Perceptions of the Community toward the Nursing Profession and its Impact on the Local Nursing Workforce Shortage in Riyadh

A thesis submitted for the degree of Doctor of Philosophy

By

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Author's Declaration

I declare that this thesis is a presentation of my original research work for the PhD program at Anglia Ruskin University and has not been previously submitted, in whole or in part, for any other degree or qualification to any other academic institution. Wherever the contributions of others are involved, this is clearly acknowledged and referenced. Some of the material contained here has been presented in the form of the following:

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List of Abbreviations

BSN–Bachelor of Science in Nursing

CEO–Chief Executive Officer

MoCS–Ministry of Civil Services

MoEP–Ministry of Economy and Planning

MoH–Ministry of Health

MoHE–Ministry of Higher Education

MoL–Ministry of Labour

MoP–Ministry of Planning

KSA–Kingdom of Saudi Arabia

RN–Registered Nurse

SA–Saudi Arabia

KSA–Kingdom of Saudi Arabia

SCFHS–The Saudi Council for Health Specialities

α–Statistical Significance Alpha

ANOVA–Analysis of Variance

SD–Standard Deviation

SPSS–Statistical Package for the Social Sciences

WHO–World Health Organization

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ABSTRACT

Riyadh City in the Kingdom of Saudi Arabia (KSA) has a chronic and severe shortage of Saudi-trained nurses and a high nurse turnover rate. Expatriate nurses comprise most of the nursing workforce in Riyadh. This presents a challenge to safe healthcare delivery. To formulate strategies to promote and encourage secondary school Saudi students to choose nursing as their career path, it is imperative to understand community attitudes and perceptions toward the nursing profession.

The aim of this study is to explore the perception of the Riyadh community toward nursing as a future career choice. In this study, the Riyadh community refers to final year high school students, parents of high school students and Saudi nationals working as nurses in Riyadh.

A sequential exploratory mixed-method study was utilised to accomplish the aim and objectives of the study. The first phase uses qualitative focus groups and was conducted with the general community and nursing groups; it explored the issues and their perceptions of nursing in general. A questionnaire was adopted from Elham Al Naqshbandi. The validity and reliability of the questionnaire was tested, and the items of the questionnaire were assessed for their appropriateness. Finally, the questionnaire was distributed to the target sample in groups in Riyadh City.

The qualitative findings were presented using explanatory themes in two sections. The three themes in section one are as follows: *What is nursing? The contradictions; Social challenges;* and *Influence on the students' decision to choose nursing as a career choice*. The two themes in section two are the following: *Experiences in career choice* and *a view of nursing in the Riyadh community.*

In the quantitative stage, 554 (86.6%) high school students completed the questionnaire in October 2014. The findings indicate that although school students respect the nursing profession, they demonstrated a lack of awareness in the community about nursing. Students' concerns about nursing were around perceived future marital status and the lower financial remuneration compared to other professions.

Riyadh community high school students are potential recruits for local nursing programmes and are a source of understanding about nursing as a career choice. The findings of this study support previous studies that reveal that choosing nursing as a career in Riyadh, KSA is strongly influenced by the societal image of the nursing profession and family attitude toward nursing. One's perception of nursing as a career in Riyadh is influenced by institutional factors in the Saudi context (cultural-cognitive and normative factors). The reasons for not being interested in nursing as a future career include, but are not restricted to, normative factors; social status, financial status and sociocultural factors, such as influence of parents and religion; the issue of mixing with other genders; and long working hours and doing night shifts.

Encouraging Saudi high school students to consider nursing as a future career option in Riyadh city requires fundamental reform and improvement to the societal image and understanding of the nursing profession. Strategies to do require plans to engage family

members, particularly parents, as well as the leaders from high schools, nursing, the community, media and religious leaders to help reshape the image of nursing.

Key Words: Nursing, Saudi Arabia, Workforce, Recruiting, Shortage, Perception

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Chapter 1:

INTRODUCTION

1.1 Introduction

Nurses are the largest workforce and provide a crucial role within healthcare services, practitioner support services and healthcare providers. A shortage of nurses compromises healthcare provision and the health of a population (WHO, 2013), creating serious concerns about a patient's safeguarding (safety) and quality of care issues (WHO, 2013). The nursing shortage has emerged as a global challenge for all societies, irrespective of their economic status. The emerging issues facing policy makers in all primary, secondary and tertiary sectors are principally the same because nursing shortages impact national healthcare strategies. Countries such as the United States, UK, Australia and South American Profession (Sigma Theta Tau International, 2001; WHO, 2010; Peterson, 2014; U.S. Department of Health and Human Services, 2014). In the UK, the current shortage of nurses is having a material impact across the NHS and adult social care sectors. There is a shortage of 15,000 nurses in the UK (christieMediaLibraries, 2015).

Nursing in Riyadh, the capital of the Kingdom of Saudi Arabia (KSA), is provided primarily by expatriate nurses because of the insufficient number of trained nursing practitioners from the local populous (Aboul-Enein, 2002; Al-Omar, 2003; Almutairi, 2015). Expatriate Nurses are foreigners who are recruited from outside the KSA. The Saudi Ministry of Health's strategic decision makers (health ministers supported by consultants) hire non-Saudi nurses to cover this shortage. Although this practice has occurred for 30 years, there is recognition that this situation is not sustainable in the long term, and there is a need to recruit and educate local persons to undertake nursing in Riyadh (Abu-Zinadah, 2006; Almahmoud, 2012).

In 1992, the KSA introduced a strategic human resources planning approach to introduce and implement the plan to create the 'Saudization' of workplaces in the KSA for many areas, especially the healthcare industry (Al-Mahmoud, 2012; Al-Asmari, 2008). The aim of the plan was to replace expatriates working in the KSA with Saudi nationals (Al-Asmari, 2008; Al Mutairi, 2015; Albougami, 2015). Policy makers need to investigate the reasons underpinning the low nursing recruitment levels of the local Saudi population. Significantly, this information will enable the KSA to provide for its growing population and an economic advantage for the country (Ahmad, 2011; Al-Asmari, 2008; AlYami & Watson, 2014). There is a need to review current KSA studies to understand why the recruitment of local nurses is low; however, there are a lack of such studies. Therefore, there is a need to explore the community of Riyadh's perception of nursing as a profession to understand why recruitment of the local population is low (Alomar, 2004; Al-Mahmoud, 2012; Al Mutairi, 2015; Albougami, 2015). This study seeks to investigate the perception of the KSA community toward nursing as a career choice to understand the shortage of local nursing cohorts in Riyadh, KSA.

1.1 Background

Shortfalls in nursing recruitment are an ongoing issue that has been experienced across the world (WHO, 2013). In addition, the International Council of Nurses (ICN) reported that many countries (regardless of their economic status) had fewer student nurses entering the nursing profession worldwide than what are critically required to fill vital vacancies (Hsia, 2002; U.S. Department of Health and Human Services, 2014).

The nursing shortage in the United States has been catapulted from a health disaster to a nationwide security concern (Nelson, 2002; U.S. Department of Health and Human Services, 2014). A study of more than 43,300 registered nurses in 711 hospitals in the United States, United Kingdom, Canada and Germany described nursing as a profession in total crisis (Aiken et al., 2001; Sigma Theta Tau International, 2001; WHO, 2010; Peterson, 2014; U.S. Department of Health and Human Services, 2014)

Similarly, the shortage of trained nurses in the KSA has been graded as a significant problem for numerous years (Mansour, 1992; Al-Mahmoud, 2013; AlYami & Watson, 2014; Almutairi, 2015). The healthcare system in the KSA has a shortage of Saudi national nursing practitioners. Current cohorts of nursing staff are primarily held by international staff, with

most being filled by American, Filipina and Egyptian nurses (Carty, Moss, Al-zayyer, Kowitlawakul, & Arietti, 2007; Aboul-Enein, 2002; Al-Omar, 2004; Almutairi, 2015). Although there are similarities in the reasons behind the shortage of nursing personnel in the United States, UK and KSA, such as low enrollment, there seems to be a supply of nursing staff without the need of a local cohort of recruitment. However, there are also some differences among the various countries, which is why the researcher is conducting this study.

Factors that contribute toward the low level of interest in nursing are said to have been highly influenced by a poor image of nursing based on its lower position compared to that of a doctor, an increasingly lower pay for a higher than average number of work tasks, poor working conditions and long working hours. These contributory factors have created a perceived and documented need to prepare Saudi citizens to be reassured of the career choice of nursing. The assistance of a national, positive action recruitment to enable a wider appreciation and context of nursing's role should be imbedded within the school systems (Carty et al., 2007; Aboul-Enein, 2002; Al-Omar, 2004; Almutairi, 2015).

A nursing shortage creates administrative discomfort for policy makers and raises anxiety about patients' quality of care. For these reasons, Saudi ministerial policy makers have tended to hire non-Saudi nurses to fill the growing gap; however, what has now emerged is a growing concern, in which a national investigation is perhaps needed to further assess and understand the underlying reasons behind the low recruitment of the nursing profession among Saudi students. Consequently, this study aims to investigate the overriding perception of Saudi community-cultural sensitivity toward nursing in Riyadh City, which is the capital of Saudi Arabia. This study will also examine and test the impact of this perception on the growing shortage of local nursing cohorts in the Riyadh and wider community in the KSA.

To create an environment for the optimum healthcare results, a qualified nursing workforce is essential. Nursing shortages are impacting the quality of care and patient satisfaction levels within healthcare services. Levels of competencies, years of experience, communication barriers and the diverse cultural and educational backgrounds of the nurses are crucial when trying to combat this shortage. A study reported that the most important influencing factors

when choosing a healthcare centre are overall quality of medical care, which emerges from both qualified and experienced medical and nursing staff. In addition, access to the latest technology is important (Al-Doghaither, Abdelrhman, Saeed, & Magzoub, 2003; Almalki, FitzGerald, & Clark, 2011; Al Fozan, 2013). Moreover, in such settings, the potential for cultural conflict and stress is much higher than the acceptable norms. The presence of a culturally diverse workforce in healthcare settings is an emerging global situation (Hammoud, White, & Fetters, 2005). To overcome such diversity and identify this problem that exists in the KSA, professional collaboration and respect between healthcare team members are essential and fundamental to the overall perspective on quality of care. Practicing nursing in the Middle East in general is a struggle when trying to stay professional. In keeping with international trends, nursing in the KSA has predominantly been filled with female employees. In the Middle East, women have assumed a dependent role for generations. Moreover, the less attractive status of nursing has a disadvantage when it comes to developing nursing as a profession (Owais, 2005). There are cultural and religious considerations for female employment within the KSA, which partly contributes to the continuous reliance on expatriate healthcare workers in the region, especially in the Gulf Council Countries (Shukri, 2005; Sidumo, Ehlers, & Hattingh, 2010; Al Mutari, 2015; Albougami, 2015). This matches the situation in the KSA, where the number of Saudi national nursing personnel have been affected by the negative and unattractive views of a career nursing. This has necessitated the country heavily relying on an expatriate nursing workforce. Riyadh was chosen specifically because it is where all the policy makers are situated. The capital is the benchmark for best practice and roll out. If it fails in Riyadh, then there is little hope elsewhere in KSA.

For decades, studies such as Jackson and Gary (1991), Mansour (1992) and Al-Mahmoud Mullen, and Spurgeon (2012) have focused on factors that have influenced the overriding recruitment of nursing professionals. This has also been hampered by a larger emphasis on employee factors and the work environment's components. Job performance is a common mode of discovering employee satisfaction is the basis of many studies, especially when teamed with work attitudes, such as job satisfaction, attitudes and behaviours toward employees' duties and commitment to their organisations. These topics have attracted researchers because of the impact on behaviour by work culture and the quality of patient care (Al-Ahmadi, 2009; Almalki et al., 2011; Al Fozan, 2013). However, the effect of psychosocial attitudes toward nursing has not been given the same importance in the

literature, despite the growing interest in issues related to performance in health organisations. A reflection of the increasing interest in quality improvement is essential.

In all industries, human resources is a crucial factor when it comes to offering high-quality services to the community. However, the issue is much more important in the case of a healthcare personnel. To attain the high patient satisfaction and quality of care, then it is crucial for nurses to begin to understand the physical, cultural and religious needs of their patients. Consequently, an understanding of the community's attitudes and perceptions toward the nursing profession is vital for formulating strategies. The capability of promoting a positive image of the profession and encouraging candidates to choose nursing as their career path will require some persuasion.

Because this study explores the perceptions of the Saudi population toward the nursing profession, it is vital that an assessment of the impact of the psychosocial attitudes of the derived perceptions are understood by exploring the cultural context of Saudi Arabia. Some factors are the country's demographics, cultural background, health and provision of health services. The situation of nursing education and the nursing workforce is rarely misunderstood as a lower quartile position of importance. Therefore, the following section presents an overview of the Saudi context to better understand the actual situation within the country.

This introductory chapter provides an overview of the thesis, beginning with an overview of its contents. It also presents a thorough background of the topic and includes an overview of the Saudi situation, including its demographics, cultural background and healthcare provisions. An outline of the aims and methodology of the research is also presented. The chapter concludes with an overview of the contents of the thesis chapters.

1.2 Personal Interest in the Research

My interest in the phenomenon of the shortage of local nursing personnel began from my personal observations of the local Saudi nursing workforce's makeup. As a human resources specialist and, later, a director of human resources in one of the major hospitals in Riyadh and then as the director of human resources in a health studies college in Riyadh, I have noticed

that in the hospitals, most nurses are expatriates, and none are Arabic speakers. The human resources department I worked with faced significant difficulty in recruiting local citizens (Saudis) to be nurses. This was especially difficult for those who had a bachelor's degree in nursing. As a recruiting team member, I became interested in establishing how many Saudis had attained a nursing degree. I, therefore, contacted the appropriate colleges and universities and discovered that there are very few graduates with a nursing degree. In part, this is because of the limited number of enrolments in the programme each year. I experienced a similar issue when trying to recruit high school students for nursing specialities when I was a member of the admission committee at a health studies college. These issues led to my interest in the topic area. I identified that the shortcomings of the nursing shortage had not been previously explored, and this set me on the course for my doctoral studies.

1.3 Significance of the Project

In all disciplines, when an expatriate workforce is dominant, it can impede the quality of services offered because of cultural barriers. However, the issue is much more important in the case of healthcare personnel. Moreover, an understanding of the community's attitudes and perceptions toward the nursing profession is critical in formulating strategies that can promote the image of nursing. Encouraging candidates to choose nursing as their career path is difficult in many cases.

This study is significant because it will be one of the few studies undertaken in KSA, the first in Riyadh, to investigate the attitudes of the Saudi community toward nursing. Furthermore, this study will add to the existing body of knowledge and help improve the image of the nursing profession in Riyadh and other similar Arab countries.

1.4 Methodology

A sequential exploratory mixed-methods study was followed to accomplish the aim of this study.

The first phase utilised qualitative focus groups and was conducted with the general community and, importantly, nursing groups; this helped explore the issues around nursing and the people's perceptions of nursing in general. A questionnaire was adopted from Elham Al Naqshbandi.

The validity and reliability of the questionnaire was tested, and items of the questionnaire were assessed for their appropriateness to the Saudi culture and ethical attitudes of the community. Finally, the questionnaire was distributed to the target sample in Riyadh.

1.5 Aim and Objectives of the Study

1.5.1 Aim

The aim of this study is to explore the perception of the Riyadh community toward nursing as a career choice. In this study, the Riyadh community refers to final year high school students, parents of high school students and Saudi nationals working as nurses in Riyadh.

1.5.2 Research questions

The primary aim of the study is as follows:

- 'What is the Riyadh community's perception of nursing as a future career?'

Secondary questions include the following:

- 'What are high school student's perceptions and their future career intentions toward nursing?'
- 'What are the perceptions of parents of high school students about nursing as a future career choice?'
- 'What are registered nurses' perceptions about the sociocultural impact of choosing nursing as a career?'

1.5.3 Objectives

The following objectives will be addressed in this study:

- Explore the factors influencing Riyadh's community (high school students and the parents of high school students).
- Explore health professionals' (nurses) decisions to choose nursing as a long-term profession.
- Identify the sociocultural impact of choosing nursing as a profession in Riyadh.

- Assess the association between the public image of nursing and the shortage of local nurses in Riyadh.
- Develop clear guidelines and recommendations for policy makers to encourage Riyadh's population to consider nursing as a future profession.

1.6 Overview of the Thesis

This section presents an overview of the content of each chapter of the thesis, as follows:

Chapter 1 of this study is the introductory chapter and provides an overview of the thesis, including a background of the topic and outline of the aims and methodology of the research.

Chapter 2 provides the background of the study by providing a discussion of the sociocultural context of the KSA. This chapter presents a summary about the Saudi healthcare system, nursing history, nursing education and nursing workforce issues. An overview of the nursing profession and its related issues in the KSA is provided.

Chapter 3 is a review of the existing literature on the perception of communities toward the nursing profession and compares the findings of this literature with international benchmarks. The chapter also addresses the gaps in knowledge in the existing literature. The chapter also presents the theoretical framework of this study.

Chapter 4 describes the methodology used in conducting the research. A brief discussion on the mixed-methods approach is given, followed by a description of the sampling techniques, description of surveying instruments and data collection methods.

Chapter 5 presents the findings from the qualitative data collected in the focus group discussions.

Chapter 6 presents the quantitative findings from the survey of Saudi high school students.

Chapter 7 integrates the major findings.

Chapter 8 discusses these results and compares them with the current literature.

Chapter 9 describes the limitations and strengths of the study. It also summarises directions for future research and presents recommendations and a conclusion.

1.7 Summary of the Chapter

This introductory chapter presented the background of the topic and briefly described the Saudi context, before going into more detail about the significance, aim and objectives of the project. The Saudi context is unique in terms of its cultural background and nursing workforce issues, making it more difficult to implement high-quality healthcare services in the KSA. Therefore, there is a need to investigate the impact of these factors on the local nursing shortage. The next chapter presents an overview of the nursing profession and its related issues in the KSA.

Chapter 2:

SAUDI CONTEXT AND NURSING IN SAUDI ARABIA

2.1 Introduction

This chapter explores the background of the study by discussing the sociocultural context of the KSA and the current perspective status. It also presents an overview of the Saudi healthcare system. This will be followed by a detailed synopsis of the development of the nursing profession in the KSA. The chapter will also be accompanied by a description of the development of nursing as a profession, which will be accomplished by reviewing the historic nature of nursing in the KSA; this will describe the nursing education processes, d workforce issues related to nursing and human resources statistics related to the healthcare setting and nursing workforce.

2.2 Saudi Demographics

Saudi Arabia is one of the largest countries in the Middle Eastern region and has one of the largest oil reserves in the world (SAMA, 2013; Albogami, 2015). The KSA is a young country that was unified under the leadership of the late King Abdulaziz Al Saud, the founder of Saudi Arabia, in 1932 (Long, 2005; Albogami, 2015). Islam is the only religion in Saudi Arabia, and Saudis citizens are all Muslims. Saudi Arabia is in the far eastern part of southwestern Asia, occupying around 2,218,000 square kilometres. The country is a member of the Arabian Gulf Cooperation Council. The KSA is divided into 13 administrative regions, with Riyadh being the capital and the largest region (see Figure 1).

Figure 2-1: Geographical location of Saudi Arabia and its 13 regions

The discovery of crude oil in the KSA in 1938 put the country on a path of rapid social and economic development (Long, 2005; Almutairi, 2015), which impacted the citizens' health and lifestyles (Al-Yousuf, Akerele, & Al-Mazrou, 2002; Almutairi, 2015; Albogami, 2015). According to the KSA's Central Department of Statistics and Information (CDSI), the latest population count in 2016 was approximately 31 million, with over 12 million who classed as migrant workers. The population is expected to reach 47 million by the year 2020 (Kingdom's Central Department of Statistics and Information [CDSI], 2016).

The median age of population in the KSA is 26 years, with an annual population growth rate of 2.11% (SAMA, 2013). Life expectancy increased from 52 years in 1970 to 73 and 74 years in 2009 and 2011, respectively. Improvements in both healthcare and social services (SAMA, 2013) have contributed to higher life expectancies. Furthermore, because of a mandatory vaccination programme that took place in the 1980s, the mortality rate of children under 5 years of age dropped dramatically, from 250 per 1,000 live births in 1960 to 21 per 1,000 in 2009 (UNICEF, 2009). The next subsection describes the Saudi culture and healthcare system in the KSA.

2.3 Saudi Culture

The Saudi culture is shaped and influenced largely by Islamic law, which has formed the overall Saudi perspective. In such a context, it is often difficult to distinguish between cultural norms and religious perspectives because participants' views sometimes reflect these interchangeable links, perhaps subconsciously, between the two; thus, many assume that the two perceptions are one in the same.

Riyadh was chosen as the key focus area and study site for several reasons. Riyadh is the largest city of Saudi Arabia and its capital. The Riyadh Region is the land of many conservative traditional trips. Riyadh's citizens do not tend to mix with outsiders or newcomers like those in other cities in SA, such as the western region, which is a destination for pilgrimages, or the eastern region with its international workers who work for the oil companies.

Some families in Saudi Arabia, especially tribal families, have traditionally portrayed a masculine social life style; males are perceived to have more power and authority than females, and there is respect for age and superiority (Long, 2003; Gazzaz, 2009; Danish & Smith, 2012). The traditional extended family, or tribe, forms the basic component of Saudi society, and within it, there are dominant gender roles. Therefore, men are often the breadwinners, whereas women are usually housewives and mothers. Although, this style is changing, and women are now more educated and work in high positions in some areas. Traditionally, members of larger families live in a close-knit community, yet they don't it is not socialising on a regular basis. Each family member shares a sense of collective responsibility for the welfare of their family and tribe. Long (2003) argued that in such a society, family comes as the first priority, not the government, as might be experienced in the west. The members of these families seek help and support from the family first if they have difficulties, rather than relying on assistance from the government.

The family is the most important component of Saudi society. Family means identity and status. Family members have the same identity, and each member is expected to believe in and accept the ideals of honour, pride and dignity as a sign of respect for the family's rules. In Saudi culture, families and tribes sometimes associate and cooperate with other families who have the same lifestyles or cultural norms and roles; this is referred to as a caste system or influence-based status.

Individuals from tribal families who move to urban cities try to keep in contact with their tribe's members (Long, 2005; Gazzaz, 2009). This may limit their personal interactions and communications with other tribal families within the urban community because they do not share the same principles and beliefs (Frisbie, 1995; Gazzaz, 2009). This means that their personal cultural values and social patterns align with their family's values. With the urban life style having no real impact or influence on a changing environment, this ensures cultural identity and consistent affiliation to these people's inherited norms. Most tribal families are large; marriage occurs at an early age, especially for females; men may have more than one wife. Marriage mostly occurs within the same tribe; a woman's role is mostly to stay at home as a wife. However, the new generation is trying to merge with the new urban communities and has slowly severed contact with their original families and their values. However, to date, the concept of tribalism in urban cities is still observed thoroughly (Long, 2005; Gazzaz, 2009; Almutairi, 2015).

People from the western and eastern regions may have slight differences compared to the other regions in Saudi Arabia. Riyadh's citizens do not get involved with outsiders or newcomers like those in the other main cities in KSA, such as the western region, which is a destination for pilgrims (Hajj pilgrims from across the world), or the eastern region, where international workers come to work for the oil industries. The growing economy and the country's political openness has introduced the KSA to a large international workforce with diverse social and cultural backgrounds. Such economic growth and an open-door approach toward recruiting non-professional labour, were all needed to carry fill the unskilled manual labour positions within domestic industries, including maids and drivers. These recruits came mainly from the Indian subcontinent, but also from other Arab countries. Recruiting these unskilled personnel is perceived as a sign of richness in the Saudi society. Nursing in the main a female role traditionally advocated by Florence Nightingale, however, due to the non-mix diversity/gender issue, culture has dictated a none gender-mix in KSA. Therefore, diversity is not seen as a bad thing because larger numbers of doctors are females, yet the personal care aspect becomes an issue for female nurses when treating male patients. Diversity is not a simple difference of the makeup of individuals; rather, it is more specific in

these terms an issue of willingness/opportunities/ and social acceptance of traditions and family concept of native KSA individuals.

2.4 Health and Healthcare in Saudi Arabia

One of the major goals for rapid development in the KSA is to provide accessible and a higher-than-normal standard of healthcare services for both Saudi citizens (population) and expatriates working within the public sector. Healthcare financing in the KSA is provided mainly from the government (save for non-citizens, who are paid for by employers), and this money largely comes from oil revenues (Al-Yousuf et al., 2002; Ministry of Economy and Planning MOEP2013a; MOH, 2012). It has been reported that 6% of the government's expenditures are allocated to healthcare services (UNICEF, 2009).

Hospitals and primary healthcare centres in Saudi Arabia are operated by governmental agencies and private organisations. The Ministry of Health is the governmental agency responsible for providing the KSA's public healthcare. It provides primary and tertiary healthcare services through a network of primary healthcare centres throughout the KSA and includes a referral system to acute and advanced healthcare services (Aldossary, While, & Barriball, 2008; Almutairi, 2015). Other governmental agencies, such as the Ministry of Defence, the Ministry of Interior, the Saudi Arabian National Guard and the University Teaching Hospitals, provide healthcare services directly to their employees and their dependents, as well as to the general population within their individual conurbation (Aldossary et al., 2008; MOH, 2015).

Given the market's needs, healthcare in the private sector has significantly increased in the KSA and is coordinated within the referral network that includes hospitals, clinics, dispensaries and pharmacies (Al-Yousuf et al., 2002; Almalki et al., 2011). The Saudi government encourages the establishment of new health institutions by providing funding to the private sector (Abu-Zinadah, 2004; Gazzaz, 2009; Almutairi, 2015) As a result, many private healthcare institutions have been established and have spread over several regions of Saudi Arabia, with the first private healthcare institute opening in 1999 (Al Thagafi, 2006; Gazzaz, 2009; Almutairi, 2015). The Ministry of Health provides 60% of the healthcare services, with the remaining governmental agencies and the private sector together providing the remaining 40% (Abu Zinadah, 2006; Almutairi, 2015). The next section describes the cultural background regarding health in the KSA.

2.5 Cultural Background of Healthcare in Saudi Arabia

Arabic is the native language in the KSA, and Islam is the only religion for the local citizens. This implies submission, surrender and conformity to Allah (Almighty God), with the Qur'an as the holy book for Muslims. The prophet Muhammad – peace be upon him – (PBUH) exclaimed that Islam is based on five pillars: to testify that there is (1) no god but Allah; that Muhammad is Allah's messenger (2) to perform prayers; (3) to pay obligatory charity; (4) to fast during Ramadan; and (5) to perform a pilgrimage to Mecca if financially and physically able (Alkhuli, 2000). While these aspects are mandatory in Islam, Sunnah represents the prophetic tradition and the way Prophet Muhammad (PBUH) lived his life, and it is followed voluntarily by Muslims. Therefore, the Qur'an and Sunnah are the leading codes for the Islamic religion and form mandatory norms.

Because a fundamental principle in Islam is loyalty, Muslims believe in predestination and attribute the occurrence of disease to the will of Allah. The Prophet Mohammad said, 'No fatigue, no disease, nor sorrow, nor sadness, nor hurt, nor distress befalls a Muslim, even if it were the prick he receives from a thorn, but Allah expiates some of his sins for that' (Khan, 1994, p. 934). Rassool (2000) explained the perceptions of Muslim patients regarding illness, suffering and death as a part of life and tests from Allah that is to be addressed with patience, meditation and prayers. Al-Shahri (2002) reported that Muslims do not perceive illness as a form of punishment, but rather as a way of atonement for one's sins. Nonetheless, Muslims are encouraged to seek medical care during their illness and to utilise the available preventive services, such as childhood immunisation services, despite their belief in predestination. To ignore and allow suffering is equally against their beliefs; therefore, proactive treatment is seen as a progress of health welfare and their fulfilment of starting a fresh.

Islam promotes health by encouraging a healthy lifestyle and habits, such as moderate eating, regular exercise, no alcohol, no tobacco and no drugs and encouraging personal hygiene and breastfeeding (Rassool, 2000). However, some unhealthy lifestyle behaviours are common among Saudis. These include malnutrition (unhealthy eating habits) that result in obesity, especially among females, smoking and a lack of physical exercise among both genders (Al-Nuaim, 1997). Smoking among females is culturally unacceptable and is rejected in most

regions in the KSA (Al-Bedah, 1989). Healthcare professionals need to practise caution when asking female patients about their medical histories because such questioning might be viewed as insulting; for example, when asking about sexual history, a female professional is better suited.

Furthermore, alcohol and drugs are prohibited by Islamic law (Shari'a) and are a taboo issue if used or if someone is seen to be under the influence. Additionally, all sexual relationships outside of marriage are illegal; those discovered to have been involved in such relationships can be socially rejected and stigmatised because of the lost honour, and this stigma may be attached to their families for generations; in some regions, fornication can carry severe punishments. Therefore, enquiries about alcohol consumption and drugs or history of engagement in extramarital sexual activities could be very offensive to the vast majority of Saudis. If the healthcare team member who takes the history does not strongly suspect such behaviours, it is highly recommended to avoid such questions if at all possible (Al-Shahri, 2002).

2.6 A Historical Background

Even though Florence Nightingale is often recognised as the founder of modern-day nursing, historically, nursing services have grown out of caring for sick people. There is a short supply of documentation about nursing during the pre-Islamic period in the Arabian Peninsula. However, it is believed that nursing and medicine were practised by the same person, and it was a dual profession. During the early Islamic era, nursing became more recognisable when a group of women served in the Muslim armies to care for injured soldiers (Aldossary et al., 2008; Tumulty, 2001). These women were known as 'Al Asiyat' or 'Al Awasi', which is derived from the Arabic word 'Asiyah'. This term came from the Arabic verb 'aasa', which means caring for and emotionally supporting injured people (Al Thagafi, 2006; Tumulty, 2001). The term was changed to 'momarredhah' for a female nurse and 'momarredh' for a male nurse, which comes from the Arabic verb 'marradha', meaning to care for a sick individual. Rufaidah Al-Aslamiyah is known as the first Muslim nurse and the initiator of nursing in the Islamic era (Jan, 1996).

Rufaidah is an Arabic noun derived from the verb 'rafada', which means helping others. Rufaidah learned her nursing skills from her father, who was recognised as skilled healer (Kasule, 1998). In addition to serving during wars, Rufaidah practiced nursing in peace time

by treating ill patients and teaching other female nurses (Kasule, 1998). A few Muslim worked as nurses with Rufaidah and continued to practice nursing after she passed away (Al Thagafi, 2006).

The practice and education of nursing in other parts of the Islamic world has been described in the literature (Hamarneh, 2004). Miller-Rosser, Chapman, and Francis (2006) claimed that physicians during that period were more practical in the provision of healthcare and delivered care that was more nursing oriented. Hamarneh (2004) supported this theme, reporting that several famous physicians in the Islamic world between 632 and the 1950s were interested in nursing and nursing education.

For many years nurses in the KSA had no professional representation in the Ministry of Health, but in 1987, the Central Nursing Committee (CNC) was established; it was composed of physicians and nurses, with the head of the committee being a physician. The committee included both Saudi and non-Saudi members. The primary aim of that committee was to improve the quality of nursing care in the KSA by evaluating nursing practices and the level of collaboration and communication with nurses to understand their needs and perceptions regarding the overall importance of their role (Tumulty, 2001).

2.7 Nursing Education

The rapid expansion of healthcare services in the Gulf Region has brought to the surface many issues related to healthcare human resources development, particularly in the field of nursing education. The shortage of nursing personnel is a primary barrier to the effective provision of healthcare services (Kronfol & Affara, 2003; Almalki et al., 2011; Albulaitih, 2015). The Saudi government stressed the importance of both education and training in the healthcare industry by investing 14% of its total expenditure on education (UNICEF, 2009). In 1958, the Ministry of Health in collaboration with WHO initiated the first Health Institute Program in Riyadh. Fifteen Saudi male students enrolled in a program for a year.

During the mid-1980s, a professional nursing education program was initiated between the Kingdom of Saudi Arabia and the United States (Carty et al., 2007). Based on a perceived and documented need, a collaborative education and research program was established with

George Mason University in Fairfax, Virginia to begin building a community of new scholars to assist in the advancement of professional nursing in the KSA.

Later, two health institute programs were set up, one in Riyadh and one in Jeddah, the second largest city in the KSA. These two institutions were introduced to enrol Saudi nationals (Tumulty, 2001; AlMadani, 2015), and those who graduated were recruited as nurse aides (Miller-Rosser et al., 2006). Within a brief period, more institutes were initiated, and the 1-year program was extended to 3 years (Miller-Rosser et al., 2006; AlMadani, 2015).

In 1990, the number of healthcare institutes increased to a total of 17 for females and 16 for males. The total number of male and female graduates in 1990 increased to 915 and 476, respectively (El-Sanabary, 1993; Mufti, 2000; Almutairi, 2015). In 1992, under the umbrella of the Ministry of Health, a junior college was established to promote training competencies of Saudi nurses. This offered graduates a diploma in nursing and classified them as technical nurses (Abu Zinadah, 2006).

Furthermore, the Ministry of Higher Education introduced the first Bachelor of Science in Nursing (BSN) program in 1976 and introduced a Master of Science in Nursing in 1987 at King Saud University in Riyadh. Later, BSN programs were initiated in 1987 at other universities in the large cities in the country (Tumulty, 2001). Nurses with a BSN were classified as professional nurses, and those obtaining a master's degree were classified as nursing specialists. In addition, a PhD scholarship programme was established in 1996 to enable Saudi nurses to reach higher levels of education and leadership within nursing (Abu Zinadah, 2006; AlYami & Watson, 2014; Almutairi, 2015).

Nursing programs and year of established and number of educational programs currently active in the KSA.

Program's level	Bachelor of Science in Nursing (BSN)	Master of Science in Nursing	PhD scholarship programme
Year established	1976	1987	1996

Number of nursing educational programs currently active in the KSA	25	5	2

Recently, some governmental agencies have begun their own nursing education programmes to train high school students. For example, the Medical Services Division of the Ministry of Defence and Aviation runs a nursing education program that gives students a diploma in nursing (Abededdin, 2007), while the private sector delivers programmes at both diploma and BSN levels (Abu Zinadah, 2006; Almutairi, 2015).

For several years, the MOH continued to operate two levels of nursing education: the 'Post-Intermediate Nursing Institute' (3-year course with a diploma) and the 'Post-High School Nursing College' (bachelor's degree in nursing) (Carty et al., 2007, Abu Zinadah, 2006; Almutairi, 2015). In 2010, the MOH recommended that a baccalaureate of nursing should be the minimum degree required for an entry-level nursing position (Jradi et al., 2012; AlMadani, 2015). However, the MOH, in its attempt to improve the nursing profession, has developed an upgraded bridging programme for diploma students (Miller-Rosser et al., 2006; AlMadani, 2015).

Approximately 23,000 Saudi nursing graduates were identified as candidates for the bridging programme (Jradi et al., 2012). Furthermore, the MOH has upgraded its health institutes to the 'Colleges of Health Sciences', and by 2008, all educational organisations under the MOH were transferred to the Ministry of Health Education (MOHE) to improve the quality of nursing education (Almalki et al., 2011; AlMadani, 2015). Despite these efforts to improve nursing education in Saudi Arabia, nursing still lacks a common consensus of importance within the wider context of social and healthcare domain services.

Governmental support has been dramatically increasing in both the number of nursing institutions and nursing graduates (both genders); but the number nurses needed to achieve

the goals remains problematic. The number of graduates does not meet the KSA's needs, and this is evident by the presence of a large expatriate nursing workforce.

Abu Zinadeh (2011) has stated there is a need to establish a dependent nursing council in the KSA to act as a regulatory body for the nursing profession. The council would take sole responsibility of ensuring planning nursing and human development and represent the KSA in forums, councils and international platforms both domestically and internationally.

2.8 Nursing Workforce in the KSA

In most countries, nursing constitutes the largest portion of healthcare personnel. They deliver the highest percentage of patient care, both preventative and curative (Oulton, 2006). Saudi Arabia is faced with a chronic and severe shortage of Saudi nationals going into nursing and high rates of personnel turnover. Consequently, expatriate nursing forms a large proportion of the nursing workforce in Saudi healthcare facilities, with Saudis comprising only 29.1% of the total nursing workforce (Saudi Council for Health Specialities, 2015). Although the proportion of Saudi nurses is very low in general, this rate is much lower in the private healthcare sector, where local nurses comprise only 4.1% of the total number (Almalki et al., 2011).

The majority of patients are Saudi nationals; therefore, Arabic is their first language. However, English is the language of communication, both written and verbal, among expatriates serving in healthcare. This situation impedes the communication process between patients and healthcare team members, which in turn affects the whole medical process. Furthermore, English is not the first language of most expatriate nurses in the country (Simpson, Butler, Al Somali, & Courtney, 2006). The majority of expatriate nurses working in the Ministry of Health are Indian and Filipino (Tumulty, 2001), while others are recruited from North America, the United Kingdom, Australia, South Africa, Malaysia and the Middle East (Aboul Enein, 2002).

The statistics show that the number of Saudi nurses has increased from 9% to 22% of the total nursing workforce in 1996. Despite increasing interest in considering nursing as a future career, it has been estimated that it would take another 25 years to train enough Saudi nurses to have it reach 29% of the total nursing workforce (Abu Zinadah, 2006; Albulaitih, 2015; Saudi Council for Health Specialities, 2015). The Saudi Ministry of Health implied that the shortage of nurses in the KSA is increasing and is expected to reach 48,000 nurses by 2020

(MOH Statistic, 2013) The employment of foreign nurses is also a growing phenomenon in other Gulf countries. In Qatar, the ratio is 91.75% foreign nurses to 8.25% locals. In other countries, there are few locals who undertake this important role (Palestine, effectively at 0.1%; Egypt, less than 1%; Jordan, 6%; and Bahrain, 40%; Shukri, 2005). Overall, the nursing profession in general is unable to attract an adequate number of Saudi students from both genders. This is because of a complex array of cultural, social and religious factors that influence the overall perspectives and perceptions regarding providing healthcare services.

2.9 Human Resources in the Saudi Healthcare System

Physical and human resources for healthcare in Saudi Arabia have increased with the population growth rate. In 2005, there were 331 hospitals and 2,838 primary healthcare centres (Abu Zinadah, 2006), which were staffed by 19 physicians, 2.1 dentists, 3.4 pharmacists and 35 nursing and midwifery personnel per 10,000 people, a twofold increase. The World Health Organization (2011) reported that there are only 21 nurses for every 10,000 people in the KSA (WHO, 2013).

Surprisingly, according to the statistics published by the Ministry of Health in 2011, the above-mentioned ratios of physicians, dentists, nurses and pharmacists have declined (MOH, 2011), thus compromising overall view points and the array of a lack of understanding amongst the local populous who are less forwards for engaging such careers.

Within the nursing workforce of the KSA, the total number of nursing personnel is 77,946. Moreover, the number of Saudi nursing personnel is 40,437 (51.9%). The ratio of nurses is 27 47 nurses per 10,000 (one nurse for 364 people). Furthermore, about 18% of the pharmacists and 87% of allied health personnel in the KSA are locals (MOH, 2012).

In 2002 in Riyadh, the total number of nursing personnel was 5,236 of which 86% were non-Saudi nationals (Al-Ahmadi, 2002). This number has recently increased to 16,016 nurses, of which 9,564 (59.7%) are non-Saudis. Of these expatriate nurses, 8,784 are females and 780 are male (Saudi Ministry of Health, 2011). However, this increase in the total nursing number dropped to 29% in 2015, indicating the challenge and the growth of demands the Saudi government is now facing.

According to the latest statistics published by the Saudi Council for Health Specialities in KSA in 2014, the total number of physicians was 128,000 (20% Saudis). Therefore, the ratio of physicians to the population is 12.8/10,000. In nursing, the total number of nurses was 245,000 (29% Saudis). The ratio of nurses is nurses 24.5/10,000 people. Furthermore, there are about 46,000 pharmacists (18% Saudis of the total).

Table 2-1: The total number of healthcare practitioners in KSA in 2015

Speciality	Number of Saudis	Number of expatriates	Total number	% of Saudis	% of Expatriates
Physicians	7,047	32,898	128,828	18%	82%
Nursing	72,485	173,500	245,985	29%	71%
Pharmacists	25,860	102,968	39,945	20%	80%

All nurses (Saudi and expatriates) must register with the Saudi Council for Health Specialities to practice nursing. However, the 'nurse title' includes all those who work in nursing, regardless of their qualifications. Most of the local nurses in the KSA have a diploma in nursing, and a smaller percentage of Saudi nurses have a bachelor's degree. The annual number of (Saudi) students in nursing is insufficient to meet the increasing healthcare demands (Gazzaz, 2009; AlMadani, 2015). Despite the increase in the number of local nurses in the KSA, expatriate nurses still dominate the nursing workforce in the country, especially among female nurses.

2.10 Government Plan: Saudizations

The government of Saudi Arabia understands the risk of depending on expatriates for strategic and crucial roles, especially within healthcare services. Therefore, a royal decree from the monarchy issued the Saudization plan in 1992. Saudization means replacing expatriate professionals within the workforce (Al-Mahmoud, 2012; Albulitauh, 2015). The Saudi government is encouraging the establishment of new healthcare institutions by funding the private sector and accrediting new institutions as a part of the planning process to introduce and implement the Saudization plan (Abu-Zinadah, 2004; Albogami, 2015). However, despite governmental support and the increase in the number of both nursing

institutions and nursing graduates of both genders, the required number of Saudi nationals taking nursing remains problematic. The number of local national citizen graduates does not meet the market needs, evidenced by the presence of a large number expatriate nursing personnel.

2.11 Summary of the Chapter

This chapter has provided an overview of the social, cultural and economic contexts through which the shortage of Saudi nursing personnel may be understood. A description of the Saudi healthcare system was given, along with the development of the nursing profession in the KSA. A description of the development of nursing as career was provided; this was examined by reviewing the history of nursing in the KSA, describing the nursing education process and discussing some of the workforce issues related to nursing.

Chapter 3:

LITERATURE REVIEW

3.1 Introduction

This chapter examines the existing literature that is relevant to perceptions toward nursing as a career choice, with a focus on Arab countries in particular. Using an integrative review approach, a search was conducted on this topic to identify literature pertaining to the Saudi culture and the conservative community of Riyadh. Gender was an important factor to consider because of the Saudi societal and community perceptions toward the nursing profession; looking at gender helped identify why the people of the KSA are less interested in nursing as professional career choice. Furthermore, the review sought to explore what literature exists by way establishing the gaps within the literature. This chapter will follow a theoretical framework, a section with more literature reviews that encompasses the wider international perspective.

3.2 Methods of Literature Search

The more common types of literature review are integrative reviews, systematic reviews, meta-analyses and qualitative reviews. The researcher has followed an integrative review in this research. An integrative review is a specific review method that summarises past empirical or theoretical literature to provide a more comprehensive understanding of a phenomenon (Broom, 1993, Robin & Kathleen, 2005, pp. 546–547). Integrative reviews are the broadest type of research review methods, allowing for the simultaneous inclusion of experimental and non-experimental research to more fully understand a phenomenon of concern.

3.3 Literature Search

The literature was selected from a wide range of academic journals and books, both printed format and in electronic databases. To identify relevant studies, electronic databases such as Medline, Google Scholar, PubMed and CINAHL were integrated and searched with key

words relevant to the main research problem. Several techniques were used to locate relevant literature. First, the researcher conducted an extensive search of the published literature on the above-mentioned databases using the following search terms and relevant truncations (perception OR image*, Saudi Arabia* OR KSA OR Gulf country/ies* OR Arab country/ies*, nurse*; Career choice* OR Career*). Second, the researcher searched the bibliographies of all relevant papers for additional references; this bibliographic search was supplemented by citation searching and manually searching an extensive collection of relevant reprints. This process was performed iteratively until no new potentially relevant references could be identified. Saturation was felt to have been reached. Third, the data from national Saudi reports were included in the review, in addition to information from local Saudi newspapers and web pages. Finally, non-published literature (grey literature), such as in doctoral theses, reports and conference papers, were searched for more detailed information. The search was conducted for papers published between 1970 and 2016, and the search was repeated regularly to find any new papers. The English language was used for this academic search.

The preliminary search focused on the KSA; although, this only identified four papers. Two papers (Al-Omar 2004; Al-Mahmoud 2013) focused on the knowledge, attitudes and intention among Saudi national students toward the nursing profession in Saudi Arabia. Two papers (Mansour, 1992; Ahmed Mahran & Al Nagshaband, 2011) were an evaluation of the perception of university students and their parents toward nursing in the KSA. There were some studies, such as El-Gilany and Al-Wehady (2001) and Al-Shehri (2002) that talked about the large number of expatriate nurses in the KSA. Table below provides a more in-depth outline of these studies and some critiques of their methods.

Paper title and Author(s) name	Aim of the Study	Methods of the Study	Key Findings of the Study	Limitations of the Study

The commitment of Saudi nursing students to nursing as a profession and as a career By: Al-Mahmoud (2013)	This study aims to explore the motivation of Saudi nationals for entering nurse training and the attractiveness of nursing as a career.	This study aims to study potential barriers to achieving the Saudization goal of increasing the number of Saudi nurses; a survey of first-year nursing students was carried out to explore their motivation for entering nurse training, their perceptions of the attractiveness of nursing as a career, their future aspirations and the reasons they thought students might drop out of training.	The students in the survey were very positive about nursing, with the vast majority claiming to have chosen it because they wanted to become a health professional. The statement that the Saudi community views nursing in a negative way as a low job elicited strong agreement from many respondents. Many responding students considered the heavy workload facing students,	Recognising the limitation that the data here can report only on aspirations or expectations, it is potentially worrying how few see themselves remaining in nursing after 5 years, even if rather more see themselves working within healthcare. Further studies to determine actual career patterns and impact on Saudization would be useful. In addition, perhaps there should be a special study concerning non-first-choice students and their more negative attitudes toward nursing and its low anticipated retention levels.

Knowledge, attitudes and intentions of high school students toward the nursing profession in Riyadh city, Saudi Arabia. By: Al-Omar (2004)	To determine the knowledge, attitudes and intentions among Saudi high school students toward the nursing profession. In addition, the study aims to identify what prevents them from becoming nurses. It also aims to determine the factors influencing the Saudi high school students' choice of going into the nursing profession.	Used a descriptive analytical research design. Stratified random sampling procedures were employed to represent the Saudi high school students, three male and three female schools scattered in all areas of Riyadh city were selected. A total of 600 questionnaires were distributed, and 503 questionnaires were returned, of which 479 questionnaires were valid for analysis (79.8%	High school students scored a reasonable level on the knowledge dimension but did not achieve high scores on the attitude dimension; however, they achieved very low scores on the intention of being a nurse in the future (5.2% of them indicated nursing as their preferred future job). Inferential data analysis showed that attitude, having or not having a nurse friend and knowledge was found to have a	This study was quantitative (surveys) and didn't use qualitative methods, nor did the authors ask parents, nursing personnel and the students what their perceptions were about nursing as a career choice.

		response rate).	significant positive influence on high school students' intention while long working hours and a high work load compared to other jobs were found to have a significant negative influence.	
Impact of perceived public image on turnover intention of female students from joining to nursing profession at King Abdul-Aziz University, Kingdom Saudi Arabia. By: Ahmed Mahran & Al Nagshaband	This study aims to explore the impact of public image on turnover intention of female students from joining to nursing profession at king Abdul-Aziz University.	A convenience sample of 100 Saudi female students at king Abdul-Aziz University and 90 parents were collected. This descriptive correlation study was performed and, data were analysed with a t-test.	The study revealed that 87.8% of the parents disagreed with teaching one of their sons nursing.	This study did not include male students; however, it was conducted on university students, not high school students.

(2011)				
Nursing in Saudi Arabia as perceived by university students and their parents by Mansour (1992)	The study aims to determine the reasons for not selecting nursing as an area of study, to identify perceptions of nursing among university students and their parents, and to identify recommended strategies to increase enrolment in nursing.	The preliminary results pertained to 43 students from the colleges of medicine, dentistry and pharmacy and to 34 of their parents. Data were analysed manually using a chi-square test to determine the differences in perceptions between the students and their parents.	The results of the study can be divided into two groups. On the one hand, there are the positive results, namely that most of parents and students perceive a great need for Saudi nurses, that nursing is a humanistic profession and that it is an acceptable career for men. On the other hand, there are the negative results, namely, the students' reluctance to enrol in nursing and the incorrect	This study did not represent the population because it was conducted only for university students.

			knowledge and negative images of nursing	

However, to formulate an overall understanding of the issue literature from other countries that share similar contexts with the KSA were also reviewed.

The inclusion criteria applied in the process of literature selection included the following:

- Research concerning perceptions of the nursing profession in the KSA and or other Arab countries.
- Research of cultural and religious factors affecting nursing as a career choice in the KSA or other Arab countries.
- Literature about barriers when it comes to choosing nursing in the KSA or other Arab countries.
- English language barriers and native language communication problems.
- Search outcomes and a presentation of findings that discuss the focus of nursing among Saudi students, their perception to nursing as profession and the factors that influence choosing nursing as a career.

As indicated, only four of the primary studies were conducted in the KSA; one study was from Riyadh and seven were from other Arab countries: three from Jordan, two from Egypt, one from Qatar and one from Kuwait. They all show result of poor perception of nursing among students. However, these studies are out dated and the changes in economic and social life style, since these studies took place could present new findings. These studies were all quantitative (surveys) and no studies used qualitative methods nor did they ask parents, nursing personnel, and the students what their perceptions were about nursing as a career choice. These studies were all English language used only.

3.4 Background

As stated in the previous chapter, the Saudi context is unique because of its cultural approach and traditions. This has affected the Saudi community's perception of nursing. The following sections detail the perceptions of the nursing profession, the representation toward nursing in Arab countries and the factors affecting these perceptions. Moreover, detailed information

can be found in the following sections and sub-sections about culturally sensitive care and gender issues regarding the nursing profession.

The perception of the nursing profession among communities, nursing personnel and students has been investigated in many countries, including the United States (Carty, Moss, Al-zayyer, Kowitlawakul, & Arietti, 2007; Saied et al., 2016), UK (Marsland, Robinson, & Murrells, 1996; Saied et al., 2016), USA (Wieck, 2000; Hemsley, Brown, & Foskett, 1999; Evans, 2004; Keogh & O'Lynn, 2006; Kemmer & Silva, 2007; Saied et al., 2016).On the other hand, only a few studies have been conducted in the KSA, with the overall findings indicating that Saudis are not interested in nursing as a future career. This could be due to a complex array of cultural, social and religious factors (Al-Mahmoud, 2013; Al-Omar, 2004; El-Gilany & Al-Wehady, 2001; AlYami & Watson, 2014; Saied et al., 2016).

The poor representation of nursing and poor working conditions have correlated with low enrolments in nursing programmes in Saudi Arabia (Al-zayyer 2003; Alomar, 2004; Saied et al 2016). For example, long working hours and doing night duties are constraints for enrolment in nursing, and this particularly applies to females.

Aldossary et al. (2008) and AlMadani (2015) reported that Saudi nurses constitute only 29% of the nursing workforce in the KSA, and the majority of this percentage is not well utilised and developed (Al-Mahmoud et al., 2012; Almutairi, 2015; Saied et al., 2016). The employment of foreign nurses is a growing phenomenon in other Gulf countries. In Qatar, the ratio is 91.75% foreign nurses to 8.25% locals. In other Arab countries, there are few to no foreign nurses (Palestine, few to none; Egypt, less than 1%; Jordan, 6% and Bahrain, 40%; Shukri, 2005).

It has been reported that the success or failure of any healthcare organisation depends on its workforce and the employees' success, commitment and communication (Al-Shehri, 2013). Nurses are fundamental pillars to any healthcare service. It is important that they are supported in their career choice. Abu Zinadeh (2011) reported that although there has been an improvement in considering nursing as a career in the KSA, working in nursing sectors, however, still faces a lot of criticism. Both at the community level and professional practice

of nursing, as well as problems identified, there are an urgent and radical solutions required, most notably is the absence of a one responsible authority for nursing in the Kingdom.

The nursing profession in Saudi Arabia is still not considered in the development strategic plans in the healthcare sector, even though the absence of Saudi personnel in the field of nursing has compounded with the increased number of population (Abu Zinadeh, 2011). Abu Zinadeh (2011) reported that the need for the KSA's nursing workforce is 172,380 nurses; however, only 84,000 nurses are available (Abu Zinadeh, 2011). What is particularly surprising is that only 4% of nurses have a bachelor's degree, meaning the remaining 96% only have nursing diplomas.

3.4.1 Culturally sensitive care

It has been suggested that care is linked with cultural values, beliefs and practices, which are influenced by the language, philosophy, religion, kinship, social, political, legal, educational, economic, technological, ethno-historical and environmental context of the culture (Leininger, 1997; Albogami, 2015; Almutairi, 2015). Evidence has focused on the perceptions of Saudi patients cared for by nurses of diverse cultural backgrounds because values, culture and caring are primary concepts within nursing, particularly within the Saudi context (Mebrouk, 2008; Albogami, 2015; Almutairi, 2015). Therefore, because the Saudi context has a unique culture, there is a need to investigate the attitudes and cultural values toward nursing profession.

The shortage of well-trained Saudi healthcare personnel and the reliance on non-Saudis makes comprehensive coverage of the population more difficult when considering culturally sensitive issues (El-Gilany & Al-Wehady, 2001; Aldossary et al., 2008; Albulitayah, 2015). Al-Shehri (2002) reported that healthcare services in the KSA can be compromised because of a large number of expatriate nurses, for which language barriers can adversely affect communication between nurses and patients. Most patients and their families are Saudi nationals. Therefore, Arabic is their native language. However, English is used to communicate between expatriate healthcare providers in the healthcare facilities. This situation impedes the communication process between patients and healthcare team members, affecting the whole medical process.

Most expatriate nurses working in the Ministry of Health are Indian and Filipino. Some nurses are also recruited from other countries such as North America, United Kingdom,

Australia, South Africa, Malaysia and the Middle East (Aboul Enein, 2002; Tumulty, 2001; Al-Mahmoud et al., 2012; Saied et al., 2016). Therefore, English is not the first language of most expatriate nurses, which may affect communication between nurses themselves. This situation may also affect the quality of healthcare services (Simpson et al., 2006; Al Yousuf et al., 2002; Almalki et al., 2011) because of a lack of knowledge from the expatriate nurses concerning the Saudi community and the sensitive issues related to the Saudi culture.

Students are said to start forming attitudes toward their future profession, including nursing, in the early years of their education. Investigations of students' awareness toward nursing in the KSA have remained consistent for several decades, with the population at large indicating a preference for nursing care to be provided by Saudi nationals rather than expatriates (Jackson & Gary, 1991; Mansour, 1992; Al-Mahmoud et al., 2012).

A random survey was administered to 1,131 high school and university students to determine attitudes and general knowledge of Saudi nationals toward the healthcare system and the perceived role of nurses (Jackson & Gary, 1991). In this study, most of the participants preferred hospitalisation within the KSA with nursing care provided by Saudi nationals rather than expatriates.

Another study by Mansour (1992) found that people in the KSA emphasised the importance of Saudi national nursing personnel. It was considered easier to communicate with patients, Saudi nurses were thought to be more loyal to Islamic attitudes and national nurses were thought to have a better approach and understanding of the Saudi culture. Conversely, the nursing needs of Saudi Arabia far exceed the supply of Saudi nursing personnel with Saudi students tending to choose careers other than nursing, as the offer of higher financial rewards and greater prestige (Al-Hamadi, 2002; Gazzaz, 2009; Albulaitayah, 2015).

Unfortunately, these relatively old and outdated notions regarding nursing as a less honourable profession have not changed overtime. More recent reports indicated that most nurses in the Saudi healthcare system remain expatriates, and the Saudization of the nursing workforce has continued to encounter difficulties when it comes to attracting students and retaining Saudi nurses in the workforce (Al-Mahmoud et al., 2012; Saied et al., 2016).

Culturally sensitive healthcare based on the patient's and family's values is fundamental to nursing (Hammoud, White, & Fetters, 2005; Almalki et al., 2011). The International Council of Nurses' (ICN) Code for Nurses stated that nursing care for a patient of a different culture and religion is both challenging and rewarding (McKennis, 1999). Considering the context of Islam, Saudi nurses are more appropriate for providing nursing care to the local population. Nurses who share a similar cultural context to their patients or have a better understating of the patients' cultural and social values and needs may be better suited to providing nursing care.

However, the Saudi community's attitude toward nursing is negative. The number of Saudi nurses is considerably low, especially among females as issue of a sensitive nature can be a conflict. Further details about this are presented in the following section.

3.5 Gender Stereotype and Nursing

Gender deals with issues related to all aspects of the lives of males and females— their different opportunities, needs and concerns. Gender roles are defined as those roles that are socially assigned, exchangeable and variable according to class, race, ethnicity, religion, age and time (United Nations, 2001). The structure and reproduction of these roles take place at both the individual and community levels. Therefore, gender analysis explores associations and inequalities in the private and public sectors in a culture (United Nations, 2001). Moreover, the importance of studying gender has been stressed; gender is a useful and widespread concept in feminist theory and gender research (Davies, 2001).

The literature related to gender equality or inequality, especially regarding women, in the Arab world, particularly in the Gulf countries, has been one of the main limitations in this part of the paper. The study of gender in Gulf countries concerns the ways in which dominant cultures in these societies have defined masculinity and femininity as points of opposition and difference, in which males occupy positions of power, decision making and domination. The Quran assigns different societal roles to men and women because of their different biological natures. Men are seen as the protectors or guardians of women because Allah has given them more strength and because they make money for the remaining members of the family. Equally, women have powerful rights that must be respected by men.

In Arab countries, female literacy rates have increased threefold in the last 30 years (Sidani, 2005). Figures on Arab development show that there have been significant improvements in

addressing women's issues in the Arab world (Arab Human Development Report, 2002). However, Sidani (2005) argued that the participation of women remains relatively low, and differences among the Arab countries have become increasingly obvious. The development of Saudi Arabia has brought increasing opportunities for women in both education and employment. Current statistics show that in the KSA, women account for approximately 55% of Saudi graduates; although, they compose only 4.8% of the workforce in the KSA. There are an estimated 4.7 million Saudi women who are capable of working (Gorney, 2016). Although opportunities for women may exist, taking educational programs is reported to largely depend on family attitudes toward such opportunities *Gorney National Geographic's (2016)* because education for males and females is not obligatory in Saudi Arabia. The role of Islam in the Saudi culture cannot be underestimated. The existing traditions and culture of Saudi Arabia play a major role in the preparation of social attitudes and shaping the lives of both males and females in the KSA.

The situation of women in the Saudi community is complex and often misunderstood. The social norms in Saudi Arabia require segregation of the genders in public and private life. The issue of segregation between genders is of concern to most Saudi males and female nurses (Alomar, 2004; Albulitayah, 2015). Male nurses are usually restricted to caring for male patients, and female nurses prefer to give care to female patients. Most female nurses and their families do not accept mixing with the other gender. The requirements of nursing are socially unacceptable, opposing the nature of being female. However, nurses recognise that nursing requires working long hours (including night shifts), which takes them away from home, and this is troublesome because women's primary role is at the home, being mothers and housewives (El-Sanabary, 1993; Tumulty, 2001a; Alomar, 2004; Albulitayah, 2015).

There is also a strong view from the powerful religious establishment in the kingdom toward gender separation at work. This situation results in conflict for nurses and their families, which in turn impacts Saudi society. A well-known Muslim religious leader in the KSA, Ibinbaz (1985), wrote that the engagement of women in 'male domains' separates them from their innate natures (*fitra*), which ultimately leads to women's depression and termination from their work. However, he also asserted that women can work in areas that are dominated

by women, such as education in girls' schools, nursing and medical care. Therefore, although religious leaders have no objection to women's education or employment, they emphasised that it should be within a framework at which men and women are alienated. Islam views the free mixing between women and men in a work domain as leading to the decay and demise of the Muslim community (Ibinbaz, 1985). This has made Saudi society conservative and relatively sceptical when it comes to mixing genders in workplaces, hence why there are restrictions on any social interactions between both genders; however, minimal and necessary interactions between the two genders in the workplace are allowed. In fact, this might impact maximising the capacity of women and their ability to contribute to society.

Some Muslim leaders believe that the current practices of veiling and gender segregation in Gulf societies are influenced by cultural customs (Ibinbaz, 1985). Most women do not cover their faces, and some women are unveiled in certain Arab and Muslim countries. Moreover, there is no gender segregation in educational institutions and workplaces in some Arab countries. In fact, some Arab and Islamic countries have female ministers, such as with the UAE and Kuwait.

The KSA has assessed the risk of depending on expatriates in crucial roles. A Royal Decree from the Monarchy of Saudi Arabia was issued on the Saudization plan in 1992. The healthcare system with KSA is experiencing a server shortage of KSA national in nursing as profession. Most positions are filled by American, Filipina, and Egyptian nursing personnel (Carty et al., 2007; AlYami& Watson, 2014; Saied et al 2016).

Investment in resources for women in the workforce has become a chief issue for policy makers in almost all Gulf cooperative countries because they represent an untapped human resource. It was suggested that public prejudices about the nursing profession should be eradicated to build a national Saudi nursing workforce, because some families in Riyadh, KSA adopt more conservative standards in defining the extent of veiling and segregation (Gazzaz, 2009).

In Islamic countries, if the job fits with the Islamic culture is vital when it comes to if women will be accepted for that job (Youssef, 1974; Saied et al., 2016). Other factors, such as prestige, general reputation and the potential moral and social risks of women's occupational involvement, are also important considerations (El-Sanabary, 1993; Alomar, 2004; Saied et

al, 2016). This helps in explaining the acceptability of the teaching profession in the KSA but the country's general rejection of nursing.

While recognising the changing enrolment patterns in recent years, Nursing in Western countries was traditionally a female-dominated occupation while the medical profession was predominantly filled by males. The situation is totally different in Islamic countries, where women's involvement is conspicuously low compared to males, not only in nursing, but also in other health and health care disciplines (El-Sanabary, 1993). Medicine is a highly acceptable and prestigious profession for women in the KSA, whereas nursing is still perceived as a low-status occupation (Alomar, 2004; Abu-Zinadah, 2006; Al-Mahmoud, 2013). Consequently, despite society's need for both female doctors and nurses, medicine is highly sought after while nursing is not. This situation has created a major problem in the Saudi nursing workforce over the past 30 years (Abu-Zinadah, 2006).

This problem has impeded the KSA's efforts to solve the shortage within its national nursing workforce. This problem is not unique to Saudi Arabia but is found, at different levels of intensity, in all Arab countries, especially the richer ones (Jensen, 1974; Alzalabani, 2002; Almutairi, 2012).

It has been reported that nursing was not fully appreciated as a career for young Kuwaiti women (Al-Raqem, 1997). It has been argued that a crisis confronting the nursing profession in Gulf countries, including the KSA, threatens 'not only the quality of nursing care available to the people who live in the area, but the very future of nursing itself' (Meleis & Hassan, 1980). In Bahrain and other Gulf countries, it has been stated that 'the short-age of nurses constitutes the primary limiting factor to the effective provision of health care' (Kronfol & Affara, 1982).

In 1976, 40 years after establishing the first nursing education programme in Saudi Arabia, the crisis is more intense, reports suggest that the demand for nursing education is low, and the numbers of female students and graduates are too low to meet domestic needs (El-Sanabary, 1993, 2003; Abu-Zinadah, 2006). Subsequently, nursing education programmes have failed to cover the shortage of (national) female nurses in the country, with a higher

reliance on expatriate nursing personnel continues. Although the shortage of local healthcare personnel has existed for decades, the situation in KSA is more serious in nursing and has serious consequences for the status and employment of Saudi women and for healthcare development of the country in general.

Another study of healthcare personnel in Saudi Arabia revealed that one of the most challenging problems facing Saudi healthcare planners and their decision makers is that the number of Saudi men and women entering the nursing and medical professions is far below the country's need and capacity. The rate is declining, leaving the KSA reliant on international professionals (Looney, 1991; Abu-Zinadah, 2006; Almutairi, 2012).

Foskett et al. (1998) stated that gender representation influences the perceptions of nursing. Historically, nursing has been an occupation for women, as evidenced by all female nursing management, staffing, teaching, discipline and organisation. In fact, males of less than 10 years of age included in the study ignored the question about males in nursing. The 17-year-old males, however, were more conscious of being politically correct but still referred to the stereotypically feminine personality characteristics needed to be a nurse.

Saudi men who choose nursing also face criticism from family and friends (Al-Mahmoud et al., 2012). For example, Miller-Rosser et al. (2006) reported one Saudi male nurse as saying that his mother refused to tell her friends that her son was a nurse. When he was observed working in the hospital, his mother reported that he was a doctor.

Therefore, it is imperative to investigate this issue in the KSA for its unique sociocultural context and to assess the perceptions of the Saudi people toward the nursing profession. Moreover, there is little evidence on the factors that influence the perceptions of Saudi nationals when it comes to considering nursing as a career. The next section discusses the perception of nursing as a profession.

3.6 Perceptions of the Nursing Profession

Traditionally, females dominated the nursing profession and were easily recognised by their white hats and uniforms (Alomar, 2004). Nowadays, the white uniforms and hats have been replaced by bright coloured scrubs worn by both male and female nurses, as well as most of the other employees in the healthcare arena. Perceptions of nursing are said to be based on visual images that are often limited to bedside care and drug administration, instead images

of a highly skilled and well-educated nursing professional who has an important role to play in healthcare (Alomar, 2004; Saied et al., 2016)

Al-Omar (2004) used a descriptive analytical research design to determine the knowledge, attitudes and intentions among Saudi students toward the nursing profession. Three male and three female schools located in all areas of Riyadh were selected and employed via stratified random sampling procedures. A total of 600 questionnaires were distributed, and 503 questionnaires were returned, of which 479 questionnaires were valid for analysis (79.8% response rate).

Students scored a reasonable level on the knowledge dimension but did not achieve high scores on the attitude dimension; however, they achieved low scores on the intention of considering nursing as a future career (5.2% of students indicated nursing as their preferred future job). Data analysis showed that attitude; having or not having a nurse friend; and knowledge was found to have a significant positive influence on students' intention. Long working hours and high work load were found to have a significant negative influence. The results of this study indicated that more knowledge of and a positive attitude about nursing were associated with attracting students to the nursing profession. However, this study was conducted around the mid-1990s, and significant changes have occurred since then in the economy, life style, technology and education areas, so it is not known if and to what extent these attitudes remain today.

A recent study was conducted in the KSA with the aim to assess the motivation of Saudi nationals regarding entering nursing training and the magnetism of nursing as a career (Al-Mahmoud, 2013). In this study, 498 questionnaires were distributed (response rate = 100%), and where a low reflection toward nursing was evident. When participants were asked about if the Saudi community views nursing activities negatively, their responses were of the highest 'mean' agreement scores, and the agreement score for males was significantly higher than for females. Despite the students being engaged in nursing education and training, this response reflects the community view toward nursing. This supports earlier references that nursing is seen as a lower level career.

Many lay people have not spent time with a nursing professional or volunteered in a healthcare setting (Wieck, 2000). Therefore, the perception of the nursing profession appears to be ambiguous, and many people, especially students who are at the stage of deciding their career preferences are confused about the tasks and responsibilities of nurses.

As with many professions, high students form the core of recruits for nursing. In many instances, school is the stage where individuals make decisions about their potential careers. Therefore, understanding students' perceptions of nursing can be influential in formulating curricula to empower students with career decision skills (Wieck, 2000). It would seem logical to suggest that individuals may be motivated to choose a profession to which they have an attraction to (Law & Arthur, 2003). This attraction may be derived from workers' knowledge and understanding of the profession. Therefore, they build their image in relation to what they know.

Nursing faces competition from many other careers, which has made it more difficult to recruit students into nursing. Students are looking for high-status careers, and because students' perceptions of nursing are limited to visible images instead of information about the profession, many currently view nursing as bedside care and taking orders from physicians (Wieck, 2000). Foskett et al. (2000) sought to develop an understanding of how students perceive nursing as a career at various stages in their education and how these perceptions affect students' concerns about nursing. The study indicated that decisions about jobs are made at an early age, and that by late elementary school, students have often rejected jobs based on their perceptions. Thus, it is important to provide career information and experience to give well-defined perceptions about nursing.

Students are looking for innovative degrees and are often confused when it comes to academic pathways for nursing. These students are often discouraged by the lack of standardisation in nursing education and choose alternative curricula instead of nursing. Students also need to be aware of advanced degrees in nursing that can prepare them to achieve advanced educational opportunities (Law & Arthur, 2003).

Understanding why students choose or reject a nursing career is relevant when designing a recruiting program for students. Nurse educators face the challenge of providing students with a variety of information about nursing to help with career decision making. Students are currently formulating career decisions from a variety of sources but rarely from nurses;

therefore, students may have vague, distorted or inaccurate images of nursing that result in dissatisfied career choices.

A study was conducted in the KSA, and it reported that the role of the nurse was perceived as an extension of the physician, having a limited or no role in disease detection and decision making (Al-Mahmoud, 2013). Moreover, Al Thagafi (2006) reported that nursing suffers from a poor image that prevents high school students from becoming nurses. Participants in this study stated that their perceptions were derived from the perceived community image of nursing. Data from these studies provide insight into the current perception of nursing as a potential career for Saudi nationals and give a direction for future concerns in the development of nursing by detecting the public's image toward nursing.

For various reasons, it seems that the overall image of nursing is perceived to be negative, placing the country at risk of complications from culturally sensitive issues because of the expatriate nursing workforce (Al-Mahmoud, 2013). The next section goes into more detail about the image of nursing.

3.7 Image of Nursing

Nursing is a profession that has long been troubled by its public image. The public is said to have a stereotypical view of nursing, in which nurses may be regarded as less intelligent than doctors, dependent on doctors, powerless and underpaid (Rossiter, Bidewell, & Chan, 1998; Tang et al., 1999). A poor public image of nursing may affect not only recruitment, but also nurses' attitudes toward their work (Takase, Kershaw, & Burt, 2002).

Representation is one of the most important determinants in the development of the nursing profession and was reported to be inhibiting the interest of potential nursing staff (Ellis & Hartley, 1998; Kalisch & Kalisch, 1986). Johnson and Goad (1984) identified several factors that affect the outlook of nursing and the choice of nursing as a career. These factors included media, public image, social prestige, nurses themselves, having a family member, relative or a friend who is a nurse, physician–nurse interaction, nurse preceptors, risk of violence, exposure to health hazards and nursing education programs (Johnson & Goad, 1984). However, only a few studies have assessed the impact of these factors on the perceptions of

nursing in the KSA. Therefore, the researcher will include research about the image of nursing from Arab countries that share the KSA's sociocultural context.

3.7.1 Image of nursing in Arab countries

In Saudi Arabia and Arab countries in general, there is a negative image of nursing and a very low career interest in becoming a nurse (Al Thagafi 2006; Al-Omar, 2004; Mansour, 1992). However, there is a lack of literature when it comes to the image of nursing held by the community. Al Thagafi (2006) reported that nursing suffers from a poor image that prevents high school students from becoming nurses. Participants in this study reported that their perceptions came from the community's image toward nursing. Furthermore, a study by Mansour (1992) that aimed to evaluate the perception of university students and their parents toward nursing in the KSA revealed that 59% of the parents were educated, and 62% were professionals. However, both students and parents had negative images of nursing, and most of the respondents either disagreed or were neutral in response to positive statements about nursing. Participants reported that nurses cannot make critical decisions and that nursing is mainly carrying out the doctors' orders (Mansour, 1992).

The same study found that the perceived prestige of nurses was much lower than that of doctors and pharmacists; nurses were seen to be on the same level, or to some extent higher, than secretaries, laboratory technicians and dieticians. But they were seen as higher than hospital cleaning staff. Another study from the KSA reported that a nurse was perceived as being a caring person and responsible for giving custodial care (Jackson & Gary, 1991). This result is consistent with studies from other countries, for example in Hong Kong, where in terms of status, nurses were considered to be like maids (Foong, Rossiter, & Chan, 1999).

It is worth mentioning that because participants compared nursing with cleaning work, this suggests a negative image, despite participants ranking nursing as higher than cleaning. However, whereas cleaning is a respected job in some societies, this is not so in the Saudi community. Therefore, there is a need for further investigation of this issue to improve the image of nursing at both the policy and community levels in the KSA.

Remarkably, people view the career of physician as centred on intellectual capabilities while nursing is centred around serving skills (Marsland et al., 1996). This may refer to the high academic requirements of the medical profession, in which individuals are required to receive high averages to be able to enrol in medical school. Moreover, people view doctors as the

ultimate decision makers in the treatment process, whereas the nurses' role is limited (Jackson & Gary, 1991). This view needs to be changed by nursing role models and mentors to change students' image of nursing. Young people need to be given the opportunity to see first-hand the positive images of nursing, either through the media or interactions with positive nursing role models from their own communities.

Despite the negative image toward nursing, a high percentage of Saudi female nurses have shown high levels of job satisfaction (El-Gilany & Al-Wehady, 2001). This finding indicates that there is a misunderstanding of the conditions of the nursing profession in the KSA. Therefore, efforts should be made to show the correct face of the nursing profession. The poor image of nursing is compounded by the KSA's traditions and views on nursing, which depict a less-skilled role that is not socially acceptable for both genders.

Studies from the KSA did not fully show the dynamics that shape the negative image of nursing. Therefore, the researcher will detail these factors later in this thesis.

In other Middle Eastern countries, the image of nursing has improved in recent times but still lacks appeal and prestige (Shukri, 2005). In Jordan, for example, nursing is considered unskilled work, and the roles and responsibilities of the nurse have not yet been formally defined by Jordanian policies or its nursing registration bodies. Although Jordanian nurses are educated to be patient advocates, health educators and critical thinkers, the society's image of the nursing profession is still low and considers nursing to be medical assistants and housekeepers (AbuGharbieh & Suliman, 1992). Furthermore, nursing in Jordan is still seen as a woman's job. Nurses in Jordan continue to fight to attain respect from society, but it is difficult for them to change the view that their position is inferior position (Oweis, 2005).

The results of the studies from Jordan are consistent with results from studies in other Arab countries (Shukri, 2005). However, the previous study by Oweis (2005) in Jordan did not mention the causes or factors behind the negative image of nursing. The study only reported negative image as being a barrier to students considering nursing as a future career. Therefore, further studies should explore the factors affecting the public's image of nursing

rather than just reporting the existence of this representation without exploring its associated cause.

A study in Egypt was conducted to determine male undergraduate nursing students' perceptions of the nursing profession; it revealed that most of the participants were negatively influenced by the public's view of nursing (El Hawashy & Taha, 2011). Moreover, an alternative study reported that the reflection of nursing in Egypt has improved after the establishment of baccalaureate nursing programmes at universities (Meleis & Hassan, 1980). This means that for any career in Arab countries, a university education and certification are mandatory for the profession to gain respect from the community.

The result showing an improved image of nursing following the acquisition of a university degree (Meleis, 1980) and is consistent with findings from Hong Kong, where participants viewed nursing as an occupation rather than profession because nurses were seen to lack education, or the educational entry requirements for nursing were judged to be low (Foong, Rossiter, & Chan, 1999). There is an assumption that nursing care can be done by anyone (Wieck, 2000). There seems to be some ignorance of the roles of nurses and what is required to become a nurse. It seems that this view is now shared across all developed and developing countries.

In Qatar, a study was conducted to identify why female students decided to become nurses and how the students perceived the community's attitude toward nursing (Wieck, 2000). A questionnaire was distributed to all (n=57) female nursing students at the University of Qatar Nursing College. The two most common reasons for joining the nursing profession were reported to be an interest in medical services and the humanitarian nature of nursing. However, there were 33 students (58%) who thought there was a negative attitude toward nursing, mainly because of the presence of male patients and colleagues (Okasha & Ziady, 2001). This referred to the cultural and religious restrictions of mixing with the other gender in Qatar and other Arab countries, including the KSA.

The results of the study were interesting, given the fact that the total number of the participants was 57 girls. This low number of the total nursing students at the University of Qatar could indicate the negative perceptions of the nursing career. The situation has changed now, and the University of Qatar Nursing College was moved under the umbrella of Canadian University, which could make it more appealing to Qatari citizens.

Furthermore, Qatar is one of the richest countries in the world, which means that the effect of low salaries to consider any job is very minimal in the country. This situation matches what is found in the KSA because both countries share similar inputs and characteristics. Similar intentions were reported among Kuwaiti students, who reported poor illustration of nursing as the major reason for not enrolling in a nursing degree (Al Jarallah, Moussa, Hakeem, & Al Khanfar, 2009; Meleis, 1980).

Overall, nursing was perceived to be negative in most Arab countries. However, this view varied among the countries. Sociocultural norms and religious values were sources of the poor nursing impression and acted as barriers to retaining local nurses in the nursing profession (Al Jarallah et al., 2009).

3.8 Factors Affecting the Image of Nursing as a Career Choice in Riyadh

3.8.1 Family/parents

The literature indicates that people's perceptions of careers are influenced by what they expect to gain from that career. However, these perceptions are highly affected by parents and friends (Foskett & Hemsley-Brown, 2000; Alomar, 2004; Ahmed Mahran & Al Nagshaband, 2012). Thus, career perceptions of nursing may be less defined, resulting in a decline in interest or ignorance of the profession.

In the Saudi culture, elderly people are treated with much respect, especially when it comes to parents. The family leader, usually the father, is often the breadwinner, protector, authoritarian and spokesperson. He is usually the final decision maker (Al-Shahri, 2002; Ahmed Mahran & Al Nagshaband, 2012). Therefore, it is pivotal for individuals to consult with their families regarding their issues. To a great extent, the family controls individuals' decisions, especially females (Al-Shahri, 2002; Ahmed Mahran & Al Nagshaband, 2012). Therefore, decisions made by individuals can often be changed by other family members.

The findings from the above Saudi study about the effect of family on individuals' decisions are consistent with earlier studies, such as Meleis (1980) and Rayner (1984), which reported

that career choices in the Gulf countries, including the KSA, are greatly influenced by parents.

Parents in Saudi Arabia tend not to accept nursing as a career choice for their children because of its negative social depiction (Ahmed Mahran & Al Nagshaband, 2012). When subjects were asked to respond to nursing and non-nursing duties, a majority had mistaken information about nursing. However, participants viewed nursing as a complete profession requiring licensing and university teaching (Mansour, 1992). Such results demonstrate an unexplained and complicated negative perception of the nursing profession. The results also show the power of the family over siblings when it comes to determining career choices.

Family plays an important role. However, the role of the family in Saudi society is greater than that in other societies because of the KSA's unique cultural and religious dimensions. In the Saudi community, associations between family members are strong, leading the family to have more power over its individual members.

3.8.2 Financial status and salary

In the KSA, a study investigated the financial status level among Saudi nurses and reported that financial incentives were not often suggested as a way of improving work conditions (El-Gilany & Al-Wehady, 2001). This might be because of the economic situation of the KSA, including the tax-free salaries for locals. Consistent with the results from the above study regarding salaries of nurses is Rossiter (1999), who stated the salary of nurses was seen to be relatively high. One of the responses reported that 'if you work as a clerk for a company, you may not have such allowances'. Findings from the Qatari study also supported this theme (Okasha & Ziady, 2001).

However, another Saudi study reported that increasing financial rewards is one of the most frequently cited recommendations to promote the Saudization of nursing (Jackson & Gary, 1991; Alomar, 2004). Therefore, from the contradiction in both the Saudi studies regarding salary not being a major determinant of job satisfaction, it seems that a financial incentive is not a major factor when it comes to the impression of nursing in the Saudi community, especially to those who belong to high-income families or who are already rich.

On the other hand, in Jordan, low salaries are one of the major reasons for nurses' dissatisfaction and intention to leave nursing (AbuAlRub, 2007). The underpayment for

nurses drives students away from choosing nursing. It has been found that many Jordanian nursing students believe that nursing is below their ambitions and dreams. They considered nursing wages to not align with the efforts of the job.

Compared to the results from Saudi studies regarding the salaries of nurses, the results of the study from Jordan show how the economic situation of a country can raise or lower the importance of wages; therefore, improving the perception of nursing as a career is easier in wealthy countries than in developing countries, and a way to attract the individuals from low financial status families. It is evident that salary is not the main determinant of choosing a career in the KSA because of the good financial status of most Saudi families, which places more weight on the social and community perceptions toward the job.

3.8.3 Religious factors

Islam is undoubtedly the chief force in shaping the culture in the KSA. This is consistently expressed in the lives of Saudis, starting from the flag of the country and the legal system to the daily lives of individuals (Al-Shahri, 2002). Therefore, Islamic customs and norms affect the legal and social status in Saudi Arabia, especially for females (Mobaraki & Söderfeldt, 2010). For example, women in Saudi Arabia are forbidden to drive because of strict religious beliefs. The local tradition is that male relatives should drive females to their destinations. This is a cultural aspect that restricts women's mobility and is linked with religious belief that women should be accompanied when in public.

In the past, Saudi women were only named, not pictured, on family identity (ID) cards, which identify them as dependants of their husbands or fathers. This means that women can be vulnerable to abuse by their male guardians (Mobaraki & Söderfeldt, 2010). Without a photo on the ID cards, a woman's identity cannot be confirmed. In the KSA, when a wife delivers a child, the new-born may be registered under another female's name, especially if the father has more than one wife (Vidyasagar & Rea, 2004).

Recently, after a long discussion with religious leaders in the country about the permissibility of female faces on photographed IDs, the government has allowed photo ID cards to be

issued to women. However, many Saudi Arabian females are still unable to obtain a personal ID because their male guardian's consent is mandatory (Vidyasagar & Rea, 2004).

The government does not forbid females to practice sports in public or in segregated private places, but social norms place limits on females regarding exercise in schools or in public (Al-Nozha et al., 2005). Thus, such restrictions may explain the high prevalence of obesity among Saudi females. For an invasive medical procedure, Saudi woman cannot be admitted to the hospital without her male guardian providing consent (Abu-Aisha, 1985). Saudi law requires a male relative's permission before a woman can seek work, education and travel (Vidyasagar & Rea, 2004).

The same applies to female nursing education, which is encouraged by the government but can be socially rejected, causing difficulties in getting married because nursing's harsh demands. A religious reason that affects females who consider nursing as future career in Muslim-dominated countries is that families disapprove of the nursing profession for their daughters because they do not want their daughters to work night shifts and be in the company of other males, professional or patients. Islamic codes are very strict regarding females staying outside of the confines of their homes for long periods of time. Nurses in the KSA prefer a single (morning) shift and no weekend duty (El-Gilany & Al-Wehady, 2001).

The above is supported by the fact that many men are reluctant to marry nurses because nurses usually must work night shifts (Al Ma'aitah, Cameron, Armstrong-Stassen, & Horsburgh, 1999). It is rare (although now is more common than it used to be) to find a Saudi husband who permits his wife to be away from home for long hours or to sleep outside the home, even for work purposes. Moreover, the average age of female nursing graduates is between 20 and 25, and most women are expected to marry by the age of 30. As a result, turnover rates are high for nurses because if these women's husbands can afford a good living, the nurses can focus on their maternal roles and family's needs (Oweis, 2005).

Moreover, mixing with the other gender is largely unacceptable in the KSA, from both a religious and cultural point of view; although, it is permitted under very strict conditions (Oweis, 2005). Islam discourages the free mixing of men and women when they are alone. Interactions between men and women must be maintained at a healthy and modest level; they can socialise to know each other, as ordained by Allah in the Quran (Surah al-Hujurat), as long as there is no obscenity, touching, secret meetings and any sexual contact (Oweis, 2005).

Saudi female nurses working in female wards reported more satisfaction than those working in male wards. However, most the nurses in the KSA do not accept working with male patients (El-Gilany & Al-Wehady, 2001). This theme was supported by another Saudi study, reporting that people in the KSA do not want their sons and daughters to choose nursing as a future career because it involves mixing with the other gender (Mansour, 1992). It has been reported that the separation of hospitals into male and female hospitals were the most frequently cited recommendations to promote the Saudization of nursing (Jackson & Gary, 1991). A study from Kuwait supported this theme, reporting that most people did not prefer nursing because of the likelihood of mixing with the opposite gender (Meleis, 1980).

The nature of working long hours and night shift duties were reported to have negatively affected people in the KSA who were considering nursing as one of their career options (Looney, 1991). A study about the job satisfaction of Saudi nurses revealed that more than 75% of the nurses suggested either a one-duty shift or fewer working hours could improve working conditions and make them more religiously acceptable (El-Gilany & Al-Wehady, 2001). Most Saudis did not prefer nursing as a career option because of the long working hours (Mansour, 1992). This result was emphasised in another study as well (Al-Omar, 2004). The same theme was reported in Kuwait (Meleis, 1980).

In conclusion, the Islamic culture of Saudi Arabia is full of traditions that are reflected in all aspects of life, including work. According to Islamic traditions, women should not work with men, work long hours outside the home or do night shifts. This makes considering nursing as a career very difficult for both males and females. Even for those who challenge themselves, culture and social norms, the traditions make it hard for women to accept job opportunities in sites far from their families and homes. Public attitudes toward nursing prevent women from getting the training they need or applying their skills after graduation (El-Sanabary, 1993). As a result, it could be very challenging for the Saudi government to replace non-Saudi female health workers with Saudi women.

In fact, the findings regarding mixing with the other gender are surprising because females are continuously encouraged and motivated to be doctors but are discouraged to consider nursing. Both doctors and nurses are prone to mix with the other gender and must stay

outside their homes for long hours. This reflects that the religious and cultural factors are not the only factors affecting the perception of the Saudi community toward nursing. It seems that having a prestigious job, such as being a doctor, has dominated both the religion and culture. Moreover, the process of image formation in the Saudi community is complex.

3.8.4 Other factors

To be secure while at work is essential when considering a job. Investigating this issue in the KSA has revealed negative results. To determine the extent of work-related violence against nurses working in hospitals in Riyadh, a cross-sectional study was conducted by randomly distributing a questionnaire to 500 nurses (Mohamed, 2002). The questionnaire inquired about exposure to workplace violence and nurses' perceptions of the causes of violence. Workplace violence was experienced by about 55% of the participants. The violence took the form of verbal threats, attempts of physical assault or physical assaults. Nurses perceived a shortage in security personnel, shortage in nursing staff and language barriers as the causes behind their exposure to violence (Mohamed, 2002).

Kuwaiti nurses have also experienced violence from time to time, both in the form of physical and verbal violent incidents (Al Jarallah et al., 2009). All other professionals may be abused by several violent actions. However, violence toward healthcare providers might be more serious because the violence is usually caused by the strong emotions of the assailant. Such results in the above study can be problematic by aggravating the negative attitude toward nursing in Saudi Arabia (Oweis, 2005).

Some people have already been engaged in the nursing profession and made their choices to be nurses. Therefore, it is of great value to explore the factors that helped them continue in nursing. Nursing students choose their path for many reasons. The most common and first reason for considering nursing was a desire to help. However, meeting emotional needs, work opportunities, financial incentives and interest in disease science were classified as second-level reasons (Kersten, Bakewell, & Meyer, 1991).

The desire to help people as the main reason for considering nursing has been supported by other studies (Kelly, Shoemaker, & Steele, 1996; Stevens & Walker, 1993). It was reported as the most frequent reason for college-bound students to choose nursing, followed by wanting to do important work and the desire to work with all kinds of people.

Kelly et al. (1996) examined the motivational factors behind males choosing a career in the predominantly female-dominated field of nursing. The results revealed that the choice was influenced by job availability; professional autonomy; and previous contact with the healthcare system, such as volunteering or having a family member work in healthcare. Previous studies revealed that most male and female students' primary interest in nursing was not linked to a cognitive understanding of nursing, but rather from emotional desires, such as helping people.

Nursing provides opportunities of employment overseas. Consistent with this is the response stating that 'Being a nurse in hospital can get married with a doctor' (Foong, Rossiter, & Chan, 1999). Logically, this response is a negative, rather than positive, one. It suggests that some may go into nursing for more selfish reasons. The public image these types of people manifest may well contribute to nursing's overall negative perceptions.

In conclusion, what is good for one person may not be for another. Some people like nursing while others do not. Nevertheless, most people hold a negative image of the profession. This explains why nurses have reported acceptable levels of job satisfaction. In other words, people judge nursing having the full picture of what nursing is.

3.8.5 Comparing the findings of Saudi and Arab countries' literature with Western literature

The literature review revealed that the perception of nursing in the KSA is mostly negative because pf complex cultural and professional factors. These factors include personal intention, systems-related factors, managerial problems and the sociocultural influence of nursing. The reasons for not being interested in nursing as future career include the following: the negative image of the community regarding nursing; the work load of nurses; religious factors, such as the issue of mixing with the other gender; and long working hours and doing night shifts (Oweis, 2005).

International studies have many common findings when it comes to choosing nursing as a career, but the influencing factor that shapes this decision is different in different cultures. The community's perception of nursing affects the enrolment and recruitment of nursing

(Price et al., 2013). The community's positive perception of nursing attracts more enrolments, whereas a negative image keeps students away from it (Beck, 2000; Seago et al., 2006; Price et al., 2013). Studies in Western countries revealed that most of community members still perceived nursing as a females' career and a caring job (Hemsley, Brown, & Foskett, 1999; Evans, 2004; Keogh & O'Lynn, 2006; Kemmer & Silva, 2007). Other studies indicated that the nursing profession has not been recognised and valued as a professional entity by most of the community (Kemmer & Silva, 2007; Hoeve et al., 2013; Price & McGillis, 2013). Ben, Natan, and Backer (2010) found that nursing as a career is perceived as profession that lacks status, satisfied working conditions, high salaries, prestige and status. The nursing profession is not among the preverbal careers compering to medicine and other healthcare profession (Johnson & Bowman, 1997; Seago et al., 2006; Turner & Whitfield, 2007).

In the other societies, the most influential factor behind the negative image of nursing is the media (Dahlborg-Lyckhage et al., 2009). The media presents nurses as a doctors' assistants, maids, feminine and sexy, not as a profession with skills and knowledge that is just as important as doctors (Gordon & Nelson, 2005; Bridges, 1990; Hallam, 1998; Takase et al., 2006; Price & McGillis, 2013; Kemmer & Silva, 2007). However, several studies reported that nursing is viewed as a trusted and highly respected profession in several Western societies, but this has not translated into an adequate supply of individuals who are willing to join the profession (Donelan, Buerhaus, DesRoches, Dittus, & Dutwin, 2008; Gallup Organization, 2007).

According to the American Association of the Colleges of Nursing (AACN) the rent increase in enrolment in nursing is still insufficient to meet future workforce needs (AACN, 2001).

Health policy administrators are responsible for planning and implementing steps that can address this issue in the KSA. The focus should be directed at both the system and community. Moreover, nursing staff can play an important role in the establishment of comprehensive and accurate information by acting as role models for prospective candidates. This would include encouraging nurses to convey a positive image of nursing to their families and friends and show the positive aspects of the nursing profession.

This integrated review showed there are some gaps in the literature. All the primary studies were surveys, and there were no qualitative studies or studies that sought the perceptions of parents, students or nurses about nursing as a career choice. There were a few studies in the

KSA and only one from Riyadh, and the literature identified were dated (2004). Moreover, the student survey tool used in the study from Riyadh (Alamery, 2006; Mahran & Al Nagshabandi, 2012), although seemingly appropriate, did not present information about the validity and reliability of the tool did not have any psychometric testing before being used.

The Western literature examined in more detail the influencing factors related to job satisfaction, gender and organisational work environment and the media as major influences. The Arabic literature focused more on the work load of nurses, religious factors and long working hours and night shifts. Taking into consideration the differences between the two cultures, there are some factors that could be more influenced in one culture compared to another.

The next section will explore, define and discuss some theories and theoretical framework for a person's career choice within the context of Riyadh.

Numerous theoretical approaches have been used to predict and understand what influences the career choice of individuals. These approaches can broadly be divided into three categories: psychological, sociological or institutional. These approaches (psychological and sociological) differ in what they emphasise regarding one's understanding of career choice (Holland Moore et al., 2007; Brown, 2002a; Albogami, 2014). The institutional framework developed by Scott (1995) and used in a Saudi context by Albogami (2014) will be used in the current study. The framework is described here in detail and why it was chosen for this study. The section begins with a summary of the psychological and social perspectives of career choice.

Most of the literature on career choice has been developed in by Western authors, with more of a focus on the 'individual' as the key player in this process. This chapter sheds light on the important roles that institutional factors play in the daily decisions and career choices of individuals living in Riyadh.

3.8.6 Psychological perspective in career choice

The psychological approach to career choice focuses on the individual's needs, desires, hopes and values as motivational drivers. Moreover, this is also a perspective on individual personality and how this is affected by the individual's surrounding influences (Moore et al., 2007). Broadly, this approach is concerned with matching individuals to their careers and how individuals choose the careers that best fit their skills, personality and behaviours. Much emphasis is given to genre-specific roles and what is classed as a genuine occupational qualification, which depicts the roles of gender separation in work (Johnson & Mortimer, 2002; Holland, 1997, 1973; Schein, 1990, 1978; Super, 1992, 1953; Albogami, 2015). This approach has been criticised for its focus on the individual as a major influence and for ignoring the culture factors where the individual lives (Patton & McMahon, 2014; Sullivan & Baruch, 2009; Brown, 2002b). The psychological approach emphasises the term 'self', including self-concept and self-observation on the career-choice process; though, significantly, the norm has shifted to a point where access to work and previous restrictions in the KSA are now being balanced by national needs (Gottfredson, 2005, 1981; Super, 1992; Holland, 1990, 1973; Mitchell & Krumboltz, 1990; Albogami, 2015).

The social cognitive career theory adopted the psychological approach in career choice development. In the social cognitive career theory, Lent et al. (1994, 2005) discussed how career and academic interests mature, how career choices are developed and how these choices are turned into action. This is achieved through a focus of three primary tenets: self-efficacy, outcome expectations and goals. Lent viewed work in terms of beliefs about self-efficacy (Lent, 2005). The social cognitive career theory has been criticised for its overwhelming focus on the individual, regardless of the culture the person lives in; in the current study's case, it was excluded. However, the social cognitive career theory touched on the important role of the contextual factors on career choice. Culture seems to dominate contributing factors of choice; however, within this study the focus is much more about national requirements and their ability to plan ahead and then to focus on tradition and culture which is the main are the norms but in a bygone era which is not reflective of the healthcare services requirements of today. The focus is on the self-efficacy and outcome expectations in most of the research adopting this theory.

3.8.7 Sociological perspective in career approach

The sociological approach views the career-choice process differently from the psychological approach, which depicts an emotional attachment to cultural norms and the requirements to not step out of a community perspective. The emphasis is in the freedom the individuals' decision in their careers. The sociological approach focuses on the other contextual-related factors and influences, such as family, parents, religion, gender, social status and economic opportunities (Patton & McMahon, 2014; Albogami, 2014; Fouad & Byars-Winston, 2005; Johnson & Mortimer, 2002). Structural theories, such as ones with an economic and sociological emphasis, are major influential factors on the process of career choice (Patton & McMahon, 2014). Most of the researchers emphasised that the most influential factors, such as parent, community, friends and relatives, on career choice are related to sociological variables (Amani, 2013; Karakitapoglu, Aygun, & Sayim, 2007; Albogami, 2014). There were few theories that touched on the influence of the sociological variables on the career-choice process (Pringle & Mallon, 2003). One of the theories that adopts the sociological approach in the development of career choice is institutional theory. In the institutional theory, both individual and organisation decisions are influenced by the institutional environments, the individuals' decision and behaviour influenced by the need to be seen by society as acceptable (Albogami, 2014; Battilana & D'Aunno, 2011). The institutional theory assumes that the individuals' decisions about their careers are not about the individuals' interests; rather, they are affected and influenced by various social and cultural norms (Tolbert & Zucker, 1996, p. 176).

3.8.8 Institutional theory in career approach

The institutional theory is built on concepts of conformity, convergence and adaptation to institutional environments. Organisations' and individuals' decisions and behaviours are influenced by the institutional environment in which they are embedded (Dacin et al., 1999); furthermore, the institutional theory looks at the deeper aspects of social structures. It proposes that individuals' behaviours are shaped by their need for legitimacy and recognition by others within the context of specific institutions (Battilana & D'Aunno, 2011, Albogami, 2014). The institutional theory has been used while looking at the career-choice process in

studies done in Western cultures; however, there is a lack of a similar application in non-Western cultures, especially in an Arabic culture (Ituma & Simpson, 2009; Gunz & Mayrhofer, 2007; Ozbilgin et al., 2005; Perry, 2000). Scott (1995) developed a useful conceptual framework to explore and understand the controlling factors that shape career choice by looking at three pillars: regulative, normative and cultural-cognitive elements (Scott, 2014; Albogami, 2014). Albogami (2014) used this conceptual framework in the career choice of MBA students. For the current study, this conceptual framework will be the guideline for discussing institutional factors. The references from Albogami (2014) create a similar dimension for the study aim of this report, however, as this report develops it demonstrates the necessities to focus much more on the relationship of culture, norms and expectations. In this research, the regulative pillar will be the work condition and Saudization (government plan of replacing expatriate nurses with local ones); however, this variable in this pillar will be more of a background compared to the other two pillars. The normative pillar will contain social status and financial status, and the cultural-cognitive pillar will contain parents' influence and religious influence. The requirements of the pillars create a much more significant point perspective in career approach. Social status is a common determiner in social acceptance for a number of reasons, such as respect, marital status and inheritance. This creates a position of status and elevated position based on the family's community position. Dovetailed, to the social status which combines financial stability. Current social status demands the necessary financial situation be stabile; therefore, the career choice would very much determine this path. However, the most significant factors are influenced from elders, such as parents. Parents in Riyadh determine a child's career path way before the individual can rationalise his or her own path; therefore, the three co-exist.

The aim of the current study is to explore the perceptions of the Riyadh community toward nursing as a career choice. In this study, the Riyadh community refers to final year high school students, parents of high school students and Saudi nationals working as nurses in Riyadh. By exploring the influence of the institutional factors, such as social and financial status, parents and religious influences and work conditions when deciding whether to choose nursing as a future profession.

Considering the nature of the people of Riyadh's lives and culture, the desire for gaining ***social status*** plays an important role in shaping and constraining nursing as a career choice for high school students in Riyadh. People of Riyadh perceive a socially acceptable job as an

important factor when deciding on their careers. In the case of the nursing profession, their resentment can be attributed to disapproval of family status in the society. However, ***financial status*** is one of the factors that also affects the social status of the families in Riyadh' society. People work to live, and money is what sustains living, privilege, social status and a sense of security (Judge et al., 2010; Albogami, 2015). Individuals in Riyadh have many social and economic obligations toward their families, parents and relatives; therefore, finding a job that can financially satisfy these social responsibilities represents a priority among Saudis (Fakeeh, 2009; Albogami, 2015).

In Riyadh's community, ***parents' influence*** is defined as children paying back their parents and responding positively to their parents' needs and wishes without being forced to do so by their parents. It is a way of showing respect and kindness. This cultural value is seen within the Islamic teachings regarding the parent–child relationship. Parents should be consulted before the child chooses a career.

Religion is certainly the chief factor responsible for shaping the culture in Riyadh. Religious customs and norms affect the legal and social status of people in Riyadh, especially females (Mobaraki & Söderfeldt, 2010; Albogami, 2015). Religion, as a significant social institution, is strongly influential (Abuznaid, 2006; Albogami, 2015).

The poor image of nursing and poor ***working conditions*** are features that have been associated with low enrolments in nursing programmes (Al-zayyer 2003; Alomar, 2004; Saied et al., 2016). Long working hours, working with the opposite sex and doing night shifts are constraints for enrolment in nursing, and this particularly applies to females.

Table 3-2: Institutional factors in the Riyadh context

	Institutional pillars		
	Regulative	Normative	Cultural-Cognitive

Institutional factors in the Saudi context	Saudization Work condition	Social status Financial status	Parents' influence Religious influence

Chapter 4:

METHODOLOGY

4.1 Introduction

This chapter describes the research methodology used in this study, including an outline of the pragmatism of the research philosophy underpinning this mixed-methods research approach used to address the study's research questions. A description of the sequential exploratory mixed-methods approach and explanation for the choice of this design are presented. The chapter explains all the methods used, including the development and administration of the quantitative data collection instruments, how the qualitative focus group interviews were conducted and the survey was administered. The chapter also provides details about the recruitment of the participants who were interviewed and those who were surveyed.

The chapter is structured as follows:

- The aims, objectives and research questions of the study are outlined.
- The philosophical underpinnings of the research's approach are explained, after which the research design is presented.
- Information on the participants is provided.
- The ethical considerations of this research are discussed.
- The two data collection phases of the study, qualitative and quantitative, are explored.

4.2 Aim and Objectives of the Study

4.2.1 Aim

The aim of this study is to explore the perception of the Riyadh community regarding nursing as a career choice. In this study, the Riyadh community refers to final year high school students, parents of high school students and Saudi nationals working as nurses in Riyadh.

4.2.2 Research questions

The primary aim of the study is as follows:

- 'What is the Riyadh community's perception of nursing as a future career?'

Secondary questions include the following:

- 'What are high school student's perceptions and their future career intentions toward nursing?'
- 'What are the perceptions of parents of high school students about nursing as a future career choice?'
- 'What are registered nurses' perceptions about the sociocultural impact of choosing nursing as a career?'

4.2.3 Objectives

The following objectives will be addressed in this study:

- Explore factors influencing Riyadh's community (high school students and the parents of high school students).
- Explore health professionals' (nurses) decisions to choose nursing as a long-term profession.
- Identify the sociocultural impact of choosing nursing as a profession in Riyadh.
- Assess the association between the public image of nursing and the shortage of local nurses in Riyadh.
- Develop clear guidelines and recommendations for policy makers to encourage Riyadh's population to consider nursing as a future profession.

4.2.4 Research philosophy

To answer the research questions, there is a need to select and apply a research philosophy that best suits this research. The theoretical and philosophical framework is a crucial element to consider in any research design process (Elfazani, 2011, p. 105). In fact, according to Garcia and Quek (1997, p. 5), probing into the theoretical and philosophical aspects of a research is necessary 'to qualify the use of specific techniques in both the underlying assumptions guiding the research and in the theoretical framework'.

By definition, a research philosophy shows how researchers tap into the development of knowledge, or 'paradigm'. The latter relates to 'the progress of scientific practice based on people's philosophies and assumptions about the world and the nature of knowledge; in this context, about how research should be conducted' (Hussey & Hussey, 1997, p. 47). Pathirage, Amaratunga, and Haigh (2008) further emphasised the need to focus on an adopted research philosophy because it provides useful assumptions pertaining to the way or ways in which reality is constructed. These assumptions subsequently guide the research strategy and methodology used in the study. The above authors also stated that the research philosophy is embedded in practical considerations, in particular, the association between knowledge and how it is developed.

Therefore, to be able to conduct and evaluate any research, it is of the utmost importance to clarify its underlying assumptions, bearing in mind that the researcher's beliefs and understanding of any social phenomena can influence the research's design (Kumar, 2002). Moreover, there is also evidence indicating that the philosophical standpoint of one researcher can be significantly different from another's (Blaikie, 2007).

4.2.5 Types of research philosophies

There are many different research philosophies that can be adopted, with three of the most popular being positivism, interpretive (constructivism) and pragmatism. Each philosophy involves different assumptions about the research's ontology, epistemology and methodology. Ontology and epistemology are philosophical constructs and mutually support one another (Lombardo, 1987; Reber, 1995).

Ontology is a branch of metaphysics dealing with defining the issues of being and reality (Lombardo, 1987). In interpretivism, there is an acceptance of multiple realities (Reber, 1995), in positivism, there is an acceptance of a single reality and in pragmatism, there is a belief in the possibility of having multiple views of the research problem identifying the reality of either physical or abstract structures.

Epistemology is the philosophy of knowledge, or how people come to possess knowledge (Trochim, 2000) and deals with issues such as the origins, nature, extent and methods of

acquiring human knowledge (Reber, 1995, p. 256), as well as considering the meaning and nature of knowledge itself (Everitt & Fisher, 1995).

4.2.6 Research paradigms

A paradigm is the interpretive framework in terms of 'knowledge claims'; epistemology or ontology; or even research methodologies (Creswell, 2003). The most common paradigms are positivism, interpretive (constructivism) and pragmatism.

- **Positivism**

In the positivism paradigm, the world is perceived as external and objective. Researchers in this paradigm focus on facts, and the data are generated through statistical probability using a quantitative method (Collins, 2010; Ramanathan, 2008).

- **Interpretive (constructivism)**

In the interpretive paradigm, the world is perceived to be socially constructed and subjective. Researchers in this paradigm focus on meaning, and knowledge is generated through theoretical abstraction using the qualitative method (Collins, 2010; Ramanathan 2008)

- **Pragmatism**

Pragmatism is the underlying philosophical framework for mixed-methods research, where there is a belief in the potential to have multiple views about a research problem, and qualitative and quantitative methods can be combined in a single study (Tashakkori & Teddlie, 2003; Somekh & Lewin, 2005).

Methodology means the tools and methods used to understand and study a phenomenon. Although the positivist paradigm utilising quantitative methodologies was dominant from the mid-1950s to the mid-1970s, the period from the 1970s to the 1990s saw the emergence of the alternative constructivist paradigm, utilising qualitative methodologies. Subsequently, a third paradigm (pragmatism, or mixed-methods) has also emerged, resulting in the present situation where all three paradigms are in regular use (Johnson, Onwuegbuzie, & Turner, 2007).

Having briefly defined these terms, the researcher will now consider the appropriate paradigm for the current research.

There are various research paradigms that had been adopted in a wide array of empirical studies. One of particular importance and relevance to the current study is pragmatism because it has a strong foundation for the methodological backbone of the current research.

4.2.6.1 Adopting the pragmatism approach

Pragmatism was advanced as favourite to be 'the philosophical champion' of mixed-methods research by Green et al (2008). In simple terms, pragmatism identifies the empirical and practical consequences as being primary when considering the significance or value of any idea.

Pragmatism was pioneered by the American philosophers Peirce, James and Dewey as a response to the philosophical approach. In the latter, problems were addressed by reason alone while they sought to solve problems in the context of the real world. Johnson and Onwuegbuzie (2004) provided a clear guide regarding the principles and values of the pragmatic approach. They stated that the truth or value of an expression, such as 'all reality has a material base' or 'qualitative research is superior for uncovering humanistic research findings', is to be found in the credibility or usefulness of the expression in the world (Creswell & Plano Clark, 2007, p. 16). In contrast to positivism or post-positivism and constructivism, pragmatism offers a different perspective that mainly focuses on the research problem and the consequences of the research (Brewer & Hunter, 1989, p. 74; Creswell & Plano Clark, 2007, p. 26; Miller, 2006; Tashakkori & Teddlie, 1998). On the one hand, positivists firmly believe in a singular reality, that is, the one and only truth that characterises any social phenomenon and that can only be investigated using objective and value-free inquiry by relying on quantitative research methods. On the other hand, constructivists believe that no single objective reality exists and that 'subjective inquiry is the only kind possible to do' (Creswell & Plano Clark, 2007; Erlandson, Harris, Skipper, & Allen, 1993, p. 11).

Morgan (2007) stated that the pragmatic approach is heavily based on abductive reasoning that tries to operate by finding a balance between induction and deduction by first transforming observations into theories and then evaluating those theories through action. Morgan (2007) further noted that the abductive process is commonly recognised and used by

researchers who merge qualitative and quantitative methods in a sequential fashion (Ivankova, Creswell, & Stick, 2006; Morgan, 1998, 2006, in press), whereby the inductive outcomes emerging from a qualitative approach can act as inputs that contribute toward meeting the deductive objectives of a quantitative approach and vice versa. This is of direct relevance to the current study, which used findings from a qualitative method to serve as inputs for the quantitative section. Also, from a pragmatic perspective, it is strongly believed that the best way to explore inductive inferences is through action (Morgan, 2007).

There is evidence indicating that pragmatism allows researchers to develop a better understanding of the different ways in which research approaches can be successfully combined (Hoshmand, 2003) while ensuring that this process is carried out in ways that provide the best opportunities for the research questions to be answered (Johnson & Onwuegbozie, 2004). Other advantages of pragmatism are that it enables the researcher not to be trapped by mental and practical barriers usually imposed by the 'forced choice dichotomy between post positivism and constructivism' (Creswell & Plano Clark, 2007, p. 27), and researchers are not obliged to 'be the prisoner of a particular [research] method or technique' (Robson, 1993, p. 291). Pragmatists also stick to an 'ant representational view of knowledge', claiming that research should move beyond the sole aim of accurately representing reality by merely providing an 'accurate account of how things are in themselves' but rather to be useful, that is, to 'aim at utility for us' (Rorty, 1999, p. xxvi).

Nevertheless, based on the literature, there is still an ongoing debate regarding the extent to which pragmatism is a research approach and its applicability. Mertens (2003) explained that choosing pragmatism over other research approaches can sometimes be problematic because the real reasons behind this choice very often remain unclear. In other words, pragmatic researchers sometimes fail to identify who actually benefits from a pragmatic solution. Johnson and Onwuegbozie (2004) also highlighted that pragmatism is strongly supported by arguments revolving around its usefulness or workability but these can be vague unless the researcher draws attention to these arguments by explicitly clarifying the underlying reasons as to why this approach is preferred. Moreover, it has also been pointed out that many empirical studies have combined methods but do not clearly state whether the practice refers to the mixed-methods approach or its practical and philosophical assumptions (Bryman, 2006; Gorard & Taylor, 2004; Green, Caracelli, & Graham, 1989). The originality of the principles and nature of pragmatism have also been questioned, whereby empirical work

based on this largely overlaps with symbolic interactionists, such as Dewey, Mead, Blumer and Goffman (Cherryholmes, 1992; Maxcy, 2003), as well as sharing many similarities with the grounded theory, ethno methodology, conversational analysis and discourse analysis put forward by people such as Glaser, Strauss, Garfinkel, Cicourel and Foucault (Guignon, 1991; Rorty, 1982, 1991). Keeping in mind the aforementioned issues as potential barriers, the researcher intends to overcome some of them as much as possible.

Taking all the above into consideration, the current research has enough support to justify its reliance on a mixed-methods approach while also paying very careful attention to ensure that the imposed dichotomy of quantitative and qualitative methods and data are overcome and that data are not used and presented as 'totally or largely independent of each other' (Bryman, 2007, p. 8).

The discussion on methods and research designs and mixed-methods designs leads into the next area. To further emphasise the link between pragmatism and mixed-methods research, Johnson et al. (2007) pointed out that it is widely recognised that the main philosophy of mixed-methods research resides in the concept of pragmatism. That is, from a general perspective, any mixed-methods research approaches knowledge (theory and practice) by relying on not one, but various viewpoints, perspectives and positions (from both qualitative and quantitative lenses). In fact, in line with the views of the researcher, those who embrace pragmatism as a research paradigm could claim that just as research paradigms can undoubtedly remain separate, they can certainly be mixed into another research paradigm (Johnson et al., 2007).

Table 4-3: Research paradigms, methods and data collection's tool.

Research Paradigms	Research Methods	Data Collection Tools
Positivism	Quantitative	Statistical probability
Interpretivism (constructivism)	Qualitative	Theoretical abstraction
Pragmatism	Mixed Methods	Combine findings from complementary data sets

4.2.6.2 Purposes of Mixed-Methods Research

The following are the uses and values of the mixed-methods approach:

a) Using mixed methods to enhance the accuracy of data
b) Employing mixed methods to combine findings from complementary data sets
c) Utilising mixed methods to counter biases intrinsic to single-method approaches, thereby balancing out the strengths and weaknesses of varied approaches
d) Using mixed methods to provide a means of enhancing and expanding upon initial findings with varied methods
e) Using mixed methods in the sampling process, for example, using questionnaires to provide an initial screening for an interview program.

4.3 Research Design: Mixed Methods

It has long been accepted that within the research world, the two dominant research philosophies are positivism (based purely on a quantitative research design) and non-positivism (based purely on a qualitative research design). However, the mixed-methods design disputes the above and aims at overcoming this 'false dichotomy' (Doyle, Brady, & Byrne, 2009). In fact, Parahoo (2006) pointed out mixed-methods studies in nursing, health and social research are on the rise and are well accepted. Although not explicitly discussed further by the author, because of the complexity of the research questions in the healthcare field, a combination of quantitative and qualitative research methods could help to address an issue. This argument finds support in the work of Sale et al. (2002), who confirmed the usefulness of a combination of research approaches in the field of nursing in cases where the nature of a phenomena is complex and requires a range of perspectives to facilitate its understanding. In fact, following a review of past research across various disciplines that used a mixed-methods design, there are several main benefits to choosing this design (Green et al., 1989; Bryman, 2006). It helps to find corroboration between quantitative and qualitative data to enhance validity, a process known as triangulation. An opportunity to combine research approaches also provides a more complete and clearer picture of the topic being studied. Furthermore, Bryman (2006) and Creswell et al. (2003) argued that a mixed-methods strategy can help to compensate for the weaknesses of each approach while maximising the strengths that each approach carries. Similarly, Andrew and Halcomb (2009) stated that such is also witnessed in the recent scientific literature and that there should also be an increase in the teaching of these approaches as part of the curricula. Mixed-methods research was developed as a way of combining traditional research methods, and it mainly attempts to overcome the deficiencies and bias that can occur when using a single method

(Duffy, 1987; Mitchell, 1986). It is useful for investigating complex issues as it enables the use of multiple methods and approaches.

Nevertheless, Sale et al. (2002) cautioned against the unchallenged adoption of mixed-methods research by new researchers who tend to be oblivious to the underlying assumptions and existing differences between quantitative and qualitative research methods. However, Onwuegbuzie (2002) explained that this is not an issue if one recognises that the positivist and non-positivist philosophies are the two extremes of an epistemological continuum, with mixed-methods research in the middle. The researcher of the current study was also aware that a mixed-methods study requires the researcher to be well versed in both the quantitative and qualitative methods independently and combined to yield good study outcomes (Doyle et al., 2009).

Because of the nature of the research topic, the limited amount of data on the topic in the KSA, and the unique sociocultural context of Riyadh, it was decided to use an exploratory mixed-methods study design and involve other stakeholders in the research. Because the research problem itself is multi-faceted and the phenomenon under study is rather complex, there is a need to look at the issue from multiple views with the help of multiple data collection techniques. In doing so, the researcher aimed at gaining a more in-depth understanding of the research topic by using empirical lenses that move beyond a restrictive framework, instead embracing both an objective scientific and a subjective interpretivist way of answering the research questions.

This study used a sequential, exploratory mixed-methods design of both qualitative and quantitative approaches to address the research questions. A mixed-methods approach is ‘an approach to inquiry that combines or associates both qualitative and quantitative forms in the same study (Creswell, 2009, p. 4). As a sequential mixed-methods design, data were collected through consecutive qualitative and quantitative data collection phases (Creswell, 2009, p. 206). In such an approach, there is a sequence of data collection and analysis that occurs through different phases, and either the qualitative or quantitative data collection phase can come first. Mixed-methods model designs are generally about the mixing of the quantitative and qualitative approaches at several points in the research study. The sequential mixed-methods design is one type of the multi-strand mixed designs proposed by Tashakkori and

Teddlie (2003, pp. 685–688) that primarily uses two methods to respond to either explore or confirm the research questions. Another aspect of this specific design is the stages of integration or the inclusion of both qualitative and quantitative data sets. Tashakkori and Creswell (2007) emphasised that mixed-methods research is still developing, and hence, the debate around what it is should be addressed with an open mind. Johnson et al. (2007) also suggested that the conceptualisation of mixed-methods research will undergo changes over time.

The rationale for incorporating both types of data in a single study is that neither quantitative nor qualitative methods are effective enough to capture the complexity of the phenomena under investigation. It can be argued that without both methods complementing each other, it would be impossible to capture the patterns and details of this particular social phenomenon. In fact, there is evidence showing that when the two methods are combined, the quantitative and qualitative methods indeed complement one another, and this combination paves the way for a more robust analysis while maximising the strengths of each (Green et al., 1989; Miles & Huberman 1994; Green & Caracelli 1997; Tashakkori & Teddlie 1998). Furthermore, there is accumulating evidence indicating that contemporary research is now increasingly adopting mixed-methods designs across various, diverse fields, such as information systems (Mingers, 2003), counselling (Hanson, Creswell, Clark, Petska, & Creswell 2005), management (Cameron 2008; Hurmerinta-Peltomaki & Nummela, 2006) and qualitative research undertaken in Switzerland (Eberle & Elliker, 2005). Therefore, the current study also aims to contribute by applying a sequential mixed-methods design in the field of nursing in Saudi Arabia. Interestingly, in relation to nursing, Doyle et al. (2009) acknowledged the possibility that healthcare researchers may use this dynamic approach to probe the various complex and multi-faceted research problems that the healthcare sector usually faces.

Mixed method research reviews identify the following applications and benefits of this approach: firstly, using mixed methods to enhance the accuracy of data by combining findings from complementary data sets; secondly, utilising mixed methods to counter biases intrinsic to single method approaches, thereby balancing out the strengths and weaknesses of varied approaches. Mixed methods also provide a means of enhancing and expanding upon initial findings. Finally, mixed methods are useful in the sampling process e.g., using questionnaires to provide an initial screening for an interview programme.

The rationale for using this specific design in this study was to attain a greater integration of the different method types, and to obtain an extensive range of data that would not have been possible if only one methodological approach had been followed. Researchers use this approach to pursue a better and expanded understanding of a phenomenon, and to provide an opportunity to explore the problem in two different ways: qualitative and quantitative (Creswell, 2009). In addition, more insight can be gained by using a mixed method approach than through a solely qualitative or quantitative approach. Consequently, a qualitative approach was used in the form of focus group discussions, where participants were purposefully sampled to best inform the subsequent quantitative survey of high school students. As background information about this research problem in the Kingdom of Saudi Arabia (KSA) is scarce, this approach was expected to generate a large amount of data (Minichiello, Fulton, & Sullivan, 1999). Rich qualitative data from the focus group discussion was expected to help inform the research. The combination of both qualitative and quantitative methodologies in the present research project allowed for an enhanced scope, depth and exploration of findings, creating both measurable and quantifiable data, and data that gave priority to insight and reflection based on individual experiences of participants in the Saudi community. This study was conducted through three different phases, once the researcher had reviewed existing literature and explored and generated a list of factors considered central to the nursing profession in KSA. Firstly, factors found in the literature to be impacting on the nursing profession were presented to selected key members in the form of focus groups for discussion and examination. Subsequently, a survey instrument was selected for distribution to high school students in order to assess their views on nursing as a career. Finally, the instrument was offered to the sample and data was analysed.

Due to the nature of the research topic, the limited available evidence on the topic in KSA, and the unique socio-cultural context of Riyadh City, it was decided to use an exploratory, mixed methods study design.

The findings from the qualitative section were further researched in the quantitative section. For example, in the qualitative stage, most participants viewed salaries and other financial benefits as important elements in influencing their decision about nursing as a career choice.

These findings were further explored in the quantitative section, where a statistically significant association between the intention to study nursing and family income was reported. It was clear that the smaller the income category, the more likely participants were to choose nursing as a profession. Most participants from both groups viewed money, whether in the form of salary or other financial benefits, as an important factor, influencing recruitment and attracting the community to consider nursing as a career choice.

In this study, qualitative data were collected and analysed in the first stage, followed by a second stage of quantitative data collection and analysis that built on the results of the first stage (Creswell, 2009). Brewer and Hunter (1989) stated that most major areas of research in the social and behavioural sciences now use a mixed-methods design because such an approach allows investigators 'to attack a research problem with an arsenal of methods that have no overlapping weaknesses in addition to their complementary strengths' (Brewer & Hunter, 1989, p. 17; Green et al., 1989; Miles & Huberman 1994; Green & Caracelli 1997; Tashakkori & Teddlie, 1998). Researchers use this approach to pursue a better and more expanded upon understanding of a phenomenon and to provide an opportunity to explore the problem in two different ways: qualitative and quantitative (Creswell, 2009). Consequently, a qualitative approach was used in the form of focus group discussions, where participants in the focus groups were purposefully sampled to best inform the subsequent quantitative survey of high school students because there is scarce background information about the research problem in the KSA. This approach was expected to generate a large amount of data (Minichiello, Fulton, & Sullivan, 1999). This study was conducted in three different phases, after which the researcher reviewed the existing literature to explore and generate a list of factors considered central to the nursing profession in the KSA. First, factors found in the literature to impact the nursing profession were presented for discussion and examination to selected key members in the form of focus groups. After that, a survey instrument was selected to be distributed to high school students to assess their views about nursing as a career. Finally, the instrument was offered to the sample group, and data were analysed.

4.4 Setting and Sample Participants

Riyadh was chosen as the key focus area and study site for several reasons. Riyadh is the largest city of Saudi Arabia and its capital. The Riyadh Region is the land of many

conservative traditional trips. Riyadh's citizens do not tend to mix with outsiders or newcomers like those in other cities in SA, such as the western region, which is a destination for pilgrimages, or the eastern region with its international workers who work for the oil companies. The population of Riyadh is about 7 million, according to the world population review 2014. Although there are regional differences, most areas in the KSA have similar cultural communalities that indicate Riyadh may be representative of the whole Saudi community.

Because the researcher is a Saudi national, it was beneficial for the research to be conducted within a context familiar to the researcher to enable effective communication and a fuller understanding of the situation. That is, being a Saudi could promote a contextual understanding of the research that an outsider may not have. This is a significant advantage given that Saudi society is very conservative, and its norms, values, beliefs, language, customs and religion can be better understood by a native.

Furthermore, familiarity with the research context can help to create rapport with the participants so that rich data could be obtained. In this instance, both the researcher and the participants shared the same language and sociocultural values and backgrounds.

- **Nurses**

The sample of nurses was drawn from one of the biggest medical cities in Riyadh. This city is considered one of the most advanced city centres in the Middle East. It is located in the heart of Riyadh, approximately 20 kilometres from the city's centre, and it is easily accessible to the general population. It includes the main hospital, the southwest corner and the new southwest corner extension, which has a capacity of about 1,200 beds. Additional facilities are being built on a regular basis to accommodate the growing population and their needs and to further enhance the quality of patient care. Amongst the nurses were those who were trained locally as well as overseas. Also, a significant number of the nurses were expatriates.

- **Students**

The student sample was drawn from three general public boys' schools and two public girls' secondary schools. Both male and female participants were chosen to be part of this research to capture any gender differences in relation to the choice of nursing as a profession.

The chosen schools were in the centre, south and north of Riyadh. The students were aged between 18 to 22 years and were all from middle-class Saudi families. Compared to UK high school students, the ones in Saudi Arabia were older. The researcher specifically chose this age group because following this phase of schooling, students must choose a career. However, children in the KSA start school at seven and graduate from high school at 19, and some of them choose to stay in last year grade for more one year to get higher grades.

- **Parents**

As for the sample of parents used in the current study, it was drawn using network (snowball) sampling. The six parents who participated had sons and daughters who recently graduated from high school and wanted to attend college. The researcher made sure that the samples were from Riyadh and hence likely to represent the Riyadh community.

4.5 Ethics Considerations and Approval

This study was reviewed by Anglia Ruskin University's Faculty Research Ethics Panel and approved by the appropriate Saudi authorities. The researcher has a scholarship from the Saudi government, with part of the scholarship being a major source of funding for the research. The research proposal went through several iterations between March and August 2013 before the final draft was completed. Advice was sought from supervisors to ensure that the methods addressed the study's aim and objectives. The final proposal was submitted to the Anglia Ruskin University Committee/DREP and was approved (Appendix 1: An Ethical Approval Issued by Anglia Ruskin University).

The process of ethical approval started by completing the Research Ethical Application Form (STAGE 1) on 26 February 2014. A submission of the research outline in accordance with relevant ethical considerations was necessary because it was anticipated that the participants of the study would be recruited from hospitals (nurses), schools and network sampling. As such, the researcher was fully aware of the need to respect all ethical guidelines in an endeavour to ensure good practice.

A report by the International Centre for Nursing Ethics (ICNE, 2003, pp. 122–125) clearly stipulated a code of professional ethics in relation to university research, touching upon 'philosophy of care, cultural and religious values, law and accountability in the field of nursing and healthcare related disciplines'. The five main ethical guidelines put forward were:

(1) Respect for persons,
(2) Beneficence,
(3) Justice,
(4) Respect for community and
(5) Contextual caring.

Respect for people includes the principle of 'respect for autonomy', whereby all participants are free to decide whether they want to participate or not. As such, prior to conducting the focus group and administering the questionnaires, all participants were provided with an information sheet guide that explained the aims and objectives of the study, hence enabling a greater understanding that allowed the participants to fully appreciate the level of responses required. An informed consent form was also attached with the information sheet guide. It was also made clear to all the participants that the focus group discussions would be audio-recorded (Appendix 4: Copy of Consent Form). 'Beneficence' in the context of research primarily refers to actions carried out for the benefit of the participants that maximises the good and limits any harm; 'justice' refers to the fair treatment of participants. With these two principles in mind and regarding the conduct of the focus group, it was also explained that the discussion would be strictly anonymous (identifying information such as personal details would not be used), and no one other than the researcher and the researcher's thesis supervisor would have access to the collected data prior to its destruction, which is in-line with Anglia Ruskin University's policy. All the qualitative data were kept confidential and protected in a locked and secure location. Participants were also reassured that this would also be the case for all the collected quantitative data. Participants were also encouraged to be as open as possible because there would be no right or wrong answers to the questions. Moreover, the researcher emphasised that all participants would have the right to not answer any question, and this would be respected. To further implement the principle of 'respect for autonomy' and the principle of 'contextual caring' that expects the researcher 'to behave

toward each participant as a person within an ethical relationship of caring concern grounded in the researcher's personal values' (ICNE, 2003, p. 126), participants would also be able to withdraw or stop the interview at any stage without the need to give any explanation; no physical or psychological risk would be involved as a result of their participation in this study. The information sheet further informed the participants that their legal rights would not be compromised should anything go wrong, and no special precautions would need to be taken before, during or after taking part in the study. Lastly, the researcher highlighted that the results of the study would be published in scholarly journals and presented at conferences. All such actions are covered in the consent form.

Following the submission of the ethical approval form, the letter was returned to the researcher with some minor changes, which were addressed in a statement by the researcher. All comments and issues have been addressed, and updated versions of any amended documents are available for consideration. The application for ethical approval was considered by the faculty of (For Health & Social Care & Education) DREP for Allied Health & Medicine Department on 24 March 2014.

- **Approval from local Saudi organisations**

The data collection started after the researcher had the final approval from Saudi government to begin on July 2014, and it continued until September 2014. This was necessary because the study was conducted in Saudi Arabia, and it was deemed necessary to abide by the rules and regulations of the Saudi government prior to data collection.

- **About the students**

Because students were to take part in this research, it was deemed necessary by the researcher to seek Saudi governmental approval to ensure that data collected from students were in-line with the norms, values and religious expectations of the KSA.

4.6 The Phases of the Study

The methodological framework of this study is based on two phases: qualitative (focus group discussion) and quantitative (survey questionnaires).

4.6.1 Phase one: The qualitative component

The qualitative phase of this study comprised of focus group discussions with selected respondents. Focus group discussions were the preferred mode to collect data because there was little information about the problem being investigated (Tashakkori & Teddlie, 1998).

4.6.1.1 Data collection methods: Focus group

A focus group discussion is a research technique that collects data through group interactions on a topic determined by the researcher (Morgan, 1996). A focus group discussion is a special type of group in terms of purpose, size, composition and procedures, its purpose being to listen, gather information and better understand how people feel or think about an issue (Krueger & Casey, 2009). Focus groups combine elements of both interviewing and the participants' observations. This is useful in answering questions but within a more social context. Focus groups are very advantageous in the elicitation of a wider variety of views in relation to an issue rather than would potentially be possible with individual interviews (Bryman, 2001). Focus groups also enable the researcher to collect a large amount of data in a short time. Moreover, because interactions between participants are a key feature of the focus group discussion, the participants' views and beliefs about the issue are highlighted, permitting re-evaluation of the experience (Kitzinger, 1994).

According to Rabiee (2004), focus group interviews are increasingly used as a data collection tool in healthcare research to investigate people's beliefs, how they feel and the different ways in which they behave, which is important in the current study's context. There is accumulating empirical evidence indicating that focus groups are becoming increasingly popular in nursing (Webb & Kevern, 2001). For instance, some research has adopted this method to define the objectives and standardised measures of hospital quality from registered nurses' point of view, as well as design healthcare surveys to evaluate the effectiveness of educational programmes on healthcare behaviours (O'Brien, 1993; Rudolph & Hill, 1994). As such, the current study also aimed to use focus groups as a methodological tool for research in the field of nursing.

However, focus group discussions have also been critiqued. For example, their findings are generally not representative of the population at large (Hansler & Cooper, 1986; Beck,

Trombetta, & Share, 1986). Another pitfall is that of social posturing, whereby the participants choose to be polite to fit the norm, sometimes becoming victims of forced compliance. Nevertheless, the role of the researcher is to make it clear to the participants that any response or behaviour should not be more positively viewed than another (McQuame & Mclntyre, 1987). With this in mind, the researcher incorporated this clarification in the information sheet to avoid this potential problem. The researcher was also aware of the potential difficulty of not being able to ensure the active participation of every participant in the focus group discussion (Stewart & Shamdasani, 2014). As such, the researcher paid careful attention to making sure that time was monitored and that everyone had a chance to express their views freely while also keeping the discussion on track. As far as the techniques of data analysis in focus group research are concerned, these are rarely, if at all, discussed in any detail (Carey, 1995; Frankland & Bloor, 1999), including in nursing research focus groups (Webb & Kevern, 2001). Furthermore, although focus groups mainly aim at describing group dynamics, very few articles using this method have provided any discussion of the interactions in the focus groups under study (Webb & Kevern, 2001).

- **Purpose of focus groups**

This phase of the research study was designed to do the following:

- Investigate, explore and describe the issues face nursing and its image in the views of different stakeholders
- Develop an understanding of the issues, experiences and needs of local nurses

In all three focus groups, an interview schedule was designed and administered specifically to address the primary topics to be discussed.

- The first focus group's (students) aim was to generate views to understand the image of nursing, their intention to study nursing and what would be the main factors deterring them from choosing nursing.
- The second focus group's (parents) discussion has the aim of giving more understanding to the image of nursing and about the participants' agreement and approval for their sons and daughters to study nursing. Also, the main

factors deterring them from agreeing to their children becoming nurses were explored.

- The third focus group's (nurses) discussion revolved around their experiences and how they convinced their families to approve of them becoming nurses and what the main factors influenced their decision to choose nursing. Themes were then generated across the three focus groups to be explored further in the quantitative stage.

- **General conduct of the focus groups**

In all three focus group discussions, the discussions went through the following three phases:

- First, the opening phase helped to obtain the essential knowledge of the participant and to make the participant feel relaxed and more open to the discussion. This finds support from Kitzinger (1994), who highlighted that interaction (through discussion) between participants is an important attribute of the focus group discussion because it contributes to gaining a better insight into the participants' views and beliefs about the topic while also allowing a reassessment of one's experience.

- Second, the main body of the discussion helped to develop the main themes and explore the most important issues.

- Third, the closing phase, produced recommendations and suggestions to help in answering the research questions.

4.6.1.2 Sampling of the participants in the focus groups

Participants in the focus groups were purposely sampled. The advantage of purposive sampling is its ability to select participants who could provide rich information about an issue, enabling an in-depth investigation of the problem (Patton, 2001). In purposive sampling, individuals most likely know of the phenomenon selected (Sandelowski, 1995). Participants in the focus groups were selected either because of their familiarity with the study's environment and similarity the survey participants or because they were directly

affected by the problem as nurses. Participants were recruited through the researcher's local professional networks. For each of the focus groups, participants had to meet certain inclusion criteria. All participants in the focus groups had to be Saudi citizens who were born and raised in Riyadh. In the case of the group of nurses, participants had to meet the following criteria:

- Employed as a nurse
- Working in a government hospital
- Working in a hospital in Riyadh for a minimum of 1 year. In the other two groups, inclusion criteria involved being a high school student or a parent of a high school student.

All three groups need to have been born and raised in Riyadh city.

4.6.1.3 Organising the focus groups

Compared to other types of interviews, organising focus groups is considered more difficult and requires more planning (Gibbs, 1997). The tasks of finding a suitable place and time convenient to all participants, recruiting members for the focus groups and making sure that the environment is comfortable for the participants are all vital factors to be considered when planning focus groups (Litosseliti, 2003). Most of these were not issues for the study because participants were recruited through the researcher's professional network. Because the topic was significant to all the participants, recruitment was also not an issue. Two of the focus group's discussions were held at the researcher's home, which is culturally acceptable, the students, and parents of the student group were undertaken at differing at time periods. In the case of the third group, the nursing professional group, the discussions were held at the nursing department meeting room at the organisation (hospital) in Riyadh, where the researcher had an approval letter to undertake the group session (Appendix 8: Written Permissions to Access the Selected Hospitals).

4.6.1.3.1 Group one: High school students

Six students (two males and four females) were purposefully sampled for this group. Their age ranged from 18 to 22. 'Purposeful sampling' is usually followed when the 'researcher solicits persons with specific characteristics to participate in the research study' (Johnson & Christensen, 2007, p. 239). The meeting was coordinated with the help of a female relative who assisted in inviting female participants, and two young men were also recruited from the

community. It is well-known that the cultural atmosphere of Saudi Arabia is deeply religious, and the country is conservative; Islamic teachings and Arabian cultural values always guide the life of any Saudi person (Baker, Al-Gahtani, & Hubona, 2007). As such, men and women interact but only by strictly adhering to set cultural norms and traditions; this was why it was deemed necessary to have a female involved in the recruitment of female participants. The researcher met this group at researcher's home in Riyadh, and coffee and tea was served. The researcher started by defining the research, its objectives and the desired dimensions of the research. The researcher also mentioned the role of the participants and the importance of their participation and expressing their views openly and transparently. This was mainly to achieve a clear understanding of their image of nursing, their intention to study nursing and what the main factors are that deter them from becoming nurses. It was challenging to assign an appointment suitable for all the participants because of their commitments and transportation difficulties. It was agreed that researcher could guarantee dropping off female participants to their homes after completing the discussion.

The discussion commenced with open questions, allowing each participant to talk early in the discussion so that participants could feel comfortable. Additionally, the longer it took a participant to say something in the group discussion, the less likely she or he would be active and say anything at all (Krueger & Casey, 2009).

Participants were asked to introduce themselves and to tell others how they viewed the nursing profession. After that, the participants were guided to talk about the advantages and disadvantages of nursing. Then, key questions addressing the main themes of the research problem were presented for discussion. After completing the focus group discussion, the researcher summarised the main themes and ideas of the discussion, and participants were asked if they had any comments or new ideas to add. At the end of the discussion, participants were given the chance to propose recommendations for health managers to improve the nursing profession. Moreover, each participant was given the time to identify the main associated factors when considering nursing as a future career.

4.6.1.3.2 Group two: Parents of high school students

The parent group were known through the social network of the researcher. The six parents had sons and daughters who had recently graduated from high school and were wanting to attend college. The researcher met this group at researcher's home in Riyadh, and coffee and tea was served. The researcher started by defining the research and its objectives and the desired dimensions of the research. The researcher also mentioned the role of the participants and the importance of their participation and expression of their views openly and transparently. The focus group looked into what the main factors are that deterred them from agreeing to their children becoming nurses.

For this group, it was easier for parents to find a time convenient for everyone because all of them were fathers and could travel without restrictions. A major challenge in this group was the inability to find a mother who functioned as the breadwinner because the father is the breadwinner (who makes decisions for the family) in Saudi Arabia, and if not, an uncle will take this role.

4.6.1.3.3 Group three: Nurses

For the nursing group, coordination with the Department of Nursing at Prince Sultan Military Medical City in Riyadh was carried out to nominate six nurses for the discussion. Those nurses met the inclusion criteria for participation, which was mainly being a Saudi-born and raised in Riyadh. The meeting was held at the Nurses Hall of the Nursing Department. There were five female nurses and one male nurse. The researcher, as with the other groups, defined the research and the desired dimensions, the role of the participants and the importance of their participation. The purpose of this group was to enable the nurses to talk about their personal experiences and how they convinced their families to approve of them becoming nurses; also explored was the main factors that influenced their decision to choose nursing. The group also considered the image of nursing and how the community views the nursing profession. There were no challenges in organising this group.

4.6.1.4 The role of the researcher during focus group discussions

The role of the researcher was important in terms of providing participants with an explanation of the aim and objectives of the study, helping participants feel comfortable and facilitating discussion among group members. The researcher also took down field notes of

aspects of the discussion that were perceived as relevant or significant. These notes complemented the transcripts of the audio-recorded discussions. At the beginning of each FGD, the researcher tried to ensure that the same information regarding aim, objectives, importance of the study and the importance of focus group discussion in enriching the research process was explained to each group. During the discussion, the researcher asked open-ended questions and answered emerging questions by the group, as needed, in a simple and clear way so that everyone could hear what was being said. When necessary, the researcher took care to guide the discussion back to the topic under investigation if the conversation appeared to be drifting. Each participant was active in the discussion and given sufficient time to express his or her feelings and opinions about the topic. Discussions in the FGDs were conducted in Arabic. The time for each focus group discussion ranged between 60 to 90 minutes, which is consistent with the ideal time for a FGD (Krueger & Casey, 2009).

4.6.1.5 Data analysis of the qualitative data

This section outlines the process through which the qualitative data were pooled together to make sense of the findings. Interviews result in large quantities of data. Alreck and Settle (2007) specified the need to summarise the data into meaningful information. Immediately after conducting each focus group, data were transcribed verbatim in the Arabic language from the audio tapes into Microsoft Word documents. Preparation of the qualitative data included transcription of the group discussion and checking the transcription for accuracy. As suggested by Creswell and Clark (2007), the data were examined by reading through all the data, recording initial thoughts, writing notes and looking for codes or themes. Several themes and sub-themes emerged from the qualitative analysis of the data.

- **Translation**

The transcriptions were translated into English with the assistance of a professional translator who worked with the researcher to ensure the data did not lose its richness and meaning (Sperber, Devellis, & Boehlecke, 1994). Translation generally occupies a major part of multilingual and intercultural research (Crane, Lombard, & Tenz, 2009). However, this process is not without its challenges and difficulties. For instance, Booth (1993), Helms, Lossau, and Oslender (2005) and Muller (2007) stated that there are important cultural

differences between culturally specific academic writings and 'cultural gaps' that need to be considered and addressed in this type of research. Moreover, Muller (2007) drew attention to the notion of power in relation to translation, where he stressed that the translation process is complex, political and subjective. As Smith (2003) pointed out, translation relies on a high level of sensitivity to contextual factors, such as cultural difference and similarity, which includes unequal power relations. Therefore, it is difficult to deny that such would be rather difficult for any researcher to fully accomplish. The researcher tried to maximise the validity of the translations. Moreover, there is an association between language and what can be expressed using it. Some linguists have explained that how one experiences social reality is unique to one's own language, and hence, people speaking different languages have different perceptions of the world (Chapman, 2006). Therefore, language differences could be challenging because these might limit the transfer and loss of meaning, subsequently resulting in a negative impact on the validity of the qualitative study. Translation of quotes can also be problematic because it may be tricky to translate concepts that are closely tied to specific culturally bound words expressed by the participants (Van Nes, Abma, Jonsson, & Deeg, 2010). This can also result in the use of more words when compared to the original quote, which then changes the voice of the participant. This is a major challenge because qualitative research revolves around the importance of giving a voice to the participants (Denzin & Lincoln, 2000).

As such, it could be suggested that the validity of the translations[1] in relation to the extent to which the data produced reflects its original version could be significantly questioned, including in the current study.

- **Thematic analysis**

A thematic analysis was used in the current study because this type of analysis is designed to make sense of transcribed interviews by transforming notes (the participants' responses) into themes that are then closely identified, described, analysed and reported within the data (Braun & Clarke, 2006). The main advantage of this analysis is that it allows the conceptualisation of the participant's own perspective through his or her account of his or her experiences, beliefs and perceptions (Park, Butcher, & Mass, 2004). Because the

[1] Certain words when translated have differing meanings.

investigation of the issues, experiences and needs of local nurses within a cultural context is rather complex, this technique was the most suitable because it has the power to offer an in-depth understanding of how cultural traditions could play a crucial role in this research area. Furthermore, this analysis tool is designed specifically for qualitative data and is very flexible in the sense that it provides a range of analytic options (Braun & Clarke, 2006) that could be very appropriate in a field of research that is still in its infancy, such as the current study.

As described by Braun and Clarke (2006, p. 87), thematic analysis is used to refine relevant data and categorise it into themes and sub-themes through the following stages:

- Familiarisation with the data by transcription, repeatedly reading the data, searching for meaningful ideas and generating an initial list of relevant ideas.

- Generating initial codes by coding items of interest in a systematic fashion across the entire data set and then collating the data relevant to each code. Codes refer to 'the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon' (Boyatzis, 1998). This was done by reading the transcripts a few times to obtain a general sense of the data. The researcher was immersed in hardcopies of the transcriptions to develop themes and patterns across questions and participants (Braun & Clarke, 2006, p. 87). The aim of these first two stages of the thematic analysis was to discover the main themes emerging from the discussions and to begin organising them.

- The next step was searching for themes by collating codes into potential themes and gathering all data relevant to each potential theme. This was done after having an extensive list of the different codes that were identified from the discussions. Then, ideas were classified into themes and sub-themes. The data were analysed manually using Microsoft.

- Next was reviewing themes by checking if they worked in relation to the coded extracts (Level 1) and the entire data set (Level 2).

- The common themes and ideas were then extracted for the design and development of the survey questionnaire, which was to be used in phase two.

- **Rigour**

To establish rigour in 'qualitative' research, Guba and Lincoln (1989) stressed credibility, transferability and dependability. Credibility refers to the idea of 'fit' between respondents' perspectives and the way in which the researcher represents them (Schwandt, 2001). According to Guba and Lincoln (1989), a study is credible when the descriptions provided are accurate and are in agreement with co-researchers or readers engaged with the experience. In cases where differences are observed, it is the role of the researcher to clarify the link between each theme and the descriptions. In line with the above authors, the researcher of the current study ensured that the original text was revisited on an ongoing basis to verify that all the conclusions were closely linked to the data or justified by the researcher's interpretive scheme. Transferability is comparable to external validity and addresses the issue of the generalisability of an inquiry. To ensure transferability, the researcher should provide enough contextual information to allow for similar judgements to be made by others (Reinharz, 1983; Guba & Lincoln, 1989). As for dependability, much like reliability, through auditing, inquirers work toward ensuring that the research process is coherent, identifiable and clearly documented (Schwandt, 2001). Therefore, rigour in the current study was achieved by providing a constructed reality of the participants' experiences that 'is as informed and sophisticated as it can be at a particular point in time' (Guba & Lincoln, 1989, p. 44). Moreover, it has also been documented that as a researcher, one's personal and professional 'prejudices' could negatively impact the trustworthiness of a study (Koch, 2006). With this as a potential barrier, no attempt was made to conceal an unintended influence. However, to deal with this issue effectively, the researcher, as far as possible, was continuously in touch with various concerns throughout the research process.

- **Reflexivity**

Reflexivity is the recognition that the researcher and the object of study have a mutual influence on each other throughout the research process (Alvesson & Skoldburg, 2000). When discussing reflexivity, the social position of the researcher and the role played by the latter's emotional responses to participants can influence the researcher's interpretations of the participants' accounts (Mauthner & Doucet, 2003). Therefore, given that the researcher

was working in the healthcare industry as a human resources manager and is a Saudi citizen, it could be argued that the researcher perhaps placed the researcher's background, history and experiences in relation to the participant (Brown, 1994). Furthermore, the interpersonal, political and institutional situations in which researchers are involved can also have an influence on their decisions (Bell & Newby, 1977; Bell & Roberts, 1984). This could have equally been the case in the current study. Nevertheless, according to scholars, being reflexive is encouraged in the research process, especially in relation to how researchers make sense of their data, contribution in the analytic process and the preconceived ideas and assumptions that researchers have that can influence their analysis and reading (Devine & Heath, 1999; Clifford & Marcus, 1986; Geertz, 1973). There is also an ongoing debate about the 'neutral' status of texts because different readers comprehend texts differently based on their social location and perspectives (Denzin, 1994). As May (1998, p. 173) explained, this 'epistemology of reception' questions 'how and under what circumstances social scientific knowledge is received, evaluated, and acted upon and under what circumstances'.

4.6.2 Phase two: Quantitative component

The quantitative phase of this research comprised of the administration of questionnaires to high school students. Using the questionnaire as a data collection tool was considered useful for probing their views and perceptions regarding their decision to opt for nursing as a career.

This quantitative phase of the research was designed to do the following:

- Further explore and quantify the factors influencing the decision to choose nursing as a profession among high school students in Riyadh.
- Investigate and gain further insight into the perceptions of the nursing profession and how the public image of nursing impacts the shortage of a local nursing workforce in Riyadh.

4.6.2.1 Selection of the questionnaire

This section briefly reviews the questionnaire selection process. It discusses the rationale for utilising a questionnaire survey.

4.6.2.1.1 Rationale for using questionnaires

The survey, as a method of collecting information from people about their ideas, feelings, beliefs, attitudes, needs, motivations and behaviour, has been widely used in social science research (Fink, 2003). According to Gillham (2000), questionnaires have the following advantages: they are effective in terms of time and money; participants can complete the questionnaire when it suits them; there is less pressure for an immediate response; there is a lack of interviewer bias; and it allows for the anonymity of the participants. Questionnaires provide a mechanism for collecting measurable data when known variables are present (Gall, Gall, & Borg, 2007). An already tested questionnaire was selected for use in this research, and permission was asked from the original author (Appendix 2: Written Approval From the Author to Use the Original Questionnaire). This questionnaire was specifically selected because it was designed to explore the relationship between the respondents' demographic characteristics and their views, while also incorporating short answer questions about the society's and students' attitudes toward the nursing profession in Riyadh; that is, their reasons to or not to study nursing; intention to study nursing; the image of nursing as a profession; and work conditions. This questionnaire also had an open-ended question that fed into the qualitative aspect of this research, providing an opportunity to the respondents to express themselves in a more elaborate way. However, some modifications and a rewording of the statements was applied when necessary.

4.6.2.1.2 The final questionnaire

A cover letter was attached to the final questionnaire that explained the reasons for the survey (Jankowicz, 2005). The cover letter that accompanied the questionnaire is provided in Appendix 3.

The items in the final questionnaire were sensitively worded so that participants would feel comfortable answering all the questions. To enable rapid completion of the questionnaire, thereby increasing the return rate, most of the answers took the form of selecting from multiple choices. Moreover, the items were brief, to the point and arranged in a sequence to ensure that the respondents remained interested throughout the process of filling out the questionnaire. It has been reported in the literature that the layout of the questionnaire should be attractive to encourage the respondent to complete it, and the questionnaire should not be

too long. The best way of obtaining optimum responses is to keep both the visual appearance of the questionnaire and the wording of each question simple (Saunders, 2003).

The questionnaire was administered in Arabic because this was the mother tongue language of the study participants. The final questionnaire consisted of 52 items over four pages, and the questionnaire cover letter was two pages long and was presented with each questionnaire (Appendix 6: The Questionnaires' Arabic Version). This questionnaire contains three parts, as follows:

- Eight personal question items were developed to collect data related to the demographic characteristics of the students, such as their age, gender, family members working in nursing, family income, number of family, friends working in nursing, intention to study nursing and their advice given to friends. These demographic characteristics were selected to explore whether there are age and gender differences in relation to the participants' decision to choose nursing. Moreover, it was also anticipated that having someone in the family or a friend who is already in this profession could influence the participant's own career choice. Finally, family characteristics, such as size and income, were also expected to have an impact on the students' decision of whether to choose nursing.

- Sixteen Likert-scale question items, multiple choice items and questions requiring short answers were given. This part was divided into three subscales; Subscale 1: Intention to study nursing (Items 22, 27, 23, 10, 26 and 17), where all items in this subscale were about the students' intention to study nursing and choosing nursing as a career. Subscale 2: Family community attitude toward nursing and their influence on nursing as a profession (Items 13, 15, 24, 21 and 20), where all the items in this subscale were about negative family and community attitudes toward nursing as a profession. Subscale 3: Work-related barriers (Items 43, 42, 41, 14 and 36), where all the items in this subscale were about the work-related barriers that could prevent students from choosing nursing.

- One open-ended question was included at the end of the questionnaire to allow respondents to expand upon their answers and provide more in-depth responses (Rattray & Jones, 2007).

4.6.2.2 Distribution of the questionnaire

4.6.2.2.1 Permission to distribute the questionnaire

An official letter was sent to the Ministry of Education in the KSA, asking for approval to distribute the questionnaires to secondary students in Riyadh schools (Appendix 7: Written Permissions to Access the Selected Schools). The minister's office referred the application and the questionnaire to the Ethical Committee of Scientific Research in the ministry. The committee approved conducting the study and distributing the questionnaires.

4.6.2.2.2 Sampling and setting

The study's population was secondary school students in the Riyadh area. Participants had to meet the following inclusion criteria to be eligible for participation in the study:

(1) Be a Saudi citizen who was born and raised in Riyadh
(2) Be a high school student
(3) Can easily read and write in Arabic

- **Data collection**

Initially, the questionnaire, information sheet and the consent form were given to 100 students who met the inclusion criteria, and they were asked to return the questionnaires the following work day; this was done as an attempt to evaluate the distribution process.

Unfortunately, the response rate was very low (15%). After consulting with teachers and school principals. Permission was given for students to complete the questionnaire Physical Education lessons for male students, and Art lessons for female students.

In keeping with cultural traditions where males cannot enter a school for females, a female relative of the researcher assisted with the administration of the questionnaires in these schools.

The information sheet indicated that the return of a completed questionnaire would be interpreted as consent in cases where the participants did not want to complete the consent form and wanted to remain completely anonymous. Gay et al. (2009) indicated the importance of allowing participants an adequate time frame to respond within.

In total, the questionnaire was distributed to 639 students, of which 554 completed the questionnaire, indicating a response rate of 86.6%. Several other factors improved the response rates (Gay & Airasian, 2009). These included notifying respondents before giving them the survey, including a covering letter and an easy return method, setting a specific deadline and limiting the overall survey's length. The researcher had also mentioned the estimated time of filling the questionnaire (about15–20 minutes) in the cover letter.

4.6.2.3 Analysis of the quantitative data

The data were tested using various statistical tests. The researcher intended to use principal component analysis (factor analysis) to standardise the research items and categorise them into different groups, the resulting factors (groups of items) were tested for internal reliability (through Cronbach's alpha) and then descriptively analyzed using descriptive statistics such as mean, percentage and frequency; this helped with describing the distribution of the data and determining an idea of the general answers produced. This was followed by inferential statistics based on the overall averages of each of the determined factors; inferential statistics are based on an alpha level of 5% (0.05). Probabilities below that score determine if the outcomes are significant. Inferential statistics was conducted to measure the effects of all the demographic variables and general information (e.g., gender, age, family income, etc.) on the

main factors. This study used an independent samples t-test to measure the difference between the two independent groups (e.g., male vs. female). Furthermore, an independent sample one-way analysis of variance (ANOVA) was used to measure the difference between the three independent groups of participants (e.g., family income). Finally, a Pearson's

correlation coefficient test was conducted to test the relationships between all the factors. Overall, inferential tests that are significant show there are significant effects of one variable on another or a correlation between one variable and another (depending on the test type). Such statistics allowed the researcher to make inferences from the samples used in this study to the larger population (Field, 2013). All statistics were conducted through SPSS (Statistical Package for Social Science).

Factor analysis:

Principal Component Factor Analysis (PCFA) is helpful and useful for placing variables into meaningful categories. Factor analysis can thus be used in the analysis of the validity of an instrument. There are two main factor analysis techniques which are: Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) (Tabachnick & Fidell, 2001). "Confirmatory Factor Analysis is much more sophisticated technique used in advanced the stage of the research process to test theory about latent process. CFA is most often performed through structural equation modelling." (Tabachnick, 2013, p. 662). EFA was conducted on the Nursing Career Choice-Saudi Arabia (NCC-SA) scale used in this study. EFA is used to discover the number of factors (subscales) influencing variables and to analyse which variables are grouping together (Child, 2006).

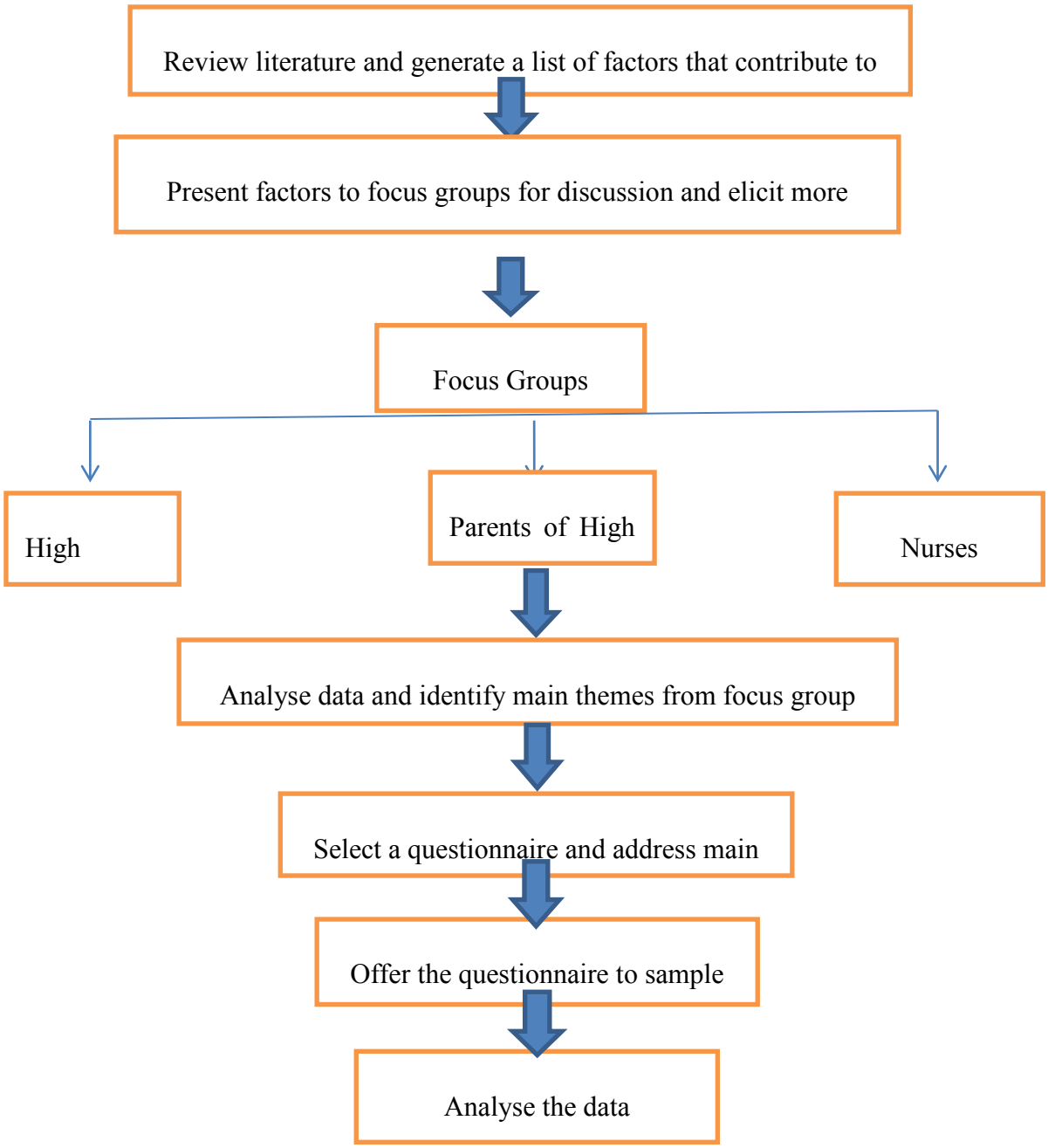
Factor Analysis (FA) was useful in condensing the items on the questionnaires into more meaningfully linked construct dimensions. These dimensions were later used to enable easier examination of any potential statistical relationships among these underlying dimensions which FA had produced, along with other important variables in the study.

4.7 Summary of the Chapter

This chapter revolved around the use and discussion of the appropriateness of the choice of pragmatism as the methodological backbone of this study. Given the nature of the topic under research and the complexity of the research questions, the views of the participants (students, parents and nurses) needed to be captured because information about their opinions, choices and decisions are essential. Furthermore, the analysis of the available literature on this topic showed there is an absence of research on this specific topic, especially in conservative societies such as Saudi Arabia.

Uncomplicatedness was specifically chosen as the methodological foundation of this study, with an aim of incorporating both a qualitative and a quantitative phase that together could capture the views of the participants as accurately as possible. The chapter explained each of the two data collection phases thoroughly while also giving due thought to sampling and ethical considerations. A focus group discussion, followed by a survey, were used to collect data about the participants' perceptions of nursing. The next chapter presents the qualitative findings and outlines the findings of the focus group discussion.

Figure 2: ***The mixed-methods sequential research design***



Chapter 5:

RIYADH COMMUNITY'S PERCEPTION OF NURSING AND NURSING AS A CAREER: QUALITATIVE DATA

5.0 Introduction

This chapter presents the findings of the three focus group discussions (high school students, parents of high school students and nurses) and the three key themes drawn from the data analysis, which are supported by narrative quotations for the themes and sub-themes.

This chapter begins with a description of the focus group participants' demographic characteristics. The three themes in section one are the following: *What is nursing? The contradictions; social challenges;* and *Influence on the students' decision to choose nursing as a career*.

The two themes in section two are the following: *Experiences in career choice* and *a view of nursing in the Riyadh community*, and their subthemes are presented in depth. Because there was similarities among the findings for the students and parents, it was decided to present these findings together. This chapter is arranged into two main sections with the following associated themes and subthemes:

- Saudi students' and parents' perceptions of nursing and career choice. There were three themes in this section: *What is nursing? The contradictions; social challenges;* and *influence on the students' decision to choose nursing as a career*.

- Local nurses' experiences of choosing nursing as a career and the community's view. There were two themes in this section: *Experiences in career choice* and *a view of nursing in the Riyadh community.*

5.1 Focus Group Participants

As mentioned in the Chapter Four, the three focus groups were conducted in June 2014 with participants currently employed as nurses, high school students and the parents of high school students in Riyadh. A summary of the demographic characteristics of the focus groups is presented in Table 5-1.

Table 5-4: The demographic characteristics of the focus groups

Variables		Nurses	High school students	Parents	Total
Gender	Male	1	2	6	9
	Female	5	4	0	9
Age group /year	18–22	0	6	0	6
	23–34	4	0	0	4
	35–43	2	0	4	6
	44–52	0	0	2	2
Education	High school	0	6	2	8
	Diploma	0	0	3	3
	Bachelor's	5	0	1	6
	Master's	1	0	0	1
Total		18	18	18	18

As noted in the above table, each focus group consisted of six participants. Male and female participants were not equally distributed among the three groups; however, the total number of participants of each gender were equal (9 males and 9 females). Regarding age, all the participants in the student group were between 18–22 years old, and four of the six nurses were between 23–34 years old, revealing a remarkably young and middle-aged population among the participants. Only two participants were between 44–52 years old.

5.2 Saudi Students' and Parents' Perceptions of Nursing and Nursing as a Career Choice

This section provides detailed information about the observation of nursing among students and parents and how they view nursing as a career. The themes and sub-themes in this section emerged through the analysis, the steps of which being found in Chapter Four. The themes

presented describe the main issues that the participants viewed and sensitivity as being influential on the decisions of different sub-groups of the Saudi community to consider nursing as a future career. The themes and sub-themes are presented separately, complemented by narrative quotes from the participants. Pseudonyms are used to protect the participants' anonymity.

The findings indicated that the responses focused on three themes, as follows:

- What is nursing? The contradictions
- Social challenges
- Influence on the students' decision to choose nursing as a career

The first theme, *what is nursing; the contradictions,* broadly focused on the parents' and students' perceptions of nursing. This was divided into two sub-themes: *humanitarian work and servants and the role of nursing is complex*. The second theme of this section is *social challenges,* which was divided into two sub-themes: *unacceptable occupation and perceived low chances for getting married*. The third theme in this section focused on *students' intention to study nursing and the impact of family and financial status on that decision.* This theme was divided into two sub-themes: *intention to study nursing and family influence and salary compared to other jobs.*

A summary of the themes and sub-themes of section one (Saudi students' and parents' perceptions of nursing and nursing as a career choice) is presented in Table 5-2.

Table 5-5: Section one's key themes and sub-themes: Saudi students' and parents' perception of nursing and nursing as a career choice

Themes	Sub-themes
What is nursing? the contradictions	• Humanitarian work • Servants • The role of nursing is complex
Social challenges	• Unacceptable occupation • Perceived lower chances of getting married
Influence on the students' decision to choose nursing as a career	• Intention to study nursing and family influence • Salary compared to other jobs

Each of these major themes will be presented in detail.

- **What is nursing? The contradictions**

This theme focused on the parents' and students' perceptions of nursing and nursing as a career. The parents and students described nursing in an incongruous manner, with nurses being perceived as humanitarian workers and as having a role equivalent to servants who deal with the objectionable roles of healthcare delivery. This theme was divided into three sub-themes.

- *Humanitarian work*

This sub-theme is concerned with Saudi students' and parents' knowledge about nursing and the wider picture. It is important for the researcher to explore the information that parents and high school students have about the nursing profession to obtain better findings. The participants of both groups spoke about nursing when they were asked to answer the question, 'What is nursing?' Participants talked about nursing as a humanitarian job that helps people in need. They also commented on how it is important in Islam to save other people's lives and how this is a moral and just position to have. The participants did not know much about nursing and hung to the religious aspect about saving other people's lives. The participants tried to use their perceived religious stance to defend their views. This outlined the pivotal role of religion in shaping the participants' views. It also indicated the poor level of knowledge they had about the nursing profession. One of the students stated,

'Nursing is humanity work, and Islam directs us to do humanitarian work'

When answering this question, most of the participants thought nursing was humanism and caring of others. They thought that caring is an individual inclination, not a learned skill, and it is only about the emotion of helping to save lives. Nurses are always linked to helping, saving, humanity and emotions in the participants' mind. One of the students reported that, *'Helps doctors to save people's lives…'*

One of the parents spoke about the AJER (Granted from God) that all healthcare practitioners gain by doing their job, saying the Quran Ayah Verse: 'and who so saved the life of one, it shall be as if he had saved the life of all mankind'. AJER and THAWAB[2] are rewards from Allah to those who help others in need. The parent stated that,

'It's not only a job to get salary, its where can you get AJER and THAWAB too'.

A member of the parent group reported that the nursing profession is one of many good things that Islam encourages its followers to do. He reported that nursing is about helping others to cure and perform their daily activities and did not consider some of the negative aspects of the job. As he said:

'For each and every profession there are some positives and negatives, but nursing is more negative due to its duties and responsibilities, however there is nothing complete, but God'.

- **Servants**

In the Saudi context, many Saudi families employed expatriate workers of both genders to work in their homes as drivers and maids. Because of the perceived nature of nursing activities as a helping profession dealing with dirty utilities, it appeared that the participants viewed nurses much like domestic workers. One of the students stated that:

'Nurses are helping patients by changing bed sheets and helping old patients to use the toilet, giving them a shower'.

Moreover, a member of the same focus group had the same view and reported that:

[2] THAWAB means Rewards

'Nursing is doing servants jobs, dealing with dirty utilities, cleaning rubbish and changing diapers'.

Another student highlighted the importance of this feeling, reporting that:

'I feel that I cannot be a nurse due to the nature of the serving activities of the nursing profession. I need a clean job at least'.

The participants made a link between recruiting maids and overseas nurses from the same countries. And this link between servants and nurses goes back to the beginning of the nursing profession in Saudi Arabia; it started with nurses and housemaids who were recruited from the countries in east Asia.

One of the parents highlighted an interesting issue when talking about nursing as a job for overseas people. The parent made a strong link between nurses and house workers and viewed both jobs as servants, stating that:

'We as Saudis used to and still do call Saudi nurses Filipinos, because we saw these jobs [nurses and servants] as being occupied by people from the Philippines'.

One of the parents stated seeing a similar link between nursing and the low-class jobs such as maids: 'It is a low class and dirty job'.

The participants viewed nurses as being similar to domestic workers, which is one of the major factors that could affect the nursing profession as a career choice.

- **The role of nursing is complex (the perceived image of nursing)**

Most of the participants seemed to have a lack of understanding about nursing roles or the role that nurses have in the treatment process. They viewed nursing roles as limited to an assistant's job or as being less important than other practitioners such as physicians. A member of the student group outlined the perceived low level of the nursing profession, showing a misunderstanding of the nursing role. The student perceived nurses as people who took instructions from doctors and reported that,

'….it is a profession without identity, always taking instructions from others'.

Sometimes, the perceived actions and behaviours of nurses give a negative impression to the patients or visitors, especially when they do something outside of their normal nursing duties or roles, such as asking a doctor if he or she wants tea or coffee. Such actions appear to convey a negative impression to the public because people then believe that such tasks are part of the nursing role.

One of the parents told of his experience and reported that:

'I was in visiting a doctor and while waiting for the doctor to finish my prescription, the nurse came and asked the doctor if he needed a coffee or tea'.

The participants did not know that nurses have medical knowledge, participate in medical cures and have technological knowledge. Nurses are always participating in medical diagnoses, prescription and treatment and thus make a real difference in medical outcomes. The role of nursing is based on the knowledge and skills that nurse should learn; it is a learned skill that is acquired after years of study.

On the other hand, a member of the parents' group who was working in the healthcare industry explained the importance of the nursing profession and its role in the treatment of patients, stating that:

'The role of nurses is complex. In my opinion, nurses are an important and vital part of the treatment chain. Nurses' role involves connection with other parties in the treatment chain. For example, their role involves giving attention to doctors' orders and rounds and giving medications. At the same time, their role involves observing patients, coordinating with the laboratory, ward clerks, pharmacists, dieticians, and even calling and observing cleaners'.

5.2.1 Social challenges

Sociocultural dimensions in Saudi Arabia are strongly shaped by Islam, and they have marked effects on the Saudi community's perspectives. It is hard to distinguish between cultural norms and religious perspectives because the participants' views sometimes reflect links between these two. In fact, many Saudi cultural beliefs and norms, including those

relating to the family, respect for parents, family prestige, women's work outside the home, a mixed-gender work environment, caring for patients of the opposite sex and marriage have a link to an Islamic interpretation in a direct or indirect way, which makes each of them important in society (El Sanabary, 1993; Meleis & Hasan, 1980; El-Sanabary, 2003; Gazzaz, 2009).

The *social challenges* theme was divided into two sub-themes: uunacceptable occupation and perceived lower chances of getting married.

- *Unacceptable occupation*

Participants acknowledged perceived social acceptability as an important factor that influences career choice. There was an agreement among the participants that people professed nursing as a socially unacceptable occupation. This is consistent with what has been raised in the literature (El Sanabary, 1993; Meleis & Hasan, 1980; El-Sanabary, 2003; Gazzaz, 2009). The participants in both focus groups indicated that families in Riyadh, especially the tribal ones, view nursing as a job that brings shame and disgrace to the family and tribe because nursing is still not acceptable, especially for women. They attributed this to resentment and disapproval of family status.

One of the parents emphasised this and explained how society's view of his children's occupation is important to him and how the occupation must be acceptable in society; this would make him shay indicating to that as if you did something that deviate from the acceptable social norms in your society value and believes. He stated that:

'I would feel shy if my daughter was a nurse. What should I tell others? My daughter works as a nurse?'

Participants often reported that people perceived certain jobs in medicine, engineering and law as more prestigious and socially acceptable. A member of the parents group reported that:

'In our Saudi society, especially in Riyadh, for parents some jobs such as an engineer or lawyer is best and better for their children more than nurse, people respect you more if you are lawyer'.

A prestigious occupation is the first thing that students and their families would consider when looking for a job. In Saudi Arabia, a person's job is largely indicative of his or her social identity; it is involved in and affects everything in Saudis' lives, including social relationships and family social status. Families with a very high reputation and that have a wealthy status consider a family member's occupation as part of the family's identity, so the occupation must be socially accepted.

One of the students reported scary feelings when imagining being a nurse, underscoring the importance of social acceptability and how it is important for famous people in society to have a job that is acceptable and to cope up with the society believes to keep up yours and your family status. This student stated:

'My family would kill me if I thought about nursing, my father is a very well-known person in Riyadh…. its shame they would say!'

One of the students explained that nursing is a job for a female from a family that does not care about society and how society will look at them. Those who lived in western countries are more liberal and free of cultural barriers and don't care much of the society. The student reported:

'Thinking of studying nursing would bring stigma to the whole family and tribe, nursing is not for triable female member, females who join nursing are only those without families or those whose fathers have lived in the Western world'.

- *Perceived lower chances of getting married*

Saudi Arabia is an Islamic nation run under Sharia law, and getting married is a very important life event for Muslims. Marriage is one of the most important acts of worship in Islam, and it is a social obligation for men. The participants in the discussion groups

emphasised the adverse effect of getting married while being a nurse. Interestingly, this effect was thought to impact not only female nurses, but also males. It is society's belief that many men are reluctant to marry nurses because nurses work night shifts and are in mixed-gender places; this was contextualised strongly in the participants' views. It is extraordinary to find a Saudi husband who permits his wife to be away from home for long hours or to sleep outside the home, even for work purposes. The participants believed that males who considered nursing as a career also had lower chances of being married because the work is in a mixed-gender place with other females, there are long hours and it is hard to spend enough time with his wife and children.

One participant in the parent's group mentioned that:

'I would not permit my son to get married to a nurse nor my daughter to get married to a male nurse due to the nature of nursing work, and mixing with the other gender'.

Traditions are reflected in all aspects of life, including work. Most believe that a woman's appropriate job is being a mother, wife and taking care of the children; although, this image has been increasingly changing in Saudi society (Al-Suwaigh, 1989; Meleis & Hasan, 1980; El-Sanabary, 1993; Gazzaz, 2009). In the Saudi context, the husband is the breadwinner and the wife is a mother, and men look for women who are not working or who are working in a socially acceptable job, such as a teacher.

One of the other parents said:

> *'The right place for women is home and raising children … not staying out at nights or over the weekend where the whole family are all together…working women in general and specially nurses are not the first choice when looking for a marriage, and you can see most nurses are still single. I would not like to see my daughter being like them'.*

One of the students had a similar view about women's work and that the normal place for a wife is staying home and taking care of her children and husband. This person stated that:

'I think a female's normal place is her home and taking care of her family and the husband is the worker who bring money not the wife, that's why I will not marry a worker woman'.

Being a nurse in Saudi Arabia means there is a good chance of interacting with opposite-gender colleagues or patients, which is generally prohibited. Community members who do not respect the traditions and religious roles of both men and women are thought to have a bad character. This is why some people consider female nurses, because of their talking and interacting with non-relative (MOHRAM[3]) males, as showing disrespect for society's morals. It is important to have a good reputation and to follow society's traditional roles to get married (El Sanabary, 1993; Meleis & Hasan, 1980; El-Sanabary, 2003; Gazzaz, 2009) Members of the student group also emphasised this sub-theme. A member of this group stated:

'If you want to get married earlier, don't consider nursing as a career [Researcher: Why?] Males refuse to get married to nurses due to the hard working conditions of the nursing profession. Nurses are forced to do night shifts and mix with other genders as you know and this is enough in my opinion'.

Another one of the students stated something similar:

'Many people avoid considering nurses when they start thinking of getting married. They think that nurses, especially females, have bad morals, due to the nature of nursing work'.

5.3 Influence on the students' decision to choose nursing as a career

This theme focused on the students' intention of studying nursing in the future and the influence of family on the students' decision to choose nursing as a career. Both groups discussed remuneration and the expected nursing duties. The theme of nursing as a career choice was separated into two sub-themes: intention to study nursing and family influence and relative salary compared to other jobs.

[3] MOHRAM means male relatives of females

- *Intention to study nursing and family influence*

This sub-theme involves the intention of parents and high school students to study nursing in the future and the influence of parents and family on the students' decision to consider nursing as a profession, specifically how the latter appears to be discouraging them from pursuing nursing.

The participants had some diverse opinions on this sub-theme; most of the students had the intention of considering nursing as a career, whereas most of the parents disagreed with their children considering this option. When asked if she had the intention of studying nursing in the future, one of the students stated:

'I would if I could; my character is appropriate for nursing and I am comfortable with the idea of being a nurse'.

One of the other students stated that he would consider nursing after high school:

'Why not? … It depends on my grades and what choices I have after high school, usually students who join nursing are those who couldn't get any other chance [other major at university] but nursing'.

Although the socioreligious aspect was not directly alluded to in the questions, the students assumed it was inferred, and they observed that there are no religious prohibitions against being a nurse, but they acknowledged the traditional cultural barriers to the nursing profession, most likely pertaining to the gender issues of women working and in nursing context in particular. This is seen in the following response:

'Yes, why not? Since there are no clear statements in our religion [Islam] that clearly say that nursing is not allowed for females'.

However, there were mixed views on accepting nursing as a future career. Other students had the opposite opinion when asked about considering nursing after high school:

'To be honest … No, it's not a job for females, not even Saudi females'.

However, another student stated that she would not consider nursing in the future because even though it is of social value, her personal interests were not conducive to a career in healthcare:

'Nursing is humanitarian work and I do respect it, but for me it's not my dream. I am interested in painting and I would love to have a job in my interest in future'.

When asked whether he would accept a sibling or child becoming a nurse, one of the parents said:

'I would not accept nursing for my siblings or children, either males or female; nursing is a stressful job and they could have a stress-free job rather than nursing, such as teaching or other civil work'.

One of the parents agreed with the previous view but had a slightly different reason:

'I strongly don't have any intention to let one of my children consider nursing in the future, due to what I see when I go to the hospital – nurses mixing with the other gender and laughing loudly, and no supervision [chaperone]'.

One of parents explained his opinion about not agreeing to nursing for his family, noting the negative community attitudes of it:

'I wouldn't agree, not because of nursing as a profession itself, but because of how our society [specifically in Riyadh] looks at nursing and the [negative] image that they have in their mind. A lot of professions were not acceptable in our society a long time ago, such as office boy and undercover detective, and they are acceptable nowadays in our society'.

On the other hand, one of the parents had the opposite opinion, stating that:

'I'm a father of two female nurses and I completely understand the nature of their work. In my opinion, if we all refuse our children to be nurses, who will do so? For how long will Saudi Arabia continue to depend on expatriates for treating and caring for Saudis?'

One of the students reported that her intention to study nursing was linked strongly to family agreement, stating that:

'No one in my family would agree to any female within the family studying nursing, so why should I think of nursing?'

Most of the students and parents who took part in this study emphasised the importance of 'respect' and 'obedience to one's parents', which are key elements of Islam and cultural norms embedded in the society and culture of Saudi Arabia. This was reflected in several high school students' comments. When asked if it was important to have parents' and family' input when choosing nursing as a career, one student stated:

'I can't refuse or reject what my parents ask me to do, if my parents ask me to not choose nursing I will obey what they want, as stated in the Holy Qur'an, in one of the verses it is stated: 'Thy Lord decrees that you worship none but Him, and be virtuous to parents. Whether one or both of them reaches old age, say not to them 'Uff!' nor chide them, but speak unto them a noble word' [Qur'an, 17: 23]'.

Thus, to pursue nursing, many students considered their parents' approval as being crucial, simply because respecting their parents was perceived to be a sign of respect. Another student agreed with the previous statement and cited how obeying and listening to one's parents is the key to *tawfik* (Divine guidance and facilitation in one's life):

'If you choose nursing and your parents disagree with your choice, Allah will not guide you in the right direction'.

In Saudi culture, it is not socially acceptable to have bad relationships with one's relatives, especially close and immediate family members; having poor relationships is construed as a failure on one's part because of not maintaining the ties of kinship, regardless of the cause; thus, extended families may cut their relationships with such a person in retaliation for upsetting the group's harmony. One of the students explained the expected answer if she were to talk to her family about choosing nursing as a career, talking about how her family had punished her sister just because she had thought about nursing:

'It happened in our family that my sister asked about whether she could study nursing, and one of my uncles got angry and did not talk to her for about three months'.

Most of the parents emphasised that when asked if they would interfere in their children's decision about choosing nursing, they thought it was their role to guide their children toward what they perceived to be most advantageous careers for their social prestige; however, viewed from another perspective, this amounts to imposing their own views and prejudices on their children, relying on cultural and religious norms to enforce obedience. And most children would accept this.

One of the parents justified this scenario when explaining whether he would interfere in his children's decision to study nursing:

'Parents love their kids and want them to have better chances and choices when it comes to the programme that they will join at university. They help children to make the right decision and give them the better advice based on their experience and knowledge in life. For example, if my children asked me about joining nursing I would have to explain to them all that I know about this profession and how it will affect their life in the future'.

Another parent stated that:

'I would not say it is interfering in their decision, but I think children should consult parents when choosing a career, because that reflects on their family and tribe, your job is your identity in the society, so I would ask them to choose what makes them respectful and recognized in the tribe and in the society'.

However, the response of one of the parents was interesting, suggesting general permissiveness about children's choices except when it comes to nursing:

'Usually, I do not interfere with the choices of my sons and daughters. But, if they think of nursing, I will forbid them from joining the nursing programmes due to the hard nature of the job'.

In this sub-theme, the participants had different opinions. Most of the students were open to the idea of considering nursing as a career in the future, whereas most of the parents disagreed. Participants and students in both discussion groups emphasised the importance of the agreement of family members when considering any career choice, especially nursing, and parental agreement was fundamental to the expectations of all the groups. It was obvious from this sub-theme that parents exert a great amount of influence on their children when it comes to choosing a future career.

- *Salary compared to other jobs*

This sub-theme was concerned with the salary of nursing compared to other occupations. Most participants viewed salaries and other remunerative benefits as important elements that influenced their career choice decisions. They agreed that the first thing they looked for when considering a job is the salary and how salary should match the duties and the efforts of the job. Most participants from both groups viewed money, either in the form of salary or other financial benefits, as an important factor influencing recruitment and attracting people to consider nursing as a career choice and how people could change their views with time and by changing their economic status. This is shown in the following statement from one of the students:

'I think that money is an important element in people's lives; they change their attitudes and opinions with the change of economic status – what was viewed as unacceptable is now preferred'.

Another participant from the same group agreed with the previous statement and added some examples of changes in the community that occur with changes in people's lives and the need for money, reporting that:

'In the Saudi community, the Riyadh context particularly, people viewed working females as unacceptable in the community, but with the change of people's economic status and the need for money, women's work is socially acceptable nowadays in teaching or other jobs. However, if the salary of nursing increased, nursing would be their preferred career in future'.

One of the participants from the parents' group felt that nursing salaries did not match the efforts or the nature of the work performed when compared to other jobs such as teaching, stating that:

'The salary of nursing is less than a teacher's salary, but nursing has difficult and sensitive duties, it's a risky job compared to teaching duties'.

Another participant from the parents' group indicated that nurses have longer and more contact hours with the public (patients, families and visitors); they work rotating shifts, including night shifts; and have weekend duties. Yet compared to other careers in the healthcare environment, such as pharmacists, nurses have a lower salary:

'Nurses work rotating shifts, night shifts, and at the weekend most of the time. In addition to that they meet different people with different mentalities in a day, which causes them stress. With all that, their salary is the same as any administrative work, with no shifts or rotating work and you have your weekends off'.

Salary may not be as powerful as the other resisting forces (i.e., the cultural and community image of nursing) for those who belong to families of a higher socioeconomic status and who have financial security. One student highlighted that she considered the salary as not being low, and remuneration did not have any impact on her decision to consider nursing as a career. However, she was concerned about the negative image of nursing among the Riyadh community, reporting that:

'Despite the relatively high salaries offered to nurses compared to other professions, I feel that I cannot be a nurse due to the low-class view of this profession, as viewed by most people'.

In this sub-theme, participants and students in both discussion groups emphasised the importance of salaries and other financial benefits in influencing their decisions about nursing as a career choice. They indicated that nursing salary, compared to other careers in the healthcare industry or other industries, is still not competitive. Also, participants from both discussion groups agreed that increasing nurses' salaries to be in line with the duties of the job could attract more Saudis to consider nursing as a career.

5.4 Local nurse's experience of choosing nursing as a career and community views

This section will provide detailed information of nurses' experiences with their families and how they became nurses. This section will also include the nurses' experiences with the Riyadh community and how they have been viewed. The themes and sub-themes in this section emerged through the analysis that was detailed in Chapter Four.

The themes are presented separately, complemented by narrative quotes from the participants. Pseudonyms are used to protect the participants' identities.

The findings indicated that the responses focused on two themes: experiences in career choice and the view of nursing in the Riyadh community. A summary of the themes and sub-themes are found in Table 5-3.

Table 5-6: Section two key themes and sub-themes—Local nurses' experiences of choosing

Themes	Sub-Themes
Experiences in choosing nursing	• A driving force for change: choosing nursing as a career • Lack of family support
A view of nursing in the Riyadh community	• Increased conflict level with the public • Improving the image of nursing

5.4.1 Experiences in choosing nursing

This theme focused on the local nurses' experiences of choosing nursing as their careers, what motivated them to do so and how they made the decision and convinced their family to let them be nurses. This theme also went over the difficulties they had with their families after becoming nurses. The theme of nurses' experiences was divided into three sub-themes, choosing nursing, family and making the decision and experience after becoming a nurse.

- *A driving force for change: choosing nursing as a career*

This sub-theme went over how and why nurses chose nursing as a career and what was the driving forces that led them to choosing the profession. Most of participants in this group reported that it was a new experience that they wanted to try and liked being different from the people around them. One of the nurses reported that*:*

'I don't know about nursing till I start studying the program, but I always I felt that I want to be deferent in everything even in my career, I have heard many negative things about nurses in the society which I don't think it's true, choosing nursing was a challenge to the society and adventure for me, it's a prove of identity'.

Another member of the group stated something similar: how she saw nursing as a something unique, being different from other jobs that girls can do in Saudi society. She reported that:

'I have made my decision of choosing nursing while I am in high school, when I saw the nurses in maternity ward, when my mum gave a birth, I spent a time watching them talking in English and wearing a uniform, I was just loved to be like them, they were deferent from teachers or anyone else'.

Some of nurses agreed that getting a job immediately was the motivation for them to choose nursing as a career:

'After I finished high school I applied for many major at university and one of the options I had at that time was nursing, I didn't know about it, and I asked the admission people about nursing, where one of them recommended me to join nursing to have immediate job, at that time it was important for me to have a job after finishing college to help my family instead of choosing what I really like or my dream job, all I was concerned with at that time is to get job easily after graduation that why I chose nursing'.

Having a family member as a health practitioner who could give insight into working in healthcare was also seen as a positive driving force. A daughter of a health practitioner stated that:

'My father encouraged me to study nursing, he knows about health industry and told me that if you are majoring in nursing and graduated you will not wait to find a job, you will have your job the next day of graduation [indicating to the immediate recruitment for Saudi nurses], so I have decided to choose nursing as a career'.

One of the nurses stated an academic reason behind the choice of being a nurse, and the choice of being a nurse was based on academic achievement. Students in the field of medical and health sciences have a foundation year where after this year university distribute to the appropriate health care discipline/ course based on the foundation year' GPA result:

'After I finished my high school, I was majored in radiological sciences, and started my first year in the foundation year and after the year was finished the department informed me that I didn't meet the admission requirement for the radiological science and the college committee transferred me to nursing department, and this is how I am becoming a nurse'.

- *Lack of family support*

Participants in this sub-theme emphasised that the influence of their families continued even after they became nurses. Participants agreed that family influence was behind why most nurses left the profession.

One nurse explained that the culture of Saudi Arabia is full of traditions that are reflected in all aspects of life, including work. Most people believe that the most appropriate job for women is being a mother and taking care of children; although, this image has been changing. She stated that:

'Our relatives still look at me in inferior way. I have witnessed many divorce cases for several of my colleagues due to the nature of their work. Unfortunately, the community still holds negative views toward nurses'.

Another female nurse reported that there are some families who understand the nature of nursing and the heavy work load, and this brings stress to the house sometimes. However, they still accepting nursing due to the financial status and the salaries:

'Despite the fact that my husband understands the nature of my work, his family has impacted on him to the extent at which I start having conflicts with him before my role was changed from bedside nurse to diabetic nurse after which the conflicts subsided as the diabetic nurse works only at morning shifts and the work load is much less than that for bed side nurses'.

Most of the participants responded that the rotating shift and working weekends were the main concerns for families:

'My husband and I got married, and he knew that I am a nurse. I was working in GP clinic at that time from morning to afternoon every day except weekends, then I have been transferred to a general hospital where I have night shift and weekends duties, since then the issue of leaving my profession and such problems appeared in my house'.

Another female nurse said:

'My husband kept insisting on me to leave nursing, I think because he is committed to the Islamic instructions. As you know it is prohibited for me to travel alone without my husband being with me. In fact, I felt comfortable there (previous job place) because it was a small village….no stress; and we (health team members) were like a family but finally, I had to leave because I had to choose between my husband and my job'.

5.4.2 The view of nursing in the Riyadh community

The second theme in this section went over the image of Saudi nursing and how Saudi nurses are viewed in Riyadh. The participants spoke about their interactions with the public (visitors, patients and colleagues) and how they were mostly viewed in a negative light; they gave some ideas about how to improve the image of nursing. Two sub-themes were discovered: increased conflict level with the public and improving the image of nursing.

- *Increased conflict level with the public*

Participants raised the issue of increased conflict between nurses and patients or the public when compared to conflicts happening within other professions. One nurse responded to this notion, stating:

'Nurses are exposed to many insults, whether physical or verbal by both patients and relatives accompanying them. I was attacked by relatives of a patient in the emergency department. I was explaining to them that the doctor would come to examine their patient, but the doctor delayed because he was seeing another patient, but the relatives attacked me, accusing me of lying and one of the relatives told me that I'm just a slave and I should respect him and my role is just to call the doctor.... I will quit nursing as soon as I can'.

Another member explained that the conflict occurs with female nurses because they can't argue with patients or the relatives:

'Male nurses couldn't defend about themselves What about us (females)? How we can defend

if someone attacks us…Really we sometimes feel disappointed because of this work'.

The most interesting response about rotating shifts in nursing was given by a female nurse:

'People think that nurses are night girls or cheap. It happened with me that a husband of a patient has asked me for marriage in the Misyar way as his wife will be unable to make sexual relationship with him for 3 months after delivery...Then I collapsed and started crying... I can't imagine how such people think'.

In fact, Misyar marriage is common in the KSA and usually involves a secret second or third wife. Misyar is an official relationship between a man and a woman but does not involve the man and woman's lives coming together, nor is the man responsible for the financial upkeep of his Misyar wife. Misyar allows the man to have a normal wife in addition to his Misyar wife(s). The Misyar wife is expected to live with her parents, and her husband can visit her according to a pre-determined schedule. It allows for a lesser form of relationship between man and woman than a normal marriage, However it is not acceptable in most of society, especially for women.

One of these groups explained what they face every day, such as humiliation or sexual harassment in either a direct or indirect way from the public and male colleagues:

'Saudi nurses face a disrespect and sexual harassment almost every day they go to work, either verbal or physical, direct or indirect, not only from public but also from a male co-worker, this is something makes you to re-evaluate your decision about this job, did I do the right choice? Did I do something wrong?'

Most of the group explained an interesting issue and why nurses faced this conflict when no other health profession did:

'Nurses start with the patients when they get in the clinic or the emergency department and remain with them to the wards in case of admission, that's why they look at us as servant where they can just give us orders, they don't look at us positively and to take care of them like doctors, and here where usually the conflicts take place'.

- *The drive to improve the image of nursing*

In this sub-theme, participants gave some recommendations based on their experiences to improve the image of nursing in the community. Most of the participants agreed that improving the image of nursing should start with nurses and healthcare practitioners, and the role of the media should be to make the community aware of the need of Saudi nurses.

One group member suggested that nurses should take the responsibility of changing and adding respect to their profession:

'Nurses must respect this profession[nursing] by doing their job with no break of culture norms, such as having over make up or laughing louder with colleagues specially the opposite sex front of people, even if that not wrong but we have to improve the negative image on the society'.

Another member stated that showing respect from our healthcare practitioners is important and reflected on the importance of the nursing profession:

'Some doctors don't trust Saudi nurses and that can be witnessed by visitors or patients, one day I was in my duty and when the doctor knew that I am a Saudi nurse he asked the head nurse [which is usually western nurse] to be with him, I felt I was humiliated, if this is the view of our colleagues how do you think normal people will view us'.

Most of participants agreed that the media should do its part; they felt there is an absence of the media and social media delivering the message of the importance of Saudi nurses in the community and that the media does not show the positive message of nursing enough:

'Media is not showing the positive side of nursing, if you watch the drama in Saudi, its only concerned about doctors when it has part in hospitals, and sometimes shows the family has a doctor son and how they are proud of him. I have never seen in our media anything presents nursing as proud job or a job that dream of parents for their children its only about engineering or doctors'.

Another one explained that people get their image of nursing from the media; this person thought the media reflects the image of society, so the media is important in society regarding reflecting the image of nursing:

'I think people get influenced by what in our channels, the role of media is important in my opinion to be one of the methods to improve the image of nursing, if media presents nursing profession to community, specially parents and kids who spent time on TV as a job that all society member dream of, and how it is a job that recommended by Islam. I think most people will have a positive image instead of the negative one'.

One emphasised that the salary and benefits is important to attract students and change nursing's negative view:

'The nursing salary and benefits should be reviewed and increased to attract more young people, the most concerned for students when looking for job is salary so that can be the best way to attract them to join nursing; public image will improve if nurses have a salary that matches with their duties and responsibilities'.

5.5 Summary of the Chapter

To summarise the the findings of the three focus group discussions (high school students, parents of high school students and nurses), female participants appeared to be more likely to select a career in nursing compared to males. However, considering nursing comes with barriers that keep females from selecting nursing. Families tend to disapprove of the choice of nursing for their female children, but their disagreement was not with nursing as a profession, but rather was in line with the community's attitude toward nursing and the working conditions. Many students' and family's interpretations of the Islamic restrictions in the work environment played a pivotal role in influencing the decision for accepting or rejecting nursing as a career choice and included women's work outside the home, a mixed-gender work environment, caring for patients of the opposite sex and perceived lower chances of getting married. Parental agreement is a way of respect and obedience that the Islamic culture instructs people to do. perceived social status is also important for high school students and their parents. ' low class job' and 'prestigious occupation' affect the family's reputation, especially for very well-known families. However, for females, social status when it comes to career choice is perceived to be more influential than for men. The social status of women is important and is seriously taken into consideration when deciding to go for nursing as a career. The roles of nursing were also linked to those of the domestic worker (i.e., the maids' jobs). The participants viewed nursing roles as limited to assistant jobs or less important than other practitioners.

Chapter 6:

QUANTITATIVE RESULTS

6.1 Introduction

This chapter presents the results generated from the students' quantitative questionnaires. The aim was to explore the perceptions of high school students regarding nursing and their intentions to study nursing at university. Also examined were the factors that influence students' decision making when it comes choosing nursing as a profession. The results pertaining to the students' socio-demographic information are also presented. Moreover, all results for the statistical analysis of the questionnaire items are presented. Additionally, the results of the psychometric testing for the study's tools, which are from Mahran and Nagshabandi's (2012) study, are presented. The researcher has named the tool used as the Nursing Career Choice-Saudi Arabia Scale (NCC-SA). The quantitative analysis of NCC-SA will answer the questions below.

The research questions to be answered by the NCC-SA scale are as follows:

- Further explore and quantify the factors influencing the decision to choose nursing as a profession among high school students in Riyadh.
- Investigate and gain further insight into the perceptions of the nursing profession and how the public's image of nursing impacts the shortage of a local nursing workforce in Riyadh.

The chapter starts with a description of the sample, the association between studying nursing after high school and the sample demographic; this is followed by a factor analysis of the NCC-SA instrument. Then, reliability measures for each of the factors are reported. Results for each of the factors are given (descriptive statistics). Finally, the results for the inferential statistical analysis assessing the relationship among the socio-demographic (independent variables) and the NCC-SA instrument and its subscales are presented.

6.2 Sample Demographic Information

The questionnaire was distributed to 639 high school students, of which n=554 completed the questionnaire, which is a response rate of 86.6%. Table 6.1 below shows the descriptive statistics for the demographic characteristics of the sample.

6.2.1 Participant's gender and age

Female participants comprised 35% (n=193) and male participants 65% of the sample (n=361). Most of the students were between 18–21 years old, with 29% (n=161) 18 years old, 67% (n=371) between 19–21 years old and only 4% (n=22) above 21 years of age.

6.2.2 Students' family's characteristics

For students' family's characteristics, most of the participants (92%; n=512) indicated that their families (brothers, sisters and parents) has less than 15 members while 8% (n=42) of the participants stated they had more than 15 family members.

Family income varied, where most of the participants' family incomes were less than 120,000 Saudi Riyals (SR) per year, which was reflected by almost 49% (n=269) of the participants, followed by 39% (n=218) who stated a family income of between 120,000–210,000 SR p/y and only 12% (n=67) stating a family income of over 210,000 SR p/y (1 SR is equivalent to £0.1866).

Table 6.1: Descriptive statistics for socio-demographic

SAMPLE SOCIODEMOGRAPHIC			
Variable	**Categories**	**Frequency**	**Percent %**
Age	18 years	160	28.9
	19-21	371	67
	More than 21 years	23	4.2
	Total	**554**	**100**
Gender	Male	361	65.2

	Female			193	34.8
	Total			**554**	**100**
Family income/year	Less than 120 thousand SR	Male	196	269	48.6
		Female	73		
	120–210 thousand SR	Male	125	218	39.4
		Female	93		
	More than 210 thousand SR	Male	40	67	12
		Female	27		
	Total			**554**	**100**
Number of family members	Less than 15 members	Male	329	512	92.4
		Female	183		
	15 members and more	Male	32	42	7.6
		Female	10		
	Total			**554**	**100**

6.3 Psychometric Analysis of the NCC-SA Scale

This tool was used and published in a previous study by Mahran and Nagshabandi (2012). The original authors approved the use of this tool, and because it did not have a name, the researcher called it the Nursing Career Choice-Saudi Arabia (NCC-SA) Scale. This scale aimed to explore the perceptions of high school students regarding nursing as a profession and their intention to study nursing at university. It also examined the factors that influence students' decision making about choosing nursing as profession in Riyadh.

6.3.1 Reverse coding items

Before conducting a factor analysis, the researcher recoded items to suit most items in the list, that is, an item that was negative among mainly positive items was recoded (i.e., 1=5, 5=1), and the value was changed to be (Strongly agree=Strongly disagree, Agree=Disagree, Neutral=Neutral, Disagree=Agree, Strongly disagree=Strongly agree). Team members (supervisors, candidate and statistician) independently reviewed the items and then came to an agreement that the items 13, 14, 15, 16, 17, 18, 19, 20, 21, 24, 25, 28, 29, 32, 36, 38, 39, 41, 42, 43 and 51 needed to be recoded. It was then decided not to recode some items that had

been already recoded (15, 16, 38 and 51) to be positive. Recoding the relevant items on any scale is important because it helps provide more a higher reliability and creates an accurate average of each subscale for use in a statistical analysis.

6.3.2 Psychometric testing

No psychometric testing was been performed previously with this tool. Therefore, the psychometric properties for the tool were examined using principal components analysis and varimax rotation to ensure that the instrument was performing adequately. The results of the principal component factor analysis were arranged by size. For example, high-loading items were listed first; also, any loading on each factor less than 40%, or 0.40, was not considered. The magnitude of inter-correlations among items and the appropriateness of a factor analysis were examined by the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity (Field, 2013). Internal consistency was analysed using Cronbach's alpha. The validity and reliability of the data collection method are very important because this gives the research findings their credibility (Parahoo, 2006). The original instruments had 39 items, and once the data were screened and normalised, the researcher conducted an initial test of the reliability using Cronbach's alpha as a measure of internal consistency (DeVellis, 1991). Cronbach's coefficient alpha can also be thought of as the mean of all the correlations between each item and the total (Fink, 1995b, p. 48). The researcher first examined the suitability of the data for factor analysis and examined the correlation matrix when searching for clusters of items that correlate more highly with each other than with other items or clusters of items (Carmines & Zeller, 1979, p. 59), for entirely items (the 39 items) in the original instruments. To test these factors further, a reliability test was conducted. The overall the reliability score would be insufficient if it ranged between 0.30 and 0.65, adequate if it ranged between 0.70 and 0.80 and very good if it ranged between 0.80 and 0.90 (DeVellis, 1991). A range of .80 to .90 or over is recommended for instruments that are widely used (Carmines & Zeller, 1979). At this stage, a reliability of .70 to .80 was desired. In addition to the initial reliability analysis, the researcher also examined the correlation matrices (computed using Pearson's r) to find items that correlated only weakly or infrequently with other items. Such items were marked for possible elimination after considering the factor structure of the instruments. According to Tabachnick and Fidell (2001), elimination is an

acceptable option. So the researcher eliminated the items 11, 31 and 37 because they did not correlate with other items. However, the reliability score and the correlation among items were insufficient, so items 11, 12, 31, 33, 37, 51 and 44 were eliminated. The steps of eliminating and reversing the items have been taken again and again to have a reliable score and strong correlation among the items. The last step was eliminating 23 items, and the remaining 16 items (10, 13, 14, 15, 17, 20, 21, 22, 23, 24, 26, 27, 36, 41, 42 and 43), where the items number (17, 13, 24, 21, 20, 4, 42, 41, 14 and 36) are reversed to be positive depending on their psychometrics performance with other items.

6.4 Choosing Nursing as a Career

Table 6.2 below shows the information that is relevant to the choice of nursing as a career. This is explained through the intention to study nursing, family or friends working in nursing and whether family members advise others to study nursing.

6.4.1 Study nursing after high school

Approximately a third of the students (33%, n=183) did not intend to study nursing in the future, a third (32%, n=177) indicated they did and just over a third (35%, n=194) were undecided.

6.4.2 Family members or friends working in the field of nursing

Most of the students did not have any family members working in nursing (89%, n=491), and 70% (n=389) indicated that they did not have any friends or relatives working in nursing.

6.4.3 Advise others to study nursing

When asked whether the advice other to study nursing a clear majority of students (76%, n=421) indicated that they would advise others to study nursing.

Table 6.2: Descriptive statistics for choosing nursing as a career

CHOOSING NURSING AS A CAREER					
Variable	**Categories**			**Frequency**	**Percent%**
If any friends work in nursing	Yes	Male	90	165	30%
		Female	75		

	No	Male	271	389	70%
		Female	118		
	Total			**554**	**100**
If any of family members work in nursing	Yes	Male	46	63	11
		Female	17		
	No	Male	315	491	89
		Female	176		
	Total			**554**	**100**
Study nursing after high school	Yes	Male	82	177	32
		Female	95		
	No	Male	148	183	33
		Female	35		
	Not decided yet	Male	130	194	35
		Female	64		
	Total			**554**	**100**
Advise others to study nursing	Yes	Male	247	421	76
		Female	174		
	No	Male	114	133	24
		Female	19		
	Total			**554**	**100**

6.5 The Association Between Studying Nursing After High School and the Sample Demographics

The association between the intention to study nursing after high school and the sample characteristics was measured using a chi-square test (X^2) using the significance level of p=0.05 (5%).

6.5.1 Study nursing after high school and gender

The association between studying nursing after high school (yes, no) and gender (male, female) was examined using a chi-square test. The results showed a statistically significant association $X^2(2)=46.38$, $p=0.000$. Female participants appeared to be more likely to select a career choice in nursing compared to male participants.

Table 6.3: A cross tabulation table between the intention to study nursing and gender

Study nursing after high school and gender				
		What is your gender?		Total
		Male	Female	
Do you want to study nursing after high school?	Yes	47% (n=82)	53% (n=95)	32% (n=177)
	No	80%(n=148)	20%(n=36)	33% (n=183)
	Not decided yet	68%(n=130)	32%(n=62)	35% (n=194)
Total		100% (n=361)	100%(n=193)	100%(n=554)

Table 6.4: The significance of the association between intention to study nursing and gender

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	46.386[a]	2	.000
Likelihood Ratio	46.837	2	.000
Linear-by-Linear Association	17.066	1	.000
N of Valid Cases	554		
a. 0 cells (0.0%) have the expected count of less than 5. The minimum expected count is 62.01.			

6.5.2 Study nursing after high school and age

Age was found to have a statistically significant association with studying nursing after high school; the results were significant at $X^2(4)=17.01$, $p=0.002$. Participants more than 21 years of age were more likely to choose this option, followed by participants aged 19–21 and lastly 18-year-old students.

Table 6.5: A cross tabulation table between intention to study nursing and age

Study nursing after high school and age					
		How old are you?			Total
		18 years	19–21 years	More than 21 years old	
Do you want to study nursing after high school?	Yes	19%(n=34)	74%(n=131)	7%(n=13)	32%(n=178)
	No	33%(n=61)	64%(n=117)	3%(n=6)	33%(n=184)
	Not decided yet	34%(n=65)	64%(n=123)	2%(n=4)	35%(n=192)
Total		28.9%(n=160)	67%(n=371)	4.2%(n=23)	100%(n=554)

Table6. 6: The significance of the association between intention to study nursing and age

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.014[a]	4	.002
Likelihood Ratio	17.336	4	.002
Linear-by-Linear Association	13.393	1	.000
N of Valid Cases	554		
a. 0 cells (0.0%) have the expected count of less than 5. The minimum expected count is 7.39.			

6.5.3 Study nursing after high school and family working in nursing

There was no statistically significant association between the intention of participants to study nursing and having family members working in nursing ($X^2(2)=2.40$, $p=0.300$).

Table 6.7: A cross tabulation between intention to study nursing and family working in nursing

Study nursing after high school and family work in nursing				
		Does any of your family work in nursing?		Total
		Yes	No	
Do you want to study nursing after high school?	Yes	9.6% (n=17)	90% (n=161)	32.1%(n=178)
	No	14% (n=26)	86% (n=158)	33.2%(n=184)
	Not decided yet	9.9% (n=19)	90.1% (n=173)	34.7%(n=192)
Total		11.2% (n=62)	88.8%(n=491)	100%(n=554)

Table 6.8: The significance of the association between intention to study nursing and family working in nursing

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.406[a]	2	.300
Likelihood Ratio	2.331	2	.312
Linear-by-Linear Association	.005	1	.943
N of Valid Cases	554		
a. 0 cells (0.0%) have the expected count of less than 5. The minimum expected count is 19.92.			

6.5.4 Study nursing after high school and friends working in nursing

A significant association was found between studying nursing after high school and having friends working in nursing. Participants who had nurse friends were more likely to choose the options studying nursing ($X^2(2)=45.39$, p=0.000).

Table 6.9: A cross tabulation between the intention to study nursing and friends working in nursing

Study nursing after high school and a friend work in nursing			
	Does any of your friends work in nursing?		Total
	Yes	No	

Do you want to study nursing after high school?	Yes	46.1% (n=82)	53.9% (n=96)	32.1%(n=178)
	No	14.1% (n=26)	85.9% (n=158)	33.2%(n=184)
	Not decided yet	27.1% (n=52)	72.9% (n=140)	34.7%(n=192)
Total		28.9%(n=160)	71.1%(n=394)	100%(n=554)

Table 6.10: The significance of association between intention to study nursing and friends working in nursing

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	45.391[a]	2	.000
Likelihood Ratio	46.156	2	.000
Linear-by-Linear Association	15.237	1	.000
N of Valid Cases	554		

a. 0 cells (0.0%) have the expected count of less than 5. The minimum expected count is 51.41.

6.5.5 Study nursing after high school and family income

There is a statistically significant association between intention to study nursing and family income, at $X^2(4\ )=28.47$, p=0.000. It was clear that the smaller the income category was, the more likely participants were to intend to study nursing.

Table 6.11: A cross tabulation between the intention to study nursing and family income

Study nursing after high school and family income					
		How much is your family income per year?			Total
		less than 120 thousand SR	120-210 thousand SR	more than 210 thousand SR	
Do you	Yes	62.4% (n=111)	31.5% (n=56)	6.2% (n=11)	32% (n=178)

want to study nursing after high school?	No	35.9% (n=66)	46.2% (n=85)	17.9% (n=33)	33% (n=184)
	Not decided yet	47.9% (n=92)	40.1% (n=77)	12.% (n=33)	35% (n=192)
Total		48.6% (n=269)	39.4% (n=218)	12% (n=67)	100% (n=554)

Table 6.12: The significance of the association between intention to study nursing and family income

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.475[a]	4	.000
Likelihood Ratio	29.057	4	.000
Linear-by-Linear Association	7.433	1	.006
N of Valid Cases	554		

a. 0 cells (0.0%) have the expected count of less than 5. The minimum expected count is 21.53.

6.5.6 Study nursing after high school and members in family

The intention to studying nursing was not statistically significantly associated with the number of members in the respondent's family ($X^2(2)=1.45$, p=0.484).

Table 6.13: A cross tabulation between the intention to study nursing and members in the family

Study nursing after high school and number of members in your family				
		How many members are in your family?		Total
		Less than 15 members	15 members and more	
Do you want to study nursing after high school?	Yes	93.8%(n=167)	26.2%(n=11)	32.1%(n=178)
	No	92.9%(n=171)	7,1%(n=13)	33.2%(n=184)
	Not decided yet	90.6%(n=174)	9.4%(n=18)	34.7%(n=192)
Total		92.4%(n=512)	7.6%(n=42)	100%(n=554)

Table 6.14: The significance of the association between intention to study nursing and members of family

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.451[a]	2	0.484
Likelihood Ratio	1.426	2	0.49
Linear-by-Linear Association	1.359	1	0.244
N of Valid Cases	554		
a. 0 cells (0.0%) have the expected count of less than 5. The minimum expected count is 13.49.			

6.5.7 Study nursing after high school and advising others

A statistically significant association was found between intention to study nursing and advising others to study nursing at $X^2(2)=92.74$, p=0.000. Participants who intend to study nursing are more likely to advise others to study nursing too (91%).

Table 6.15: A cross tabulation between intention to study nursing and advising others to study nursing

Study nursing after high school and advising others to study nursing			
	Do you advise others to study nursing?		Total
	Yes	No	

Do you want to study nursing after the high school?	Yes	91% (n=162)	9% (n=16)	32.1% (n=178)
	No	51.6% (n=95)	48.4% (n=89)	33.2% (n=184)
	Not decided yet	85.9% (n=165)	14.1% (n=27)	34.7% (n=192)
Total		76.2% (n=422)	23.8% (n=132)	100% (n=554)

Table 6.16: The significance of the association between intention to study nursing and advising others to study nursing

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	92.744[a]	2	.000
Likelihood Ratio	89.940	2	.000
Linear-by-Linear Association	.874	1	.350
N of Valid Cases	554		

a. 0 cells (0.0%) have the expected count of less than 5. The minimum expected count is 42.41.

Summary table with each independent variable and whether it is statistically significant or non-significant and p values

	Statistically significant	NOT statistically significant
Study nursing after high school and gender	Statistically significant association ($X^2(2)$ =46.38, p=0.000)	
Study nursing after high school and age	Statistically significant association ($X^2(4)$=17.01, p=0.002)	
Study nursing after high school and family member working in nursing		Not statistically significant association (X2(2)=2.40, p=0.300)
Study nursing after high school and friends working in nursing	Statistically significant association (X2(2)=45.39, p=0.000)	
Study nursing after high school and family income	Statistically significant association (X2(4)=28.47, p=0.000)	
Study nursing after high school and number of family members		Not statistically significant association (X2(2)=1.45, p=0.484)
Study nursing after high school and advising others	Statistically significant association (X2(2)=92.74, p=0.000)	

In summary, the intention to study nursing was significantly associated with gender; girls are more likely to want to study nursing. It also seems that students who are 19–21 years old are more likely to choose nursing. Having friends working in nursing can also significantly influence the decision to study nursing while those who advise others to study nursing are also more likely to study it. Having a low family income (120,000 or less) increases the chance of study nursing after high school.

6.6 Factor Analysis

A principal component factor analysis is helpful for placing variables into meaningful categories. A factor analysis can be used in the analysis of the validity of an instrument. There are two main factor analysis techniques: exploratory factor analysis (EFA) and confirmatory factor analysis (Tabachnick & Fidell, 2001). 'Confirmatory factor analysis is much more sophisticated technique used in advanced the stage of the research process to test theory about latent process. CFA is most often performed through structural equation modelling' (Tabachnick, 2013, p. 662). An exploratory factor analysis was conducted on the NCC-SA scale used in this study. An exploratory factor analysis is used to discover the number of factors (subscales) influencing variables and to analyse which variables are grouped together (Child, 2006). The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) resulted in a KMO=.853, a level of inter-correlation among items considered meritorious (Kaiser & Rice, 1974). Likewise, Bartlett's test of sphericity (DF=120, P=0.000, approx., chi-square=3007.607) showed significant results ($p<0.001$), as shown in Table 6.17. The results of both tests indicated that the data presented were factorable and sufficient to perform a principal component factor analysis (Tabachnick & Fidell, 1996). In doing so, the researcher used a varimax rotation and arranged item loading by size items with the higher loadings are listed first; while loadings less than 40% were excluded from the rotated component matrix table. The results of the rotated component matrix (Table 6.18) showed that items were loaded into three factors. By examining the content of each factor (items within) the researcher provided a label that could reflect its content. Such labels were provided based on items within while consulting the literature review.

Subscale 1: Intention to study nursing (Items 22, 27, 23, 10, 26 and 17), where all the items in this subscale were about the students' intention to study nursing and choosing nursing as a career.

Subscale 2: Negative family and community attitude toward nursing (Items 13, 15, 24, 21 and 20), where all the items in this subscale were about the negative family and the community attitude toward nursing as a profession.

Subscale 3: Work-related barriers/ work conditions (Items 43, 42, 41, 14 and 36), where all the items in this subscale are about work-related barriers that could prevent students from choosing nursing. The mean and the standard deviation (SD) are also reported in Table 6.20 for each item.

Table 6.17: Sampling adequacy for the factor analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.853
Bartlett's Test of Sphericity	Approx. Chi-Square	3007.607
	Df	120
	Sig.	.000

P = statistically significant

Table 6.18: The rotated component matrix of NCC-SA's three subscales using a varimax principle component factor analysis

Rotated Component Matrix[a]			
Subscales	Component		
	1	2	3
Intention to study nursing			
Seriously, I'm thinking in studying nursing	.834		
I want to study nursing if I get accepted in a nursing school	.812		
If my parents agree for me to study nursing, I will do so	.785		
When I see a nurse, I wish if I'm working like him/her	.753		
I advise my colleagues to study nursing	.579		
I completely reject the idea of working in the field of nursing	.499		
Negative family and community attitude toward nursing			
My family rejects the idea of working in the field of nursing		.784	
The community disrespects those working in the field		.699	
Most people look to the nursing profession in inferiority		.610	
I refuse to work in nursing because chance of mixing with other gender is high		.604	
Working time of nursing shifts is inappropriate		.562	
Work-related barriers			
Working with patients increases risk of infection transmission			.811
Working with patients increases psychological stress			.765
Working night shifts prevents me from considering nursing as future			.601
Nursing is exhausting profession			.512

I think that enrolment in nursing profession limits the chances of marriage for females		.484
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation.		
a. Rotation converged in 5 iterations.		

6.6.2 Factors reliability measure

Following the factor analysis, each of the subscales was tested for reliability. Cronbach's alpha was used to test the internal consistency between the items, with 100% (1.00) reflecting perfect reliability and 0% (0.00) reflecting no reliability. Overall, the reliability score was sufficient, and all scales and subscales were considered reliable. Table 6.19 shows the reliability scores, along with the number of items for each subscale.

Table 6.19: The Cronbach's alpha reliability for each of subscale and for the NCC-SA scale overall

Subscales	Number of Items	Cronbach's Alpha
Intention to study nursing	6	.815
Negative family and community attitude toward nursing	5	.762
Work-related barriers	5	.726

6.7 Descriptive Analysis of the Extracted Factors

This section provides descriptive statistics of all the subscales and items within. The descriptive statistics used are mean, standard deviation and rank. Each item will be ranked within the subscales, that is, the item that received the highest disagreement (higher mean score) will be ranked first, and the one with the least agreement mean will be ranked last, as based on mean score. Such statistics will give an indication and basic description of the participants' answers for each item within the three subscales. See Table 6.20.

6.7.1 Intention to study nursing

In total, six items made the intention to study nursing subscale. By looking at Table 20 below, it is clear that the first ranked item to generate the highest disagreement (or lowest agreement) was 'Seriously, I'm thinking in studying nursing' (M=2.77), and the least-ranked item was 'I advise my colleagues to study nursing' (M=2.16), which reflects the most agreed-upon item.

6.7.2 Negative family and community attitude toward nursing

Table 20 reflects participants' answers across the five items regarding the negative family and community attitudes toward nursing. By looking at the mean scores, it is evident that the most disagreement was generated for the item 'Working time of nursing shifts is inappropriate' (M=3.55). And the least disagreement was generated for the item stating, 'My family rejects the idea of working in the field of nursing' (M=2.50).

6.7.3 Work-related barriers

Work-related barriers included five items; overall, there was more disagreement across all items, as reflected in the mean scores in Table 20. The most disagreement was generated for 'Working with patients increases risk of infection transmission' (M=3.97), and the lowest was generated for 'Working night shifts prevents me from considering nursing as future' (M=3.55).

Table 6.20: Descriptive statistics of the NCC-SA's three subscales

DESCRIPTIVE STATISTICS OF THE NCC-SA's THREE SUBSCALES			
Items in each subscale	**Mean**	**SD**	**Rank**
Intention to study nursing subscale	2.45	0.92	
Seriously, I'm thinking in studying nursing	2.77	1.30	1
I want to study nursing if I get accepted in a nursing	2.58	1.28	2

school			
When I see a nurse, I wish if I'm working like him/ her	2.37	1.29	5
If my parents agree for me to study nursing, I will do so	2.45	1.39	3
I advise my colleagues to study nursing	2.16	1.14	6
I completely reject the idea of working in the field of nursing ®	2.37	1.23	4
Negative family and community attitude toward nursing subscale	3.02	1.03	
My family rejects the idea of working in the field of nursing ®	2.50	1.572	5
The community disrespects those working in the field	2.57	1.40	4
Most people look to the nursing profession in inferiority ®	3.46	1.41	2
I refuse to work in nursing because chance of mixing with other gender is high ®	3.04	1.46	3
Working time of nursing shifts is inappropriate ®	3.55	1.36	1
Work-related barriers	3.68	0.91	
Working with patients increases risk of infection transmission ®	3.97	1.16	1
Working with patients increases psychological stress ®	3.50	1.35	4
Working night shifts prevents me from considering nursing as future ®	3.55	1.40	5
Nursing is exhausting profession ®	3.67	1.31	3
I think that enrolment in nursing profession limits the chances of marriage for females ®	3.72	1.40	2

® = Reversed Items

6.8 Inferential Statistics

Inferential statistics are tests that can used to generalise data from a small sample to a larger population. The larger population in this context is Riyadh high school students. Inferential statistics are mainly characterised by the alpha level used to reflect the chance of a result occurring due to chance, which is usually set at 5% (0.05) or lower. In this section, an independent samples t-test and an independent sample one-way analysis of variance (ANOVA) are used to measure the effect of certain independent variables (what the researcher is manipulating, that is, the sample demographic details) on the dependent variables (what the researcher is measuring, that is, the three subscales). Furthermore, the researcher uses Pearson's correlation coefficient, r, to establish the relationship between the three main subscales (*Intention to study nursing; Negative family and community attitude toward nursing; and work-related barriers*). As stated above, an alpha level of 5% (0.05) determines the significance of the results in these inferential statistics.

Independent variables

In this section, the researcher is interested in measuring the effect of the sample demographic on each of the subscales. Hence, the variables examined here are gender, age, family income, members of family, family working in nursing, friends working in nursing, study nursing after high school and advising others to study nursing.

Dependent variables

The subscales, or dependent variables, are the items in the scale and are grouped into the following three subscales:

- *Intention to study nursing*
- *Negative family and community attitude toward nursing*
- *Work-related barriers*

6.8.1 Computing subscales

Before conducting inferential statistics, it is essential that each of the subscales be averaged, that is, items within each of the subscales summed and divided by the total number of items in each subscale. This allows the researcher to deal with an overall average per factor.

6.8.2 Distribution of results

After averaging the items within each factor, the researcher attempted to examine whether the overall averages followed a normal distribution (bell-shaped histogram), that is, if averages for all the participants were nearer to the overall average and had few extreme scores. In doing so, the results indicated that all the factors followed a normal distribution, as can be seen in the histograms below and Table 6.21. By looking at the general statistics below (Table 21) and the frequency histograms, the data for all the factors can be considered normally distributed, and the skewness and Kurtosis results were between +/-2, indicating a normal distribution. Hence, the researcher can choose to use parametric inferential tests (tests that are based on interval data and a normal distribution).

Table 6.21: The distribution of the main dependent variables

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Intention to study nursing	554	1.00	5.00	2.4555	.92055	.487	.104	-.145	.207
Negative family and community attitudes	554	1.00	5.00	3.0264	1.03359	.439	.104	-.775	.207
Work-related barriers	554	1.00	5.00	3.6830	.91847	-.219	.104	-.739	.207
Valid N (listwise)	554								

6.8.3 Age effect

Age as an independent variable was placed into three categories (18 years, 19–21 and 21 and above). An independent ANOVA was used to determine the effect of this variable on the three subscales (see Tables 22–24). The results revealed that there is a statistically significant effect regarding age on the intention to study nursing ($F(2,551)=7.82$, $p=0.000$). Participants who were more than 21 years old showed the lowest mean score ($M=1.80$) compared to participants who were 19–20 ($M=2.43$) and 18 years old ($M=2.59$). A post-hoc Bonferroni test showed that the oldest group was statistically significantly different from each of the two other groups ($p<0.05$)

Age also had a statistically significant effect on negative family and community attitudes ($F(2,551)=730.63$, $p=0.000$). Participants who were 18 years old generated the lowest mean scores ($M=2.51$), followed by those who were 19–20 years ($M=3.24$) and participants who were over 21 years old ($M=3.24$). A post-hoc Bonferroni test showed that the youngest group was statistically and significantly different from each of the other two groups ($p<0.05$).

A statistically significant effect of age was found on work-related barriers ($F(2,551)=20.79$, $p=0.000$). The youngest group generated the lowest mean score ($M=3.30$), followed by the 19–21 group ($M=3.82$) and participants older than 21 ($M=4.01$). Again, a post-hoc Bonferroni test showed that the youngest group was statistically and significantly different from each of the other two groups ($p<0.05$).

Table 6.22: Descriptive statistics of the age groups across the NCC-SA's three subscales

Descriptive

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Intention to study nursing	18 years	160	2.5938	1.00309	.07930	2.4371	2.7504	1.00	5.00
	19–21 years	371	2.4362	.88462	.04593	2.3459	2.5265	1.00	5.00
	more than 21 years	23	1.8043	.52861	.11022	1.5758	2.0329	1.00	2.67
	Total	554	2.4555	.92055	.03911	2.3787	2.5323	1.00	5.00
Negative family and community attitudes	18 years	160	2.5138	.71061	.05618	2.4028	2.6247	1.00	4.80
	19–21 years	371	3.2340	1.06737	.05542	3.1250	3.3429	1.00	5.00
	more than 21 years	23	3.2435	1.16456	.24283	2.7399	3.7471	1.20	5.00
	Total	554	3.0264	1.03359	.04391	2.9401	3.1126	1.00	5.00

Work-related barriers	18 years	160	3.3062	.80123	.06334	3.1811	3.4314	1.00	5.00
	19–21 years	371	3.8248	.92311	.04793	3.7306	3.9190	1.20	5.00
	more than 21 years	23	4.0174	.86321	.17999	3.6441	4.3907	1.40	5.00
	Total	554	3.6830	.91847	.03902	3.6064	3.7597	1.00	5.00

Table 6.23: ANOVA results and significance level for age effect

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Intention to study nursing	Between Groups	12.948	2	6.474	7.828	.000
	Within Groups	455.676	551	.827		
	Total	468.624	553			
Negative family and community attitudes	Between Groups	59.117	2	29.558	30.634	.000
	Within Groups	531.658	551	.965		
	Total	590.775	553			
Work-related barriers	Between Groups	32.742	2	16.371	20.796	.000
	Within Groups	433.759	551	.787		
	Total	466.501	553			

Table 6.24: Post-hoc Bonferroni results

Multiple Comparisons						
Dependent Variable	(I) How old are you?	(J) How old are you?	Mean Difference	Std. Error	Sig.	95% Confidence Interval

			(I-J)			Lower Bound	Upper Bound
Intention to study nursing	18 years	19-21 years	.15754	.08601	.203	-.0490	.3641
		more than 21 years	.78940*	.20279	.000	.3024	1.2764
	19–21 years	18 years	-.15754	.08601	.203	-.3641	.0490
		more than 21 years	.63186*	.19541	.004	.1626	1.1011
	more than 21 years	18 years	-.78940*	.20279	.000	-1.2764	-.3024
		19-21 years	-.63186*	.19541	.004	-1.1011	-.1626
Negative family and community attitudes	18 years	19-21 years	-.72021*	.09291	.000	-.9433	-.4971
		more than 21 years	-.72973*	.21905	.003	-1.2557	-.2037
	19–21 years	18 years	.72021*	.09291	.000	.4971	.9433
		more than 21 years	-.00952	.21108	1.000	-.5164	.4973
	more than 21 years	18 years	.72973*	.21905	.003	.2037	1.2557
		19-21 years	.00952	.21108	1.000	-.4973	.5164
Work-related barriers	18 years	19-21 years	-.51855*	.08392	.000	-.7201	-.3170
		more than 21 years	-.71114*	.19786	.001	-1.1863	-.2360
	19–21 years	18 years	.51855*	.08392	.000	.3170	.7201
		more than 21 years	-.19259	.19065	.939	-.6504	.2652
	more than 21 years	18 years	.71114*	.19786	.001	.2360	1.1863
		19-21 years	.19259	.19065	.939	-.2652	.6504
*The mean difference is significant at the 0.05 level.							

6.8.4 Gender effect

Using an independent samples t-test, it was found that gender has a significant effect on all three variables (Tables 25–26). A statistically significant effect was found on the intention to study nursing ($t(552)=8.00$, $p=0.000$). The female participants generated lower scores ($M=2.09$) compared to the male participants ($M=2.64$). Also, gender was found to have a

statistically significant effect was found on negative family and community attitudes (t(552)=14.43, p=0.000). Male participants (M=2.59) showed lower scores compared to the female participants (M=3.82). Finally, gender had a significant effect on work-related barriers (t(552)=12.98, p=0.000); male participants (M=3.35) showed a lower mean score compared to female participants (M=4.29). It should be noted that lower scores reflect more agreement.

Table 6.25: Descriptive statistics of genders across the descriptive statistics of the NCC-SA's three subscales

Group Statistics					
	What is your gender?	N	Mean	Std. Deviation	Std. Error Mean
Intention to study nursing	Male	361	2.6459	1.00167	.05272
	Female	193	2.0993	.60315	.04342
Negative family and community attitudes	Male	361	2.5994	.72349	.03808
	Female	193	3.8249	1.05446	.07590
Work-related barriers	Male	361	3.3584	.76270	.04014
	Female	193	4.2902	.87771	.06318

Table 6.26: The results and significance level of the independent samples t-test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Intention to study nursing	Equal variances assumed	63.561	.000	6.936	552	.000	.54658	.07880	.39180	.70136
	Equal variances not assumed			8.003	544.396	.000	.54658	.06830	.41243	.68074

Negative family and community attitudes	Equal variances assumed	92.723	.000	-16.105	552	.000	-1.22542	.07609	-1.37488	-1.07596
	Equal variances not assumed			-14.431	290.980	.000	-1.22542	.08492	-1.39256	-1.05829
Work-related barriers	Equal variances assumed	5.335	.021	-12.987	552	.000	-.93171	.07174	-1.07263	-.79078
	Equal variances not assumed			-12.447	348.059	.000	-.93171	.07485	-1.07893	-.78449

6.8.5 Family working in nursing

An independent samples t-test was used to find whether having a member of the family working in nursing impacts the dependent variables (Tables 27–28). This did not have a statistically significant effect on intention to study nursing ($t(551)=1.71$, $p=0.086$); negative family and community attitudes ($t(551)=0.034$, $p=0.971$); and work-related barriers ($t(551)=0.300$, $p=0.765$).

Table 6.27: Descriptive statistics of family working in nursing across the three subscales

Group Statistics					
	Does any of your family work in nursing?	N	Mean	Std. Deviation	Std. Error Mean
Intention to study nursing	No	491	2.4318	.92302	.04166
	Yes	62	2.6452	.89294	.11340
Negative family and community attitudes	No	491	3.0240	1.04323	.04708
	Yes	62	3.0194	.94969	.12061
Work-related barriers	No	491	3.6843	.93275	.04209
	Yes	62	3.6516	.79336	.10076

Table 6.28: The results and the significance of the independent samples t-test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Intention to study nursing	Equal variances assumed	.005	.944	-1.695	552	.091	-.20844	.12299	-.45002	.03314
	Equal variances not assumed			-1.748	80.248	.084	-.20844	.11921	-.44567	.02879
Negative family and community attitudes	Equal variances assumed	1.478	.225	-.147	552	.883	-.02041	.13844	-.29236	.25153
	Equal variances not assumed			-.157	81.850	.876	-.02041	.13012	-.27927	.23845
Work-related barriers	Equal variances assumed	6.918	.009	.092	552	.927	.01130	.12303	-.23035	.25296
	Equal variances not assumed			.103	84.878	.918	.01130	.10982	-.20705	.22965

6.8.7 Friends working in nursing

Similar to the above analysis, the effect of having friends working in nursing was measured (Tables 6.29–6.30). The only statistically significant effect was intention to study nursing (t(552)=4.70, p=0.000). Those who had friends and relatives working in nursing showed lower mean scores (M=2.17) compared to those who did not have relatives or friends working in nursing (M=2.57). It should be noted that the lower the score, the more agreement there is on the scale. No significant effect was found on negative family and community attitudes (t(552)=0.763, p=0.446) or work-related barriers (T(552)=478, p=0.663).

Table 6.29: Descriptive statistics relatives/friends working in nursing across the three subscales

Group Statistics

	Do any of your friends or relatives work in nursing?	N	Mean	Std. Deviation	Std. Error Mean
Intention to study nursing	Yes	160	2.1719	.87364	.06907
	No	394	2.5706	.91520	.04611
Negative family and community attitudes	Yes	160	2.9738	1.02057	.08068
	No	394	3.0477	1.03936	.05236
Work-related barriers	Yes	160	3.6537	.87472	.06915
	No	394	3.6949	.93647	.04718

Table 6.30: The results and the significance level of the t-test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Intention to study nursing	Equal variances assumed	.262	.609	4.708	552	.000	.39877	.08469	.23241	.56512
	Equal variances not assumed			4.802	307.578	.000	.39877	.08304	.23536	.56217
Negative family and community attitudes	Equal variances assumed	.049	.824	.763	552	.446	.07397	.09693	-.11643	.26436
	Equal variances not assumed			.769	299.635	.443	.07397	.09619	-.11532	.26325
Work-related barriers	Equal variances assumed	1.002	.317	.478	552	.633	.04117	.08616	-.12807	.21042

	Equal variances not assumed			.492	313.940	.623	.04117	.08371	-.12354	.20588

6.8.8 Family members

The number of family was measured by using two categories (less than 15 members and 15 members or more). The effect of family number was measured by an independent samples t-test, and no statistically significant effect was found on intention to study nursing (t(552)= 1.52, p=0.129); negative family and community attitudes (t(552)=0.42, p=675); and work-related barriers (t(552)=0.330, p=0.742) (See Tables 31–32).

Table 6.31: Descriptive statistics of number of Family across the three subscales

Group Statistics					
	How many members is your family?	N	Mean	Std. Deviation	Std. Error Mean
Intention to study nursing	less than 15 members	512	2.4385	.91552	.04046
	15 members and more	42	2.6627	.96727	.14925
Negative family and community attitudes	less than 15 members	512	3.0316	1.03255	.04563
	15 members and more	42	2.9619	1.05668	.16305
Work-related barriers	less than 15 members	512	3.6867	.91859	.04060
	15 members and more	42	3.6381	.92682	.14301

Table6. 32: The results of the t-test regarding the effect of family members

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper

Intention to study nursing	Equal variances assumed	.074	.785	-1.519	552	.129	-.22422	.14758	-.51411	.06567
	Equal variances not assumed			-1.450	47.227	.154	-.22422	.15464	-.53528	.08684
Negative family and community attitudes	Equal variances assumed	.005	.941	.420	552	.675	.06974	.16602	-.25638	.39585
	Equal variances not assumed			.412	47.651	.682	.06974	.16931	-.27076	.41023
Work-related barriers	Equal variances assumed	.559	.455	.330	552	.742	.04862	.14754	-.24118	.33843
	Equal variances not assumed			.327	47.849	.745	.04862	.14866	-.25031	.34755

6.8.9 Family income

Family income was placed into three categories (less than 120,000 SR, 120,000–210,000 SR and more than 210,000 SR). To test the effect of this variable, an independent samples ANOVA was used (See Tables 33–35). A statistically significant effect for family income was found on intention to study nursing ($F(2,551)=3.61$, $p=0.028$). Those in the less than 120,000 category generated the lowest mean score (reflecting more agreement) ($M=2.35$) compared to those with 120,000–210,000 ($M=2.52$) and participants with more than 210,000 ($M=2.64$). A post-hoc Bonferroni test showed that none of the three groups were statistically significant when compared to each other ($p>0.05$).

A statistically significant effect was found on negative family and community attitudes ($F(2,551)=24.37$, $p=0.000$). The lowest mean score was generated by those earning less than 120,000 ($M=2.72$), followed by participants with 120,000–210,000 ($M=3.30$) and participants earning more than 210,000 ($M=3.33$). A post-hoc Bonferroni test showed that participants earning less than 120,000 were statistically and significantly different from the two other groups ($P<0.05$).

The ANOVA also revealed a statistically significant effect on work-related barriers ($F(2,551)=3.71$, $p=0.025$). The lowest mean score was generated by those earning less than 120,000 ($M=3.57$), followed participants earning more than 120,000 ($M=3.75$) and finally participants earning between 120,000–210,000 ($M=3.79$). A post-hoc Bonferroni test showed

that the significant difference came between those earning less than 120,000 and those earning between 120,000–210,000($p<0.05$).

Table 6.33: Descriptive statistics of family income across the three subscales

Descriptive Statistics									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Intention to study nursing	Less than 120 thousand SR	269	2.3544	.97202	.05927	2.2377	2.4711	1.00	5.00
	120–210 thousand SR	218	2.5229	.87257	.05910	2.4065	2.6394	1.00	5.00
	More than 210 thousand SR	67	2.6418	.81766	.09989	2.4423	2.8412	1.00	5.00
	Total	554	2.4555	.92055	.03911	2.3787	2.5323	1.00	5.00
Negative family and community attitudes	Less than 120 thousand SR	269	2.7234	.82095	.05005	2.6249	2.8220	1.00	5.00
	120-210 thousand SR	218	3.3064	1.11449	.07548	3.1576	3.4552	1.00	5.00
	More than 210 thousand SR	67	3.3313	1.18452	.14471	3.0424	3.6203	1.00	5.00
	Total	554	3.0264	1.03359	.04391	2.9401	3.1126	1.00	5.00
Work-related	Less than	269	3.5747	.79773	.04864	3.4790	3.6705	1.60	5.00

barriers	120 thousand SR								
	120-210 thousand SR	218	3.7936	.98662	.06682	3.6619	3.9253	1.20	5.00
	More than 210 thousand SR	67	3.7582	1.09075	.13326	3.4922	4.0243	1.00	5.00
	Total	554	3.6830	.91847	.03902	3.6064	3.7597	1.00	5.00

Table 6.34: The results of the ANOVA test and its significance on income

ANOVA

		Sum of Squares	Df	Mean Square	F	Sig.
Intention to study nursing	Between Groups	6.066	2	3.033	3.613	.028
	Within Groups	462.558	551	.839		
	Total	468.624	553			
Negative family and community attitudes	Between Groups	48.018	2	24.009	24.373	.000
	Within Groups	542.758	551	.985		
	Total	590.775	553			
Work-related barriers	Between Groups	6.198	2	3.099	3.710	.025
	Within Groups	460.302	551	.835		
	Total	466.501	553			

Table 6.35: The post-hoc Bonferroni test showing multiple comparisons between groups

Multiple Comparisons
Bonferroni

Dependent Variable	(I) How much is your family income?	(J) How much is your family income?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Intention to study nursing	Less than 120 thousand SR	120-210 thousand SR	-.16854	.08350	.132	-.3690	.0320
		more than 210 thousand SR	-.28739	.12510	.066	-.5878	.0130
	120–210 thousand SR	less than 120 thousand SR	.16854	.08350	.132	-.0320	.3690
		more than 210 thousand SR	-.11886	.12799	1.000	-.4262	.1885
	More than 210 thousand SR	less than 120 thousand SR	.28739	.12510	.066	-.0130	.5878
		120-210 thousand SR	.11886	.12799	1.000	-.1885	.4262
Negative family and community attitudes	Less than 120 thousand SR	120-210 thousand SR	-.58300*	.09045	.000	-.8002	-.3658
		more than 210 thousand SR	-.60792*	.13551	.000	-.9333	-.2825
	120–210 thousand SR	less than 120 thousand SR	.58300*	.09045	.000	.3658	.8002
		more than 210 thousand SR	-.02492	.13864	1.000	-.3578	.3080
	More than 210 thousand SR	less than 120 thousand SR	.60792*	.13551	.000	.2825	.9333
		120-210 thousand SR	.02492	.13864	1.000	-.3080	.3578
Work-related barriers	Less than 120 thousand SR	120-210 thousand SR	-.21886*	.08329	.027	-.4189	-.0188
		more than 210 thousand SR	-.18349	.12480	.426	-.4832	.1162
	120–210 thousand SR	less than 120 thousand SR	.21886*	.08329	.027	.0188	.4189
		more than 210 thousand SR	.03537	.12767	1.000	-.2712	.3420
	More than 210 thousand SR	less than 120 thousand SR	.18349	.12480	.426	-.1162	.4832

		120-210 thousand SR	-.03537	.12767	1.000	-.3420	.2712
*The mean difference is significant at the 0.05 level.							

6.8.10 Intention to study nursing

Participants were asked to state if they wanted to study nursing after high school; they were given three answers to choose from (yes, no and not decided). An ANOVA was used to test the effect of this variable on the three factors (Tables 36–38). The only statistically significant effect was found on intention to study nursing ($F(2,551)=153$, $p=0.000$). Participants with an intention to study ($M=1.75$) showed the lowest mean score (reflecting more agreement), followed by participants who were not decided ($M=2.47$) and finally participants who had no intention to study nursing. A Bonferroni post-hoc test showed statistically significant differences between any of the three categories ($p<0.05$). No significant effect was found on negative family and community attitudes ($F(2,551)=0.404$, $p=0.668$) and work-related barriers ($F(2,551)=0.130$, $p=0.273$).

Table 6.36: Descriptive statistics of intention to study nursing after high school across the three subscales

Descriptive Statistics									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Intention to study nursing	Yes	178	1.7528	.63464	.04757	1.6589	1.8467	1.00	3.67
	No	184	3.1132	.86577	.06383	2.9873	3.2392	1.00	5.00
	Not decided yet	192	2.4766	.69625	.05025	2.3775	2.5757	1.00	5.00
	Total	554	2.4555	.92055	.03911	2.3787	2.5323	1.00	5.00
Negative family and community attitudes	Yes	178	3.0292	1.02381	.07674	2.8778	3.1807	1.00	5.00
	No	184	2.9761	.90528	.06674	2.8444	3.1078	1.00	5.00
	Not decided yet	192	3.0719	1.15411	.08329	2.9076	3.2362	1.00	5.00
	Total	554	3.0264	1.03359	.04391	2.9401	3.1126	1.00	5.00

Work-related barriers	Yes	178	3.6921	.91765	.06878	3.5564	3.8279	1.20	5.00
	No	184	3.6011	.89967	.06632	3.4702	3.7319	1.00	5.00
	Not decided yet	192	3.7531	.93545	.06751	3.6200	3.8863	1.60	5.00
	Total	554	3.6830	.91847	.03902	3.6064	3.7597	1.00	5.00

Table 6.37: The ANOVA results showing the significant effect of students' intention to study nursing

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Intention to study nursing	Between Groups	167.576	2	83.788	153.355	.000
	Within Groups	301.048	551	.546		
	Total	468.624	553			
Negative family and community attitudes	Between Groups	.864	2	.432	.404	.668
	Within Groups	589.911	551	1.071		
	Total	590.775	553			
Work-related barriers	Between Groups	2.194	2	1.097	1.302	.273
	Within Groups	464.307	551	.843		
	Total	466.501	553			

Table 6.38: ***The post-hoc Bonferroni test showing multiple comparisons between groups***

Multiple Comparisons						
Bonferroni						
Dependent Variable	(I) Do you have intention to study	(J) Do you have intention to study	Mean Difference	Std. Error	Sig.	95% Confidence Interval

	nursing after the high school?	nursing after the high school?	(I-J)			Lower Bound	Upper Bound
Intention to study nursing	Yes	no	-1.36042*	.07771	.000	-1.5470	-1.1738
		Not decided yet	-.72375*	.07691	.000	-.9084	-.5391
	No	yes	1.36042*	.07771	.000	1.1738	1.5470
		Not decided yet	.63666*	.07626	.000	.4535	.8198
	Not decided yet	yes	.72375*	.07691	.000	.5391	.9084
		no	-.63666*	.07626	.000	-.8198	-.4535
Negative family and community attitudes	Yes	no	.05313	.10878	1.000	-.2081	.3143
		Not decided yet	-.04266	.10766	1.000	-.3012	.2159
	No	yes	-.05313	.10878	1.000	-.3143	.2081
		Not decided yet	-.09579	.10675	1.000	-.3521	.1605
	Not decided yet	yes	.04266	.10766	1.000	-.2159	.3012
		no	.09579	.10675	1.000	-.1605	.3521
Work-related barriers	Yes	no	.09105	.09651	1.000	-.1407	.3228
		Not decided yet	-.06099	.09551	1.000	-.2903	.1684
	No	yes	-.09105	.09651	1.000	-.3228	.1407
		Not decided yet	-.15204	.09470	.327	-.3794	.0754
	Not decided yet	yes	.06099	.09551	1.000	-.1684	.2903
		no	.15204	.09470	.327	-.0754	.3794
*The mean difference is significant at the 0.05 level.							

6.8.11 Advising others to study nursing

Furthermore, participants were asked whether they would advise others to study nursing (yes or no). Using an independent samples t-test, this variable was found to have a significant effect on the intention to study nursing ($t(552)=10.50$, $p=0.000$) (See Tables 39–40). Those who recommend nursing showed a lower mean score ($M=2.22$) compared to those who said no ($M=3.18$). Also, a significant effect was found on negative family and community attitudes ($t(552)=2.04$, $p=0.042$). Participants who recommended studying nursing had a higher score ($M=3.06$) compared to participants who did not recommend studying nursing ($M=2.88$). No significant effect was found on work-related barriers ($t(552)=1.82$, $p=0.069$).

Table 6.39: Descriptive statistics of advising working in nursing across the three factors

Group Statistics					
	Do you advice others to study nursing?	N	Mean	Std. Deviation	Std. Error Mean
Intention to study nursing	Yes	422	2.2259	.77779	.03786
	No	132	3.1894	.95948	.08351
Negative family and community attitudes	Yes	422	3.0692	1.09282	.05320
	No	132	2.8894	.80431	.07001
Work-related barriers	Yes	422	3.7227	.92790	.04517
	No	132	3.5561	.87904	.07651

Table 6.40: The results of the independent samples t-test for the differences between both groups

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Intention to study nursing	Equal variances assumed	14.286	.000	11.717	552	.000	.96349	.08223	.80197	1.12500
	Equal variances not assumed			10.508	187.918	.000	.96349	.09169	.78260	1.14437
Negative family and community attitudes	Equal variances assumed	20.872	.000	-1.748	552	.081	-.17980	.10289	-.38190	.02230
	Equal variances not assumed			-2.045	295.331	.042	-.17980	.08793	-.35284	-.00676
Work-related barriers	Equal variances assumed	2.745	.098	-1.824	552	.069	-.16669	.09140	-.34623	.01285

	Equal variances not assumed			-1.876	229.553	.062	-.16669	.08885	-.34175	.00838

6.9 Correlations Between Factors

A Pearson's correlation coefficient was used to test whether there was a significant correlation between the three factors (intention to study nursing, negative family and community attitudes and work-related barriers). A significant positive correlation was found between negative family and community attitudes and work-related barriers (r(554)=0.628), where a higher score on one variable leads to a higher score in another. No significant correlation was found between intention to study nursing and negative family and community attitudes (r(554)=0.037, p=0.388) and with work-related barriers (r(554)=-0.033, p=0.444).

Table 6.41: The persons' correlation coefficient matrix for the three factors

Correlations

		Intention to study nursing	Negative family and community attitudes	Work-related barriers
Intention to study nursing	Pearson Correlation	1	.037	-.033
	Sig. (2-tailed)		.388	.444
	N	554	554	554
Negative family and community attitudes	Pearson Correlation	.037	1	.628**
	Sig. (2-tailed)	.388		.000
	N	554	554	554
Work-related barriers	Pearson Correlation	-.033	.628**	1
	Sig. (2-tailed)	.444	.000	
	N	554	554	554

**Correlation is significant at the 0.01 level (2-tailed).

6.10 Gender Effect on Items Within Each of the Subscales

An independent samples t-test was conducted to measure the difference between male and female participants for each of the items for each of the three factors. Table 42 shows the mean for male and female participants for each item, factor and overall scores (average items and average factors). There is a significant difference in all items in this scale between male and female participants, where the females generally showed significantly higher scores ($p<0.05$).

Table 6.42: Descriptive statistics of all items across genders

Group Statistics					
	What is your gender?	N	Mean	Std. Deviation	Std. Error Mean
i10. When I see a nurse, I wish if I'm working like him/ her	Male	361	2.6759	1.33446	.07023
	Female	193	1.8031	.98562	.07095
13R. My family rejects the idea of working in the field of nursing	Male	361	1.99	1.180	.062
	Female	193	3.46	1.762	.127
14R. Nursing is exhausting profession	Male	361	3.23	1.293	.068
	Female	193	4.50	.873	.063
i15. The community disrespects those working in the field	Male	361	1.9751	1.08112	.05690
	Female	193	3.7098	1.23270	.08873
i17R. I completely reject the idea of working in the field of nursing	Male	361	2.3573	1.34671	.07088
	Female	193	2.4041	1.00124	.07207
20R. Working time of nursing shifts is inappropriate	Male	361	3.16	1.306	.069
	Female	193	4.29	1.141	.082
21R. I refuse to work in nursing because chance of mixing with other gender is high	Male	361	2.89	1.465	.077
	Female	193	3.32	1.422	.102
i22. Seriously, I'm thinking in studying nursing	Male	361	2.9668	1.40594	.07400
	Female	193	2.4249	.99258	.07145
i23. If my parents agree for me to study nursing, I will do so	Male	361	2.8199	1.47130	.07744
	Female	193	1.7720	.90130	.06488
24R. Most people look to the nursing profession in inferiority	Male	361	2.98	1.338	.070
	Female	193	4.35	1.079	.078

i26. I advise my colleagues to study nursing	Male	361	2.4044	1.23935	.06523
	Female	193	1.7306	.78392	.05643
i27. I want to study nursing if I get accepted in a nursing school	Male	361	2.6510	1.42986	.07526
	Female	193	2.4611	.93530	.06732
36R. I think that enrolment in nursing profession limits the chances of marriage for females	Male	361	3.45	1.398	.074
	Female	193	4.23	1.255	.090
41R. Working night shifts prevents me from considering nursing as future	Male	361	3.17	1.353	.071
	Female	193	4.27	1.200	.086
42R. Working with patients increases psychological stress	Male	361	3.21	1.359	.072
	Female	193	4.03	1.172	.084
43R. Working with patients increases risk of infection transmission	Male	361	3.73	1.189	.063
	Female	193	4.41	.981	.071
Intention to study nursing	Male	361	2.6459	1.00167	.05272
	Female	193	2.0993	.60315	.04342
Negative family and community attitudes	Male	361	2.5994	.72349	.03808
	Female	193	3.8249	1.05446	.07590
Work-related barriers	Male	361	3.3584	.76270	.04014
	Female	193	4.2902	.87771	.06318
Mean of all items—The scale	Male	361	2.8541	.55505	.02921
	Female	193	3.3232	.70687	.05088
Mean of the three sub-scales	Male	361	2.8679	.54330	.02859
	Female	193	3.4048	.72612	.05227

Table 6.43: The t-test results of the effect of gender on each of the items

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper

i10. When I see a nurse, I wish if I'm working like him/ her	Equal variances assumed	30.983	.000	7.994	552	.000	.87279	.10918	.65832	1.08726
	Equal variances not assumed			8.743	497.763	.000	.87279	.09983	.67665	1.06893
13R. My family rejects the idea of working in the field of nursing	Equal variances assumed	140.679	.000	-11.649	552	.000	-1.464	.126	-1.711	-1.217
	Equal variances not assumed			-10.371	286.312	.000	-1.464	.141	-1.742	-1.186
14R. Nursing is exhausting profession	Equal variances assumed	56.836	.000	-12.209	552	.000	-1.267	.104	-1.471	-1.064
	Equal variances not assumed			-13.685	522.950	.000	-1.267	.093	-1.449	-1.086
i15. The community disrespects those working in the field	Equal variances assumed	5.004	.026	-17.123	552	.000	-1.73478	.10131	-1.93378	-1.53577
	Equal variances not assumed			-16.458	350.747	.000	-1.73478	.10541	-1.94209	-1.52746
i17R. I completely reject the idea of working in the field of nursing	Equal variances assumed	20.368	.000	-.424	552	.672	-.04680	.11035	-.26356	.16996
	Equal variances not assumed			-.463	495.702	.644	-.04680	.10108	-.24541	.15180
20R. Working time of nursing shifts is inappropriate	Equal variances assumed	5.184	.023	-10.151	552	.000	-1.132	.112	-1.351	-.913
	Equal variances not assumed			-10.575	440.169	.000	-1.132	.107	-1.343	-.922
21R. I refuse to work in nursing	Equal variances assumed	.019	.891	-3.320	552	.001	-.429	.129	-.683	-.175

because chance of mixing with other gender is high	Equal variances not assumed			-3.350	402.690	.001	-.429	.128	-.681	-.177
i22. Seriously, I'm thinking in studying nursing	Equal variances assumed	28.231	.000	4.757	552	.000	.54189	.11391	.31814	.76564
	Equal variances not assumed			5.268	511.146	.000	.54189	.10286	.33981	.74397
i23. If my parents agree for me to study nursing, I will do so	Equal variances assumed	109.820	.000	9.028	552	.000	1.04792	.11607	.81993	1.27592
	Equal variances not assumed			10.373	542.028	.000	1.04792	.10102	.84948	1.24637
24R. Most people look to the nursing profession in inferiority	Equal variances assumed	12.290	.000	-12.217	552	.000	-1.367	.112	-1.586	-1.147
	Equal variances not assumed			-13.029	468.495	.000	-1.367	.105	-1.573	-1.160
i26. I advise my colleagues to study nursing	Equal variances assumed	59.222	.000	6.854	552	.000	.67386	.09831	.48076	.86697
	Equal variances not assumed			7.813	536.777	.000	.67386	.08625	.50444	.84329
i27. I want to study nursing if I get accepted in a nursing school	Equal variances assumed	69.301	.000	1.664	552	.097	.18983	.11411	-.03432	.41398
	Equal variances not assumed			1.880	530.139	.061	.18983	.10098	-.00853	.38819
36R. I think that enrolment in nursing profession limits the chances of marriage for females	Equal variances assumed	10.625	.001	-6.517	552	.000	-.784	.120	-1.021	-.548
	Equal variances not assumed			-6.732	430.122	.000	-.784	.117	-1.013	-.555
41R. Working night shifts	Equal variances assumed	7.549	.006	-9.526	552	.000	-1.106	.116	-1.334	-.878

prevents me from considering nursing as future	Equal variances not assumed			-9.878	434.538	.000	-1.106	.112	-1.326	-.886
42R. Working with patients increases psychological stress	Equal variances assumed	16.600	.000	-7.072	552	.000	-.818	.116	-1.045	-.591
	Equal variances not assumed			-7.394	444.555	.000	-.818	.111	-1.035	-.600
43R. Working with patients increases risk of infection transmission	Equal variances assumed	13.674	.000	-6.834	552	.000	-.683	.100	-.880	-.487
	Equal variances not assumed			-7.240	460.452	.000	-.683	.094	-.869	-.498
Intention to study nursing	Equal variances assumed	63.561	.000	6.936	552	.000	.54658	.07880	.39180	.70136
	Equal variances not assumed			8.003	544.396	.000	.54658	.06830	.41243	.68074
Negative family and community attitudes	Equal variances assumed	92.723	.000	-16.105	552	.000	-1.22542	.07609	-1.37488	-1.07596
	Equal variances not assumed			-14.431	290.980	.000	-1.22542	.08492	-1.39256	-1.05829
Work-related barriers	Equal variances assumed	5.335	.021	-12.987	552	.000	-.93171	.07174	-1.07263	-.79078
	Equal variances not assumed			-12.447	348.059	.000	-.93171	.07485	-1.07893	-.78449
Mean of all items	Equal variances assumed	36.360	.000	-8.595	552	.000	-.46914	.05459	-.57636	-.36192
	Equal variances not assumed			-7.996	320.849	.000	-.46914	.05867	-.58456	-.35371

Mean of the three sub-scales	Equal variances assumed	49.026	.000	-9.820	552	.000	-.53685	.05467	-.64424	-.42946
	Equal variances not assumed			-9.011	309.352	.000	-.53685	.05958	-.65408	-.41962

The outcome of the factor analysis:

The KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) resulted in a KMO=.853, a level of inter-correlation among items considered meritorious (Kaiser & Rice, 1974). Likewise, Bartlett's Test of Sphericity (DF=120, P=0.000, Approx. Chi-Square=3007.607) showed significant results ($p<0.001$) as in table 2. The results of both tests indicated that the data presented was factorable, and was sufficient to perform PCFA (Tabachnick & Fidell, 1996). In doing so, the researcher used a Varimax Rotation and arranged item loading by size: items with the higher loadings were listed first, while loadings of less than 40% were excluded from the rotated component matrix table. The results of the rotated component matrix (Table below 6.44) showed that items were loaded into three factors/components. By examining the items within each factor, the researcher provided a label/name to reflect its content. Such labels were provided based on content while consulting the literature review.

Table 6.44 : The outcome of the factor analysis : Component Matrix[a]

	Component								
	1	2	3	4	5	6	7	8	9
i9.I appreciate those saudis who work in the nursing profession	-.354	.437	-.118	.011	-.020	-.214	-.160	.350	-.253
i10.When I see a nurse, I wish if I'm working like him/ her	-.279	.587	.201	.064	-.373	.224	-.087	.123	-.019

12.Work in the field of nursing is fit for a certain class of the community	.313	-.389	.283	.042	.084	.318	.027	-.396	.136
13.My family rejects the idea of working in the field of nursing	.682	.288	.052	-.020	.057	-.238	-.165	-.060	-.008
14.Nursing is exhausting profession	.580	.125	.116	-.001	.072	.038	.084	.005	.214
i15. The community disrespects those working in the field	.539	.266	.087	.181	.305	-.154	-.288	.297	.074
i16. Our tradition in Saudi Arabia prevent us from working in the field of nursing	.226	.183	-.298	.569	-.253	.085	.054	.079	.239
i17. I completely reject the idea of working in the field of nursing	.238	.560	-.031	-.154	-.324	-.120	-.137	.006	-.024
18.Financial benefits for workers in nursing are little compared to others	.391	.048	-.065	.357	-.082	.324	-.057	.328	-.204
19.Educational institutions specializing in the nursing profession are few	.245	-.020	-.070	.442	-.150	.322	.304	.048	-.021

20.Working time of nursing shifts is inappropriate	.650	.166	-.004	.023	-.018	-.214	.125	-.109	.101
21.I refuse to work in nursing because chance of mixing with other gender is high	.427	.399	.070	.085	-.235	-.181	-.093	-.107	-.090
i22.Seriously, I'm thinking in studying nursing	-.129	.604	.447	-.185	-.229	.238	-.191	-.154	.034
i23. If my parents agree for me to study nursing, I will do so	-.417	.511	.314	-.285	-.176	.205	.066	.036	.115
24.Most people look to the nursing profession in inferiority	.645	.109	-.152	.082	.161	-.083	-.072	.103	.010
25. I hate dealing with patients	.383	.363	-.110	-.084	-.160	-.146	.405	-.142	-.238
i26. I advise my colleagues to study nursing	-.271	.515	-.007	-.225	-.075	.096	.213	.199	-.081
i27. I want to study nursing if I get accepted in a nursing school	-.037	.687	.375	-.150	-.186	.106	-.143	-.025	.133
28.The nursing profession is not for Saudis	.069	.501	-.419	-.039	-.082	-.043	.328	.113	.080
29.Employment opportunities in the field of nursing are few	.374	-.426	.293	.009	.012	.270	-.164	.013	-.104

i30.I hope to see all of the workers in the field of nursing are Saudi nationals	-.262	.509	-.314	-.211	.207	.083	.042	-.021	.079
32.The presence of large numbers of foreign workers in the nursing profession is risky to the community on the long run	.362	-.138	.390	.194	-.337	-.114	.136	.048	-.229
i33.There should be a plan for the preparation of national competencies in the field of nursing	-.432	.257	-.287	.032	.153	-.188	-.009	-.147	.228
i34.It is not possible to dispense with the foreign labor in the field of nursing	-.332	-.125	.487	.099	-.059	-.242	.133	.072	.181
i35.Saudi nurses are more competent to deal with Saudi patients compared to expatriate nurses	-.229	.364	-.255	.001	.354	.335	-.055	-.107	.183
36.I think that enrollment in nursing profession limits the chances of marriage for females	.586	.067	-.035	-.026	-.108	-.020	.028	-.190	-.059

38.The nursing profession lacks the opportunities for promotion to higher positions	.313	-.201	-.038	-.457	.160	.175	.286	.226	-.142
39.Lack of sufficient awareness of the importance of the nursing profession in the Saudi community adversely affects number of Saudi nurses	.491	-.137	.111	-.204	-.053	.258	-.073	.303	.259
i40.The media gives enough attention to the nursing profession	-.140	.236	.147	.588	.138	.360	.032	-.037	-.110
41.Working night shifts prevents me from considering nursing as future	.626	.052	-.035	-.212	-.118	.065	-.123	.006	.097
42.Working with patients increases psychological stress	.605	.145	-.107	-.318	-.034	.011	.285	-.058	.118
43.Working with patients increases risk of infection transmission	.560	.053	.048	-.263	.053	.259	.134	.029	.032
i44.In treating patients, nurses have good opportunities of participation in decision-making process	.341	.432	.166	.028	.253	-.130	-.224	-.286	-.243

i45.Nurses have good opportunities for continuing education	.060	.432	.212	.092	.395	.074	.207	-.237	-.354
i46.Saudi nurses are competent as expatriate nurses	-.268	.438	-.261	.166	.229	.200	.014	-.201	-.061
i47.Compared to other professions, financial rewards of nursing profession are excellent	.187	.244	.098	-.103	.603	.077	-.025	.294	-.163
i48.The public has positive image towards nurses	.398	.357	.098	.243	.402	-.096	-.054	.025	.289
i49 .Expatriate nurses fully understand the Saudi norms and traditions	-.163	.180	.513	.171	.244	-.170	.340	.061	.199
i50.Expatriate nurses maintain high quality health services	-.169	.173	.436	.304	.062	-.258	.259	.138	.090
51.I think that nursing is a profession for females only	.240	.245	-.408	.294	-.348	.004	-.053	-.077	.040

Extraction Method: Principal Component Analysis.

Chapter 7:

INTEGRATION OF THE RESULTS

7.1 Introduction

Mixed-methods research is 'an approach to inquiry that combines or associates both qualitative and quantitative forms in the same study' (Creswell, 2009, p. 4). As a sequential mixed-methods design, data were collected through consecutive qualitative and quantitative data collection phases (Creswell, 2009, p. 206). In such an approach, there is a sequence of data collection and analysis that occur in different phases, and either the qualitative or quantitative data collection phase can come first. In the mixed-methods design, the data must be integrated in one or more stage in the research process (Andrew & Halcomb, 2009; Tashakkaori & Tiddlie, 2010). The mixing of this data and its interconnectivity could occur at any stage of the research, such as data collections, data analysis or during the dissection of the results. In this study, both the qualitative and quantitative data were collected and analysed separately; qualitative data were collected and analysed in the first stage, followed by a second stage of quantitative data collection and analysis that built on the results of the first stage (Creswell, 2009, p. 211). The integration of the data took place at the discussion of the results.

The aim of this study is to explore the perception of the Riyadh community regarding nursing as a career choice. In this study, the Riyadh community refers to final year high school students, parents of high school students and Saudi nationals working as nurses in Riyadh.

The primary aim of the study is as follows:

- 'What is the Riyadh community's perception of nursing as a future career?'

Secondary questions include the following:

- 'What are high school student's perceptions and their future career intentions toward nursing?'

- ‘What are the perceptions of parents of high school students about nursing as a future career choice?’
- What are registered nurses’ perceptions about the sociocultural impact of choosing nursing as a career?’

The following objectives are addressed in this study:

- Explore the factors influencing Riyadh’s community (high school students and the parents of high school students).
- Explore health professionals’ (nurses) decisions to choose nursing as a long-term profession.
- Identify the sociocultural impact of choosing nursing as a profession in Riyadh.
- Assess the association between the public image of nursing and the shortage of local nurses in Riyadh.
- Develop clear guidelines and recommendations for policy makers to encourage Riyadh’s population to consider nursing as a future profession.

Of the mixed methods design writers, it was Tashakkori and Teddlie (1998) and Greene et al. (1989) who emphasised the importance of considering the stage of the research process at which integration of quantitative and qualitative data collection takes place. Integration can be defined as the combination of quantitative and qualitative research within a given stage of inquiry. For example, integration might occur within the research questions (e.g., both quantitative and qualitative questions are presented), within data collection (e.g., open-ended questions on a structured instrument), within data analysis (e.g., transforming qualitative themes into quantitative items or scales), or in interpretation (e.g., examining the quantitative and qualitative results for convergence of findings). The decision that needs to be made relates to a clear understanding of the sequential model of the research process and approaches typically taken by both quantitative and qualitative researchers at each stage. (As a contrast, see the interactive model as advanced by Maxwell and Loomis in Chapter 9 of this volume [Tashakkori & Teddlie, 2003].)

Process of integrating the data:

Both the quantitative and qualitative processes described here are oversimplifications of the actual steps taken by researchers; they serve as a baseline of information to discuss where integration might take place in a mixed methods study. The most typical case is the integration of the two forms of research at the data analysis and interpretation stages after quantitative data (e.g., scores on instruments) and qualitative data (e.g., participant observations of a setting) have been collected. For example, after collecting both forms of data, the analysis process might begin by transforming the qualitative data into numerical scores (e.g., themes or codes are counted for frequencies) so that they can be compared with quantitative scores. In another study, the analysis might proceed separately for both quantitative and qualitative data, and then the information might be compared in the interpretation or discussion stage of the research (e.g., Hossler & Vesper, 1993). Less frequently found in mixed methods studies is integration at the data collection stage.

In this study, both qualitative and quantitative data were collected and analysed separately. Qualitative data was collected (in the form of focusing group discussion) and analysed in the first stage, followed by a second stage of quantitative data collection (in the form of instruments), and analysis was built on the results of the first stage (Creswell, 2009). The interaction or integration in this research took place at the point of discussion of the results. The information was then compared in the discussion stage of this research.

7.2 Major Findings

According to general authority of statistic in Saudi Arabia, the population of the KSA was 30,770,375 in 2016, with an annual growth rate of 2.3%. This rapid growth increased the demand for healthcare resources and provided more career chances for the young population. The KSA has introduced these demands with growth in healthcare, with its infrastructures, education and workforces. This included building new hospitals and health facilities and building more than 18 universities across the country, each one of them with a college of nursing or nursing department (Ministry of Higher Education, 2014). This rapid growth of health facilities and healthcare education, especially in nursing, has consequently resulted in many career opportunities. However, the required number nationals working in nursing remains problematic. Perceptions of nursing as a career in Riyadh seem to be influenced by the institutional factors found in the Saudi culture. These factors include normative factors such as social status and cultural-cognitive factors. The reasons for not being interested in nursing as future career include the following: normative factors; social status; financial

status; and cultural-cognitive factors, such as influence of parents and religion, which includes the issue of mixing with the other gender, long working hours and doing night shifts.

The interaction or the integration in this research took place at the point of discussion of the results. Perception in Riyadh, KSA, towards nursing as a career, is largely influenced by institutional factors within the Saudi frame of reference. These factors include normative factors and cultural-cognitive factors, which are the most influential. Reasons for disinterest in choosing nursing as a future career include, but are not restricted to, the following: normative factors such as social status; financial status; and socio-cultural factors, such as the influence of parents and religion, mixing with other genders, and long working hours and doing night duty, which is borne out by the results of this study.

Some major findings were concluded from the first research stage and followed through in the second; for example:

Qualitative results suggest that most of the participants considered nursing as a servant profession, linking the role of nursing with that of the domestic worker (i.e., maids). They viewed nursing roles as being limited to assistant positions and therefore less important in the treatment chain than other practitioners such as physicians. This result followed through in the second research stage (quantitative).The community has a negative perception towards nursing due to the nature of the nursing work environment which is socially unacceptable in the Saudi culture norms.

Where plans to study nursing were considered, qualitative results revealed diverse opinions among male and female students and the parents who participated in this study. Female students were more likely to consider nursing as a future career compared with male students, while parents disagreed when considering nursing as a future profession for their children. This result followed through in the second research stage (quantitative) where approximately 33% of students (n=183) did not intend to study nursing in the future, 32% (n=177) indicated they did, and just over 35% (n=194) were undecided.

In the qualitative stage, most participants viewed salaries and other financial benefits as important elements influencing their decision about nursing as a career choice.

Findings in the quantitative section also suggest that there is a statistically significant association between intention to study nursing and family incomes. It was clear that the smaller the income category, the more likely participants were to want to study nursing as a profession. Most participants from both groups viewed money, in the form of salary or other financial benefits, as an important factor, influencing recruitment and attracting the community to consider nursing as a career choice.

7.2.1 Perceptions of nursing

The result of this study revealed contradictory perceptions among Saudis. Whereas some of the participants agreed that nursing is a humanitarian job and Islam encourages Muslims to be humanitarian, the qualitative results indicate that most of the participants considered nursing to be a servant profession and has no roles as a profession. They linked the roles of nursing to that of a domestic worker (i.e., maids). They viewed nursing roles as limited to assistant's jobs or less important in the treatment chain than other practitioners. The community showed a negative perception of nursing because of the nature of the work environment, which is socially unacceptable in Saudi culture norms.

The findings of this research revealed diverse opinions when it comes to the intention to study nursing among male and female students and among their parents. The female students were more likely to consider nursing as one of their careers compared to male students, whereas parents would not consider nursing for their children in future. Approximately a third of the students (33%, n=183) did not intend to study nursing in the future, a third (32%, n=177) indicated they did and just over a third (35%, n=194) were undecided. Most students (76%, n=421) indicated that they would advise others to study nursing. A statistically significant association was found between intention to study nursing and advising others to study nursing ($X2(2)=92.74$, $p=0.000$). Participants who intended to study nursing were more likely to advise others to study nursing too (91%).

7.2.2 Factors that influence nursing as a career choice

Cultural-cognitive factors

- *Parents influence*

In the Saudi culture, elderly people are regarded with high respect, especially parents. The family leader, usually the father, is often the breadwinner, protector, authoritarian and spokesperson. He is usually the final decision maker (Al-Shahri, 2002). Therefore, it is fundamental for individuals to consult with their families about their life issues. To a great extent, parents control individuals' decisions about their education choices or career, especially females (Al-Shahri, 2002). Therefore, decisions made by individuals can often be changed to fit what the parents want. The results showed a statistically significant association between study nursing after high school (yes, no) and gender (male, female) ($X^2(2)=46.38$, $p=0.000$). Female participants appeared to be more likely to select nursing compared to male participants. However, considering nursing brought barriers for females. Families tended to disapprove the choice of nursing for their female children, but their disagreement was not with nursing, but was rather in line with the community's attitude toward nursing and the job's work condition. Cultural boundaries that prevented students from selecting nursing, included those relating to the family, parents' respect and family or tribal prestige. The results revealed an emphasis on the importance obtaining parents' consent when considering any career, especially nursing.

- *Religious influence*

Islam is undoubtedly the chief factor that shapes the culture in Saudi Arabia. This is consistently expressed in the lives of Saudis (Al-Shahri, 2002). Many students and families' interpretation of the Islamic restrictions in the work environment plays a pivotal role in influencing the decision to become a nurse; these influences include women's work outside the home, a mixed-gender work environment, caring for patients of the opposite sex and perceived lower chances of getting married.

In Islamic culture, mixing with the other gender and not getting married are culturally sensitive issues. Islam discourages the free mixing of men and women when they are alone, but it can occur in some situations with adherence to certain conditions. Interactions between men and women should be maintained at a healthy and modest level, to the extent where they can socialise to know each other as ordained by Allah in the Quran (Surah al-Hujurat). The current study revealed that religion (and its interpretation by the participants) is a great influence when choosing a career, and the participants preferred not working in a career

where there was a chance of mixing with the other gender. As mentioned above, Saudi Arabia is an Islamic nation run under Sharia law and getting married is very important for Muslims. Marriage is one of the most important acts of worship in Islam. It is a social obligation, an act which is highly admired by Allah and a Sunnah (the way) of the Blessed Prophet Muhammad. The current study revealed that many men are reluctant to get married to nurses because they work night shifts and are in a mixed-gender environment. It is the exception to find a Saudi husband who permits his wife to be away from home for long hours or to sleep outside the home, even for work purposes. Males who considered nursing also were affected by this thinking for similar reasons. Religion is shaping people's lives and decisions in the KSA, especially when it comes to their careers.

Normative factors

- *Social status*

Saudi individuals pay much attention to social status, and it is important when making career choices. Previous studies have highlighted the importance of perceived social status in the KSA; traditionally, most Saudis have been attracted to managerial and non-manual work. They perceive the office and managerial work as having a high social status and as being more recognised by members of the community (Iles et al., 2012; Idris, 2007; Mellahi, 2000; Al Asmari, 2008; Fakeeh, 2009). One's job is closely connected with social identity and is involved in and affected by everything in life.

The results of this study indicated that perceived social status is important for high school students and their parents. 'Low class jobs' and 'prestigious occupation' affect the family's reputation, especially well-known families in Riyadh. However, for females, social status is perceived to be more influential than for men (Albogami, 2015). The social status of women is important and is seriously taken into consideration when choosing a career. Most of the Saudi community in Riyadh believe that a woman's appropriate job is being a mother, wife and looking after her children; although this image has been increasingly changing (Al-Suwaigh 1989, Meleis & Hasan 1980, El-Sanabary 1993, Gazzaz, 2009).

Financial status

The findings indicated that there is a statistically significant association between intention to study nursing and family incomes. It was clear that the smaller the income category the participant was in, the more likely the participant was to intend to studying nursing.

Most participants viewed salaries and other financial benefits as important elements that influenced their decision to become nurses. They agreed that one thing they looked for when considering a job is salary and if that salary matches the duties and the efforts of the job. The participants could change their views either negative or positive with the change of their economic status. In the KSA, salary is not for individuals alone, but rather, it is shared with parents and siblings before marriage and with their partners after marriage.

Data has not been used in the integration process:

Some data has not been used in the integration process because more important and relevant data was presented, the focus was on presenting the most meaningful data that had direct impact/relevance to the topics/ findings being discussed, and because of the word limit.

Unused data will be published in the future. These data are:

Quantitative:

- The intention to study nursing was not statistically significantly associated with the number of members in the family, $X^2(2)=1.45$, $p=0.484$.

- A significant association was found between studying nursing after graduating from high school and having friends working in nursing. Participants who have friends working are more likely to choose to study nursing, $X2(2)=45.39$, $p=0.000$.

Qualitative:

- Most of participants agreed that the media should perform its role correctly. They felt that the media and social media did not deliver the message of the importance of Saudi nurses to the community or show nursing in a positive light.
- Another member of this focus group stated that showing respect for our healthcare practitioners is important and reflects the importance of the nursing profession in front of the community.

7.3 Summary of the Chapter

This chapter presented the major findings from both components of this study. In this study, both qualitative and quantitative data were collected and analysed separately; qualitative data were collected and analysed in the first stage, followed by a second stage of quantitative data collection and analysis that built on the results of the first stage (Creswell, 2009, p. 211). The integration of the research took place when discussing the results. Perceptions about nursing as a career in Riyadh are influenced by the institutional factors in the KSA (cultural-cognitive and normative factors). These factors included normative factors, such as social status, and cultural-cognitive factors. Reasons for not being interested in nursing included normative factors; social status; financial status; and sociocultural factors.

Chapter 8:

DISCUSSION

8.1 Introduction

Enrolment and recruitment of Saudi high school students and Saudi community is believed to be best understood when approached, analysed and discussed in relation to the conceptual framework of institutional factors influencing nursing as a career choice within Riyadh city, Saudi context.

These findings indicated that nursing in the KSA faces diverse restrictions brought about by normative (social status) and cultural-cognitive (parents' influence and religious influence) factors. Nursing is seen as a lesser career move that what is social expected within the traditional status to gain a higher stature of career choice.

The findings also indicated that certain forces, as raised by Gazzaz (2009), continue to impact the profession's ability to attract students. Gazzaz (2009) highlighted three main forces: socially unacceptable occupational choice, gender roles and marriage and family support.

This chapter will discuss the factors influencing the Riyadh's community's (high school students and parents of high school students) and health professionals' (nurses) decisions regarding choosing nursing as a profession and the sociocultural impact of choosing nursing as a profession. The findings will deal with (a) family's and parents' influence, friends working in nursing and salary and (b) the social unacceptability of the nursing job and gender roles.

To explore what Riyadh's community thinks of nursing, there needs to be an understanding of the impact that the shortage of a local nursing workforce has on Riyadh. This chapter will

discuss the perceptions of nursing as a career in the Riyadh context and how they are influenced by the institutional factors in the KSA (cultural-cognitive and normative factors). The reasons for not being interested in nursing as future career include normative factors; social status; financial status; and sociocultural factors.

8.2 Nursing Perception

The findings from this study indicated that the negative perception of the nursing profession still dominates the KSA's attitudes. This perception seems to have developed because of the perceived nature of nursing duties and the work environment and has contributed to people having mixed feelings about nursing as a career. As a profession that provides care, nursing has been perceived as performing mostly domestic roles, and this has been reported also by El-Sanabary (1993), Davies (1995), Evans (2004) and Gazzaz (2009). Similarly, Al-Omer (2004) compared the perceptions of nursing as an occupational choice among Saudi high school students to those of medicine, computer science, teaching and business administration. The study indicated the students' perceptions of nursing were not only negative as an occupation but as one that is unskilled, of low value and low status. The students perceived nurses as people who took instructions from doctors, which is not the case much of the time.

Participants in the current study believed that this negative perception was influenced by the sociocultural factors found in the Saudi society, which influences parents' and high school students' career choices. In Saudi Arabia, there are more professional women than men in this occupation, and most of them are expatriates (Salvage, 2002; Gazzaz, 2009; Albulayteh, 2015). It would appear that gender segregation tradition, the Saudi Government and public had managed to find justifications for female nurses (Local -expatriate) providing nursing care to male patients, and working in mixed place with other gender, doing a night shift, and care of all gender male and female, but not for Saudi women interestingly. Originally, expatriate female nurses wore white uniforms, which was an unusual dress in Saudi society not traditional, and they were talking and interacting with males who were not their relatives. This may have contextualised the idea that expatriate nurses and their actions can be different and that it may be acceptable to allow these expatriates to practice customs that are otherwise unacceptable for Saudi women. Saudi people viewed expatriate female nurses as having a degree of moral sexual freedom (El-Sanabary 1993). Similarly, research reported a widely perceived image of nurses as sex symbols, giving nurses a stereotypical disrespectful professional image (Kalish & Kalish, 1982; Kalisch & Kalisch, 1987; Hallam, 1998). The

findings from the current study indicated that this stereotype may have caused a great amount of damage to the image and perception of nurses, discouraging Saudi families from considering nursing for their own daughters. In addition, the care services provided by nurses and them helping doctors in the patients' treatment have been perceived as unskilful, obedient and demoralising. People made a link here between the recruitment of maids and overseas nurses (a workforce which mostly comes from the Indian subcontinent). And this perception and the perceived links between servants and nurses goes back to the beginning of the nursing profession in Saudi Arabia; it started with nurses and maids who were recruited from the Philippines and India.

The negative perception of nursing conveys the idea that female nurses are not suitable for the role of wives and mothers. This is consistent with the findings of other Saudi studies (Jackson & Gary, 1991; Al-Johari, 2001; Gazzaz, 2009). This negative image, especially for female nurses, may explain why Saudi female students who may have the intention to study nursing would eventually refrain from considering it as a career.

8.3 Intuitional Factors and Nursing as a Career Choice

According to the integrated results in Chapter Seven, all the institutional factors were viewed as being important by the participants as they considered their future careers. The institutional factors were normative factors; social status; financial status; and sociocultural factors. The next section will discuss these findings.

8.3.1 Normative factors

- *Social status and nursing as a career choice*

In the KSA in general and in Riyadh specifically, social status is important when making career decisions. The results of the current study underscored the importance of perceived social status when choosing a career. Fundamentally, a prerequisite for choosing any career in the KSA is that the career needs to be both socially and culturally acceptable. This was consistent with findings from previous studies that highlight the importance of perceived social status in career choice for Saudis (Iles et al., 2012; Idris, 2007; Mellahi, 2000). Jobs in

the KSA are largely indicative of one's social identity, and jobs are involved in and affect almost everything in an individual's life, such as social relationship and perceived family social status. Parents and families in Saudi Arabia are proud of sons who have occupations that are perceived as respectful, and these jobs may be an indicator of the family's social position. The findings from this study indicated that the social status of a family is an influential factor when choosing nursing as a potential future career (or for the family to accept nursing for these children); the perceived low-status occupation affects the social status of the family. This conflict was attributed to the low status of nurses and competition that exists between healthcare practitioners. In contrast, the Australian nursing students surveyed by Ward et al. (2003) revealed that nurses had a lower ranked status within the general community.

Similarly, Nasrabadi and Emami (2006) attributed perceived nursing stereotypes to the hierarchical structure between Iranian doctors and nurses. Differences in the hierarchy and ranks originated from the differences in educational backgrounds and the role of nurses and doctors. Nurses were unhappy with performing unskilled tasks below their level of education.

Women play a vital role in a family's social status in Arabic countries; family status is linked to the honour, pride and dignity of the family. Being an unmarried woman who is working an unacceptable job or interacting with the opposite sex could affect the family's perceived honour, social status and reputation. The majority of young women in Riyadh do not view nursing as a socially appropriate career choice (Meleis & Hasan, 1980; El-Sanabary, 1993; Hamdi & Al-Hyder, 1995; Alomar, 2004; Alsayied, 2016) because they believe it is important for women to keep the family's reputation clean by having a respectful job.

In line with the previous literature from Saudi Arabia, findings from this study indicated that having unmarried females in the family puts a negative light on the family (Meleis & Hasan, 1980; El-Sanabary, 1993; Hamdi & Al-Hyder, 1995). Moreover, the findings from this study indicated that entering the profession of nursing could lower the odds of a woman becoming married. More than half the male high school and university students involved in the study by Jackson and Gary (1991) were against marrying a nurse. Students intended to avoid nurses (Al-Johari, 2001).

Mansour (1992), Hamdi and Al-Hyder (1995) and Al-Johari (2001) argued that school students (females) who may be interested and have the intention to study nursing are most likely unwilling to take this risk because of the risk of damaging their families' reputations.

Another finding showed the influence the reputation of nurses and their family status is the nightshift, women were not allowed to work at night, assuming that the night work is not for respectful women. A female who cares for her family's social status would not come home late at night. Similarly, Al-Rabiah (1994) highlighted that the MoH is constantly losing married Saudi female nurses for social and work-related reasons, causing low enrolment in nursing programmes. Alawi and Mujahid (1982), Hamdi and Al-Hyder (1995) and Gazzaz (2009) reported that Saudi female nurses often experience family conflicts because of working night shifts, caring for male patients, working 12-hour shifts and having to work weekends.

The findings from the current study showed that Saudi women have been restricted when it comes to becoming nurses because of mixed-gender work environments. This finding is supported by other studies (Meleis & Hasan 1980; Alawi & Mujahid, 1982; Jackson & Gary, 1991; El-Sanabary, 1993; Hamdi & Al-Hyder, 1995; AlJohari, 2001; Al-Mahmoud, 2013). However, the perception of families who let their children become nurses is low (low-class family). This is because they are perceived as not following the Saudi tradition and social norms. This has contributed to the amplified perception of nursing as an unacceptable occupational choice.

Financial status and nursing as a career choice

The findings from the current study indicated that the financial status of high school students and their families appears to be a strong predictor for intention to choose nursing as a profession. Families with high household incomes are unlikely to accept their children considering nursing, and the children in these families are likely to follow suit. The findings from this study revealed that students from low-income families view nursing as an attractive profession because of the accessibility of job opportunities after graduation. This finding contradicted those of Aunrag et al. (2011), who found that the students from rural regions

(with low income) were more interested to consider nursing as future career than rural. Because they belonged to low-income families and they had to help fulfil the financial needs of their families, jobs in nursing were more agreeable while middle-class students were reluctant to become nurses. Streubert (1994) revealed that nursing was the choice because of its many opportunities available to those who needed a job.

However, the salaries and financial rewards of nurses in the KSA are not competitive compared to the financial rewards received by Western nurses, for example. Saudi nurses working in the MoH receive a salary that is 25–50% lower compared to that given to expatriate nurses from Western countries (Streubert, 1994; Al-Mahmoud, 1999, 2013; Gazzaz, 2009). Compared to some expatriate nurses, Saudi nurses receive an uncompetitive salary and only a small transportation allowance, such as return tickets to their country of origin, free accommodations free transportation, free meal tickets, free uniforms and free medical treatment (Al-Mahmoud, 1999, 2013; Gazzaz, 2009). Several studies in the KSA have discussed strategies to enhance home-grown nursing recruitment, including increasing its financial benefits (Alawi & Mujahid, 1982; Al-Moaiqel, 1991; Jackson & Gary, 1991; Al-Motairy, 1998; Al-Mahmoud, 1999, 2003; El-Gilany & Al-Wehady, 2001). In Saudi Arabia, women are not allowed to drive, so they have drivers they pay for monthly; this may be considered as an extra burden on their family's financial status. Working in nursing may not be worth it financially (Al-Mahmoud, 1999, 2013; Gazzaz, 2009). A heavy workload and poor pay may further undermine the attractiveness of nursing as a career choice (Price Waterhouse, 1988; Coombs et al., 2003; Zuraikat & McClosky, 1986; Amarsi, 2003; Demir, 2003).

The imbalance among effort, money and reward is an important factor for people to sustain their financial status. The lack of social support is a major influence on Canadian nurses' intention to quit their present jobs for another in nursing (Lavoie-Tremblay et al., 2008). The findings from the current study revealed that members from low-income families are likely to be more attracted to nursing. This is consistent with the findings from a study conducted by Marini et al. (1996), where members from both genders attached importance to the intrinsic rewards of the job; however, young women valued these aspects more. In many studies, nursing in Saudi Arabia has been ranked as inferior to other healthcare specialities, and most of those who joined nursing have done so because of its high salary and easy way to get a job immediately after graduating (Jackson & Gary, 1991; Mansour, 1992; Hamdi & AlHyder,

1995; Al-Johari, 2001). May et al. (1991) and Stevens and Walker (1993) argued that school children are continuously reviewing their options regarding future careers based on the financial status and income. Firby (1990) claimed that girls are likely to find the intrinsic nature of work more important than salary, and boys are more likely to have chosen an occupation based on its anticipated salary. However, Hemsley-Brown and Foskett (1999) reported that young people choose their careers based on interest or enjoyment, without regard for financial rewards. This may be because young people have not yet realised the importance of finances.

In conclusion, financial status is important and has a significant influence on the process of career choice in all cultures and countries, both non-Western, such as the KSA, and Western countries, such as Canada and the United States. Unlike families with low household incomes, families in the KSA with high incomes do not seem to encourage considering nursing for their children.

Cultural-cognitive

- *Parents' influence on selecting nursing as a career choice*

In the Saudi culture, obeying one's parents is a very important dimension in all life matters and aspects, especially when choosing a career. The current study revealed that parents strongly influence their children' willingness to considering nursing as a career. This was supported by the findings of a previous study in Saudi Arabia that found that high school students (males and females) scored very low on the intention of becoming a nurse (Al-Omar, 2004). These students believed that their families would not encourage such a decision. Similarly, some Saudi high school female students had an interest in nursing; however, for work-related reasons, this interest was discouraged by their families (Al-Johari, 2001). Families tend to disapprove of nursing as a future career for their children (Alawi & Mujahid, 1982; Jackson & Gary, 1991; El-Sanabary, 1993; Hamdi & Al-Hyder, 1995; Al-Johari, 2001). The findings of the current study showed that a having nurse in the family has no positive influence another member when considering nursing as a career. However, many studies in Western countries showed the opposite (Grossman et al., 1989; Mendez & Louis,

1991; Stevens & Walker, 1993; Richardson, 1996; Mooney et al., 2008). Murray and Chambers (1990) showed that college nursing students were females who came from families which had members as nurses, had decided to become nurse. Marini et al. (1996) also refuted the argument that greater demands from family roles caused women to choose jobs that required less effort or shorter hours. Family either negatively or positively influences individuals. Ward et al. (2003) reported that family members played a significant role in supporting and encouraging first-year nursing students. Similarly, Moores et al. (1983) and Mendez and Louis (1991) found that the female nurses in their study were encouraged by their family and friends with some diverse differences between the cultures. El Sharkawy and El Hadad (1996) found that family members had a significant impact on the choice of nursing as a career. Law and Arthur (2003) reported that about two-thirds of the respondents (69.5%) agreed that their parents had a positive influence on their career choice. In the current study, the resistance of family and not considering nursing as profession were both because of the nature of the work and its perceived image in society. Although the students and their families had information about nursing and agreed on its humanitarian nature, the perceived poor social image of nurses being a type of servant increased Saudi parents' refusal to approve of their daughters becoming nurses. This finding is contrary to those of Abdel El-Haleem (2011), who reported that there is a significant between family attitude toward nursing and parents' influence. However, Abdel el Haleem's study was conducted in Egypt, which may have markedly different contexts to those in Saudi Arabia. Role stereotyping is recognised as the development of males in the nursing profession. Males are a minority in the KSA (Albulitayh, 2015); however, the numbers of male nurses have recently increased.

- *Religion and nursing as a career choice*

In Saudi Arabia, Islam is the only religion practiced, shaping most of the culture and peoples' beliefs and values. It inspires peoples' lives, including their career choices (Gazzaz, 2009; Albogami, 2015). The findings from the current research indicated that Saudi high school students are influenced by Islamic customs when making their career choices. Such results were expected because of the complete effect of Islam on people living in the KSA (Ahmad, 2011; Metcalfe, 2008; Idris, 2007; Long, 2005). As described by Hassi (2012, p. 1035), 'Islam is not only a religion prescribing to prayer, worship and rituals, but is also a way of life concerning every facet of individuals, groups and societies' existence'. Belton and Hamid (2011) argued that work and knowledge are important to a Muslim person's character and

society. Islam must be practiced in an ethical manner, and one's work must benefit others and not cause any harm or damage to people or society as a whole (Ali & Al-Kazemi, 2007). The *Halal* and *Haram* concepts are important, basic teachings involved in Muslims' daily activities, including work and their income from work (Hassi, 2012). Those two concepts guide the sources of money and the work type to be *Halal* and not Haram.

The current study revealed that students and their families are more likely to choose work or careers that explicitly accommodate and respect Islamic prescribed customs, values and instructions. Activities including mixing with other gender, long working hours outside of the home and doing night shifts further complicate nursing as a career choice decision, particularly for women. Adherence to Islamic principles and teachings is the keystone of Saudi culture (Alanazi & Rodrigues, 2003), so parents and families may believe that some of nursing's activities are *Haram,* or against Islamic teachings. The KSA is a conservative Islamic state where religious practices are observed strictly in all occupations, in both governmental and non-governmental organisations. In the nursing profession, some activities might not be perceived as fully upholding Islamic teachings, according to the participants of this study. Accordingly, other careers, such as school teaching (primary or secondary) might be preferred by those who assign higher importance to religion.

In this context, the importance of religion (mainly Christianity) in career choice has been researched in countries such as Nigeria (Bassey et al., 2012) and the United States (Sigalow et al., 2012). Sigalow et al. (2012) tested the influence of religion on career choice alongside other factors, such as marriage. They found that people assigning a higher religious importance to items were three times as likely to indicate that religious factors affect their career choice compared to those who assigned a lower importance to religion. Duffy (2006) argued that for some people, participation in a religion is a predictor of an individual's inclination to move toward choosing a particular career. In Saudi Arabia, the concepts of *Halal* and *Haram* are applied to both genders; however, some religious considerations and practices are applied more strictly to women in Saudi society, and women are expected to experience a greater religious influence (and adherence) on their career choices compared to men. Because a woman's place is supposed to be at the home, certain Islamic provisions are

necessitated. These considerations are related to the work environment and interactions with the opposite sex, wearing a *Hijab* (i.e., a head scarf or veil), travelling alone for work purposes and family and home obligations. As Riedy (2013) indicated, Saudi female students in the United States do not see their Islamic religion as constraining or limiting their educational ambitions or future career choices. They believe that what limits them are traditional views toward women rather than the religion itself.

It is clear from the findings of the current study and other studies that religion has a direct effect on the process of choosing nursing as a career choice in Riyadh.

Chapter 9:

CONCLUSION AND RECOMMENDATIONS

9.1 Introduction

This chapter provides recommendations to healthcare policy makers to help improve the image of nursing in the KSA, but also for a wider audience, and to encourage parents and their families to consider nursing as a career. These recommendations were based on the findings of both components (qualitative and quantitative) of this research. Also, research ideas for the future of nursing as a career will be presented. The conclusion of this research will be presented as well.

9.2 Implication of the Recommendations

Based on the results and findings of this study, which were summarised and integrated in Chapter Seven, some important recommendations can be drawn by Saudi Healthcare policy makers and providers. These recommendations are related to the role of key people in the community, the role of educational institutions (high school and nursing colleges) and updating the nursing work policy in terms of salaries, working hours and policy related to behaviour in gender-mixing environments. The researcher hopes that the recommendations will help the Saudi government, health policy makers and other stakeholders consider more effective strategies to encourage students and their families to consider nursing as a career and change their perceptions of nursing in Riyadh and the KSA in general.

9.2.1 Role of key people

Islam is the religion that primarily implies submission, surrender and conformity to Allah (The Almighty God), with the Qur'an as the holy book for Muslims. Sunnah represents the

prophetic tradition and the way Prophet Muhammad (PBUH) was living his life and is followed voluntarily by Muslims. Therefore, the Qur'an and *Sunnah* are the leading codes for the Islamic religion. During the early Islamic era, nursing became more recognized when a group of women served in the Muslim armies to care for injured soldiers (Aldossary, et al., 2008; Tumulty, 2001). *Rufaidah Al-Aslamiyah* is known as the first Muslim nurse and the initiator of nursing in the Islamic period (Jan, 1996). The image of nursing in Islam was positive and well appreciated by Muslims. It was a respectful job for both gender in general and for women particularly in the Muslim society.

Based on the findings of this study and others in the KSA (Gazzaz, 2009) and other Islamic countries, the image of nursing has skewed more toward the negative side. The reason behind this change is significantly based on people in blend of the society of tradition and tribal culture with Islamic instruction. In Riyadh, most families are from tribal backgrounds, and the sheikh of the tribe (head of the tribe) plays an influential role in the decision-making process in relation to cultural and society-related issues. The members of the tribe are loyal to the sheikh, and he has influence over their behaviour and attitudes. The government sometimes reverts first to the sheikh to enforce some laws and regulations.

The image of nursing will have to become more positive. The key people in the Saudi community, such as the *Mufti* (the highest person in the Islamic authorities) and heads of tribes need to explain how nursing is a part of Islamic religion and that it is not prohibited work for women; although, they will have to satisfy other concerns in terms of making the work environment more aligned with Islamic values (i.e., no gender mixing). Effort by key people should be directed toward targeting the individuals who are perceived as key players for the students. Making a *fatwa* (religious ruling) for the Saudi community (parents) to allow and encourage their children to enter nursing would improve the poor image of nursing profession.

9.2.2 Role of educational institutions

Despite the current economic challenges, the Saudi government gave high priority to both education and training in the healthcare industry by allocating 20% of the 2017 budget (around $53.3 billion) to education and training (Ministry of Finance, 2016) 14% of the total central expenditure in education (UNICEF, 2009). Nowadays, the KSA has more than 18 universities across the country, each one of them with its own college of nursing or nursing

department (Ministry of Higher Education, 2014). However, despite the governmental support and the dramatic increase in the number of both nursing institutions and nursing graduates of both genders, the required number national nurses to achieve the goals remains problematic. The number of graduates still does not meet the required numbers, which is evidenced by the presence of a large expatriate nursing workforce in the KSA. Educational institutions (general education and higher education) are not doing more efforts or playing the role of education properly in the matter of nursing profession.

Findings from this study revealed that high school students have a narrow view of nursing roles; nurses, according to them, are assistants. They do not seem to contextualise the fact that nurses have medical knowledge, participate in medical courses and have technical knowledge. Nurses can have significant role eliciting a medical diagnosis, prescription and treatment, thus making a real difference in patient outcomes. The role of nursing is based on the nurses' knowledge and skills, learned after years of study.

This image must be changed and become more positive, and this is the role of educational institutions. As a role of general education, the curriculum of high schools must have some courses about nursing and the role of nursing as a profession. These courses could include summer visits to hospitals for a short internship to see the duties of a nurse.

As a role of higher education, nursing colleges should have marketing plans to enrol more high school students while also visiting the community and schools to give orientations about the nursing profession. To attract more high school students, the Ministry of Education (as a nursing education provider) and Ministry of Health (as a health provider) may consider a partnership for recruiting with the hospitals and other health care providers, starting with the enrolment of students in nursing colleges and then guaranteeing a job after graduation.

9.2.3 Nursing work policy

Health policy makers in Saudi Arabia need to encourage the incentives of being a nurse, in terms of both financial and job flexibility in shifts and working conditions, which would satisfy the concerns of many Saudi families. Although the current financial climate is very challenging in the KSA with the recent austerity measures, any planned incentives to

encourage Saudi nationals to consider nursing as a career will need to be within a long-term strategy that is sustainable, not only for the present, but for generations to come.

Improving the community's perceptions of nursing is likely to be less challenging because this will assist in recruitment by increasing financial rewards and salary in wealthy countries such as Gulf countries than in other developing countries. It is evident that salary is not the main determinant when it comes to choosing nursing in the KSA; however, it is a considerable influence on families with relatively low household incomes. Increasing the salary is one of the most frequently cited recommendations to promote the Saudization of nursing (Jackson & Gary, 1991; Alomar, 2004; Saied et al., 2016). The findings of the current study indicated that financial incentives are a major driving force regarding the image of nursing in the Saudi community. The lower social status that comes from the underpayment of nurses drives students away from choosing nursing.

The nature of the working hours, specifically their length (around 48 hrs), and night shift duties have all negatively influenced people from considering nursing (Looney, 1991). A study on job satisfaction of Saudi nurses revealed that more than 75% of nurses suggested either a one-duty shift or fewer working hours to improve working conditions, at least in the short term (El-Gilany & Al-Wehady, 2001). People in the KSA community do not want their sons and daughters to choose nursing as a future career because it is perceived to involve culturally insensitive practices, such as mixing with the other gender (Mansour, 1992). This study has shown similar findings; however, this can be changed if there is a strict policy to satisfy the Saudi community's concerns. Health policy makers must consider a workable strategy regarding salaries, working hours and the mixed-gender working place to attract more nurses. Involving the family and students and other stakeholders in redesigning these policies is likely to make them more successful.

Although, reducing the weekly 48 working hours should maintain the highly valued childbearing and family-relation norms and would promote nursing as an attractive career option for women.

Mix gender work place needs a strict policy and regulation to have a better work environment, in a way that will make the nursing profession especially for women culturally and religiously acceptable.

Pay and remunerations is a major factor. If the wage increase was on an even keel to that of other professions within healthcare, such as junior doctors, this might elevate status and help to improve the status of nursing as wage structures creates role status.

Role models and allowing nursing position to take greater control and higher positions such as Director of nursing.

9.3 Limitations of the Study

In line with previous research, the current study had its own limitations. The limitations of this research are related to the sampling technique. First, accessing female parent participants is challenging for a male researcher because of the social, cultural and religious constraints; as a result, the parents' participants were all male. Second, conducting interviews or focus groups with nursing colleges' deans could have enriched the research outcomes and validated the findings. Third, because of the sensitive culture of Riyadh, a female researcher could have helped with managing the focusing group with the female high school students instead of it being done by a third party. This could have allowed a more skilful management for the female student focus group, potentially allowing more enriched data to emerge. Also, the nurses who participated in the nursing focus group were selected by their managers; this strategy could have allowed the managers to pressure (intentional or unintentional) the nurses into participating in a particular way, potentially influencing the participants' views. However, no case of pressure was reported or perceived by the researcher. Despite these limitations, the findings of this study provide an important insight into the phenomena under investigation.

9.4 Future Research

However, the results of this study touch on some theoretical gaps in the literature on choosing nursing as a career, especially in the context of Riyadh. Future research could build on these findings. Future research may need to consider the need to adopt a balanced integrative framework to demonstrate understand; this could be done by using Scott's (1995) 'institutional theory' with its three pillars of regulative, normative and cultural cognitive and the 'self-determination theory' (SDT) developed by Deci and Ryan (1985, 2000) to address

the structural and cultural factors that might affect the career choice decisions in nursing as a career within the context of Riyadh.

Research on exploring and investigating the role of nursing colleges, their enrolment processes and marketing plans appears to be largely missing from both the literature and policy implementation in the KSA.

9.5 Contributions

This research provides theoretical and methodological contributions. This section will present these contributions.

9.5.1 Theoretical contributions

This study was the first to test the institutional dimension with the three pillars (regulative, normative and cultural-cognitive) developed by Scott (1995) and their influence on the process of nursing as a career choice within the context of Riyadh. The findings demonstrated the importance of institutional factors that influence nursing as a career choice in Riyadh City, where cultural and social forces are important in shaping individuals' career choices.

9.5.2 Methodological contributions

This study was the first to investigate perceptions of the nursing profession in Riyadh using a mixed-methods approach and the first in the KSA to investigate parents and nurses' perceptions and using qualitative methods. The findings will add to the existing body of knowledge concerning the nursing workforce in the KSA and other countries with similar inputs and settings.

9.5.3 Conducting factor analysis as contributions:

Factor Analysis was conducted, and those with low loading and low Cronbach alpha were deleted from the analysis. The researcher examined the correlation matrices (computed using Pearson's r) to find items which correlated only weakly or infrequently with other items. Such items were marked for possible elimination after consideration of the factor structure of the instruments. According to Tabachnick & Fidell (2001), factor elimination is an acceptable option. So, the researcher eliminated items 11, 31, and 37 as they did not correlate with other items. However, the reliability score and the correlation among items were insufficient, so the

items 12, 33, 51 and 44 were also eliminated. The steps of eliminating and reversing the items were taken repeatedly for the majority of the analysis, in order to have a reliable score and strong correlation among the items. The final step was to eliminate 23 items, leaving 16 items remaining (10, 13, 14, 15, 17, 20,21,22,23,24,26,27,36,41,42,43), where items 17, 13, 24, 21, 20, 4, 42, 41, 14 and 36 were reversed so as to be positive, depending on their psychometrics performance with other items. However, the factors discovered may need to be developed further by adding more questions.

FA has not been previously carried out on a sample from Saudi population, so this study provided unique contributions to knowledge by conducting FA to examine the underlying construct dimensions for these questionnaires using the NCC-SA scale. This enabled the researcher to closely examine potential relationships between prominent dimensions identified by FA; this was later cross-referenced with other independent variables.

9.6 Conclusion

This study was conducted in Saudi Arabia, Riyadh's high schools, Prince Sultan Military Medical City and its general community. It was designed to explore the perceptions of the Saudi community toward nursing to understand why there is a shortage of local nurses. In this study, the Saudi community referred to final year high school students, parents of high school students and nurses. Riyadh is unique in terms of its cultural background and nursing workforce issues, making it more difficult to implement high-quality healthcare services. Therefore, there was a need to investigate the impact of these factors.

To the best knowledge of the researcher, this study was the first to investigate perceptions of the nursing profession in Riyadh using a mixed-methods approach and the first in the KSA to investigate parents' and nurses' perceptions or nursing using qualitative methods. As such, its findings are unique. It is hoped that the findings of this study will add to the existing body of knowledge concerning the nursing workforce in the KSA and other countries with similar inputs and settings.

This study identified the sociocultural impact of choosing nursing as a profession in Riyadh. The findings exposed the participants' perceptions and intentions of nursing.

Perception of nursing as a career was influenced by institutional factors (cultural-cognitive and normative factors). These factors included normative factors, such as social status, and cultural-cognitive factors. The reasons for not being interested in nursing as future career include normative factors; social status; financial status; and sociocultural factors.

Important recommendations have been suggested to be taken. These recommendations were related to the role of key people in the community, the role of educational institutions (high school and nursing colleges) and updating the nursing work policy (financial, working hours and behaviour related to the gender-mixing environment). These recommendations can help the Saudi government and health policy makers encourage students and their families to consider nursing as a career and change their perceptions of nursing. This chapter presented the limitations of the research, which were mostly related to the sampling technique. The chapter also provided some ideas for future research.

The findings indicated that the career choices of Saudi high school students are not determined solely by the individuals' personal needs; one should take into account the social and cultural factors, which are more influential in Arabic contexts. The theoretical and practical implications of the findings are of interest to researchers, policy makers and employers in public and private organisations in the KSA.

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Appendices:

Appendix 1: An Ethical Approval Issued by Anglia Ruskin University

Anglia Ruskin University
Cambridge Chelmsford Peterborough

Ref: HB/PK/AHM/DREP/14-001

Enquiries: DREP-AHM@anglia.ac.uk
Direct Line: 0845-196-2421
Date: 28th March 2014

Chelmsford Campus
Bishop Hall Lane
Chelmsford
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Int: +44 (0)1245 493131
www.anglia.ac.uk

Hammad Alroqi

Dear Hammad,

1. **Re: Application for Ethical Approval**

Project Number: AHM/DREP/14-001

Project Title: Perception of Saudi Community toward Nursing Profession and its Impact on the Shortage of Local Nursing Workforce.

Principal Investigator: Hammad Alroqi

Thank you for your application for ethical approval which was considered by the Faculty (of Health, Social Care & Education) Departmental Research Ethics Panel (DREP) for Allied Health & Medicine Department week commencing 24th March 2014.

I am pleased to inform you that you have now satisfied the criteria for your research proposal and this is approved by the Faculty Research Ethics Panel under the terms of Anglia Ruskin University's *Policy and Code of Practice for the Conduct of Research with Human Participants*. Approval is for a period of three years from 24th March 2014.

It is your responsibility to ensure that you comply with Anglia Ruskin University's Policy and Code of Practice for Research with Human Participants and specifically:

- The procedure for submitting substantial amendments to the committee, should there be any changes to your research. You cannot implement these changes until you have received approval from FREP for them.

- The procedure for reporting adverse events and incidents.

- The Data Protection Act (1998) and any other legislation relevant to your research. You must also ensure that you are aware of any emerging legislation relating to your research and make any changes to your study (which you will need to obtain ethical approval for) to comply with this.

- Obtaining any further ethical approval required from the organisation or country (if not carrying out research in the UK) where you will be carrying the research out. Please ensure that you send the FREP Secretary copies of this documentation.

- Any laws of the country where you are carrying the research out (if these conflict with any aspects of the ethical approval given, please notify FREP prior to starting the research).

- Any professional codes of conduct relating to research or research or requirements from your funding body (please note that for externally funded research, a project risk assessment must have been carried out prior to starting the research).

- Notifying the FREP Secretary when your study has ended.

Information about the above can be obtained on our website at:

http://web.anglia.ac.uk/anet/rdcs/ethics/index.phtml/

http://web.anglia.ac.uk/anet/faculties/hsce/research-ethics.phtml

Please also note that your research may be subject to random monitoring by the Committee.

Please be advised that, if your research has not been completed within one year, you will need to apply to our Faculty Research Ethics Panel for an extension of ethics approval prior to the date your approval expires. The procedure for this can also be found on the above website.

Should you have any queries, please do not hesitate to contact me. May I wish you the best of luck with your research.

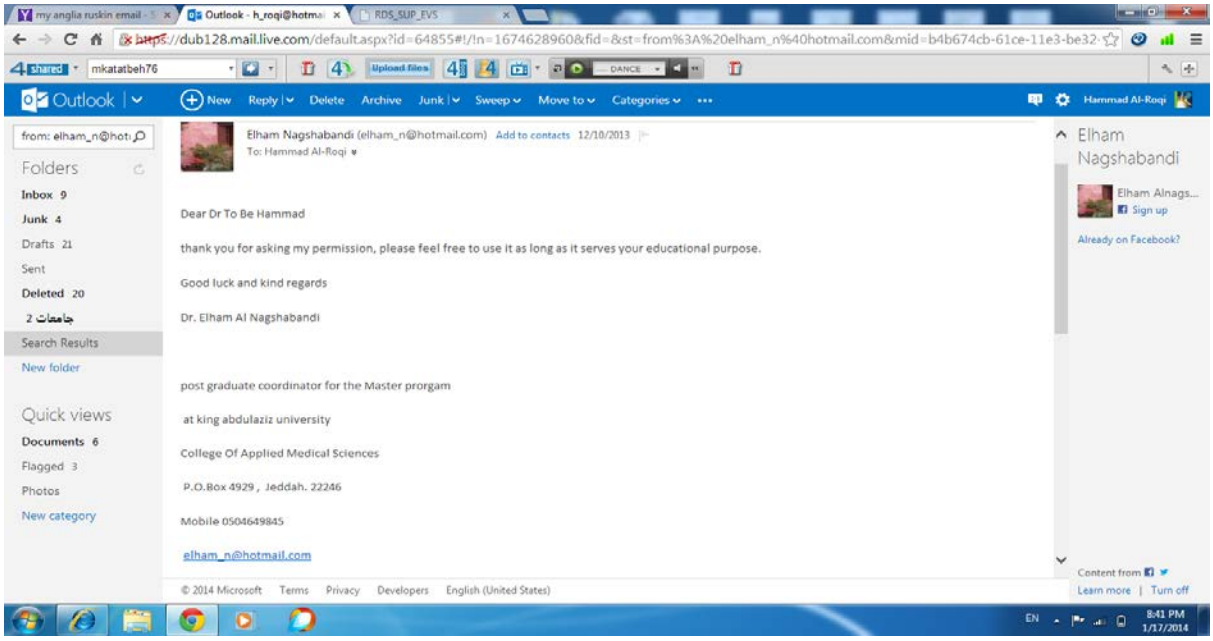
Yours sincerely,

Dr Hilary Bungay (Chair)
For the Faculty (of Health, Social Care & Education) Departmental Research Ethics Panel

T: 0845 196 2421
E: hilary.bungay@anglia.ac.uk

cc: Mansour Mansour
Dr. Sarah Burch
Dr. Sharon Andrew
Beverley Pascoe (RESC Secretary)

Appendix 2: Written Approval From the Author to Use the Original Questionnaire



Appendix 3: Participants' Information Sheet

Participant Information Sheet

(Survey Participants)

Perception of Saudi Community toward Nursing Profession and its Impact on the Shortage of Local Nursing Workforce

Purpose and value of the study

This discussion is part of a larger project involving other stakeholders, such as nurse managers, nurses and general community members from Saudi Arabia.

The purpose of this study is to explore factors' effect on the perception of nursing profession in the Saudi community. Your response can help us to understand the status of nursing profession in Saudi Arabia and, therefore, enhance the quality of health services in the country.

Organisers of the research

The researcher conducting the study is a PhD student in the Faculty of Health, Social Care and Education at Anglia Ruskin University, UK. The contact details for the investigator are at the end of this form.

Invitation to participate

As a high school student expected to join the university in few months, you are invited to be part of this survey. Your opinion is valuable whether it is positive, negative or neutral.

What does the study involve?

Your participation in the study is voluntary, and you may choose not to participate. If you choose to participate, you are asked to complete a questionnaire that will take approximately 15 minutes of your time. Please answer the questions honestly. There are no right or wrong, good or bad answers. When you complete the questionnaire, either

hand it to the researcher in the classroom or put it in the box at the office of head of school.

Do I have to take part?

Your participation in the study is totally voluntary.

What are the risks?

There are no physical risks for participating in the study. Agreement to participate in the study should not compromise your legal rights should something go wrong. There are no special precautions that you need to take before, during or after taking part in the study.

Confidentiality, Data Storage & Withdrawing from the Study

Your participation is confidential. Data collected from you will be used for research purposes only. The information you provide by filling the instrument will be confidential. Identifying information such as your personal details will not be used. Your consent form and information transcribed from the instrument will be kept in a locked cabinet until it will be destroyed according to the university policy.

If you have given consent (SID) number, you can choose to withdraw from the study up to the point where the data are aggregated for statistical analysis without it affecting you in any way.

What will happen to the results of the study?

The results of the study will be published in scholarly journals and may be presented at conferences. All information will be anonymous.

Funding for the research

The researcher has scholarship from the Saudi government; therefore, part of this scholarship will be a major source of fund for this research.

Who has reviewed the study?

This study has been reviewed by Anglia Ruskin University Faculty Research Ethics Committee and approved by Saudi authorities.

If you want further information please contact:

Dr Sharon Andrew[1]

Professor of Nursing,

Ph: 00448451964118

Email: sharon.andrew@anglia.ac.uk

1 Faculty of Health & Social Care, Anglia Ruskin University, 4th Floor William Harvey Building, Bishops Hall Lane, Chelmsford CM I 1 SQ UK

Or Hammad Alroqi at: phone# 00447587800433, email: hammad.alroqi@student.anglia.ac.uk

Appendix 4: Copy of Consent Form

Participant Consent Form

(Survey Participants)

Title of the project: Perception of Saudi Community toward Nursing Profession and its Impact on the Shortage of Local Nursing Workforce

Main investigators and contact details

1. I agree to take part in the above research and I have been given a copy of the participant information sheet.
2. I understand what my role will be in this research, and all my questions have been answered to my satisfaction.
3. I understand that I am free to withdraw from the research before analysis begins, for any reason and without prejudice.
4. I have been informed that the confidentiality of the information I provide will be maintained.
5. I am free to ask any questions at any time before and during the study.

St. Name (print)……..... Date……

If you wish to withdraw from the research, please complete the form below and return it to the main investigator named above.

Title of Project: Perception of Saudi Community toward Nursing Profession and its Impact on the Shortage of Local Nursing Workforce

I WISH TO WITHDRAW
FROM THIS STUDY

St. Name_____ Date: _____

Appendix 5: The Questionnaire's English Version

Nursing Career Choice-Saudi Arabia scale (NCC-SA)

SECTION "A" (Questions 1-8): Personal Information

1. How old are you? ..... Years
2. What is your gender?

   1. Male 2. Female
3. Does any of your family work in nursing?

   1. Yes 2. No
4. Does any of your friends or relatives work in nursing?

   1. Yes 2. No
5. How much is your family income? ……..SR
6. How many members is your family? …….
7. Do you have intention to study nursing after the high school?

   1. Yes 2. No 3. Not decided yet
8. Do you advise others to study nursing?

   1. Yes 2. No

SECTION "B" (Questions 9-52): Perception toward nursing

Please indicate the extent to which you agree or disagree with each of the following statements about nursing. Please rate your answer by ticking the numbers from 1–5, where 1= Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree, 5=Strongly Disagree.

Statement	1 Strongly agree	2 Agree	3 Neutral	4 Disagree	5 Strongly disagree
10. I appreciate those who work in the nursing profession					
11. When I see a nurse, I wish if I'm working like him/ her					
12. Nursing is a charitable profession					
13. Work in the field of nursing is fit for a certain class of the community					
14. My family rejects the idea of working in the field of nursing					
15. Nursing is exhausting profession					
16. The community disrespects those working in the field of nursing					

17. Our tradition in Saudi Arabia prevent us from working in the field of nursing					
18. I completely reject the idea of working in the field of nursing					
19. Financial benefits for workers in nursing are little compared to others					
20. Educational institutions specializing in the nursing profession are few					
21. Working time of nursing shifts is inappropriate					
22. I refuse to work in nursing because chance of mixing with other gender is high					
23. Seriously, I'm thinking in studying nursing					
24. If my parents agree for me to study nursing, I will do so.					

25. Most people look to the nursing profession in inferiority					
26. I hate dealing with patients					
27. I advise my colleagues to study nursing					
28. I want to study nursing if I get accepted in a nursing school					
29. The nursing profession is not for Saudis					
30. Employment opportunities in the field of nursing are few					
31. I hope to see all of the workers in the field of nursing are Saudi nationals					
32. Nursing is a noble profession					
33. The presence of large numbers of foreign workers in the nursing profession is risky to the community on the long run					
34. There should be a plan for the preparation of national competencies in the field of					

nursing					
35. It is not possible to dispense with the foreign labor in the field of nursing					
36. Saudi nurses are more competent to deal with Saudi patients compared to expatriate nurses					
37. I think that enrollment in nursing profession limits the chances of marriage for females					
38. Non-allocation of male nurses to male patients and female nurses to female patients affect quality of care					
39. The nursing profession lacks the opportunities for promotion to higher positions					
40. Lack of sufficient awareness of the importance of the nursing profession in the Saudi community adversely affects number of Saudi nurses					

41. The media gives enough attention to the nursing profession					
42. Working night shifts prevents me from considering nursing as future career					
43. Working with patients increases psychological stress					
44. Working with patients increases risk of infection transmission					
45. In treating patients, nurses have good opportunities of participation in decision-making process					
46. Nurses have good opportunities for continuing education					
47. Saudi nurses are competent as expatriate nurses					
48. Compared to other professions, financial rewards of nursing profession are excellent					
49. The public has positive image					

toward nurses					
50. Expatriate nurses fully understand the Saudi norms and traditions					
51. Expatriate nurses maintain high quality health services					
52. I think that nursing is a profession for females only					

53. What are your suggestions for improving the nursing profession in Saudi Arabia?

……

……

……

THANK YOU FOR YOUR COOPERATION

نظرة المجتمع السعودي نحو مهنة التمريض وتأثيرها على نقص الممرضين السعوديين العاملين في مجال التمريض

معلومات عامة عن الدراسة

أنا الباحث حماد الروقي. أقوم باجراء هذا البحث كجزء من دراستي لمرحلة الدكتوراة في تخصص التمريض في جامعة

***ANGLIA RUSKIN UNIVERSITY/* بريطانيا**

تهدف هذه الدراسة الى استكشاف العوامل التي تؤثر لنظرة المجتمع السعودي نحو مهنة التمريض وتأثيرها على نقص الممرضين السعوديين العاملين في مجال التمريض. كما أن نتائج هذه الدراسة قد يكون لها دور كبير في تحسين ظروف عمل الممرضين في المملكة وبالتالي تحسن الخدمات الطبية المقدمة للمواطنين في كافة المناطق.

يرجى من الطلاب الكرام المشاركة في هذه الدراسة من خلال تعبئة هذه الاستبانة لتمكيننا من جمع المعلومات التي بالتأكيد ستكون هامة ومفيدة للوصول للهدف من هذا البحث والمتمثل بتحسين نوعية الخدمات الطبية المقدمة في المملكة.

كما يرجى العلم بأن الوقت اللازم لتعبئة الاستبانة يقدر بحوالي 10-15 دقيقة كحد أقصى.

الموافقة على المشاركة:

ان المشاركة في هذه الدراسة هي اختيارية وبامكانكم الانسحاب في أي وقت من دون أدنى أثر عليكم كما يمكنكم الامتناع عن الادلاء بأي معلومة لا ترونها مناسبة.

سرية المعلومات في الدراسة:

ان الاستبانة لا تتضمن أي اسم لأي شخص من المشاركين, كما أنها لا تحتوي على أي معلومة قد تفضي للدلالة عن هوية المشاركين فيها بأي شكل من الأشكال. سوف يتم حفظ جميع البيانات بشكل امن قبل ان يتم اتلافها تماشيا مع سياسة

الجامعة. كما يرجى العلم أنه تمت مراجعة هذه الدراسة وتم الموافقة عليها من قبل لجنة أخلاقيات البحث العلمي في الجامعة المذكورة.

اذا رغبت في المزيد من المعلومات عن هذه الدراسة يمكنك الاتصال مباشرة مع الباحث على العناوين الاتية:

Mobile: +966500899200

Email: hammad.alroqi@student.anglia.ac.uk

Email: أو يكمن الاتصال مع المشرف المسؤول من الجامعة الدكتورة/ شارون اندرو بواسطة الايميل على العنوان:
sharon.andrew@anglia.ac.uk

مقدما وقبل البدء بملء الاستبانة أشكركم جزيل الشكر والعرفان على المساعدة والمشاركة في هذا البحث.

أخوكم: حماد الروقي

Appendix 6: The Questionnaire's Arabic Version

نظرة المجتمع السعودي نحو مهنة التمريض وتأثيرها على نقص الممرضين السعوديين العاملين في مجال التمريض

أولا: (الأسئلة 1-8): المعلومات الشخصية

1. كم عمرك ؟ ..... سنه

2. ما هو جنسك ؟

أ. ذكر ب . أنثى

3. هل يعمل أي فرد من عائلتك في مجال التمريض ؟

أ. نعم ب. لا

4 . هل يعمل أي من أصدقائك أو أقاربك في مجال التمريض ؟

أ. نعم ب. لا

5 . كم هو دخل أسرتك ؟ ..... ريال

6 كم عدد أفراد عائلتك ؟ ..... .

7. هل لديك نية لدراسة التمريض بعد الثانوية العامة ؟

أ. نعم ب. لا ج. لم أقرر بعد

8. هل تنصح الطلاب الآخرين بدراسة التمريض ؟

أ. نعم ب. لا

القسم "ب " (أسئلة 9-52) : النظرة تجاه التمريض

يرجى الإشارة إلى أي مدى توافق أو لا توافق مع كل عبارة من العبارات التالية حول التمريض ؟ يرجى اختيار إجابتك بوضع علامة √ في المربعات 1-5 حيث أن 1 = أوافق بشدة ، 2 = أوافق ، 3 = محايد ، 4= غير موافق ، 5 = لا أوافق بشدة.

الفقرة	1 أوافق بشدة	2 أوافق	3 لا أعلم/ محايد	4 لا أوافق	5 لا أوافق بشدة

10 .أنا أحترم أولئك الذين يعملون في مهنة التمريض					
11. عندما أرى ممرض/ ممرضة أتمنى لو أنني أعمل مثله /مثلها					
12. التمريض هي مهنة إنسانية					
13. العمل في مجال التمريض يصلح لفئة معينة من المجتمع					
14. عائلتي ترفض فكرة العمل في مجال التمريض					
15. التمريض مهنة مرهقة					
16. يحترم المجتمع العاملين في مجال التمريض					
17. التقاليد في المملكة العربية السعودية تمنعنا من العمل في مجال التمريض					
18. أنا أرفض تماما فكرة العمل في مجال التمريض					
19. الفوائد المالية للعاملين في مجال التمريض قليلة بالمقارنة مع العاملين الآخرين في المهن الأخرى					
20. المؤسسات التعليمية المتخصصة في مهنة التمريض قليلة نسبيا					
21. العمل بنظام الورديات في التمريض غير جيد					
22. أنا أرفض أن العمل في مجال التمريض وذلك لأن فرصة الاختلاط مع الجنس الآخر مرتفعة					
23. أنا أفكر في دراسة التمريض بشكل جدي					

24 . إذا وافق والداي لي بدراسة التمريض سوف أفعل ذلك					
25. ينظر معظم الناس إلى مهنة التمريض نظرة دونية					
26. أنا أكره التعامل مع المرضى					
27. أنصح زملائي بدراسة التمريض					
28. أريد أن أدرس التمريض إذا حصلت على قبول في كلية التمريض					
29. مهنة التمريض ليست مناسبة للسعوديين					
30. فرص العمل في مجال التمريض قليلة					
31. أتمنى أن أرى كل العاملين في مجال التمريض من المواطنين السعوديين					
32. التمريض هي مهنة نبيلة					
33. وجود أعداد كبيرة من العمال الأجانب في مهنة التمريض يشكل خطر على المجتمع على المدى الطويل					
34. يجب أن تكون هناك خطة لإعداد الكفاءات الوطنية في مجال التمريض					
35. ليس من الممكن الاستغناء عن العمالة الأجنبية في مجال التمريض					

36. الممرضين السعوديين أكثر كفاءة في التعامل مع المرضى السعوديين مقارنة بالممرضين الأجانب					
37. أعتقد أن الالتحاق في مهنة التمريض يحد من فرص الزواج بالنسبة للإناث					
38. عدم تخصيص الممرضين للمرضى الذكور و الممرضات للمرضى الإناث يؤثر على نوعية الرعاية الصحية					
39. فرص الترقية إلى مناصب أعلى في مهنة التمريض محدودة					
40. نقص الوعي الكافي بأهمية مهنة التمريض في المجتمع السعودي يؤثر سلبا على عدد الممرضين السعوديين					
41. تعطي وسائل الإعلام اهتماما كافيا لمهنة التمريض					
42.العمل في ورديات ليلية يمنعني من النظر إلى التمريض كمهنة مستقبلية					
43. العمل مع المرضى يزيد الضغط النفسي					
44. العمل مع المرضى يزيد خطر انتقال العدوى					
45. الممرضين لديهم فرص جيدة للمشاركة في عملية صنع القرار أثناء عملية علاج المرضى					
46. الممرضين يحصلون على فرص جيدة لإكمال تعليمهم					
47. الممرض السعودي كفؤ كالممرض الأجنبي					
48. مقارنة مع المهن الأخرى ، المكافآت المالية لمهنة التمريض هي					

ممتازة					
49. المجتمع لديه صورة إيجابية تجاه الممرضين					
50. الممرضين الأجانب لديهم فهم كامل للثقافة و التقاليد السعودية					
51. الممرضين الأجانب يقدمون خدمات صحية ذات جودة عالية					
52. أعتقد أن التمريض هي مهنة للإناث فقط					

53. ما هي اقتراحاتك لتحسين مهنة التمريض في المملكة العربية السعودية؟

Appendix 7: Written Permission to Access the Selected Schools

المملكة العربية السعودية
وزارة التربية والتعليم
٢٨٠
لإدارة العامة للتربية والتعليم بمنطقة الرياض
إدارة التخطيط والتطوير

وزارة التربية والتعليم
Ministry of Education

الرقم : .....
التاريخ : ١٤٣٥/٤/٧
المرفقات : .....

إلى من يهمه الأمر

اسم الدارس	السجل المدني	رقم الجواز
حماد بن مشهر سدحان الروقي	١٠٤٦٨٤٧٨٥٩	L790890

السلام عليكم ورحمة الله وبركاته وبعد :

تلبية لطلب الدارس الموضحة بياناته أعلاه ؛ فإنه لا مانع لدى إدارة التخطيط والتطوير بالإدارة العامة للتربية والتعليم بمنطقة الرياض من تطبيق دراسته في مدينة الرياض والتي هي بعنوان :

(توجه المجتمع نحو وظيفة التمريض وتأثير ذلك على نقص الممرضين في المستشفيات السعودية – منطقة الرياض)

والله ولي التوفيق

مدير إدارة التخطيط والتطوير

سعود بن راشد آل عبداللطيف

إدارة التخطيط والتطوير

Appendix 8: Written Permission to Access the Selected Hospitals

المملكة العربية السعودية
وزارة الدفاع
رئاسة هيئة الأركان العامة
الإدارة العامة للخدمات الطبية للقوات المسلحة
مدينة الأمير سلطان الطبية العسكرية
ادارة الشئون الاكاديمية والتدريب

الرقم: ٣٢٤/ش/ص
التاريخ: ١٤٢٥/٣/٥ هـ
المرفقات:

الموضوع:

حماد بن مشهر سرحان الروقي / رقم الجواز L٧٨٩٠٨٩٠

إلى من يهمه الأمر

السلام عليكم ورحمة الله وبركاته

أفيدكم بأنه لا مانع لدينا من تطبيق دراسة المبتعث المحررة هويته بعاليه لغرض الحصول على درجة الدكتوراه في مجال توجيه المجتمع نحو وظيفة التمريض، وتأثير ذلك على نقص الممرضين في المستشفيات السعودية، منطقة الرياض. وذلك بعد استكمال اوراقه الإدارية لدينا.

والسلام عليكم،،،

اللواء / الطبيب
عبدالرحمن محمد العليوي
مساعد مدير مدينة الأمير سلطان الطبية العسكرية
للشئون الأكاديمية والتدريب

المقدم الطبيب
عبد الرحمن بن ناصر القضياني

نسخة: مساعد مدير المدينة للشئون الأكاديمية والتدريب
نسخة: الصادر