the media and nursing shortages. *Nursing Economics*, vol. 26(3), pp. 143-150.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Butters, C. (2003). *Associate degree nursing students: A study of retention in the nursing education program*, EdD thesis, University of Massachusetts, Boston
- Cadman C. & Brewer J. (2001). Emotional intelligence: a vital pre- requisite for recruitment in nursing. *Journal of Nursing Management*, vol. 9(6), pp.321–324
- Campinha-Bacote, J. (2006). Cultural competence in nursing curricula: how are we doing 20 years later? *Journal of Nursing Education*, vol. 45(7), pp. 243-244

Candela, L., Dalley, K., & Benzel-Lindsey. (2006). A case for learning-centered curricula. *Journal of Nursing Education*, vol. 45(2), pp. 59-66.

Cockrell, E. (2002). *Pre-nursing students' perceptions of the nursing profession*. Master's Thesis. Louisiana State University

Cohen, L., Duberley, J. & Mallon, M. (2002). Social constructivism in the study of career: accessing the parts that other approaches cannot reach. *Journal of Vocational Behavior*, vol. 64, pp. 407-422

Cooper, P. G. (2008). A call for a paradigm shift in nursing and healthcare leadership. *Nursing Forum*, vol. 43(1), pp. 1-2

Cooper, S. (2012). *Examining student achievement and curriculum in a nursing program at a Midwestern community college*. EdD thesis, Iowa State University.

Cowin, L. & Johnson, M. (2011). Many paths lead to nursing: factors influencing student's perception of nursing. *International Nursing Review*, vol. 5(8), pp. 413-419.

Crabtree, S. (2008). Culture, Gender and the Influence of Social Change amongst Emirati Families in the United Arab Emirates. *Journal of Comparative Family studies*, vol,

Creswell, J. W. (2007, May). *Concerns voiced about mixed methods research*. Paper presented at the International Qualitative Inquiry Congress, University of Illinois, Champaign.

Creswell, J. 1994. *Research design: Qualitative and quantitative approaches*. London: Sage

Creswell, JW. (1998). *Qualitative Inquiry and Research Design Choosing Among Five Traditions*. Thousand Oaks, CA: Sage Publications.

Creswell, J. & Miller, D. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, vol. 39(3), 124-131

Creswell, J. W. (2003). *Research design: qualitative, quantitative, and mixed approaches*. (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*, 3rd ed. Thousand Oaks, CA: SAGE Publications

Creswell, J. W. & Clark, V. L. (2010). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, California: Sage publications:

Creswell, J.W., Klassen, A.C., Clark, V.L. & Smith, K.C. (2010). Office of Behavioral and Social Sciences Research, *Best practices for mixed methods research in the health sciences*. National Institutes of Health. Date retrieved. [http://obssr.od.nih.gov/mixed\\_methods\\_research](http://obssr.od.nih.gov/mixed_methods_research)

- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*, 4th ed. Boston: Pearson.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. London; Thousand Oaks, Calif.: Sage Publications.
- Cuellar, N., Brennan, M., Vito, K. & Siantz, M. (2008). Cultural competence in the undergraduate nursing curriculum. *Journal of Professional Nursing*, vol. 24(3), pp. 143-149
- D'Antonio, P. (2004). Women, nursing, and baccalaureate education in 20th century America. *IMAGE: Journal of Nursing Scholarship*, vol. 36(4), 379-384.
- Dada, R. (2011). 'Teacher leadership in the Arab Gulf: expatriates and Arab educators mentor each other', in C. Gitsaki (eds). *Teaching and Learning in the Arab World*. Peter Lang AG, International Academic Publishers, Bern, pp. 203-228
- Daleure, G. (2011). 'Factors affecting persistence in post-secondary education: a case study of Emirati males', in C. Gitsaki (eds). *Teaching and Learning in the Arab World*. Bern: Peter Lang AG, International Academic Publishers, pp. 203-228
- Daly, J., Speedy, S. & Jackson, D. (2004). *Nursing Leadership*. Sydney: Churchill Livingstone, Elsevier
- Daniels, R. (2004). *Nursing Fundamentals: Caring and Clinical Decision Making* (2<sup>nd</sup> Ed). New York. Delmar Thomson Learning
- Dapremont, J. (2013). A Review of Minority Recruitment and Retention Models Implemented in Undergraduate Nursing Programs. *Journal of Nursing Education and Practice*, vol. 3(1), pp. 112-119.
- De Alcantara, G. (1953). Nursing in Brazil. *American Journal of Nursing*, vol. 53(5), 576-579
- De Veer, A., Fleuren, M., Bekkema, N. & Francke, A. (2011). Successful implementation of new technologies in nursing care: a questionnaire survey of nurse-users. *Medical Informatics and Decision Making*, vol. 11, pp. 67
- Degazon, C., Natan, M., Shaw, H. & Ehrenfeld, M. (2015). Multi-ethnic high school students' perceptions of nursing in the USA and Israel: a descriptive quantitative study. *Nurse Education Today*, vol. 35(1), pp. 57-62
- Denzin, N. & Lincoln, Y. (2012) *The Sage Handbook Of Qualitative Inquiry*, 4th Ed.. Thousand Oaks, CA: Sage
- Diekelmann, N.L., Ironside, P. M. & Gunn, J. (2005). Recalling the curriculum revolution, innovation with research. *Nursing Education Perspectives*, vol. 26 (2), pp. 70-77
- Donley, R. (2005). Challenges for nursing in the 21st century. *Nurse Economy*, vol. 23(6), pp. 312-318

- Elgie, R. (2007). Politics, economics, and nursing shortages: a critical look at United States government policies. *Nurse Economics*, vol. 25(5), pp.285-292
- El-Haddad, M. (2006). Nursing in the United Arab Emirates: an historical background. *Nurse Educator*, vol. 53, pp. 284-289
- El-Sanabary, N. (1993). The education and contribution of women health care professionals in Saudi Arabia: The case of nursing. *Social Science and Medicine*, vol. 37(2), pp. 1331-1343
- Eman, T., Seamus, C. & Edgar, A. (2012). A triangulation study: Bahraini nursing students' perceptions of nursing as a career. *Journal of Nursing Education and Practice*, vol. 2(3), pp. 81-92.
- English, F. (2008). *The Art of Educational Leadership*. Los Angeles: Sage Publications
- Erickson, R., Grove, W. (2007). Why emotions matter: age, agitation, and burnout among registered nurses. *Online Journal of Issues in Nursing*, vol. 13(1), DOI: 10.3912/OJIN.Vol13No01PPT01
- Faqir, F. (1997). 'Engendering democracy and Islam in the Arab world.' *Third World Quarterly* 18(1): 165-174.
- Fatima College of Health Sciences. FCHS. (2009). *Faculty Handbook*. [online]. [Accessed 16 June 2012]. Available at <\\10.13.2.21\\images\\IAT HR Policies Nov09.pdf>
- Fatima College of Health Sciences. FCHS. (2011). *Policies and Procedures Manuel*. [online]. [Accessed 16 June 2013]. Available at <http://www.fchs.ac.ae/En/FCHSDocuments/Pages/default.aspx>
- Fatima College of Health Sciences. FCHS. (2011 - 2015). *Strategic Plan*. [online]. [Accessed 16 June 2013]. Available at <http://www.fchs.ac.ae/En/FCHSDocuments/Pages/default.aspx>
- Fatima College of Health Sciences. FCHS. (2009). *Student Handbook*. [online]. [Accessed 16 June 2013]. Available at <http://www.fchs.ac.ae/En/FCHSDocuments/Pages/default.aspx>
- Feldman, H. & Greenberg, M. (2005). *Educating Leaders for Leadership*. New York: Springer Publishing Company
- Fillman, V. (2015). Career interest, self-efficacy, and perception in undecided and nursing undergraduate students: a quantitative study. *Nurse Education Today*, vol. 35(1), pp. 251-5.
- Fitzgerald, G., Almalki, M., & Clark, M. (2011). The nursing profession in Saudi. Arabia: an overview. *International Nursing Review*, vol. 58(3), pp. 304-311
- Foong, A. (1999). Socio-cultural perspectives on the image of nursing: the Hong Kong dimension. *Journal of Advanced Nursing*, vol. 29(3), pp. 542-548
- Fowler, F. (2004). *Policy studies for Educational Leaders: An Introduction*. New Jersey: Pearson Education, Inc.

Gallant, M. & Pounder, J. (2008). The employment of female nationals in the United Arab Emirates (UAE) -an analysis of opportunities and barriers. *Education, business and society – Contemporary Middle Eastern Issues*, vol. 1(1), pp. 26 – 33!!

Gibbs, G. (2007). *Analyzing Qualitative Data*. SAGE publication: California

Giddens, J. F. & Brady, D. P. (2007). Rescuing nursing education from content saturation: the case for a concept-based curriculum, *Journal of Nursing Education*, vol. 46(2), pp. 65-69

Glesne, C. (1999) *Becoming Qualitative Researchers: An Introduction*, 2nd Edition. New York: Longman

Glesne, C. (2006). *Becoming Qualitative Researchers: An Introduction*: Longman

Godden, J. (2008). Nursing. *Sydney Journal*, vol. 1(3), pp. 1

Goodin, H. (2003). The nursing shortage in the United States of America: an integrative review of literature. *Journal of Advanced Nursing*, vol. 43(4), pp. 335–350.

Grainger, P. & Bolan, C. (2005). Perceptions of nursing as a career choice of students in the baccalaureate nursing program. *Nurse Education Today*, vol. 26, pp. 38-44.

Greene, J. C., Caracelli, V. J., & Graham, W. D. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, vol. 11(3), pp. 255-274.

Greene, M. T. & Puetzer, M. (2002). The value of mentoring: A strategic approach to retention and recruitment. *Journal of Nursing Care Quality*, vol. 17(1), pp. 63-70.

Greene, J. C. (2007). *Mixed methods in social inquiry*. San Francisco: John Wiley & Sons

Grypma, S. (2010). Revisiting nursing history. *Journal of Christian Nursing*, vol. 27(2), pp. 67

Guba, E. G., & Lincoln, Y. S. (2005). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed; pp. 191–215). Thousand Oaks, CA: Sage.

Hammack, B. (2003). *Values of Nursing Administrators Affecting Recruitment and Retention of Ethnic Minority Nursing Students in Texas*, EdD thesis, Baylor University

Hanley, B. & Falk, L. (2006). Policy development and analysis in theory and practice. In, D.J. Mason, M.W. Chafee and J.K. Leavitt (Eds.), *Policy and Politics in Nursing and Health Care*. St. Louis

Hassan, J., Hassan M. (2012). Nursing Image in Qatar: Past, Present and Future. *Middle East Journal of Nursing*, vol. 6(4), pp. 26-28



Health Authority Abu Dhabi. (2010). *Annual Report*. [online]. [Accessed 16 June 2012]. Available at <http://www.haad.ae/HAAD/LinkClick.aspx?fileticket=2yzzVTuw5EU%3D&tabid=1159>

Health Authority Abu Dhabi. (2011). *Health Statistics*. [online]. [Accessed 16 June 2012]. Available at <http://www.haad.ae/HAAD/LinkClick.aspx?fileticket=c-lGoRRszqc%3d&tabid=349>

Health Authority Abu Dhabi. (2012). *Healthcare regulator policy manual*. [online]. [Accessed 16 July 2013]. Available at <https://www.haad.ae/HAAD/LinkClick.aspx?fileticket=VyAME-Ojlm8%3D&tabid=1276>

Hereford, M. (2005). *Exploring the reel image of nursing: how movies, television and stereotypes portray the nursing profession*. EdD thesis, University of Idaho

Horton-Deutsch, S., Young, P. & Nelson, K. (2010). Becoming a nurse faculty leader: Facing challenges through reflecting, persevering and relating in new ways. *Journal of Nursing Management*, vol. 18, pp. 487–493

Horton-Deutsch, S., Pearsall, C., Stiles, K. & Young, P. (2011). Becoming a nursing faculty leader. *Nursing Education Perspectives*, vol. 32(4), pp. 222-231

Huston, C. (2008). Preparing nurse leaders for 2020. *Journal of Nursing Management*, vol. 16, pp. 905-911

International Council of Nurses (2005). *Summary-The Global Shortage of Registered Nurses*, Geneva: International Council of Nurses [online]. [Accessed 16 July 2013]. <http://ners.unair.ac.id/materikuliah/summary.pdf>

International Council of Nurses (2007). *Position Statement- Nurse Retention and Migration*, Geneva: International Council of Nurses. [online]. [Accessed 16 July 2013]. [http://www.icn.ch/images/stories/documents/publications/position\\_statements/C06\\_Nurse\\_Retention\\_Migration.pdf](http://www.icn.ch/images/stories/documents/publications/position_statements/C06_Nurse_Retention_Migration.pdf)

Ironside, P. M. (2003). Trying something new: implementing and evaluating narrative pedagogy using a multi-method approach. *Nursing Education Perspectives*, vol. 24(3), pp. 122 – 128

Jabeen, F. (2010). Attitudes towards Career Women Roles in outlook of Family-Social surroundings: Perspectives from the UAE. *The Business Review*, Cambridge, vol.16(2), pp. 209

Jeffreys, M.R. (2004) *Nursing Student Retention: Understanding the Process and Making a Difference*. Springer, New York.

Jeffreys', M. (2007) Nontraditional students' perceptions of variables influencing retention: a multisite study. *Nurse Education*, vol. 32(4), pp. 161-167



Jeffreys', M. (2014). Jeffreys' Nursing Universal Retention and Success model: Overview and action ideas for optimizing outcomes A-Z. *Nurse Education Today*. Vol. 35(3), pp. 425-31

Johnson, B. & Onwuegbuzie, A. (2004). Mixed methods research: a research paradigm whose time has come. *Educational Researcher*, vol. 33(7), pp. 14-26

Jones, R. A. P. (2007). *Nursing leadership and Management: Theories, Processes and Practice*. Philadelphia: F. A. Davis Company

Jones, C. (2011). Economic, social, and political attitudes in the UAE: a comparison of Emirati and non-Emirati youth in Ras al Khaimah. *Sheikh Saud Bin Saqr Al Qasimi foundation*. Working paper 1[online]. [Accessed 16 July 2013].  
[http://www.alqasimifoundation.com/Files/Pub1-paper\(Calvert.Jones\).pdf](http://www.alqasimifoundation.com/Files/Pub1-paper(Calvert.Jones).pdf)

Kalisch, P. A., & Kalisch, B. J. (1987). *The changing image of the nurse*. Menlo Park, CA: Addison-Wesley.

Kalisch, P. A. & Kalisch, B. J. (2004). *American nursing: A history* (4th Ed.). Philadelphia: Lippincott Williams and Wilkins.

Kirk, D. (2010). The development of higher education in the United Arab Emirates. *The Emirates Occasional Papers*, vol. 74, pp. 1-57

Kozier, B. (2008). *Fundamentals of Nursing*, New York: Prentice Hall

Krippendorff, K. (1980). *Validity in Content Analysis*. In E. Mochmann (Ed.), pp. 69-112

Kronfol, N. & Athique, M. (1986). Nursing education in the United Arab Emirates. *International Journal of Nursing Studies*, vol. 23(1), pp. 1-10

Kvale, S. & Brinkmann, S. (2006). *Interviews: Learning the craft of Qualitative Research Interviewing*: Sage

Laschinger, H.K., Finegan, J. & Wilk, P. (2009). Context matter: The impact of unit leadership and empowerment on nurses' organizational commitment. *Journal of Nursing Management*, vol.17, pp. 636– 646

Latimer, N. (2005). *Becoming a nurse*. Retrieved from ProQuest Dissertations and Theses. (Accession Order No. [800-521-0600])

Law, W. & Arthur, D. (2003). What factors influence Hong Kong school students in their choice of a career in nursing? *International Journal of Nursing Studies*, vol. 40, pp. 23–32

Lincoln, Y. & Guba, E. (1982). Epistemological and methodological bases of naturalistic inquiry. *Education Communication and Technology*, vol. 30(4), pp. 233-252

Lincoln, Y. & Guba, E. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications

- Lincoln, Y. S. & Guba, E. G. (1990). Judging the quality of case study reports. *Qualitative studies in Education*, vol. 3(1), pp. 53-59
- Larocco, S. (2004). *Policies and practices that influence recruitment and retention of men in nursing: a grounded theory study of socializing men into nursing*. PhD thesis, University of Massachusetts Boston
- Lumby, J. (2007). Solving the global nursing workforce shortage problem. *Nursing Aust*, vol. 8(1), pp. 16
- Mackenzie, N. & Knipe, S. (2006). Research dilemmas: paradigms, methods and methodology. *Issues in Educational Research*, vol. 16, pp. 1 - 11
- Macpherson R., Kachelhoffer P. and El Nemr, M. (2007). The radical modernization of school and education system leadership in the United Arab Emirates: towards indigenized and educative leadership, vol. 35(1), pp. 60–77.
- Mahoney, J. (2001). Leadership skills for the 21st century. *Journal of Nursing Management*, vol. 9, pp.269–71.
- Manojlovich, M., Barnsteiner, J., Bolton, B., Disch, J. & Saint, S. (2008). Nursing practice and work environment issues in the 21st century: a leadership challenge. *Nurse Research*, vol. 57(1), pp. S11-S14
- Margaret, H. (2011). The lingering presence of the Nightingale legacy. *Nursing Science Quarterly*, vol. 24(2), pp. 152-162
- Maslow, A. (1968). *Towards a Psychology of Being*. New York
- Matoney, S. (2011). Philosophical approaches to the nursing informatics data-information-knowledge -wisdom framework. *Advances in Nursing Science*, vol. 34(1), pp. 6-18.
- McDonald, L. (2001). Florence Nightingale and the early origins of evidence-based nursing. *Evidence Based Nursing*, vol. 4(3), pp. 68-69
- McDonough, D. (2012). *Promoting Student Retention in a Baccalaureate Nursing Program*, PhD thesis, Walden University
- Mc Cann, T., Eileen, C. & Sai, L. (2010). Bachelor of nursing students' career choices: A three-year longitudinal study. *Nurse Education Today*, vol. 30(1), pp. 31-36
- Mebrouk, J. (2008). Perception of nursing care: views of Saudi Arabian female nurses. *Contemporary Nurse*, vol. 28, pp. 149-161.
- Mertens, D. M. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. Thousand Oaks, CA: Sage.

- Ministry of Health (2011). *Annual Report – Federal Department of Nursing*. UAE: Ministry of Health. Progress [online]. [Accessed 11 March 2015]  
<http://nas.moh.gov.ae/Annual%20Report%202011.pdf>
- Ministry of State for Federal National Council Affairs. (2008). *Women in the UAE: A Portrait of Progress* [online]. [Accessed 11 March 2015]. Available at:  
[http://lib.ohchr.org/HRBodies/UPR/Documents/Session3/AE/UPR\\_UAE\\_ANNEX3\\_E.pdf](http://lib.ohchr.org/HRBodies/UPR/Documents/Session3/AE/UPR_UAE_ANNEX3_E.pdf)
- Mooney, M., Glackenb, M. & O'Brien F. (2008). Choosing nursing as a career: A qualitative study. *Nurse Education Today*, vol. 28, pp. 385–392
- Nelson, C. (2004), *UAE National Women at Work in the Private Sector: Conditions and Constraints*, Centre for Labor Market Research and Information, Tanmia, Dubai [online]. [Accessed 11 March 2015]  
<http://www.zu.ac.ae/infoasis/modules/mod8/business/documents/uaenationalwomenatworkintheprivatesector.pdf>
- Neuman, L. W. (2000) *Social Research Methods: Qualitative & Quantitative Approaches* (4th ed.), London: Allyn & Bacon
- National League for Nursing. (2006). *Excellence in nursing education model*. New York: Author
- Nnadi-Okolo. (1990). *Health Research Design and Methodology*. Boca Raton, FL: CRC Press.
- National League for Nursing. (2001). *Position Statement: Lifelong Learning for nursing faculty* [online]. New York [accessed 2 October 2011]. Available at:  
<http://www.nln.org/aboutnln/index.htm>
- National League of Nursing. (2003). *Position statement: Innovation in Nursing Education: A call to reform* [online]. New York [accessed 2 October 2011]. Available at:  
<http://www.nln.org/aboutnln/index.htm>
- Okasha, M. & Ziady, H. (2001). Joining the nursing profession in Qatar: motives and perceptions. *Eastern Mediterranean Health Journal*, vol. 7(6), pp.1025-1023
- Onwuegbuzie, A. J. & Collins, K. M. T. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, vol. 12, pp. 281-316
- Osgood, C. (1969). On the whys and wherefores of E, P, and A. *Journal of Personality and Social Psychology*, vol. 12 (3), pp. 194-199
- Oulton, J. (2006). The global nursing shortage: an overview of issues and actions. *Policy, Politics and Nursing Practice*, vol. 7, pp. 34S-39S
- Owens, J. K & Patton, J. G. (2003). Take a chance on nursing mentorships: Enhance leadership with this win-win strategy, *Nursing Education Perspective*, vol. 24(4), pp. 198-204

- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods* (3rd Ed.). Thousand Oaks, CA: Sage
- Peters, L. (2010). The impact of remedial education on nursing student success. PhD thesis, *Indiana State University*.
- Polit, D. F & Beck, C. T. (2006). *Essentials of nursing research- methods, appraisal and utilization*, Philadelphia, Lippincott Williams & Wilkins
- Potter, P. & Perry, A. (2013). *Fundamentals of nursing* (13th Ed.). Philadelphia, PA: F. A. Davis Company
- Pounder, J. S. (2006). Transformational classroom leadership: The fourth wave of teacher leadership. *Educational Management Administration & Leadership*, vol. 34, p. 533-545.
- Porter, R. & Porter M. (1991). Career development: our professional responsibility. *Journal of Professional Nursing*, vol. 7(4), pp.208-12.
- Prater, L. & McEwen, M. (2006). Called to nursing: perceptions of student nurses. *Journal of Holistic Nursing*, vol. 24, pp. 63-69.
- Price, S. (2011). *The experience of choosing nursing as a career: narratives from millennial nurses*. PhD Thesis, University of Toronto
- Rathus, S. A. (2003). *Psychology; Principles in practice*: A Harcourt Education Company
- Rees, G. & French, R. (2010). *Leading, Managing and Developing People*, Edition 3<sup>rd</sup>, CIPD, UK.
- Rewers, C. (2007). *The nursing shortage: a case study of nursing students' beliefs and attitudes towards various marketing strategies designed to recruit additional individuals into the nursing profession*. PhD thesis, Capella University
- Rhodes, M., Morris, A. & Lazenby, R. (2011). Nursing at its best: competent and caring. *The Online Journal of Issues in Nursing*, vol. 16(2), pp. 1-8
- Ribelin, P. J. (2003). Retention reflects leadership style. *Nursing Management*, vol. 34(8), pp. 18-20
- Riessman, C. K. (1993). *Narrative analysis*. Sage Publications
- Rogers, C. (1961). *On Becoming a Person*. Houghton Mifflin Company, Boston,
- Rogers, B. (2013). *An Examination of Why Students Choose Nursing as a Career*. Master's thesis. Gardner-Webb University
- Rummel, J. (1970). *Applied Factor Analysis*. Evanston, IL: Northwestern University Press
- Sabio, C. (2014). *Would you have enrolled? Decision factors in baccalaureate-only nursing among associate degree nursing students*, PhD thesis, Capella University

- Safadi, R., Saleh, M., Nassar, O. Amre, H. Froelicher, E. (2011). Nursing students' perceptions of nursing: a descriptive study of four cohorts. *International Nursing Review*, vol. 58, pp. 420 – 427.
- Samier, E. A. (1999). Public administration mentorship: conceptual and pragmatic considerations. *Journal of Educational Administration*, vol. 38(1), pp. 83-101
- Sand-Jecklin, K. & Schaffer, A. (2006). Nursing students' perceptions of their chosen profession. *Nursing Education Perspectives*, vol. 27(3), pp. 130-135.
- Scheckel, M. (2009). 'Nursing education: past, present, future', in Roux, G. & Halstead, J. (eds). *Issues and Trends in Nursing Essential Knowledge for Today and Tomorrow*. United States: Jones and Bartlett publishers. Ch. 2
- Schmidt, S., Vale, D., Mills, E., Shaw, T., Lindell, A., Thomas, C. & Tuchfarber, A. (2003). A collaborative effort between nurse leaders to address the hospital nursing shortage. *Nurse Leadership Forum*, vol. 8(1), pp. 28-33
- Schwandt, T.A. (2000) 'Three epistemological stances for qualitative inquiry: interpretivism, hermeneutics, and social construction' in Denzin, N.K. and Lincoln, Y.S. (editors) *Handbook of qualitative research* (2nd edition), Thousand Oaks: Sage Publications, pp.189-213.
- Schvaneveldt, P., Kerpelman, J. & Schvaneveldt, J. (2005) Generational and Cultural Changes in Family Life in the United Arab Emirates: A Comparison of Mothers and Daughters. *Journal of Comparative Family Studies*, vol. 36(1), pp. 77-91
- Seago, A., Spetz, J., Alvarado, A., Keane, D. & Grumbach, K. (2006). The nursing shortage: is it really about image? *Journal of Health Care Management*, vol. 51(2), pp. 96-108
- SEHA (2012). The changing face of healthcare. [online]. [Accessed 16 June 2014]. Available at [http://www.seha.ae/SEHA/Annual%20Report/AR%202012/pdf/seha\\_ar12\\_en.pdf](http://www.seha.ae/SEHA/Annual%20Report/AR%202012/pdf/seha_ar12_en.pdf)
- Sharon, B. (2003). Registered nursing shortages: public policy, and higher education in the western states. Western Interstate Commission for Higher Education (WICHE). *Policy Insights*, pp. 1-4
- Shukri, R., Bakker, B., El-Damen, M. & Ahmed, S. (2012). Attitudes of students at Sultan Qaboos University towards the nursing profession. *Sultan Qaboos University Medical Journal*. Vol. 13(4), pp. 539-44.
- Sigma Theta Tau International. (2006.). Facts on the nursing shortage in North America. [online]. [Accessed 16 June 2014]. Available at <http://www.nursingsociety.org/Media/Pages/shortage.aspx>.
- Sofarelli, D. & Brown, D. (1998). The need for nursing leadership in uncertain times. *Journal of Nursing Management*, vol. 6(4), pp.201–7

- Sochalski, J. (2002). Nursing shortage redux: turning the corner on an enduring problem. *Health Affairs*, vol. 21(5), pp. 157-164
- Spahr, N. (2012). *Perceptions of recent male nursing graduates regarding gender bias and gender-based educational barriers*. PhD thesis, Walden University
- Spouse, J. (2000). An impossible dream? Images of nursing held by pre-registration students and their effect on sustaining motivation to become nurses. *Journal of Advanced Nursing*, vol. 32, pp. 730–739.
- Springer, P., Clark, C., Strohfus, K. & Belcheir, M. (2012). Using transformational change to improve organizational culture and climate in a school of nursing". *Journal of Nursing Education*, vol. 51(2), pp. 81-88
- Stanley, D. (2010). Multigenerational workforce issues and their implications for leadership in nursing. *Journal of Nursing Management*, vol. 18, pp. 846-852
- Stanley, M. J. C. & Dougherty, J. P. (2010). A paradigm shift in nursing education: a new model. *Nursing Education Perspectives*, vol. 31(6), pp. 378-380
- Stake, R. E., (1995). *The art of case study research*, Thousand Oaks, CA: Sage.
- Starck, P., Warner, A. & Kotarba, J. (1999). 21<sup>st</sup>- Century leadership in nursing education: the need for trifocals. *Journal of Professional Nursing*, vol. 15(5), pp. 265-269
- Stasz, C., Eide, E. & Martorell, F. (2007). Postsecondary education in Qatar: employer demand, student choice, and options for policy. *RAND Corporation*; Pittsburgh,
- Stechmiller, J. (2002). The nursing shortage in acute and critical care settings. *Australian Critical Care*, vol. 10(2), pp. 43–46
- Stott, A. (2004). Issues in the socialization process of the male student nurse: implications for retention in undergraduate nursing courses. *Nurse Education Today*, vol. 24, pp. 91-97
- Strong-Boag, V. (1991). Making a difference: the history of Canada's nurses. *Canadian Bulletin of Medical History*, vol. 8(2), pp. 221 - 238
- Stroup, L. (2013). *Nursing as a career choice by Hispanic / latino college students*, PhD thesis, Colorado State University
- Susan, M., John, D., & Mari, T. (2012). Health information technology and nursing. *American Journal of Nursing*, vol. 112(8), pp. 36-42
- Tan-Kuick, G. (2012). *Factors affecting student's preferences of nursing education in Singapore*. DBA thesis. Southern Cross University
- Takase, M., Maude, P. & Manias, E. (2006). Impact of the perceived public image of nursing on nurses' work behavior. *Journal of Advanced Nursing*, vol. 53(3), pp. 333–343

Taylor, B., Kermode, S. & Roberts, K. (1998). *Research in nursing and health care: evidence for practice*, Australia: Cengage Learning

Teddlie, Ch., & Tashakkori, A. (2009). *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences*. Thousand Oaks, CA: Sage.

Teddlie, C. & Tashakkori, A. (2010). Overview of contemporary issues in mixed methods research. In Tashakkori, A. & Teddlie, C. (Eds.) *Handbook of mixed methods in social and behavioral research (2nd Edition)*. Thousand Oaks, CA: Sage

Tesch, R. (1990). *Qualitative Research: Analysis Types & Software Tools*. Bristol, PA: Press.

Thomas, A. (2007). Focus groups in qualitative research: culturally sensitive methodology for the Arabian Gulf? *International Journal of Research and Method in Education*, vol. 31(1), pp. 77-88

Thorne, S. (2006). Nursing education: key issues for the 21st century. *Nurse Education Today*, vol. 26(8), pp. 614-621

Thyer, G. (2003). Dare to be different: transformational leadership may hold the key to reducing the nursing shortage. *Journal of Nursing Management*, vol. 11(2), pp.73-9

Tong, Q. (2010). Wages Structure in the United Arab Emirates. Institute for Social and Economic Research, *Zayed University*. Working Paper No. 2

Tracy, C. & Nicholl, H. (2006). Mentoring and Networking. *Nursing Management*, vol. 12(10), pp. 28-29

Turale, S., Ito, M. & Nakao, F. (2009). Issues and challenges in nursing and nursing education in Japan. *Nurse Education Practice*, vol. 8(1), pp.1-4.

Turale, S., Shih, J., Klunklin, A., Chontawan, R., Ito, M. & Nakao, F. (2010). Asia-Pacific nursing scholarship development: qualitative exploration of nurse scholars in Taiwan (Republic of China). *Journal of Clinical Nursing*, vol. 19(17), pp. 2601-10

Ulrich, T., Buerhaus, I. & Donelan, K. (2007). Magnet status and registered nurse views of the work environment and nursing as a career. *Journal of Nursing Administration*, vol. 37(5), pp. 212-220

Underwood, M. (2010). UAE needs 7000 more nurses. The National Newspaper. [online]. [Accessed 16 June 2014] Available at <http://www.thenational.ae/news/uae-news/health/uae-needs-7-000-more-nurses>

UAE Ministry of State for Federal National Affairs (2008). [online]. [Accessed 20 March 2014]. Available at: [http://lib.ohchr.org/HRBodies/UPR/Documents/Session3/AE/UPR\\_UAE\\_ANNEX3\\_E.pdf](http://lib.ohchr.org/HRBodies/UPR/Documents/Session3/AE/UPR_UAE_ANNEX3_E.pdf)

UAE Nursing and Midwifery Annual Report (2011). [online]. [Accessed 20 March 2014]. Available at:

<http://www.uaenmc.gov.ae/Data/Files/Council%20Annual%20Report%202011.pdf>

UAE Nursing and Midwifery Annual Report (2012). [online]. [Accessed 20 March 2014]. Available at:

<http://www.uaenmc.gov.ae/Data/Files/Council%20Annual%20Report%202012.pdf>

UAE Nursing and Midwifery Annual Report (2013). [online]. [Accessed 20 March 2014]. Available at:

<http://www.uaenmc.gov.ae/Data/Files/Council%20Annual%20Report%202013.pdf>

UAE Nursing and Midwifery Code of Conduct. [online]. [Accessed 13 March 2012]. Available at: <http://www.uaenmc.gov.ae/Data/Files/Code%20of%20Conduct.pdf>

UAE Nursing and Midwifery Education standards. [online]. [Accessed 13 March 2012]. Available at: <http://www.uaenmc.gov.ae/Data/Files/Education%20Standards.pdf>

UAE Nursing and Midwifery Education strategy. [online]. [Accessed 13 March 2012]. Available at: <http://www.uaenmc.gov.ae/Data/Files/Education%20Strategy.pdf>

UAE Nursing and Midwifery Scope of practice. [online]. [Accessed 13 March 2012]. Available at:

<http://www.uaenmc.gov.ae/Data/Files/Nursing%20and%20Midwifery%20Scope%20of%20Practice%202012.pdf>

UAE Government Strategy (2011-2013). Putting citizens first, an accountable, lean, innovative, and forward-looking government. [online]. [Accessed 13 March 2012]. Available at: <http://www.uaecabinet.ae/English/Documents/PMO%20StrategyDocEngFinV2.pdf>

United Arab Emirates Constitution. (1971). [online]. [Accessed 13 March 2012]. Available at: [www.worldstatesmen.org/uae\\_const.doc](http://www.worldstatesmen.org/uae_const.doc)

Upenieks, V. (2002). The interrelationship of organizational characteristics of Magnet hospitals, nursing leadership, and nursing job satisfaction. *Health Care Management*, vol. 22(2), pp. 83-98

Upenieks, V. (2003). What constitutes effective leadership: Perceptions of magnet and nonmagnet nurse leaders? *Journal of Nursing Administration*, vol. 33(9), pp. 456-467

Varaei, S., Vaismoradi, M., Jasper, M. & Faghihzadeh, S. (2012). Iranian nurses' self-perception-factors influencing nursing image. *Journal of Nursing Management*, vol. 20, pp. 551-560.

Vitello-Cicciu, J.M. (2003). Innovative leadership through emotional intelligence. *Nursing Management*, vol. 34(10), pp. 28-33.



- Vygotsky, L. (1978). Interaction between learning and development. From *Mind and Society*. Cambridge; Harvard University Press
- Wallace, B. (2007). *Nursing student's perception of the public image of nursing*. Dissertation Capella University.
- Waugh, K. (2007). *The perception of transformational leadership and the critical care nursing shortage: a phenomenological study*. EdD thesis. University Of Phoenix
- West-Burnham, J. (2009). *Rethinking Educational Leadership; from improvement to transformation*. Continuum International Publishing Group, New York
- Wilson, V. (2013). *Emotional intelligence and nursing student retention*, EdD thesis, University of Arkansas,
- Wittgenstein, L. (1953) *Philosophical Investigations*. Oxford: Blackwell
- Wollin, J. & Fairweather, C. (2012). Nursing education: a case study of a Bachelor of Science Nursing programme(s) in Abu Dhabi, United Arab Emirates. *Journal of Nursing Management*, vol. 20, pp. 20-27
- World Health Organization. (2006). Working together for health [online]. [Accessed 13 March 2012]. Available at:  
[http://www.google.com/search?hl=en&source=hp&q=world+health+organization+2006+report&gbv=2&oq=world+health+organization+2006+report&aq=f&aqi=g-v1&aql=&gs\\_l=hp.13..0i15.106218656101987413713210111111116091364013-3j2j31810.11sin](http://www.google.com/search?hl=en&source=hp&q=world+health+organization+2006+report&gbv=2&oq=world+health+organization+2006+report&aq=f&aqi=g-v1&aql=&gs_l=hp.13..0i15.106218656101987413713210111111116091364013-3j2j31810.11sin)
- Yateman, S. (2004). *Nursing education: the experience of three non-traditional learners*. Masters thesis, Queen's University, Canada.
- Young, R. & Collin, A. (2003). Introduction: constructivism and social constructionism in the career field. *Journal of Vocational Behavior*, vol. 64, pp. 373-388
- Yun, H., Jie, S. & Anli, J. (2010). Nursing Shortage in China: State, Causes, and Strategy. *Nurse Outlook*, vol. 58, pp. 122-128

## APPENDIX A

### NURSING CAREER QUESTIONNAIRE

Please tick the choices that apply most to you...

- **Section A – Demographic Data**

1. Age

- a. 15 – 24
- b. 25 – 34
- c. 35– 44
- d. 45– 54
- e. 55- 65

2. Sex

- a. Male
- b. Female

3. Level in the program

- a. Pre-entry
- b. Undergraduate
- c. Postgraduate
- d. Those who have left the program

4. What was your major in high school?

- a. Science
- b. Arts
- c. Commerce

5. Where do you live in Abu Dhabi?

- a. Abu Dhabi Island
- b. Suburbs on the mainland (Khalifa City, Shahama, Musaffah etc.)
- c. Al Ain
- d. Western Region

6. Father's education level
  - a. Not educated
  - b. Primary school
  - c. Secondary school
  - d. Undergraduate degree
  - e. Higher degrees
7. Mother's education level
  - a. Not educated
  - b. Primary school
  - c. Secondary school
  - d. Undergraduate degree
  - e. Higher degrees
8. Father's occupation
  - a. Nursing
  - b. Other health care related professions
  - c. Non – health care related professions
9. Mother's occupation
  - a. Nursing
  - b. Other health care related professions
  - c. Non – health care related professions
10. Participant's Monthly Socio-economic status
  - a.  $\leq 10,000$  AED
  - b. 10,000 – 50,000 AED
  - c. 50,000 – 100,000 AED
  - d.  $\geq 100,000$  AED
11. Have you ever seen a nurse in action prior to entering the program
  - a. Yes
  - b. No

12. Any prior employment/ volunteer experiences in healthcare

- a. No experience
- b. Only Volunteered in healthcare
- c. Volunteered and Worked in healthcare
- d. Only worked in health care

13. Any family members in healthcare

- a. No one in the family in healthcare
- b. One or both parents is/are in health care
- c. One or both parents is/are a nurse
- d. Other relatives in healthcare

14. How did you hear about this College of Health Sciences (Tick all that apply)

- a. From the website
- b. From the newspaper
- c. From friends/ relatives/ family
- d. From the college open house day
- e. From the career fairs in the schools
- f. From advertisements in the malls
- g. From taking part in the “Skills for Life” camps
- h. From other students studying in the college
- i. From other nurses
- j. From the local hospitals
- k. I live nearby and know about this place

## • Section B – Porter Nursing Image Scale

By Porter R. and Porter J. (1991)

Directions: Below you will see a series of matched items which may be used to describe a number of people engaged in different professions or careers. In this instance, we are aiming to discover **your perception of the public image of nurses and the nursing profession.** Please place an “X” on the line at the point which best describes **your perception of how the society views nurses and the nursing profession.**

		Very	Quite	Slightly	Neutral	Slightly	Quite	Very	
1	Active								Passive
2	Emotional								Controlled
3	Sympathetic								Insensitive
4	Indifferent								Warm
5	Logical								Illogical
6	Powerful								Weak
7	Influential								Ineffective
8	Professional								Technical
9	Inefficient								Competent
10	Respectful								Discourteous
11	Scientific								Nonscientific
12	Non-responsible								Responsible
13	Intelligent								Dumb
14	Compassionate								Cold
15	Non-Caring								Caring
16	Hasty								Patient
17	Not bold								Bold
18	Cheerful								Gloomy
19	Weak								Strong
20	Non-prepared								Organized
21	Uncertain								Confident
22	Friendly								Cold
23	Neat								Sloppy
24	Follower								Leader
25	Rational								Unreasonable
26	Independant								Dependent
27	Compromising								Rigid
28	Outgoing								Reserved
29	Not logical								Logical
30	Submissive								Dominant

• **Section C :Personal Goal Instrument: Nursing as your Career Choice**

A. Please use the following scale to let us know about your decision to take up nursing as a career

1. I will definitely not pursue a career in nursing
2. I may not pursue a career in nursing
3. I may pursue a career in nursing
4. I will definitely pursue a career in nursing

B. If you do decide to choose nursing, which choice would it be?

1. First choice
2. Second choice
3. Third choice

C. **Who** would you say influenced your choice? (tick all choices that apply)

- |            |                  |
|------------|------------------|
| 1. Father  | 8. Neighbor      |
| 2. Mother  | 9. Friend        |
| 3. Sister  | 10. Husband      |
| 4. Brother | 11. In- laws     |
| 5. Aunt    | 12. Others _____ |
| 6. Uncle   |                  |
| 7. Cousin  |                  |

D. Reasons to choose nursing as a career would include: (in your opinion) (tick all choices that apply)

1. To help others
2. To give care and comfort to the sick
3. Job security
4. To get a high salary
5. To serve community and family
6. To meet new people
7. To work as part of a team
8. To study science

9. For higher career pathways
10. As a stepping stone to other professions
11. To get visas for my family members
12. To get respect from the community

Some other reasons on why I would like to be a nurse are:-

1. \_\_\_\_\_
2. \_\_\_\_\_

E. Reasons to **not** choose nursing as a career would include:(in your opinion) (tick all choices that apply)

1. Parental disapproval
2. Perceived difficult science program
3. Perceived high cost of baccalaureate education
4. Perceived low status occupation
5. Perceived unpleasant tasks
6. Working with patients of opposite gender
7. Working night shifts
8. Working holidays and weekends
9. Perceived poor media portrayal
10. Perceived lack of leadership roles
11. Perceived lack of roles models in the local community

Some other reasons on why I would not like to be a nurse are:-

1. \_\_\_\_\_
2. \_\_\_\_\_

## APPENDIX B



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### INTERVIEW GUIDE FOR SEMI-STRUCTURED INTERVIEWS

**Name of the Study:** An Investigation of Emirati Student Recruitment and Retention in Nursing Education, and the Experience of Nursing Educational Leaders

**Name of the researcher:** *Briliya Devadas, EdD program, British University, Dubai*

#### **Semi-structured Interview guide:**

- How would you describe your experience of being a student in health care, in the UAE?
- Could you provide some examples to illustrate your statement?
- What in your opinion is the perception of society, regarding the nursing profession in Abu Dhabi, UAE?
- What are some of the challenges faced by Emirati nurses practicing the nursing profession in the UAE?
- What are some social/ cultural factors responsible for the perception of nursing in the country?
- Is there anything else that you would like to comment or add upon?

Thank you



## APPENDIX C



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### PARTICIPANT INFORMATION SHEET

An Investigation of Emirati Student Recruitment and Retention in Nursing Education, and the Experience of Nursing Educational Leaders

Dear Student/Sir/Madam,

My name is Briliya Devadas and I am a doctorate student from the British University in Dubai (BUiD) in the United Arab Emirates. As requirement for thesis towards completion of the doctoral degree, I wish to better understand the area of *Emirati recruitment and retention within the nursing program, and the role of nursing leaders, in Abu Dhabi, UAE*. This study has been assessed and approved by the University Ethics Committee.

The purpose of this thesis is to investigate factors surrounding Emirati student recruitment into the local nursing programmes in the country, and the experience of nursing education leaders in dealing with this issue. An extensive review of the literature, both regionally and globally, identifies several factors as influencing this phenomenon, but there has been no study, published until date, from the UAE.

My assumption is based on a review of similar studies from other countries in the region and internationally, and is that societal perception regarding the nursing profession was a factor in the recruitment of students, likely to be a factor in the UAE as well. To investigate my assumption and those arising from the literature, I identified the following three research questions that will help guide the study:

1. What is the profile of the Emirati student within the nursing programme(s) in the Abu Dhabi Emirate?
2. What are the factors influencing Emirati student recruitment and retention within the nursing programme(s)?

3. What is the experience of nursing educational leaders including possible strategies, in dealing with Emirati student recruitment and retention, within the nursing programmes?

Your participation will be protected by:

The following procedures:

- Your name and personal information will be treated confidentially and anonymously,
- The information you provide can be used as anonymised quotations or reported narratives,
- The questionnaire, interview and observation information will be used only for purposes of this study and will be safely stored in my password-protected personal computer,
- Once the study is concluded, all data and materials will be destroyed.

And the following rights:

- You have the right not to answer any questions,
- You have the right to verify or check the questionnaire, interview and the observation notes and transcripts,
- You have the right to ask for feedback on the results,
- You have the right to withdraw from the study at any stage and if you choose to do so, any data collected from you will not be used in this study.

If you agree to participate in this research study, I would kindly request your signature and date the attached consent form.

I will gladly answer any questions regarding this proposed research study. If you need additional clarification, my supervisors can also be contacted at the following addresses:

**Dr. Eugenie Samier**

EdD Coordinator

Faculty of Education

British University in Dubai

Email: [eugenie.samier@buid.ac.ae](mailto:eugenie.samier@buid.ac.ae)

Thank you very much.

Yours faithfully,

Briliya Devadas

EdD program student

British University, Dubai

## APPENDIX D



### PARTICIPANT'S CONSENT FORM

**Name of the Study:** An Investigation of Emirati Student Recruitment and Retention in Nursing Education, and the Experience of Nursing Educational Leaders

**Name of the researcher:** *Briliya Devadas, EdD program, British University, Dubai*

#### Consent to participate in the research:

- ☐ I understand that the aforementioned study involves my participation and contribution to provide accurate information based on my beliefs, knowledge, practices and experience related to teaching. I also understand that:
- I am well-informed about the purpose of this research study.
  - My identity and personal information will be treated confidentially and anonymously.
  - Interview and observation information will be collected, which can be used as anonymised quotations or reported as narratives.
  - I have the right to leave any interview question unanswered.
  - I have the right to check or verify my interview and observation notes and transcriptions.
  - I have the right to request deleting or leaving specific information out for personal or professional reasons.
  - I have the right to ask for feedback on the results.
  - I have the right to withdraw from the study at any time.

- The data collected will be used exclusively for the purposes of this study, will be safely stored and all the interview and observation data materials will be destroyed upon conclusion of the study.

With full understanding of the information provided above, I agree to participate in this research project.

**Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## APPENDIX E

### BUID University Ethics Approval

#### Research Ethics Form (Low Risk Research)

To be completed by the researcher and submitted to the Vice Chancellor

**i. Applicants/Researcher's information:**

Name of Researcher /student	Briliya Devadas
Contact telephone No.	050 - 2675633
Email address	<a href="mailto:dbriliya@gmail.com">dbriliya@gmail.com</a> ; <a href="mailto:110048@student.buid.ac.ae">110048@student.buid.ac.ae</a> ;
Date	06.01.2014

**ii. Summary of Proposed Research:**

<b>BRIEF OUTLINE OF PROJECT</b> (100-250 words; this may be attached separately. You may prefer to use the abstract from the original bid):	The nursing profession is currently facing a global workforce shortage. In the UAE, there are only 339 Emirati nurses, at present (FDON, 2011). The ICN (2007) cite 'poor image of nursing' as one of the reasons for the decrease in nursing numbers entering the profession. Several studies suggest a strong influence of local perception, regarding the image of nursing, on recruitment of individuals into the profession (Grainger and Bolan 2005). The purpose of this thesis is to explore and investigate the extent to which factors related to societal views regarding the nursing profession, influence student attitude towards recruitment and retention within the program, and the role of nursing leaders in influencing local views, in Abu Dhabi, UAE. Specific research sub-questions include: (i) what are the factors influencing student recruitment and retention attitude into the nursing program, in Abu Dhabi, UAE? (ii) What is the role of nursing leaders in influencing local attitudes, in Abu Dhabi, UAE? Social-constructivism is an appropriate framework for the exploring the issue of nursing shortage in the UAE, as it incorporates traditional values as well as professional practices, leading to negotiated meaning, using prior knowledge, past experiences and reflection, in construction of an objective reality, by the nursing student pursuing the profession within the country. The research approach will be mixed methodology, and the research design will include questionnaire, interviews and document analysis.
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MAIN ETHICAL CONSIDERATION(S) OF THE PROJECT (e.g. working with vulnerable adults; children with disabilities; material that could give offence etc...):	There is very low risk in this study since the nursing students, the nursing faculty, members of student services, and the select nursing leaders are only being investigated on their views regarding factors related to recruitment and retention within the nursing program and no identifiers will be recorded and all other identifiers will be removed from transcripts and notes
DURATION OF PROPOSED PROJECT (please provide dates as month/year):	September 2013 to June 2015 (finalization of thesis)
Date you wish to start Data Collection:	February 2014
Date for issue of consent forms:	January 2014

**iii. Declaration by the Researcher:**

I have read the University's Code of Conduct for Research and the information contained herein is, to the best of my knowledge and belief, accurate:

I am satisfied that I have attempted to identify all risks related to the research that may arise in conducting this research and acknowledge my obligations as researcher and the rights of participants. I am satisfied that members of staff (including myself) working on the project have the appropriate qualifications, experience and facilities to conduct the research set out in the attached document and that I, as researcher take full responsibility for the ethical conduct of the research in accordance with the Faculty of Education Ethical Guidelines, and any other condition laid down by the BUiD Ethics Committee. I am fully aware of the timelines and content for participant's information and consent.

Print name: Briliya Devadas


Signature:

Date: 06.01.2014

 (DOS Signature)

- iv. Endorsed by the Faculty's Research Ethics Sub Committee member (following discussion and clarification of any issues or concerns)\*
- v. Approval by the Vice Chancellor or his nominee on behalf of the Research Ethics Sub Committee of the Research Committee.

I confirm that this project fits within the University's Code of Conduct for Research and I approve the proposal on behalf of BUiD's Ethics Committee.

  
19/3/2014





## APPENDIX F

### STUDY COLLEGE IRB ETHICS APPROVAL



**Fatima College of Health Sciences**  
**Institutional Research & Ethics Committee**  
**Institutional Approval Form**

<b>Chief Investigator :</b>	Briliya Devadas
<b>Thesis Title :</b>	Student Recruitment and Retention in Nursing, and the Role of Nursing Leaders: A Social Constructivist Exploration In Abu Dhabi, UAE.
<b>Degree sought :</b>	Doctor of Education
<b>Supervisor :</b>	Dr Eugenie A. Samier
<b>Duration :</b>	One year to June 2015
<b>Responsible Committee:</b> Institutional Research & Ethics Committee	
<b>Responsible Person:</b> Name: Dr Mohammed Hag Ali Capacity Committee Chairperson	
<b>Signature:</b>	
<b>Date :</b>	7 April 2014





## APPENDIX G

### CONFLICT OF INTEREST DECLARATION



#### CONFLICT OF INTEREST DECLARATION

**Name of the Study:** A study to explore and investigate the factors influencing Student Recruitment and Retention in Nursing, and the role of Nursing Leaders: A Social Constructivist Exploration in Abu Dhabi, UAE

**Name of the researcher:** Briliya Devadas, EdD program, British University, Dubai

I declare that none of the study participants, with whom I will be interacting for the purpose of data collection, are currently being taught by me, reports to me or relies on me for their grades. There is no conflict of interest of a financial or non-financial nature (e.g., interpersonal relationships, academic interests, other incentives) that may affect or influence study participants and impede voluntary participation, restrict participant autonomy or prevent informed choices being made.

There is very low risk in this study since the nursing students are only being investigated on their views regarding factors related to recruitment and retention within the nursing program, and all identifiers will be removed from transcripts and notes.

Apart from using the data collected towards completion of my thesis, for the purpose of my Doctoral requirement, I declare that I do not have any professional, personal or financial gain, from conducting the study among Emirati students, studying in Fatima college of Health Sciences, regarding factors influencing student recruitment and retention in Nursing.

Name: BRILIYA DEVADAS

Signature: Briliya S. Date: 1/3/2014