

**LEADERSHIP STYLE AND ORGANIZATIONAL COMMITMENT AMONG  
NURSING STAFF IN SAUDI ARABIA**

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## ABSTRACT

**Objective:** This study aims to examine the relationship between nurse managers' leadership style and nurses' organizational commitment in Saudi Arabia.

**Background:** The contribution that nurses make to healthcare systems is fundamental to meeting the goals of the organization in providing safe and high quality health care services. Quality of care can thus be jeopardized by a shortage of nurses: a problem of increasing concern in Saudi Arabia.

**Design and methods:** The study used a quantitative methodological approach: the Multifactor Leadership Questionnaire (1995) was used to measure nursing leadership styles, and the Organizational Commitment Questionnaire (Mowday et al., 1979) was used to assess organizational commitment. Data was collected in a one-stage cluster random sample of 219 nurses and nurse manager from two medical cities in Riyadh, Saudi Arabia

**Results:** Transformational and transactional leadership were the two most dominant leadership styles as perceived by nursing managers and their staff in the sample. Both nurse managers and staff nurses considered the transformational leadership style to be the most frequent followed by the transactional leadership style. However, differences between the perceptions of nurse managers and their staff as to their leadership style

were apparent. Nurse managers' self-rating scores were higher than their nursing staff rating scores on all five transformational, and two transactional, leadership styles.

Overall, the level of organizational commitment was higher in nurse managers than nursing staff. In both, nurse managers and nursing staff, there was a positive relationship between transformational and transactional leadership styles and the commitment to stay. Transactional leadership displayed a strong positive relationship with organizational commitment. However, after controlling for the influence of manager/staff status, nationality, and hospitals, transformational leadership styles was the strongest contributor to the organizational commitment.

Perceptions of both, transformational and transactional leadership styles, increased with age for nurse managers and nursing staff; however, there was no concrete relationship between the length of experience and the perception of leadership style.

**Conclusion:** Transformational leadership enhances organizational commitment, which can result in enhanced staff retention. If the nursing workforce is well managed and the retention of nurses is enhanced, better health outcomes for patients could be the result. An understanding of the relationship between leadership and organizational commitment, which is a predictor of nursing retention, is of paramount importance. Introducing the Full Range of Leadership model to the Saudi nursing system will help to prepare Saudi nurses for positions as nurse managers and leaders. This will not only develop and strengthen the health care system in Saudi Arabia but will also contribute to the "Saudization" programme.

## **DEDICATION**

First and foremost, to my great father and mother, Abu Abdullah and Aum Abdullah. If it were not for their continual encouragement and countless prayers, this accomplishment would have remained unfulfilled. During the time when I should have been looking after them, they encouraged me to travel overseas to gain my PhD. Their support, encouragement, and constant love have sustained me throughout my whole life.

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## LIST OF ABBREVIATIONS

<b>Abbreviation</b>	<b>Meaning</b>
BSN	Bachelor of Science in Nursing
CASP	Critical Appraisal Skills Programme
CDSI	Saudi Central Department Of Statistics & Information
CFA	Confirmatory Factor Analysis
CR	Contingent reward
Comm	Communality
EFA	Exploratory Factor Analysis
ESB	End of Service Benefit
FPUC	First principal unrotated component
FRL	Full Range of Leadership Model
HSC	Health Service Council
IC	Individual consideration
II-A	Idealized Influence – Attributes
II-B	Idealized Influence – behavior
IIO	Invariant item ordering
IM	Inspirational motivation.
IS	Intellectual stimulation
IWS-B	Index of Work Satisfaction Questionnaire Part B
JCI	Joint Commission International
KFMC	King Fahad Medical City
KSMC	King Saud Medical City

LF	Laissez-faire
MBE-A	Management-by exception- active
MBE-P	Management-by-Exception: Passive
MLQ	The Multifactor Leadership Questionnaire
MOH	Ministry of Health
NE	Nurse executive
NM	Nurse manager
NWI-R	Nursing Work Index-Revised
OCQ	The Organizational Commitment Questionnaire
PAL	Passive/Avoidant leadership
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
RN	Registered nurse
SA	Saudi Arabia
SCFHS	Saudi Commission for Health Specialists
SPSS	Statistical Package for the Social Sciences
TAL	Transactional Leadership
TLP	Transformational Leadership Profile
TRL	Transformational Leadership
UK	United Kingdom
USA	United State of America
WHO	World Health Organization

## **CHAPTER ONE: INTRODUCTION**

### **1.1. Introduction**

This thesis explores and investigates the relationship between the leadership styles of nurse managers and nurses' organizational commitment among nursing staff in Saudi Arabia (SA). Nurses make up the largest proportion of the health team in most healthcare systems; their significant contribution to the production of health care is regarded as fundamental in terms of a health organization reaching its goals to provide a safe and high quality health care service. The quality of a health care service can therefore be adversely altered by a shortage of nurses, and there is a correlation between nursing shortages and quality patient outcomes (Huber, 2010a, El-Jardali et al., 2009). Indeed, the World Health Organization (WHO) has reported the negative impact that shortages in human resources were having on global health care, and concluded that the shortage crisis has the potential to worsen in the coming years (WHO, 2006a). Achieving and maintaining a stable nursing workforce in SA is one of the main concerns of Saudi nursing leaders (Almalki et al., 2011b). This study contributes substantive knowledge to the topic of leadership style and organizational commitment, as it provides information on a non-Western healthcare system in a society that differs from western cultures.

### **1.2. Background**

The challenge of recruiting and retaining nurses for health facilities is becoming increasingly difficult. Acree (2006) has argued that nursing leadership is accountable for the retention of nursing staff once they are hired. The leadership styles that are demonstrated by nurse managers are essential factors in the decisions by nursing staff to

move from their current position, or seek another employer, or perhaps even leave the nursing profession totally (Acree, 2006). Many studies have identified effective leadership as an influential factor in staff retention (Tourangeau and Cranley, 2006, McGuire and Kennerly, 2006, Cummings et al., 2010, Eneh et al., 2012, Abualrub and AlGhamdi, 2012). The most significant determinant of continued job satisfaction and organizational commitment for staff is a positive professional relationship with the immediate leader (Wagner, 2006). Recent evidence, across different cultures and settings, suggests that transformational leadership is positively linked with organizational commitment (Avolio et al., 2004, Bass and Riggio, 2006, Casida and Parker, 2011, Brunetto et al., 2012). Bass and Riggio (2006, p.34) assert that: “Leaders in organizations can play an important part in affecting organizational members’ level of commitment by fostering followers’ commitment to the team, to the leader, and to the organization.”

Healthy work environments increase the level of nurses’ retention (Andrews and Dziegielewski, 2005), but rarely occur without effective and strong nursing leadership (Cohen et al., 2009, Casida and Parker, 2011). Effective leadership and high job satisfaction are together regarded as essential components influencing the overall effectiveness of a healthy work environment (Chen et al., 2005). A review of the literature by Utriainen and Kynga (2009) identified leadership style as a key factor affecting nurses’ job satisfaction and their intention to stay at their current job, and noted that nurses’ lack of satisfaction can lead to increased turnover rates and a shortage of nursing staff in a healthcare system (Utriainen and Kynga, 2009). A recent study by Duffield et al. (2010) found a positive relationship between a nursing leader who is

perceived to be effective, and nurses' job satisfaction and staff retention. Nursing staff identified the ward environment as positive and healthy where there are the following:

- A good nurse supervisor.
- Nurse Managers who consult with nurses on a daily basis.
- Availability of a flexible work schedule.
- A senior nursing administrator who is always accessible and visible.
- Recognition and appreciation is given for outstanding work. (Duffield et al., 2010).

### **1.3. Leadership Style**

In his most cited work, Bass (1997) stated that leadership style is a significant influence on staff satisfaction and organizational commitment. Kleinman (2004) has noted that many evidence-based studies have confirmed the relationship between effective leadership style and job satisfaction, retention, and organizational productivity, and has argued that it is important to understand the current state of knowledge regarding leadership and staff nurse retention to develop further research in this area. However, few studies in nursing have investigated leadership in relation to organizational commitment specifically from the perspective of staff retention (Gould and Fontenla, 2006).

The style of nursing leadership can have an impact on staff satisfaction and staff retention and thus ultimately on the whole health care system. It has been suggested that transformational leadership style, for instance, decreases exhaustion and burnout and increases wellbeing and job satisfaction (Kanste, 2008). In contrast, transactional

leadership style is said to be associated with burnout, exhaustion, and poor job satisfaction (Weberg, 2010).

Nursing leadership is one of the areas that requires further investigation (Williams and Irvine, 2009). A recent study concluded that nursing leadership needs the views of nurses to help formulate a positive work environment where they can make the most of their full potential and to advance nursing services (Eneh et al., 2012). An effective nurse leader should inspire and engage his/her staff and this should result in high staff satisfaction and lower turnover rates. While it has been said that organizational commitment is the essential key to a stable nursing workforce (Ward, 2001), exactly how nursing leadership contributes to organizational commitment is not well defined (McGuire and Kennerly, 2006).

## **1.4. The Health System in Saudi Arabia**

### **1.4.1. Introduction**

SA is an Arabic Islamic country, occupying most of the Arabian Peninsula in the west of Asia; its capital city is Riyadh. It is one of the richest countries in the region and is the biggest oil producer and exporter globally with over 264 billion barrels of proven oil reserves (Oil and Gas Directory, 2011). The population of Saudi is growing rapidly: according to the last Saudi official census (2010), the population was 27.1 million, compared with 22.7 million in 2004: an annual growth rate of 3.2% (Central Department Of Statistics & Information, 2012). The Saudi population is very young, so it is estimated that the population will continue to grow and reach 39.8 million by 2025, and

54.7 million by 2050 (United Nation, 2003). The population is unevenly divided in terms of gender, with 54.3% male and 45.7% female. This imbalance may be due to the high number of male expatriates working in the country (WHO, 2006a); currently Saudi citizens comprise 69% of the total population(Central Department Of Statistics & Information, 2012). The rapid growth in population is likely to exacerbate the demands placed on the Saudi health care system.

Expenditure on health services is largely funded by the Saudi government. The total health expenditure in 2010 was 4.9 % of GDP (WHO, 2011a).The Saudi Ministry of Health (MOH) was established by a Royal decree in 1950 (Almalki et al., 2011a). The MOH is the main regulating health body responsible for sponsoring and monitoring free health care to all Saudi citizens. It provides approximately 60% of the health services through 244 hospitals (33,277 beds) and 2037 primary health centres. The remaining 40% is provided by other health care providers, including private hospitals and centres; military hospitals; National Guards' hospitals; the security forces' hospitals; the Royal Commission Hospital for Jubail and Yanbua; Ministry of Higher Education Hospitals, and King Faisal Specialist Hospitals (Aldossary et al., 2008). This health care sector offers services to, for example, employees and dependants of certain organizations. To address the problem of poor communication and limited coordination between different health sectors, a royal decree was issued in 2002 to establish a health service council; this is led by the MOH and includes representative from all health care providers (Almalki et al., 2011a). The task of this council is to coordinate and integrate health policy between the various health service providers(Health Service Council, 2012).

The MOH is not the only government department involved in the Saudi Health care system and its workforce. It does not have full autonomy in personnel regulations and legislations, such as work contract length and the provision of the End of Service Benefit<sup>1</sup> (ESB) as these are regulated by other ministries such as the Ministry of Civil Affairs, and the Ministry of Interior, which deals with issuing visas for recruitment.

#### **1.4.2. Ministry of Health**

The Saudi constitution stresses that full access to all health services should be provided to all SA residents, including non-Saudis who work in the public sector (Almalki et al., 2011a, Aldossary et al., 2008). According to Saudi law, the private sector should provide health insurance for their employees; this requirement is linked to the provision of work certificates by the immigration department. The MOH is the governing agency accountable for planning, managing, developing laws and legislations, formulating health policy, and mentoring and supervising health services in the private sector (MOH, 2012a). Under the MOH there are 20 Regional Health Affairs Directorates that are distributed throughout different areas of the kingdom (WHO, 2006b). They are responsible for the management of all MOH services, using central standardized guidance from the MOH.

The MOH provides all levels of health services (primary, secondary and tertiary). The first level, of preventive and curative health services, is available through 2037 primary health centres across the country. These health care centres provide the initial point of

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<sup>1</sup>Employees who work for an extended time are entitled to an ESB

contact with a public health provider. Any case that needs additional care and further investigation can be transferred to the second level of health services (public hospital). If a case is judged to require more complex (third level) care, then the patient can be transferred to a central or specialized hospital. Recently, the MOH has responded to local demands for more beds and more specialized hospitals by establishing various medical cities in the main SA Regions. A Medical city is a medical complex in one campus that mainly provides second and third level health care. It usually contains a general hospital, a children's hospital, a women's hospital, along with a centre for cardiac care, rehabilitation centres, and research and training facilities. As these newly established medical cities are both large and complex, they need a different management approach that has more autonomy than the traditional centralized system of the MOH.

Consequently, some public hospitals in various regions, including some of these medical cities, have been granted an autonomous system. It is hoped that this change will increase both managerial and medical efficiency; achieve administrative and financial flexibility, through the adoption of a direct budget strategy; apply quality insurance programmes, and simplify the contractual process with qualified health professionals. This new system is known locally as the self-operation programme.

## **1.5. Nursing in Saudi Arabia**

Even though that social and cultural influence were beyond the scope of the current study, the following profession-wide analysis of nursing in SA provides a better understanding of the role of nursing leadership in SA.

### **1.5.1. Introduction**

The nursing profession has traditionally had a good reputation in Islam: it was mentioned for the first time during the time of Prophet Muhammad (peace be upon him) when, under the guidance of Rufaida Al-Aslamiya, who was the first nurse and the founder of nursing in Islamic history, it served the Muslim armies during periods of war (Almalki, 2012). In the early period of Islam, “the female nurse was known as “Al-Asiyah” from the verb “aasa” meaning curing the wounds. The current Arabic translation of nurse “maumarrida” was not used until much later” Tumulty (2001, p. 285). According to AlMalki (2012), there is not much literature on nursing in Arab history between the early Islam period (632 AD) and the 1950s. However, despite its long existence in the Saudi community and respected history in Islam, nursing is not currently a well-received profession among Saudi culture, as discussed below.

### **1.5.2. Nursing education**

Nursing training in SA was established in 1954, just a few years after the establishment of the MOH (Omer, 2006). The first formal nursing training programme was for one year, run in Riyadh as a collaborative venture between the MOH and the WHO (AlOsaimy, 1993, Tumulty, 2001). In 1976, a Bachelor of Science in Nursing

programme (BSN) was established in Riyadh, followed by one in Jeddah in 1977 and one in Dammam in 1978. These programmes were limited to women; it was only in 2004 that a BSN programme for men was established in Riyadh (Omer, 2006). More recently various new Saudi universities have offered male and female BSN courses. However, university courses in SA have traditionally had low enrolment levels because of the poor image of nursing compared with other professions (Tumulty, 2001). AlOsamy (2004) explains that “for a long period the nursing profession was badly condemned and misunderstood. It was not appreciated because of ignorance and the inequality in labour between men and women” (AlOsaimy, 2004, p. 38).

Masters’ programmes in nursing, which are offered in three universities, are restricted to female students only. However, there are several international (overseas) scholarship courses being offered by many governmental organizations such as the Ministry of Higher Education, the MOH and universities. According to Aldossary (2008), a PhD scholarship programme was established in 1996 to enable Saudi nurse leaders and educators to study abroad. The current overseas scholarship program includes all levels of nursing education namely Bachelor, Master, and PhD levels (Almalki, 2012).

### **1.5.3. Nursing practice**

Nursing was not represented at the MOH until 1987 when a nursing committee was established under the chairmanship of a physician (Tumult, 2001). In 1994, the MOH established the General Directorate of Nursing under the direction of the first general manager, an educated and experienced Saudi nurse (Tumult, 2001). The nursing

directorates started the attempt to improve the quality of nursing by gathering data about the nursing situation, communicating with nurses in outlying areas, and empowering nursing staff by assigning nursing representation in all 20 health regions. Although more hospitals nowadays in SA receive accreditation from the Joint Commission International (JCI), none have yet been accredited as Magnet hospitals<sup>2</sup>, although at least two hospitals are currently seeking such accreditation (Fielden, 2012).

During the second Gulf War (1990), the Saudi nursing workforce was exposed to a staff crisis when many expatriate nurses left the country without any notice (Tumulty, 2001). Such a crisis made the policy of “Saudization” a priority. The Saudi nursing workforce is challenged by the shortage of native Saudi nurses (WHO, 2006b). At the end of 2011, the number of nurses across all health sectors in SA was 134,632. However, Saudi nationals make up just 34 % of this number (MOH, 2012b) (Table 1.1). In the King Faisal Specialist Hospital (the main referral hospital in SA) the figure is merely 1-2% (Fielden, 2012). The rate of nurses in SA is 36 nurses per 10,000 population (Almalki et al., 2011b); this is lower than other countries such as Bahrain (58/10,000), France (81/10,000), Japan (95/10,000), Canada (100/10,000), USA (98/10,000) and the UK (101/10,000) (WHO, 2010). The government’s efforts to attract and retain more Saudis into the nursing profession have encountered many obstacles such as unappealing working conditions, limited options for balancing work and family responsibilities, and the perception of the role of nursing and the poor image attached to it (Al-Mahmoud et al., 2012).

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<sup>2</sup> The magnet hospital framework is a voluntary form of an external professional peer review that has instituted a set of 14 core criteria for excellence in nursing such as nursing leadership, strong representation of nursing in organization management, and interdisciplinary collaboration among healthcare professionals.

The main reasons for not choosing nursing as a profession among Saudi women are to do with cultural values, family disagreement, gender desegregation, the low image of nursing, and the night shift (Gazzaz, 2009, Al Hosis et al., 2013). A relatively recent study of grade one students at a Health Institute in SA found a negative attitude towards the nursing profession at that time (AL Thagafi, 2006). However, a more recent study indicates an enhanced attitude as Saudi female nursing students tended to be positive towards nursing profession (Miligi and Selim, 2013). One criticism of much of the literature about the Saudi nursing workforce is that it lacks solid measurement of valid indicators such as vacancy and turnover rates. The reasons for this are not given but may relate to the bureaucratic Saudi government system that prevents easy access to such data. Another possible explanation for this is the absence of a sound research culture which recognises the added-value contributed by the availability of such data.

Table 1-1. Composition of nursing staff in all health sectors in SA.

Sector	No.	Saudis	(%)	Non-Saudis	%
MOH	77.946	40.437	52	37.509	48
Other Gov. Sector	28.313	3965	14	24.348	86
Private Sector	28.373	859	3	27.514	97
Total	134.632	45.216	34	89.317	66

Data from (MOH, 2012b)

The MOH presented the problem of health workforce Saudization in its annual report (MOH, 2009) where it highlighted the following points:

1. The scarcity of qualified Saudi nurses and doctors in the workplace.
2. The lack of expansion of health education facilities, especially in the field of female nursing, which would address the needs of the health services.

3. Limited admission to the colleges and institutes of the medical sector, which has led to an insufficiency of output.
4. Limited opportunities for training and scholarships in the MOH.

The big expansion in inaugurating new health establishments to increase health services has led to a disproportionate increase in the numbers of beds *vis-à-vis* the available workforce.

#### **1.5.4. Professional regulation**

All nursing staff members have to be registered with the Saudi Commission for Health Specialties (SCFHS), which is the governmental body tasked with the development of professional performance and skills and their suitable practical application in the field of various health specialties. However, there is no clear classification of the title of ‘nurse’ in the Kingdom of SA: this description may include graduates of health secondary institutes (the equivalent of secondary school); graduates of health institutes after secondary school (whether one year or two years after secondary school); graduates of Health Colleges (i.e. three years after secondary school), or university graduates (who do not constitute a big percentage of the Saudi nursing sector). Barbara Brown, a former nursing leader in SA (and the current Editor-in-Chief of *Nursing Administration Quarterly*), stated that: “To practice in a country where there is no regulation is like leading a tossing and lurching ship through a tumultuous storm, without a lighthouse beaconing to find the course to shore” (Brown, 2008,p.264).

### **1.5.5. Expatriate nurses**

The nursing system in SA relies a great deal on expatriate nurses, recruited from over 52 countries (Suliman, 2009). The Saudi nursing workforce has nurses from the UK, the US, Canada, Australia, South Africa, Malaysia and other Middle Eastern countries, but the majority are from the Philippines and India (Tumulty, 2001, Aboul-Enein, 2002, Aldossary et al., 2008, Almutairi et al., 2012). Differences in religion, culture, social values and language can create some barriers between these expatriate nurses and local patients (Al-Mahmoud et al., 2012, Fielden, 2012). There have been recent attempts to increase the number of Saudi nationals participating in the nursing profession, such as the Saudization programme. However, Saudization of the nursing profession will take a long time: it has been estimated that at current rates of progress, 25 years will be needed to train enough Saudi nurses so that they comprise 30% of the Kingdom's nursing workforce requirements (Abu-Zinadah, 2006). Furthermore, Mitchell (2009) argued that replacement of expatriate nurses in SA is unlikely to happen before 2020. It is reasonable to assume that this apparent disagreement may be due to the scarcity of an updated human resources database for health care providers in SA so each researcher is forced to search data from different sources.

Expatriate nurses are typically women who come to Saudi for financial, professional, or personal gains (Meleis, 2012). These nurses presumably encounter challenges in adapting to their life in SA, especially as the Saudi culture does not welcome expatriate women. This may result in mediocre performance of work, or failure, in the hospital workplace (Bozionelos, 2009). Most nurses are offered a single contract, which means that the nurse cannot bring her partner or family with her to SA. The length of contract cannot exceed

one year, and there is no guarantee that it will be renewed. Furthermore, the candidate must sign a declaration agreeing that the post is replaceable at any time during the contract, which means that whenever a qualified Saudi nurse is available the contract will be ended without any compensation. Male physicians dominate the culture of the health care system in SA, which results in disparities in the way different nurses are treated (Meleis, 2012). Such disparities are apparent among the nursing profession where nurses from western countries tend to be treated more favourably than nurses from elsewhere, in terms of payment and privileges. This can cause a high level of stress among nurses, which can negatively influence their work performance and even cause them to leave the country when they have the chance. It is suggested that these nurses tend to move, when they have acquired enough knowledge and experience, to developed countries, such as the USA, Canada and the UK, where they find a more congenial working environment (Aldossary et al., 2008). A recent Saudi study of nurses, where 91% of the participants were expatriates, found that the salary represented only a small aspect of job satisfaction, compared with other much more important reasons for dissatisfaction such as the lack of contingent rewards (AL-Dossary et al., 2012).

### **1.6. Problem Statement**

The healthcare system in SA is striving to develop and improve, and keep up with changes, such as workforce challenges, growing emphasis on cost effectiveness, highly sophisticated technology and consumers' increasing expectations (Walston et al., 2008, AL-Dossary et al., 2012, Almalki et al., 2011a). These rapid changes can profoundly impact on nursing staff job satisfaction and staff retention (Mrayyan, 2006). As discussed earlier, and like many other developing and developed countries, SA suffers from a

shortage of qualified nurses (Aldossary et al., 2008, Almalki et al., 2011b, Almalki, 2012). The main challenge is that 60% of its health professionals are expatriates, resulting in a rapid turnover of staff and an unstable workforce, which involves significant direct and indirect costs to the national health system (WHO, 2006b, Almalki, 2012).

In addition to the high cost of employing well-qualified and highly efficient staff, the Saudi MOH also faces the challenge of the high cost of running hospitals due to the rise in the prices of medical equipment, medicines and other medical necessities. This means that substantial reform and restructuring of the current system is required. In the context of nursing, effective leaders will be required to ensure that no extra burden is placed on the workforce that is already overstretched and working in unsuitable environmental conditions, as that may lead to negative consequences that further increase the shortage of nurses and ultimately adversely affect the quality of the health service.

Although there have been some promising developments in many aspects of the Saudi health system, such as raising the salaries of Saudi doctors and establishing health postgraduate training programmes, health decision makers in SA have not included the issue of nursing retention among those topics receiving attention. In a predominantly male-dominated and physician-dominated health system environment, nursing remains outside the priority areas. Due to the religious and cultural beliefs and practices of SA, male nurses are not allocated to female wards under any circumstances, and generally Saudi women are not supposed to work in places with men, let alone provide nursing

care for them (Al-Mahmoud et al., 2012). For a Saudi woman, it is not easy to manage to remain in the nursing profession: typically she will face overwhelming opposition from her family, particularly from her husband, and inevitably this influences her nursing practice. A significant percentage of Saudi nurses are engaged in purely administrative duties, which exacerbates the nursing shortage. In addition, there is an unequal distribution of nursing staff in the kingdom with a concentration of nurses in the major cities (WHO, 2006b). There is also an unequal distribution of nursing staff between the different sectors: the MOH suffers from a loss of its nursing workforce to more attractive sectors such as the National Guard, King Faisal Specialist Hospital and academic universities (MOH, 2009).

A range of reasons were identified in a Saudi study that investigated nursing turnover, including insufficient compensation and lack of recognition; however job dissatisfaction was the main reason for nursing turnover. Effective leadership was found to be very important in terms of generating nursing job satisfaction and to play a pivotal role in recruitment and retention issues (Zaghloul et al., 2008).

The main challenge for the health care system in SA is to increase its proportion of local nurse leaders who are capable of leading a multinational cadre to deliver a culturally-sensitive high quality service (Aldossary et al., 2008, Fielden, 2012). The need for appropriate leadership training and education for Saudi nurses has been identified by WHO as crucial in improving Saudi health services, and it has made several recommendations in this area (WHO, 2006a).

The MOH faces a problem in filling its nursing positions, whether by Saudis or expatriates. Its inability to attract efficient and qualified staff, especially in some remote regions, is due to relatively low salaries and bonuses, and poor accommodation for expatriates. Typically, non-Saudi nurses are new graduates who seek relevant experience that will enable them to take gain employment in western countries, where they will have both greater freedom and higher salaries. Despite the opportunity to gain relevant experience, the overseas recruitment committees face many difficulties in persuading nurses to come to SA, and the situation is even more difficult when the work location is outside its main urban regions. Nurses in SA are generally held in low esteem; in addition, the social conditions for the expatriate nurse tend to be poor as there are restrictions on going to public places, and a lack of entertainment facilities such as cinemas. The MOH remains the least preferred of potential employers regarding wages and work environment compared with other employers, whether internal or external in neighbouring countries (Mitchell, 2009).

Leadership styles of nursing leaders can be responsible for creating a professional environment that facilitates the recruitment and retention of talented nurses (Toofany, 2007). Therefore, identifying the prevailing nursing leaders' styles, and any correlation with organizational commitment and nursing retention, will help to develop our understanding of effective leadership (Eneh et al., 2012). While there are studies that have investigated nursing leadership styles among nurses in a variety of cultures, there has been no such study in the entire Middle East region.

It is essential to understand the factors that influence commitment to enhance morale in the profession. By examining the relationship between leadership styles and nurses' organizational commitment, the nursing profession can begin to establish positive, mutually beneficial relationships between managers and their staff that will lead to greater efficiency, productivity, and job satisfaction. As nurses' relationships with their direct manager have an effect on productivity and attitude, length of stay in the organization can also be determined by this relationship (Ribelin, 2003).

### **1.7. Aim of the Study**

The aim of this study was to examine the relationship between nurse managers' leadership style and nurses' organizational commitment in SA. The independent variables are the leadership styles as perceived by managers and their current staff, while the dependent variable is the organizational commitment of the study sample.

### **1.8. Research Questions**

In order to analyse the leadership style of nurse managers in Saudi Arabian hospitals and to investigate any existence relationship between leadership style and organizational commitment, the following questions were explored:

- How do nursing staff managers in SA perceive their own leadership styles?
- How do nursing staff in SA perceive their nurse managers' leadership styles?

- Is there a difference between hospital nurse managers' perception and their current staff nurses' perception of their leadership style?
- Is there a difference between different types of hospitals in the study in relation to the style of leadership of the nurse managers?
- Is there a relationship between nursing managers' leadership styles and the organizational commitment of nursing staff in SA?

### **1.9. Conceptual Framework**

The conceptual framework that guided this study was based on the Full Range of Leadership (FRL) Model (Bass, 1985), which is a model of transformational leadership largely based on Burns' conceptualization (Burns, 1978). It is perhaps the most researched and validated leadership model in use globally (Kirkbride, 2006). The principle of the FRL model is that each leader demonstrates every style to some extent. McGuire and Kennerly (2006) have argued that it offers a framework that leaders can use to develop their own knowledge and skills about leading staff, shaping staff commitment and the work environment (McGuire and Kennerly, 2006). According to Bass and Avolio (1997), the FRL model connects each leadership style to the expected performance outcome.

The current version of leadership theory includes four dimensions of transformational leadership and three dimensions of transactional leadership (Bass and Riggio, 2006). The four dimensions of transformational leadership are charisma or idealized influence; inspirational motivation; intellectual stimulation, and individualized consideration.

Idealized influence characterizes leaders who are ideal role models for followers; inspirational motivation characterizes leaders who motivate followers to commit to the vision of the organization; intellectual stimulation characterizes leaders who support innovation and creativity through challenging the status quo; and individual consideration characterizes leaders who operate as tutor and counselor to followers (Bass and Riggio, 2006).

In addition to the components of transformational leadership, the FRL model also includes two components of transactional leadership along with laissez-faire or no leadership. A leader who has a transactional leadership style uses exchange transactions to compensate followers' performance. One type of transactional leadership involves a contingent reward whereby the leader rewards followers only in return for the achievement of related objectives; another type is 'management-by-exception', whereby the leader leaves followers to do their work without interference as long as performance goals are achieved (Bass and Riggio, 2006). Finally, laissez-faire leadership, the third component of the FRL model, is the avoidance or absence of leadership where leaders do not actively participate in any process of leadership: this is regarded as the most ineffective style (Bass and Riggio, 2006).

A recent study by Kanste et al. (2009), the aim of which was to statistically test the structure of the FRL model, has presented further support for its universality and applicability in a range of organizational settings, such as healthcare and nursing (Kanste et al., 2009). See Figure 1 for the concept map of the current study.



Figure 1-1. The concept map of the study

### **1.10. Summary**

This chapter has presented a brief background to the study by describing the structure of the Saudi health system and discussing the nursing shortage. The main challenges for nursing have been outlined. Finally the aim of this study, the problem statement, research questions and the conceptual framework that guided this study have been described.

Having introduced the study, the next chapter provides an in-depth systematic review of the relevant studies to the study variables.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1. Introduction

This chapter presents a systematic review of studies related to leadership styles, organizational commitment, and retention, followed by a particular focus on the relevant literature on SA. This chapter retrieved and critically appraised studies surrounding nursing leadership and organizational commitment in a systematic manner. Studies that investigated the relationships between these variables are also included. Gathering, summarizing and integrating recent related papers has developed the researcher's understanding of the nursing leadership phenomenon. It is hoped that this review enables the reader to share in this; in particular, the section on the theoretical background should help the reader to a fuller understanding of concepts of leadership.

### 2.2. Review Question

To gain a better understanding of nursing leadership and organizational commitment, a PICO-question was formulated to guide the systematic search. For the purposes of this review, P (population) refers to nursing staff who are working in health services settings; I (intervention or phenomenon of interest) refers to the impact of nursing leadership styles ; C (comparison) is not included in this review, and O (outcome) refers to nurses' organizational commitment and intention to stay. Thus the question that has guided the review was:

*Among nursing staff who are currently working in health services settings (P), what is the impact of nurse leadership styles (I) on the nurses' organizational commitment and their intention to stay or any existence relationship between these two variables within nursing (O)?*

### **2.3. The Aim of the Review**

Although there is an extensive amount of debate about the relationship between leadership styles and nurses' organizational commitment and intention to remain employed, there is minimal understanding of the real impact of nursing leadership styles on these variables. The aim of this review was therefore to summarize and analyze the best evidence of recent studies that have examined the impact of nursing leadership style on organizational commitment and nursing retention, and to generate recommendations for further study.

### **2.4. Review Methodology**

#### **2.4.1. Search strategy**

The reviewer used the following multi databases to ensure comprehensive article retrieval:

- CINAHL via EBSCO.
- Cochrane library.
- MEDLINE via OvidSP.
- PsycINFO.

The following search terms were used as the main keywords:

- Nursing leadership.
- Organizational commitment.
- Intention to leave (stay).
- Turnover.
- Retention.
- Relationship (influence OR impact)

### **2.4.2. Other Search methods**

The last five years of the *Journal of Nursing Management* and the *Journal of Nursing Administration* were manually searched for relevant articles and relevant references. The researcher also contacted some key authors in nursing leadership to inquire about ground-breaking studies in this area and about current research.

### **2.4.3. Criteria for Inclusion and Exclusion of Studies in this Review**

A variety of research designs are used in health research studies to generate new evidence-based practice. According to the nursing leadership literature, the most commonly used designs in investigating leadership outcomes are correlational, non- experimental, cross sectional or exploratory designs (Cummings et al., 2008, 2010). However, researchers in the field of health are often interested in more than simple cause-and-effect relationships, consequently this review will look at all types of relevant quantitative papers that address this issue.

### **2.4.4. Inclusion criteria**

Papers included in the systematic review should contain the following criteria:

- Studies that have been published in the last ten years (2001 to 2012).
- Studies reported in English.
- Studies in healthcare settings - the participants in the studies must work in a health service; however nursing staff from all categories (executive nurses, head nurses, staff nurses, etc.) will be included.
- Quantitative studies.

- Studies must contain some measurement of how leadership associate with one or more of the following variables:
  - Organizational commitment
  - Nurse retention
  - Nurses' intention to leave
  - Nurses' intention to stay
  - Nurses' intention to quit
  - Nurse turnover.

Most of the accessible evidence on nursing leadership development dates from the past ten years. The present review has concentrated mostly on the period 2001-2012, because nursing leadership ideas and practices change rapidly and this is the time scale in which leadership concepts (e.g. magnet hospitals concept & transformational leadership) and related leadership development terms has become more dominant in the nursing literature (Germain and Cummings, 2010). However, classical and landmark papers were retrieved beyond this time scale.

#### **2.4.5. Exclusion criteria**

- Studies that investigated clinical leadership.<sup>3</sup>
- Studies that evaluated leadership development programmes.
- Qualitative studies.
- Studies published before January 2001.
- Studies outside healthcare setting, for example educational settings.

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<sup>3</sup> Clinical leadership taken to include nurses assigned to manage the operations of the patient care area for limited shift only without twenty-four hours accountability and responsibility (e.g., charge nurses).

The study selection criteria were applied to the titles and abstracts generated from the literature search. Full texts were obtained for those studies that met the inclusion criteria.

#### **2.4.6. Critical Appraisal**

In order to make sure that all papers that were included in the review were of a high quality, quantitative studies were assessed by the reviewer for methodological validity prior to inclusion in the review using the cohort studies tool of the Critical Appraisal Skills Programme (CASP)(Solutions for Public Health, 2011). The reviewer has also used the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) tool to report and depict the flow of information through the different phases of the review (Figure 2). (PRISMA is an evidence-based minimum set of items for reporting in systematic reviews and meta-analyses, which consists of a 27-item checklist and a four-phase flow diagram.)(PRISMA, 2011)

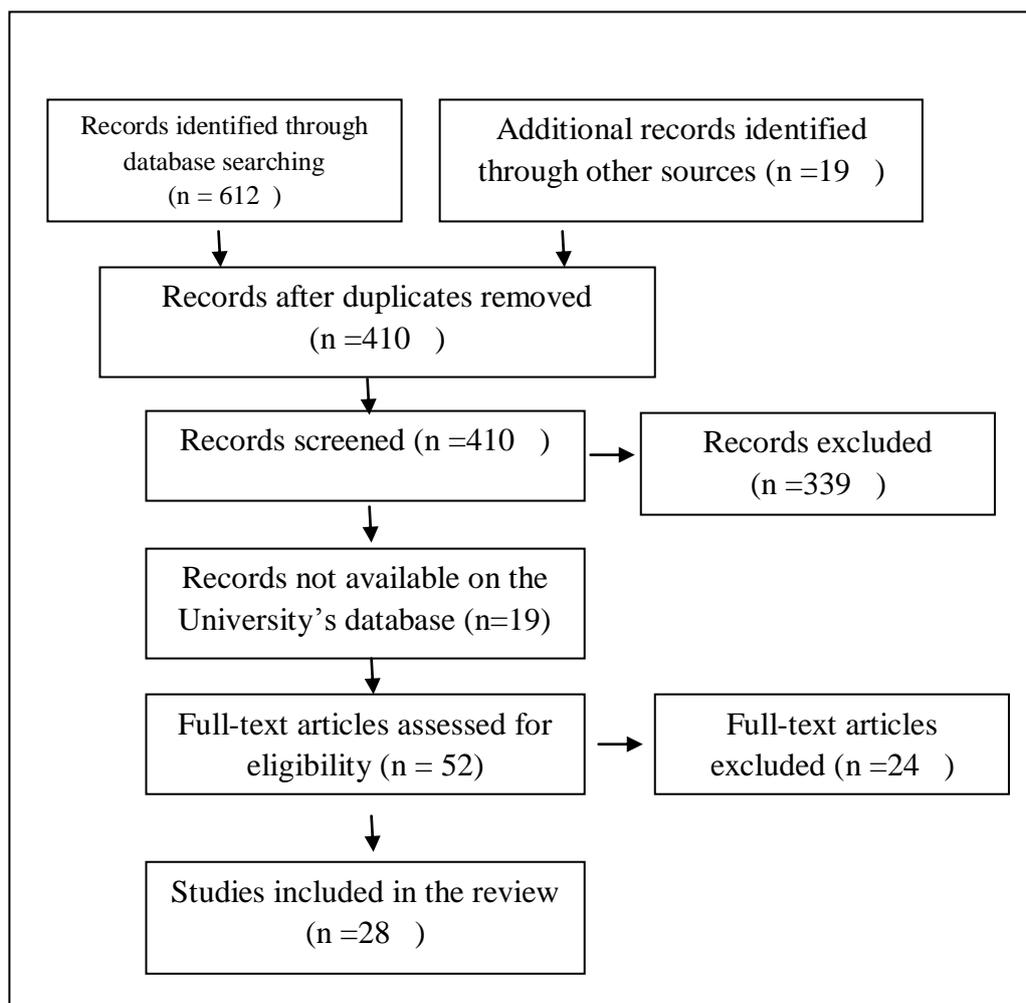


Figure 2-1. PRISMA flow diagram of the included studies.

## 2.5. Theoretical Background

### 2.5.1. Leadership

This study is based on the transformational leadership theory developed by Bass (1985).

Bass's theory is based on Burn's (1978) work, with some modification and elaboration. This conceptual framework considers the full range of leadership, which incorporates transformational, transactional, and laissez-faire leadership styles. Each component of these styles consists of elements or factors that represent the leaders' attribute or behaviours.

Transformational leadership is concerned with the performance and development of followers

to their fullest potential. It consists of four factors: idealized influence or charisma (attributed or behaviours); inspirational motivation; intellectual stimulation, and individualized consideration. Transactional leadership is concerned with the exchange of things of value between the leader and the followers to advance the leader and followers' agenda. According to Bass (1985), the leader rewards or disciplines the followers depending on the adequacy of the followers' performance. Transactional leadership consists of three factors: contingent reward, management-by-exception (active) and management-by-exception (passive). Finally, laissez faire is the most ineffective and inactive style and represents the avoidance and absence of leadership. Bass (1985) viewed transformational and transactional leadership as complementary constructs. Bass later developed the Multifactor Leadership Questionnaire (MLQ) to assess the different leadership styles.

The transformational leadership model developed by Bass enables the transformation of followers in one of three ways:

1. By raising the followers' level of awareness or level of consciousness about the importance and value of desired outcomes, and different ways of achieving them.
2. By getting followers to transcend their own self-interest for the sake of the team or organization.
3. By changing followers' need level or expanding their portfolio of needs.

The continuum of the Full Range of Leadership is composed of three levels of leadership which are:

1. The transformational leader, who moves the followers beyond self-interest and is charismatic, inspirational, intellectually stimulating and individually considerate.



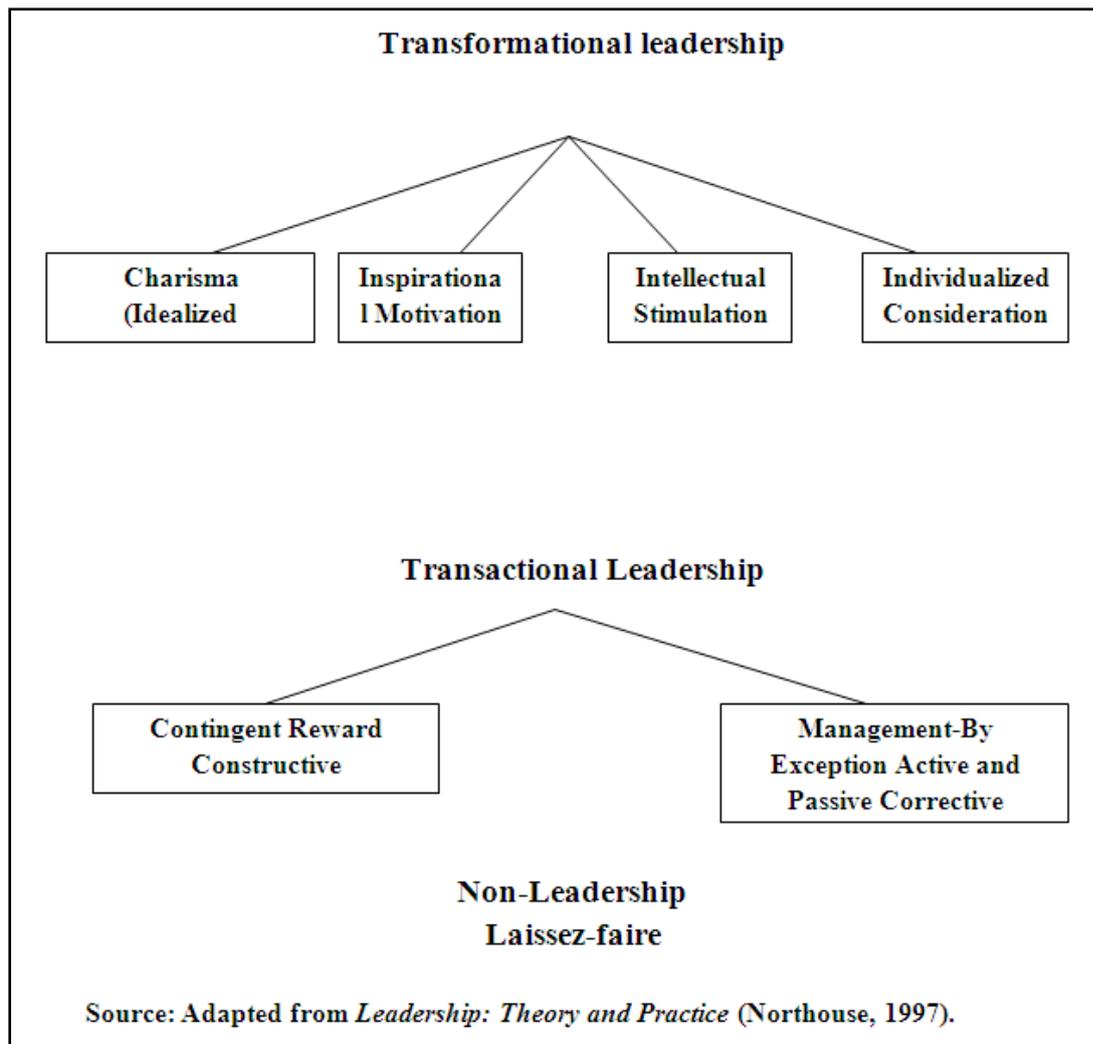


Figure 2-3. Bass's model of Full Range of Leadership.

Bass (1997) argued that there is universality in the transactional-transformational paradigm, which means that the same conception of phenomena and relationship can be observed in a wide range of organizations and cultures. Culture and organization have a great influence on leadership and interpersonal behaviour as differences in cultural beliefs, values, and norms moderate the leader - followers' relationship. Bass (1997) states seven reasons to support the argument for the universality of the transformational leadership phenomenon:

1. Leadership itself is a universal phenomenon.

2. The discussion of lay people on the issue of whether a leader is born or made is universal.
3. The need for more envisioning, enabling, and empowering leadership for the 21st century.
4. A socially oriented transformational leader engages in the moral uplift of his followers.
5. The transactional-transformational paradigm can be extended to describe team and group effects as well as whole organizations.
6. The contribution of web communication and technology on leadership.
7. Globalization and adaptation of American management practice and management education.

#### ***2.5.1.1. Definition of leadership***

Leadership has been described in many different ways, usually by being contracted to a definition of management. In the past, leadership has been viewed as a form of social influence, but recently it began to be viewed as form of organizing. Leadership can be viewed as both a perceptual and behavioural phenomenon. Finding a single definition of leadership appears difficult and fruitless, because an appropriate choice of a definition depends on the theoretical, methodological, and substantive aspects of leadership being considered (Marshall, 2011). Marriner-Tomey (1993) found that the definitions of leadership are often confusing and unclear because of the use of some terms such as authority, management, power, administration, and supervision. Bass's leadership definition has multiple views (Marriner-Tomey, 1993). One definition views leadership as the focus of group process, where the leader is at the centre of this group activity, another definition views leadership

from the perspective of the personality and focuses on the traits and characteristics of the leader, while another focuses on the act or the behaviour of the leader. In addition, leadership has been defined as a power relationship as well as an instrument of goal achievement.

Marshall (2011, p. 2) suggested the following simple definition of leadership: 'leadership is the discipline and art of guiding, directing, motivating, and inspiring a group or organization toward the achievement of common goals'. Bass (1985) and Burn (1978) define leadership as a transformative process through which the leader creates a vision of a future state for the organization and articulates new ways for the followers to accomplish the organizational goals.

The concept of leadership in nursing has numerous definitions too. Welford (2002, p. 7) defines leadership in nursing as, 'setting the pace and direction for change, facilitating innovative practice, ensuring the policy is up to date, that the professional standards are set in relation to care and that comprehensive service is developed over time.'

### **2.5.2. Organizational commitment**

As with leadership, the concept of organizational commitment is multi-dimensional and has multiple conceptualization and definitions. The most widely acknowledged definition of organizational commitment is that proposed by Porter et al. (1974) as being the relative strength of an individual's identification with, and involvement in, a particular organization. The authors extended their notion of commitment to another construct, namely job satisfaction, and showed that organizational commitment can be a better predictor of turnover than job satisfaction. Commitment is characterized by three factors: (1) a strong belief in, and acceptance of, the organization's goals and values; (2) a readiness to exert great effort on

behalf of the organization; and (3) a strong desire to remain in the current organization (Mowday et al., 1979). Where these factors are present, staff members hope to be active agents in their organization; have an influence on what is going on in it; feel that they have high status in it; and are willing to give more than is expected of them.

More recently, the multidimensional conceptualizations by Meyer and Allen (1991) have gained considerable attention. They proposed a three-component model of organizational commitment:

1. Affective commitment, which is the employee's emotional attachment to, identification with, and involvement in the organization. It is the strength of positive feelings toward the organization and the willingness to increase one's emotional bond to that organization that represents the affective commitment. Consequently, staff might stay in the organization because they want to, and they are willing to exert extra efforts on behalf of the organization.
2. Continuance commitment involves the employee's experience and what he or she has given to the organization. It is based on the costs that the employee associates with leaving the organization or on a perceived lack of alternative employment opportunities. Therefore staff members that have strong continuance commitment might stay in the organization just because they need it.
3. Normative commitment is where the individual has feelings of obligation to stay with the organization. In normative commitment, employees are more likely to be obedient to the organization's management and to the norms of the organization and are less likely to challenge or deviate from organizational requirements. Therefore, staff might stay with the organization because they believe that they must do so.

## **2.6. Nursing leadership**

Leadership is a natural element of the nursing profession as the bulk of nurse practice is in units or work groups (Huber, 2010b). Effective nursing leadership has been positively linked to nurses, patients and organization outcomes (Squires et al., 2010, Cummings et al., 2010, Schreuder et al., 2011). For example, a recent cross-sectional research study, which recruited 699 nurses working in a Dutch hospital, investigated the relationship between nurse managers' leadership styles with registered sickness absence among their nursing staff. The results illustrated that the leadership style characterized by high relationship was inversely associated with the number of days of sickness absence (OR = 0.60, 95% CI = 0.41–0.84) and short episodes of sickness absence (OR = 0.61, 95% CI = 0.48–0.72) while a leadership characterized by a low relationship was positively related to the number of days of sickness absence (OR= 2.82, 95% CI = 1.50–5.29) and short episodes of sickness absence (OR = 2.40, 95% CI = 1.29–4.46) (Schreuder et al., 2011).

This result demonstrates that nursing staff working under people with a focused leadership style, such as transformational leaders, have fewer short incidents of sickness absence than the staff of task-oriented leaders. Training nurse leaders in relational leadership styles can decrease understaffing and enhance nursing efficiency and quality.

## **2.7. Leadership Style**

There are many leadership styles that go beyond the primary ones. Avolio and Bass (2004) stated that the major leadership constructs, transformational leadership, transactional leadership, and passive/avoidant leadership, form a new paradigm for understanding both the lower and higher order effects of leadership style. This paradigm builds on previous leadership paradigms such as those of autocratic, bureaucratic, democratic, and laissez-faire which have dominated selection, training, development, and research in this field for the past 50 years. Different approaches toward leadership styles are based on different assumptions and theories. The style that leaders use will be based on a combination of their beliefs, values and preferences, as well as the organizational culture and norms, which encourage some leadership styles and discourage others (Marquis and Huston, 2008).

In a recent systematic review, Cummings et al. (2010) included 53 papers that examined the relationships between various styles of leadership and outcomes for the nursing workforce and their work environments. The question that guided the review was: Do nursing leadership styles influence outcomes for nurses, nursing environments, and nursing workforce? Using content analysis, the authors categorized the outcomes of the studies in two stages: first, they sorted the outcomes into thematic categories based on their common characteristics; then they identified, in each thematic category, the pattern of relationship between both relational and task-focused styles of leadership with changes in specific outcomes. The five themes that were generated were: (1) productivity and effectiveness; (2) work environment factors; (3) staff health and well-being; (4) staff relationships; and (5) staff satisfaction with work, role and pay. The results of the review identified a trend that support previous research (Sellgren et al., 2006), namely that relationship leadership practices, such as transformational leadership, contribute to improved outcomes for nurses, organization environments, and

effectiveness and productivity of healthcare systems. The most common tool used in the reviewed papers to measure leadership styles was the Multifactor Leadership Questionnaire (17 studies). Recommendations arising from the review emphasise the need for the encouragement and development of transformational and relational leadership to improve nurse satisfaction, healthy work environments, and recruitment and retention.

The previous result is also consistent with another review, by Germain and Cummings (2010), which explored leadership factors that influence nurse performance. Eight quantitative papers were reviewed using robust quality rating tools. All the studies were of nurses' perception of performance and the factors associated with it, in hospital settings. Nurses reported 25 different factors that influenced their performance; based on these the authors identified five groups: leadership practices; individual nurse characteristics; access to resources; relationship building, and autonomy. Effective leadership was considered to be an important and influential factor affecting nurses' performance and desired outcomes of the organizations. Nursing leaders who are committed to a people-focused leadership style will be rewarded with a positive workplace environment and solid patient care. More research is needed to determine the leadership characteristics that affect nurses' abilities to meet health organizational goals. The authors, in their conclusion, argue that healthcare organizations that invest in exploring effective leadership styles will be rewarded with committed and high performing employees (Germain and Cummings, 2010).

Recent work has identified the importance of identifying the views of nursing staff on their managers' leadership styles (Comings et al. 2010, Eneh et al., 2012). A study, which used an electronic version of the Transformational Leadership Scale, to examine the perceptions of

1497 Finish nursing staff about their nurses managers' leadership found that 70% of the sample held positive perceptions and that managers who have closer relationships with staff were rated more positively (Eneh et al., 2012). Such findings should encourage managers to communicate and interact more with their staff.

## **2.8. Transformational and Transactional Leadership**

A transformational leader has been defined as, “ a leader who motivate followers to perform to their full potential over time by influencing a change in perceptions and by providing a sense of direction”, whereas a transactional leader has been defined as “ a leader or manager who functions in a caretaker role and is focused on day to day operation” (Huber, 2010b;p 17). Figure 2.4.distinguishes between transactional and transformational leadership.

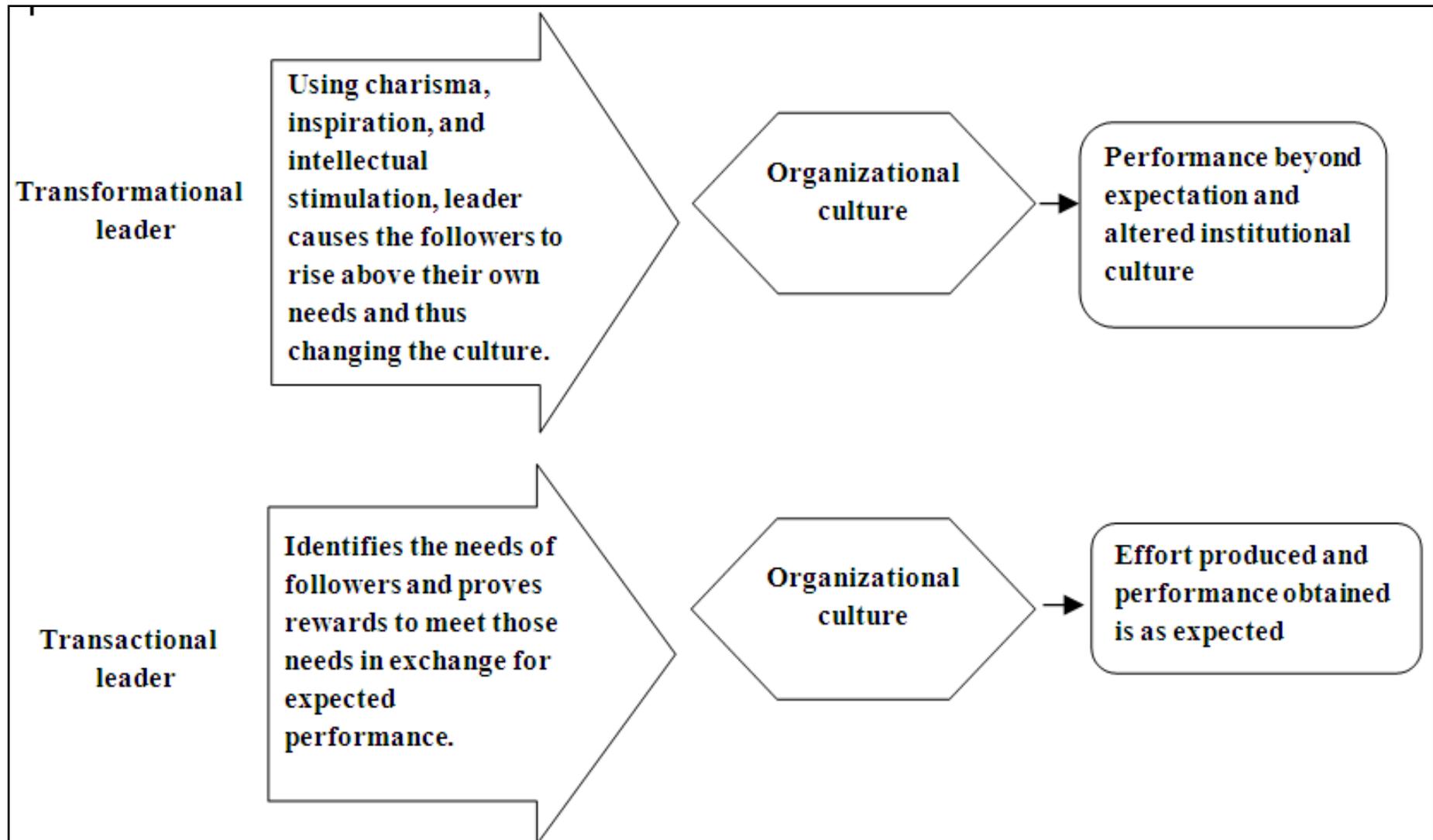


Figure 2-4. Transformational and transactional leadership (Huber, 2010).

According to Failla and Stichler (2008), many nursing leaders aspire to be, and perceive themselves to be, transformational leaders. Bass and Riggio (2006) have suggested that there is a relationship between the manager's leadership style and employees' satisfaction levels and motivation.

Based on the Full Range Leadership Model, Failla and Stichler (2008) conducted a cross-sectional, descriptive correlational and comparative study to assess manager and staff perceptions of the manager's leadership style and to determine what effect transformational leadership style has on job satisfaction. Bass and Avolio's Multifactor Leadership Questionnaire (MLQ) was used to assess the leadership styles of nurse managers (the 'Leader Form' was completed by nurse managers and the 'Raters Form' by staff), while job satisfaction was measured by using the Index of Work Satisfaction Questionnaire Part B (IWS-B). The results indicated no significant differences between the nurse managers' perceptions of their leadership style as compared with their subordinates' perceptions of the managers' leadership style. Yet, significant differences were found in two subscales: intellectual stimulation (influencing followers to think in new ways),  $p < 0.05$ ; and individual consideration subscale (mentoring followers or expressing appreciation when the mission and related goals are accomplished),  $p < 0.05$ . The authors pointed out that these two subscales measure what is most crucial in transformational leadership and which can only be obtained when the nurse manager spends more time with the staff. Pearson product-moment correlation  $r$  was used to identify the direction and strength of the relationship between nurse managers' leadership style and the subordinates' level of job satisfaction. The result indicated significant and positive correlations between transformational leadership and three subscales of the IWS-B survey: autonomy ( $r = 0.330$ ,  $p < 0.01$ ), professional status ( $r = 0.246$ ,  $p < 0.05$ ), and organizational policies ( $r = 0.380$ ,  $p < 0.01$ ), which supports previous research

indicating the association between transformational leadership and autonomy and professionalism. The data from the study support the idea that transformational leadership styles positively influence nurse job satisfaction and as a result enhance the healthcare organization's outcomes.

Using an online survey, Raup (2008) studied the impact of leadership styles, used by nurse managers in academic health centres, on nurse turnover and patient satisfaction, as measured by the Full Range Leadership Model. Staff nurses and nurse managers who agreed to participate were individually provided with a confidential, anonymous password to access the protected website where the survey was uploaded. In addition to rating themselves, managers were asked to enter patient satisfaction scores and the type of patient satisfaction survey used, and their respective staff nurse turnover data, for the most recent full year. By completing the MLQ rater form, validation of leadership styles of managers was ensured by two randomly selected nurses at each of the fifteen sites that had completed survey responses (one manager survey with outcome data and two staff nurse surveys). Although the small sample size ( $n = 45$ ) restricted any statistically significant results on staff nurse retention, nevertheless the results indicated potential significance, as the mean staff nurse turnover rate was 13% for leaders who mainly used the transformational leadership style, in contrast to a staff turnover rate of 29% for leaders who used a non-transformational style (Raup, 2008).

An earlier study, conducted to assess the dimensionality and nomological validity of Bass's (1985) FRL Model indicated a direct link between transformational leadership style and RNs' intentions to leave (Vandenberghe et al., 2002). A large sample of hospital nurses from Belgium ( $n = 1,059$ ) was hired to test the applicability of various models of nursing

leadership by using the MLQ. The study also examined the relationship of leadership style to different nursing staff outcomes, including the intention to leave or to quit their current position. The measured Full Range Leadership Model characteristics of attributed charisma, IS, and IC ( $r = -0.32$ ), as measured by the MLQ, correlated significantly and negatively with nurses' intention to leave their position ( $p < 0.01$ ). The MBE-P management style ( $r = 0.28$ ) was positively correlated with an intention to quit. This result gives further support to the argument that FRLM leadership style has an influence on nursing retention.

## **2.9. Nursing Retention and Turnover**

The most challenging issue facing health decision makers is to do with human resources of health care professionals, specifically in nursing (Laschinger et al., 2009). Recruitment and retention of registered nurses in healthcare organizations has never been such a critical concern as it is nowadays (Workman, 2010). Recruiting qualified nurses is important but more important is to maintain highly qualified nurses, which ultimately saves enormous resources of recruiting, orientation and training (Marshall, 2011). Retention has been defined as “the ability to continue the employment of qualified individuals, that is nurses and / or other health care providers/ associates who might otherwise leave the organization” while turnover is defined as the “loss of an employee because of transfer, termination, or resignation” (Workman, 2010, p. 598) Current literature suggests that turnover of nurses consumes considerable resources of healthcare organizations. Gess et al. (2008) argue that the economic cost of nursing turnover is four to five times more than healthcare organizations normally estimate it to be. Stone and colleagues (2007) estimated that the cost ranges from \$62,100 to \$67,100 per nurse. Furthermore, the cost of replacement of a critical care nurse is nearly \$145,000 (Atencio et al., 2003). In contrast, research has indicated that nursing

leadership has a direct positive impact on the retention of hospital nurses (Acree, 2006).

Anthony et al. (2005) have argued that nurses' leaders are in the best place to have an impact on retention as they have actual knowledge of the topics and challenges that are essential to nurses and care delivery.

Duffield et al. (2009) studied factors impacting on nurses' job satisfaction, satisfaction with nursing and intention to leave, in public sector hospitals in Australia. Data were collected on 80 medical and surgical units using the Nursing Work Index-Revised (Aiken and Patrician, 2000) and Environmental Complexity Scale (O'Brien-Pallas et al., 2004). The results indicated that nurses who were less likely to leave were more likely to be satisfied with their job and to be experiencing good leadership in the hospital. In their conclusion the authors assert that the role of the nursing leaders in encouraging suitable delegation and staff deployment is critical to staff retention; they can highly influence nurse job satisfaction rates by guaranteeing a positive organizational environment. Effective leadership has the capacity to influence a range of factors such as improving staffing to adequate levels; ensuring there are enough support and allied health staff; lowering workloads; supporting leaders to respond to employees concerns; encouraging good nurse - physician relationships; applying orientation programmes and offering continual training (Duffield et al., 2009).

The most cited paper in nursing retention studies is a literature review by Force (2005), which looked at nursing papers that addressed the characteristics of nurse managers' leadership styles that improve nursing retention. The author identified five themes that are important in nursing leadership, as these characteristics enhance nursing retention:

- A dominant transformational leadership style focusing on affiliation on the basis of strong communication between leaders and staff regarding organizational goals, values, and vision.
- Positive personality traits: extroverted, likeability, openness, and personal power.
- Magnet hospitals' organizational structures influence perception of power in leadership along with personal attributes and are derived from resources, information, and support systems that maintain teamwork. Tenure in the organization combined with advanced graduate education enables a manager to develop valued institution-specific interpersonal and technical expertise.
- Tenure in the organization combined with high education allows a manager to develop valued institution-specific interpersonal and technical expertise.
- The most consistent theme across all the research papers included in the review was the strong need for nurses to practice with leadership support of autonomy.

Another interesting finding was that Magnet leaders benefitted from the organizational characteristics that support empowerment among clinical nurses through better access of information and resources (American Nurses Credentialing Center, 2012). Leaders can actively seek power, rather than passively accepting the partial power found in most nursing positions; strong leaders empower their followers to work as a team to enhance efforts to achieve the goals of healthcare organizations (Force, 2005).

Intention to stay, which clearly impacts on nursing retention, can be enhanced by an effective leader. Duffield et al. (2010) investigated the impact of leadership characteristics of nursing unit managers, as perceived by nursing staff, on staff satisfaction and retention. Secondary analysis was undertaken of data from 94 randomly selected medical, surgical and combined

medical/surgical wards in 21 public hospitals in Australia. Nurses were asked to complete a survey that included the 49-item Nursing Work Index-Revised [NWI-R] together with questions relating to job satisfaction, satisfaction with nursing as a profession and nurses' intention to leave their present position. There were 2488 responses out of 3099 potential consenting respondents—a response rate of 80.3%—however, there were only 2141 valid responses. Logistic regression was applied to predict the influence of leadership items in NWI-R on the nurse outcomes. The items 'Praise and recognition for a job well done' and 'A nurse manager or immediate supervisor who is a good manager and leader' were statistically significant with intent to leave (Odds Ratio, 95% CI) 0.83 (0.739-0.937) and 0.80 (0.712-0.908) respectively. In addition, those items were also associated with 17 or 20% decrease in nurses' intent to leave when the identified factors increased by one. The results indicated that an effective nursing unit manager who is close to staff and provides positive feedback is influential in improving job satisfaction and providing a positive practice environment that leads to low turnover and more organizational commitment (Duffield et al., 2010).

Similarly, a study was conducted by Kleinman (2004) to describe the perceptions of managerial leadership behaviours associated with staff nurse turnover and to compare nurse manager leadership behaviours as perceived by managers and their staff nurses. This descriptive, correlational study was conducted at a 465-bed community hospital in the north east of America. The study sample comprised 79 staff nurses and 10 nurse managers, who completed demographic forms and the 45-item MLQ. Active management-by-exception, as perceived by staff nurses, was the only managerial leadership style associated with staff nurse turnover. Compared with the perceptions among their staff nurses, nurse managers consistently perceived that they demonstrated a higher mean frequency of transformational leadership behaviours. The transactional leadership style of active management-by-exception

not only appeared to be one of the barriers to retaining staff nurses but it also reflected leadership perceptions among staff nurses who work evening and night shifts in hospital settings (Kleinman, 2004).

Data from several sources have identified that organizational commitment is a strong predictor of turnover intentions (Brunetto et al., 2012, Wagner, 2007). Using a rigorous approach, Wagner (2007) reviewed recent studies aiming to demonstrate the predictability of organizational commitment as a variable, compare organizational commitment and job satisfaction as predictor variables, and determine the usefulness of organizational commitment in nursing turnover research. Results from the 23 included papers indicated a statistically significant predictive ability of organizational commitment with a negative relationship between organizational commitment and turnover (the greater the commitment, the lower the turnover). However, a strong correlation was not always found. The correlation values were moderate, ranging from 0.06 to 0.53. The majority of the papers placed organizational commitment as indirectly related to turnover. It was presented often as an antecedent to intention to leave. The review also demonstrated that although job satisfaction is commonly employed in turnover studies, organizational commitment is a stronger predictor. Based on this result it is safe to conclude that organizational commitment is a practical predictor of turnover in nursing research, and effective as a variable, with the most direct impact on antecedents of turnover such as intent to stay. The review also suggested that the organizational commitment variable should normally be employed in research into nursing turnover.

Among the recommendations arising from the literature is the call for retention strategies to be targeted at improving the nursing work environment, not only to attract potential nurses to the profession but also to build commitment among nursing staff and thus to maintain the nurses currently in the profession (Liou and Cheng, 2008, Lafer, 2005). Lafer (2005) argued that there is no nursing shortage; rather the lack of nurses is a result not of insufficient nurses but of the reluctance of nurses to remain in practice due to work environment issues. Lack of respect, insufficient compensation, and rotating shift work were the primary reasons cited for the increasing numbers of resignations of practicing nurses; Lafer proposed that, if the issues were resolved, there would be sufficient nurses to meet the increasing demand.

## **2.10. Nursing leadership and Organizational Commitment**

Organizational commitment has been linked with job performance (Al-Ahmadi, 2009) and staff retention (Wagner, 2007). Inspiring commitment to achieve the vision of a desired future is the core of transformational leadership (Leach, 2005). Maintaining talented staff is of high value to healthcare organizations (Tomey, 2009).

Some results suggest that the styles of transactional and transformational leadership offer a framework for interaction that might affect employee commitment, relationships and work environment. A descriptive correlational study that examined the relationship between the leadership style of nurse managers and the organizational commitment of staff nurses was undertaken by McGuire and Kennerly (2006). A convenience sample of 63 nurse managers and 500 RNs completed the Multifactor Leadership Questionnaire (MLQ) Form 5X to assess transactional and transformational leadership characteristics, and the Organizational Commitment Questionnaire to measure the organizational commitment of participants.

Pearson's product-moment correlation was calculated to determine the relationship between the leadership style of nurse leader and the degree of organizational commitment demonstrated by staff, but no significant correlation was found between the nurse managers' self-assessed leadership characteristics and the degree of organizational commitment demonstrated by their staff nurses. Some transformational characteristics, particularly inspirational motivation and intellectual stimulation, showed statistically significant results ( $p < 0.05$ ), however the correlations were too weak to draw any inferences ( $r = 0.0306$  and  $0.0133$  respectively). The generalisability of the results might have been limited by the use of a convenience sample, though the study indicated that the traits in each style combined to present an array of methods for achieving outcomes (McGuire and Kennerly, 2006).

These results confirm an earlier study based on transformational leadership theory: Leach (2005) conducted a descriptive correlational study to examine the relationship between nurse executive leadership and organizational commitment among nurses in acute care hospitals. A cross-sectional field survey of nurse executives (NE) ( $n=102$ ), nurse managers (NM) ( $n=101$ ), and staff nurses (RNs) ( $n=651$ ) was conducted to examine nurse executive transformational and transactional leadership and their relationship to organizational commitment. The 50-item Transformational Leadership Profile (TLP) was used to measure transformational and transactional leadership, and the 15-Item Organizational Commitment Scale was used to measure the level of organizational commitment. The results demonstrated that there is a statistically significant negative relationship between NE transformational leadership and what the authors refer to as "alienative" organizational commitment among RNs ( $r = -0.24$ ;  $P < 0.05$ ). Additionally, a statistically significant negative relationship between NE transactional leadership and RN alienative organizational commitment was present ( $r = -0.31$ ;  $P < 0.01$ ). There was also a statistically significant negative relationship

between NM transformational leadership and RN calculative commitment ( $r = -0.22$ ;  $P < 0.05$ ). A negative relationship between NE and NM calculative commitment ( $r = -0.44$ ;  $P < 0.05$ ) was shown. This result indicates support for the positive influence of leadership on staff organizational commitment (Leach, 2005). Calculative commitment is based on the organizational member receiving inducements to match his or her contributions while alienative commitment is the negative form of commitment that is a consequence of lack of control over the internal organizational environment and of perceived absence of alternatives for organizational commitment (Bussing, 2002).

Expatriate nurses face particular challenges, which Xu (2007) has grouped into four main themes. The first theme was communication: this was a significant challenge that arose from language barriers, vague phone communication, and the pervasiveness of language use in all aspects of life. The second theme was to do with variations in nursing practice and this included the different role of the nurse, practice scope, and the varieties of technology applied. The third theme was to do with exploitation and discrimination: nurses faced the challenges of harassment, high and difficult expectations for confirming competence, lack of equal opportunity, and difficulties in reporting unfair treatment. The last challenge was to adjust to a new culture and to avoid conflict with other non-local nurses (Xu, 2007). The most common characteristics of non-local nurses have been identified as being less assertive, more respectful of authority, less demanding, and more flexible; it has been suggested that the characteristics of expatriate nurses are connected to their background, their education, and their employment conditions, and that these shape their feelings as a foreigner, and as a perceived outsider (Kingma, 2006). As the proportion of expatriate nurses in SA increases, cultural differences need to be better understood, especially in areas such as leadership,

communication, and orientation, to enhance organizational retention and improve positive outcomes of patient care (Xu, 2007).

### **2.11. Evidence from Saudi Arabia**

Although there is a growing body of Saudi literature on retention of nursing staff as measured by job satisfaction (Abualrub and AlGhamdi, 2012, Al-Ahmadi, 2009), and intention to leave (Zaghloul et al., 2008), little is known about the impact of leadership styles on retention. Zaghloul and colleagues (2008) investigated the relationship between nurses' job satisfaction and their intention to leave, in an academic medical institution in SA. A descriptive cross-sectional design was used to describe the correlation between variables. While a total of 499 nurses were surveyed, only 276 questionnaires were suitable for analysis (a 55.3% response rate). A self-administered questionnaire was developed by the authors to collect the data, which consisted of 26 items, including demographic information and measuring nurses' job satisfaction. Intention to leave was assessed by asking a statement phrased as follows: "I intend to quit working at the University hospital"; the responses were, "I agree, I disagree, I can't tell". The results of this study showed that nurses were least satisfied regarding working environment, salary, promotions, and hospital policies. They were dissatisfied with the fairness of the performance appraisal system, bonuses, paid time off, and statements of recognition of achievements. The results indicated that 17% of the sample (47 nurses) had the intention to leave, while more than half of the sample (159 nurses) could not tell exactly whether they intended to leave or not. The results also showed that leadership style undertaken by nurses' supervisors is considered an effective motivator for nurses to stay at

work, and communication skills also significantly enhanced retention, especially among nurses dealing with other health professionals in the health facility.

Only a small number of studies were found that looked at the concept of leadership in the Saudi nursing profession; those that were found tended to focus on profiling leadership characteristics, rather than on the potential impact of leadership on nursing retention.

Two studies assessed and explored the nursing leadership styles of nurse managers working at the National Guard Hospitals in SA (Omer, 2005; Suliman, 2009). In Omer study, a mixed method design of quantitative and qualitative data collection methods were used: staff nurses and nurse managers completed the MLQ survey and, in addition, nurse managers were interviewed. Suliman used a descriptive quantitative approach by using the MLQ with the addition of a question on the willingness of participants to stay in their position for three years from the time of data collection, and their reasons if not willing to stay. In these two studies, nurse managers and staff nurses gave a higher rating to transformational factors than to transactional factors. Nevertheless, there were significant differences between the ratings of nurse managers and the ratings of the staff nurses. The staff nurses in both studies rated the nurse managers significantly lower in all nine leadership factors than did the managers. Managers thus perceived themselves as having a transformational leadership style more often than staff nurses did, a finding that is congruent with the earlier study by McGuire and Kennerly (2006). The results also indicate that there was no significant difference between the demographic characteristics concerning the perceived leadership style of the nurse managers. In terms of retention, the study by Suliman showed that the majority of staff nurses (77.1%), but only 38.7% of nurse managers were willing to stay (setting was emphasized as a key reason for not wanting to stay), which indicates the effectiveness of transformational

leadership style on nursing retention. A weakness of this study is that only 39 managers participated in this study out of 1453 staff (Omer, 2005, Suliman, 2009).

Another Saudi-based study that used the MLQ was based on a convenience sample of 308 Saudi nurses to investigate the relationship between nursing leadership and Saudi nurses' job satisfaction (AbuAlRub and AlGhamdi, 2012). The results showed that transformational leadership style has a significant positive correlation with nurses' job satisfaction ( $r=0.45$ ,  $P<0.01$ ); in contrast, transactional leadership style had a significant but negative correlation with job satisfaction ( $r = - 0.14$ ,  $P<0.01$ ). There was no significant correlation between transformational or transactional leadership styles and the level of intent to stay. It was found that the participants in the study perceived their managers to be transformational leaders rather than transactional leaders, which is comparable to the earlier studies of Omer (2005) and Suliman (2009), cited above. This study suggests that the influence of nursing leadership needs more exploration (Abualrub and AlGhamdi, 2012). Although these studies discussed the concept of nursing leadership in the Saudi context, the potential of different leadership styles appears little understood.

Nursing leadership has the ability to control or influence most variables that positively associated with retention, and research indicates that the transformational style of leadership is the most effective. Nurse leaders can actively play a key role in transforming the nursing workforce by improving satisfaction and commitment and promoting a healthy work environment.

## **2.12. Summary**

This chapter has systematically reviewed the nursing literature to explore the relationship of nursing leadership styles and the organizational commitment of nursing staff. The findings of the research studies that have been reviewed support the idea that the leadership styles of nurse managers correlated with the organizational commitment of staff nurses and their intention to stay at work. Most studies indicate that the transformational leadership style is associated positively with commitment, and organizational commitment is positively associated with intention to stay at work. However, there is a dearth of literature exploring the effect of leadership styles on retention. Having reviewed the related literature, the following chapter will discuss the methodology of this study.

## **CHAPTER THREE: METHODOLOGY**

### **3.1. Introduction**

This chapter presents the design and methods used in the present study to accomplish the aim stated in chapter 1. The three instruments: the demographic information sheet; the Multifactor Leadership Questionnaire (MLQ) 5X short, and the Organizational Commitment Questionnaire (OCQ) and their psychometric properties will be discussed. The pilot study, the research sites, sampling and sample size, ethical issues, and data analysis are also discussed.

### **3.2. Design**

To reach the aims of a study it is important that the researcher decide on the most appropriate design for achieving the aims of the study (Parahoo, 2006). A good design allows the researcher to collect and analyse data in a way that controls the study's variables, hence extraneous variables are controlled. It can enhance the variance of study variables and decrease measurement errors and thus positively affect the reliability and validity of the entire study (Brink and Wood, 2001, Polit and Beck, 2008).

The present study used a quantitative non-experimental, cross-sectional, prospective, descriptive, comparative and correlational design. A quantitative data collection technique was used to examine the relationship between the leadership styles of nurse managers and nurses' organizational commitment. The aim of quantitative research is to ensure that the study findings are reliable and valid. A descriptive design was chosen since, while there may

be literature on nursing leadership and organizational commitment in western societies, these variables have not been studied in the Saudi population, and descriptive research tends to study known variables in an unknown population. The present study can be described as comparative, as nursing leadership styles at two selected Saudi medical cities were compared (Brink and Wood, 2001). In correlational research, the investigator attempts to understand relationships (or covariations) among quantitative variables which have already occurred, without manipulating these variables. Correlational research is commonly an effective and efficient design for collecting large amounts of data about certain phenomena (Polit and Beck, 2008). Based on the literature, the current study used a correlational design to ultimately establish the strength and direction of the relationship between the independent variable (leadership styles, as reflected by the MLQ), and the dependent variable (the level of organizational commitment of nursing staff in SA, which is measured by OCQ). Non-experimental, cross-sectional or descriptive designs can limit inferences of causality (Germain and Cummings, 2010). However, a significant proportion of research studies of leadership in nursing tend to predominantly apply a correlational approach. A systematic literature review of the factors that contribute to nursing leadership found that 15 (63%) out of the included 24 papers that used correlational, non-experimental, cross-sectional or exploratory designs had been rated as moderate to high in their quality review (Cummings et al., 2008).

### **3.3. Instruments**

Parahoo (2006, p. 284) stated that “the questionnaire is the most widely used method of data collection in nursing research”. The questionnaires are efficient tool in collecting data on the attributes of clients or staff and have been used mostly to collect information on attitudes,

knowledge, beliefs, opinions, perceptions and the behaviours of clients and staff (Parahoo, 2006). Three instruments were used in this research: the demographic information sheet; the Multifactor Leadership Questionnaire (MLQ) 5X short, and the Organizational Commitment Questionnaire (OCQ).

### **3.3.1. The Demographic Sheet**

The demographic information sheet was used to collect data on the following: age; gender; marital status; job title; total number of years of work experience; nationality, and level of education.

### **3.3.2. The Multifactor Leadership Questionnaire**

The second research instrument used in this study was the Multifactor Leadership Questionnaire (MLQ) 5X short (Bass and Avolio, 1995). There are two parts to this instrument: a self rater (leader form), which nurse managers use to rate themselves, and a rater form which staff nurses use to rate their nurse managers.

The original MLQ that was developed by Bass (1985) has since undergone several revisions. The current form of MLQ (5X), developed in 1995, is a comprehensive 45-item-questionnaire with 12 subscales covering a full range of leadership factors and providing descriptions of transformational and transactional behaviours. Five subscales measure items of transformational leadership; two subscales measure transactional leadership; two subscales measure laissez-faire/passive avoidant leadership, and the remaining three subscales measure leadership outcomes (Bass and Avolio, 1995). It has been demonstrated that the MLQ is both

a reliable and a valid tool for measuring relational leadership characteristics; MLQ scales have demonstrated good to excellent internal consistency, with alpha coefficients above the 0.80 level for all MLQ scales (Bass and Riggio, 2006). The main advantage of the MLQ is its capability to assess perception of the effectiveness of leadership in many different levels of an organization. Different forms of the MLQ have been used in over 30 countries and in numerous settings including nursing (McGuire and Kennerly, 2006, Failla and Stichler, 2008), and in different languages (Bass and Avolio, 1997). The publisher of the MLQ ([www.mindgarden.com](http://www.mindgarden.com)) offers translated versions of the MLQ, including a 33-item Arabic version with no warranty or assurance of quality or dialect. However a recent Saudi study that tested the internal consistency for all eight subscales of the Arabic version using Cronbach's Alpha coefficient gave the following results:

- Transformational Leadership subscale: idealized influence (attributed) = 0.674, idealized influence (behaviour) = 0.523, inspirational motivation = 0.751, intellectual stimulation = 0.793 and individualized consideration = 0.766.
- Transactional Leadership: management-by-exception = 0.692 contingent reward = 0.731.
- Passive / Avoidant Leadership subscale management-by-exception = 0.593. and finally,
- Laissez-faire Leadership subscale = 0.733 (Abualrub and AlGhamdi, 2012).

It can be seen that one subscale had a slightly low score but otherwise all coefficients range from acceptable to good internal consistency. However, this should be considered as a limitation. Permission was obtained from the publisher to use the MLQ (Appendix 1).

### **3.3.3. The Organizational Commitment Questionnaire**

There is evidence that organizational commitment is a valuable predictor of retention and is a useful variable that directly impacts on intention to stay. The Organizational Commitment Questionnaire (Mowday et al., 1979) is the most widely used tool to measure organizational commitment (Wagner, 2007). The OCQ was developed by Porter and Smith to measure the degree of commitment a member of staff experiences towards the organization as demonstrated by the employee's readiness to give back to the organization. The OCQ is a 15-item measure with a seven-point Likert scale, ranging from 'strongly disagree' to 'strongly agree' (whereby a high score indicates greater organizational commitment). The OCQ is a reliable and valid instrument as it demonstrates good internal consistency, reliability, test-retest reliability, convergent validity, discriminated validity and predictive validity; and its alpha internal consistency usually ranges from 0.82 to 0.93 (Mowday et al., 1979). No permission is required to use the OCQ, as the original author decided not to copyright the instrument to encourage its use in research by others (Appendix 3). An Arabic version of OCQ has been developed for this study, as explained in the next chapter.

### **3.4. Pilot Study and Ethical Approval**

A pilot study is conducted to assess the feasibility of a project and to clarify any issues with conducting the research within an agreed timeframe. It is advisable that a pilot study be conducted in advance of the commencement of the main study so that any potential problems can be identified and solved (Gerrish and Lacey, 2010). The pilot study for this project was conducted to assess the suitability of the study methodology in terms of the research design; gaining approval from the two medical cities; the feasibility of accessing study participants, and the application of the research instruments.

Ethical approval for the study was obtained from the main ethical committee in the MOH (Appendix 2), which is sufficiently robust in comparison to the University of Sheffield's ethics review procedure (Appendix 4). An official letters from the General Directorate of Medical Research have been sent to each medical city to facilitate the work of the researcher. Meetings with the nursing directors in both medical cities have been held to ensure the possibility of the random selection of the study participants and the availability of responses boxes for returning the completed questionnaires. Both medical cities have issued ID cards to the researcher to facilitate his access to different departments.

Ten questionnaires, along with re-sealable envelopes, were distributed to the selected participants from the nursing staff and, in addition, two manager forms were given to nurse managers in the same way to know how long it would take participants to complete the questionnaire, as the researcher did not want them to be overwhelmed by their task, the pilot participants were asked to record on the questionnaire the time at which they started and finished.

The average length of time taken to complete the questionnaire was between 15 and 20 minutes. As a result of the pilot study some minimal changes to the main study were required, as follows:

- Response boxes were placed in the admission offices (which are open at all times) in each hospital or medical centre in the two medical cities to enhance the response rate.
- Research assistants from the nursing office in each medical city have been assigned to assist the project by identifying each selected participant and his or her location.

- In order to adhere to local cultural values, the researcher was accompanied by a female research assistant to distribute questionnaires to selected female participants who work inside purely female departments.
- Clarification was needed for a question in the demographic section as the pilot study revealed some confusion as to whether the question on experience referred to total experience or experience in the current organization. The relevant question was amended to make it clear that experience refers to time spent in the current organization.

The pilot study identified new medical centres that are part of the King Saud Medical City, which had not been considered before, namely the diabetic centre, dental centre, and rehabilitation centre, all of which provide in-patient care all day and all night which includes nursing services. Incorporating these centres into the study enhanced the recruitment of nursing managers and their staff.

### **3.5. Setting**

This study took place in Riyadh which contains 20% of the total population of SA (Central Department Of Statistics & Information, 2012). For the purpose of this study, the two biggest MOH medical cities in Riyadh have been selected, based on their evident differences in terms of top management authority. The first study site, King Fahad Medical City (KFMC), which is one of the biggest independent medical cities in the Middle East, consists of four hospitals: a general hospital; an OB/GYN specialist hospital; a paediatric hospital, and a rehabilitation hospital. KFMC is part of a new project in the Saudi MOH that aims to decentralize public hospitals to give them more operational and financial independence to provide high quality

services (Walston et al., 2008). KFMC is governed and funded independently and the MOH exerts little direct or indirect control over it, which means that it can afford high financial expenditure, including high salary offers, without sticking to tight governmental regulations. The total population of nursing staff in KFMC is 2100.

The second hospital is KSMC (King Saud Medical City), which is a medical complex composed of six different hospitals (General, Paediatric, Dental, Diabetic, Rehabilitation and OB/GYN) and is the main referral MOH facility in Riyadh Region. KSMC receives its budget and regulations from the central MOH in the traditional way. The hospital management has no authority to apply any legislation without consulting the MOH, and has nothing to do with recruitment and neither can it offer any incentives. The total population of nursing staff in KSMC is 2758. This study adopted single-stage cluster sampling to systematically compare nursing leadership styles under two different leadership circumstances. It was reasonable in such case to include all the nurses from each medical city in randomization.

### **3.6. Sampling**

Nursing staff in SA in Riyadh were the target population, and registered nurses working in the two selected medical cities were the study population from which the study sample was selected. The present study used a probability sampling scheme to recruit nursing staff for this study. For more generalizable result, probability sample is recommended (Parahoo, 2006). With probability sampling, researchers can easily calculate the error or bias which allows for more generalisability or transferability of the study result, it also ensures that each subject in the target population has an equal chance of selection. The research sample was

recruited based on single-stage cluster sampling which allows the researcher to increase the study sample size without increasing cost (Gerrish and Lacey, 2010). A letter granted from the Medical Research Directorate at the Saudi MOH to allowed access to the list of nurses in each medical city (i.e. the sampling frame) from which to randomly draw the study participants. Research Randomizer ([www.randomizer.org](http://www.randomizer.org)), which is a web-based software program, was used to randomly generate the required numbers from the numbered employment list of the two medical cities.

The inclusion criteria for nurses required that they had to work in one of the two selected hospitals in Riyadh Region and had at least two years diploma in nursing science. A convenience sample, was used to recruit nurse managers who had a minimum of six-months experience as a manager in his/her current position with twenty-four hours accountability and responsibility for operational processes. In addition, each nurse manager in the sample had to be in charge of at least three nurses who had agreed to participate in the staff sample (Avolio and Bass, 2004).

### **3.7. Sample size**

Calculation of sample size is important in identifying the main outcome variables being measured, the instrument used to measure those variables and the anticipated differences between groups (Gerrish and Lacey, 2010). Tables of sample size for specific type I error, power, and effect size combinations have been published in the literature. Cohen (1992) explained a method of power analysis based on small, medium and large effect sizes and created tables for the estimation of sample size for a range of statistical tests. The plan is to obtain a medium effect size as this is very common practice in research (Watson, 2008). The

conventional power was set at 0.80 and alpha level = 0.05. Since the study groups were nursing staff from two different medical cities, the projected method for comparison was *t* test. The sample size according to these parameters was 64 participants in each group, so the total number of participants in the survey was 128 (Cohen, 1992). To cover any participants' dropout or a low response rate, the sample size was enlarged by 10% (n=141). As cluster sampling commonly engages the allocation of the subjects in a population to equally sized clusters (Watson et al., 2006), half of the sample was to be selected randomly from each medical city. This required 71 participants from cluster one (KFMC), and 71 participants from cluster two (KSMC). However, as a larger sample will prevent the sampling error that can accompany cluster sampling, a hundred participants from each medical city were recruited, plus 30 nurse managers from each medical city. It has been argued that the more responses obtained from the survey site, the greater the statistical power (Kemper et al., 2003).

Using the Research Randomizer, a single set of random numbers to each medical city was generated, which had been selected from the employment list. The questionnaires were distributed by the researcher to the nurses, on different shifts, who had been selected for the study through their employment number. They were asked to complete and return the questionnaire within five days to secure designated boxes. The boxes were placed in different admission offices in the hospital sites to enhance the response rate. A small symbol was marked on each group's questionnaire to differentiate between them. The researcher collected the returned envelopes from the boxes weekly and was available three days a week in each medical city to answer any enquires related the questionnaire. Whenever three completed questionnaires were returned from the same department, the researcher approached the nurse manager of that department and assessed the manager in terms of the inclusion criteria. If the

manager met the criteria, he or she would be invited to participate in the study by completing the questionnaire. The researcher wore his nurse uniform during the period of data collection as it was hoped that by doing so good relationship with the participants would be established (Baruch and Holtom, 2008). The data collection phase of the present research lasted for a period of six months (July to December 2011). The overall response rate was 85.7% (N=223); however, the actual response was 219 usable surveys, which was a response rate of 84%. According to Parahoo (2006) it is difficult to define an acceptable response rate. However, Dyera et al(2007) have suggested that a response rate should be around 75%. Higher response rates lead to larger data samples and greater statistical power in addition to smaller confidence intervals around sample statistics (Baruch and Holtom, 2008).

### **3.8. Data Coding and Cleaning**

A number was assigned to each completed questionnaire and each response was assigned a numerical code. The data were then entered into SPSS (version 16). Using frequencies and descriptive procedures, the data were inspected for any error and cleaned accordingly. To ensure accuracy, 3% (N=7) were randomly selected and compared with the original questionnaires.

For a variety of statistical analyses, it is recommended to check that the assumptions made by the individual tests are met prior to running those tests (Pallant, 2010). Although this sample was large enough to skip the assumption of normality (Pallant, 2010), the data were assessed graphically (normal probability plots and histogram) by using the explore procedure which suggesting normal distribution sample (Pallant, 2010). Data were also inspected for missing values by using the descriptive procedure which indicated that there were a few missing

values in a random pattern. In addition to the earlier preliminary data cleaning, data were checked for any possible outliers by using histogram and boxplots which did not indicate the presence of outliers.

For the hierarchical regression analysis, the relevant assumptions were investigated. All predictor and out comes variables were quantitative or categorical with two categories (Pallant, 2009). Scatter plots and residual showed the assumptions of normality, linearity and homoscedasticity were met ((Seber and Lee, 2003). Furthermore, the Durbin-Watson statistic =1.8 suggesting the assumption of independent (correlated residuals) had been fulfilled. It is recommended that values greater than 1 or less than 3 are no cause for concern (Field, 2009). Outliers were checked for in the initial data screening process. A correlation matrix of all of the independent variables indicated that, generally, there was no exceptionally high correlation between any of them. Although the correlation between transformational and transactional subscales was relatively high ( $r= 0.79$ ) which may weaken the results of the regression analysis, it should not affect the results of the analysis. Field (2009) stated that very high correlation is a correlation of above 0.80 or 0.90 (Field, 2009). Finally, for the assumption of multicollinearity, tolerance and value inflation factor (VIF) were checked. Preferably, tolerance should be above 0.1 and VIF should be less than 10. Both values were within the required range, which fulfilled this assumption.

### **3.9. Data analysis**

The Statistical Package for Social Sciences computer software (SPSS) version 16 was used for coding and analyzing this study data. Different methods of data analysis were performed

including descriptive analysis and inferential statistics analysis. Descriptive statistics for the demographical data, MLQ, and OCQ were presented using means, standard deviations, frequencies, percentage, subscale and total score. A variety of statistical tests were used to identify the differences between groups such as the independent sample *t*-test, analysis of one way variance (ANOVA). Furthermore, Pearson correlation coefficient was used to identify the relationships between variables. Furthermore, Pearson correlation is used when a researcher wants to explore the strength of the relationship between two continuous variables (Pallant, 2010).

As there was some evidence that have emphasized on the influence of some demographical variables on organizational commitment suggesting some variations in the perception between managers and employees, professionals working in different health care settings, and from different nationalities (Maria, 2007, Kleinman, 2004, Al-Kahtani, 2012). The relationship between leadership style and organizational commitment would not be accurately explained without controlling these variables. Hierarchical multiple regression was used to remove the possible effect of manager/nurse statues, nationality, and hospitals type so we could see whether different leadership styles are still able explain some of the remaining variance the organizational commitment (Pallant, 2010) and to gain a better understanding of the absolute contribution of nurse managers leadership styles on staff nurses level of commitment.

For testing the reliability of the MLQ, the alpha coefficient test was examined via Cronbach's alpha coefficient that measured the levels of internal consistency between some interrelated items (Pallant, 2010). The translation procedures and the psychometric properties of the OCQ will be presented in the next chapter. The data are presented in the format of tables to help

the readers to understand the whole picture. Parahoo (2006) points out that tables facilitate the presentation of large amount of data in a concise way. The level of significance for all tests was set at  $p = 0.05$  as it is the standard level (Parahoo, 2006).

### **3.10. Ethical Issues**

The researcher considered all the ethical principles of protecting study participants from any harm arising from their involvement in the study. Approval for this study was obtained from the General Directorate of Medical Research, MOH, SA (Appendix 2) and from the Ethical Committee of the University of Sheffield (Appendix 4). Each participant was given a covering letter that explained the purpose of the study; set out their rights, if they chose to participate; introduced the survey process, and explained the procedure for completing the survey, and the use to which the data collected would be put (Appendix 5). It also explained that information given by participants would be made anonymous and that confidentiality would be ensured (see section 3.10.1); it also provided the researcher's contact details for any enquiries. The letter clearly stated that, by completing the questionnaire and returning it, the participant would be giving permission for his/her information to be used for research purposes. The researcher made sure that the covering letter provided enough information for participants to make an informed decision to participate. The nurses were advised about the voluntary nature of participation in the research and that they had the option to refuse without penalty or loss of benefit. It was made clear that the study results would be presented in a form that makes it impossible to identify participants. It was not anticipated that any harm would befall the participants by their involvement in the study. The outcome of the research might help to expand knowledge that may encourage further research in this area. All

participants were informed that they have the right to access their own personal information, whether or not it is confidential, and to be provided with a copy of the information on request.

### **3.10.1. Confidentiality**

In order to ensure confidentiality, only the researcher and his academic supervisors had access to the data on the names and demographic information of respondents. The results are presented in an aggregate form so that no individual response is identifiable. A statement of confidentiality was included in the covering letter of the survey. Individual responses remained strictly confidential to the nursing and hospital management. Storage of electronic data is in compliance with the Data Protection Act (HM Government, 1998) as adopted by the University of Sheffield. A designated external storage device secures the electronic data until its destruction occurs at the end of the holding period. A secure filing cabinet in the researcher's office at the University of Sheffield stores paper documentation until shredding occurs after the holding period.

The risks of involvement in a research study, such as this, that looks at leadership and organizational commitment, might include fear of loss of confidentiality and potentially increased anxiety and stress. To ensure confidentiality, the researcher had minimum interaction with the nurse managers. The leadership styles of nurse managers were assessed at a later stage, only after all nursing staff questionnaires had been collected. It was made clear to nurses that they could participate in the study without the knowledge, or any involvement

of, their manager. The research assistants who accompanied the researcher when accessing female departments, in compliance with Saudi culture, were selected from the office of academic affairs rather than from the nursing administration office.

### **3.11. Summary**

This chapter has described and discussed the methodology of the study. A non-experimental, descriptive, comparative, and correlation design was used to study the relationship between nurse managers leadership styles and nurse staff among a sample of hospital nurses in SA. Data were obtained from 219 respondents using a quantitative method that was based on Bass's (1985) full range of leadership conceptual model, using the Multifactor Leadership Questionnaire (MLQ) to assess the leadership styles of nurse managers working in Saudi MOH hospitals, and the Organizational Commitment Questionnaire (OCQ) to measure the level of organizational commitment of nursing staff. The development of the Arabic version of the OCQ and its psychometric properties are presented in the next chapter.

## **CHAPTER FOUR: THE DEVELOPMENT OF AN ARABIC VERSION OF THE OCQ AND ITS PSYCHOMETRIC PROPERTIES.**

### **4.1. Introduction**

This chapter presents the development of a translated Arabic version of the OCQ and a multivariate analysis using exploratory, confirmatory factor analysis and Mokken scaling, as no organizational commitment tools have been developed in the Arabic language that are specifically designed for health organizations. The generation of an Arabic version of the organizational commitment tool could aid Arabic speaking employers to better assess and understand their employees' perceptions of their organizations with a view to enhancing organizational commitment, increased job satisfaction, motivation, performance and retention. The aim of the present study was to generate an Arabic version of the OCQ that would be easily understood by Arabic speakers and would be sensitive to Arabic culture.

### **4.2. Organizational Commitment**

Organizational commitment is a well-documented concept in the management and organizational behaviour literature (Mowday et al., 1979, Commeiras and Fournier, 2001, Porter et al., 1974, Dale, 2008). Researchers working in this field have, in recent years, taken particular interest in the concept in view of the valuable information it provides about employee retention and employees' behaviours, job satisfaction and job performance (Lynn and Redman, 2005, Holtom and O'Neill, 2004, Kuokkanen et al., 2003). Studies have largely used the Organizational Commitment Questionnaire (OCQ) as a measure: this is a 15-item self-report questionnaire that assesses employee's commitment to their organization

(Mowday et al., 1979). However, despite its widespread use, the OCQ appears to have unstable factor dimensionality (Bozeman and Perrewé, 2001). Moreover, as the organizational commitment construct is Western in origin, the degree to which it may be generalized to non-Western cultures has been subject to some debate; evidence suggests organizational commitment differs greatly between cultures (Near, 1989, Al-Kahtani, 2012, Al-Meer, 1989, Ibrahima and Rueb, 1994). Given the current rapidly changing political, business and economic environment in the Arab region, research on whether the OCQ is generalizable to non-Western samples is timely.

Although the OCQ has been widely validated and used in different cultures, such as Korea (Loke, 2001, Lu et al., 2007, Han et al., 2009), there is currently no evaluated Arabic version. Evidence supports the use of translated survey instruments when sufficient attention is paid to determining the equivalence of concepts, such as culturally-specific expressions, between the primary and secondary language (Chang et al., 1999, Cha et al., 2007). The World Health Organization has emphasized that the translated version of any instrument must perform in virtually the same way as it does in its original setting and that it should be acceptable and equally natural to the study population (WHO, 2011b).

Early researchers of organizational commitment claimed that the concept was multidimensional and had multiple definitions. Porter et al. (1974), for instance, suggested that organizational commitment could be defined as the strength of an individual's identification with, and involvement in, a particular organization. Organizational commitment is characterized by three factors: (1) a strong belief in, and acceptance of, the organization's goals and values; (2) a readiness to exert great effort on behalf of the organization; and (3) a

strong desire to remain in the current organization (Mowday et al., 1979). Where these factors are present, employees hope to be active agents in their organization; have an influence on what is going on in it; feel that they have high status in it; and are willing to give more than is expected of them. Arising from this definition and conceptualization, Porter and colleagues developed the measure of organizational commitment known as the Organizational Commitment Questionnaire (OCQ) (Mowday et al., 1979). Mowday et al. (1979) extended the concept to include another construct, 'job satisfaction', and, by doing so, showed that organizational commitment can be a better predictor of turnover than job satisfaction alone.

The OCQ is the most widely used instrument to measure organizational commitment (Wagner, 2007). It was developed to measure the degree of commitment members of staff have towards their organization, as demonstrated by the employee's readiness to 'give back' to the organization (Mowday et al., 1979). The OCQ is a 15-item measure with a seven-point Likert scale, ranging from 'strongly disagree' to 'strongly agree' (whereby a high score indicates greater organizational commitment), with 6 of the 15 items reverse scored. It has been shown to be a reliable and valid instrument demonstrating good internal consistency, reliability, test-retest reliability, convergent validity, discriminated validity and predictive validity; its alpha internal consistency usually ranges from 0.82 to 0.93 (Mowday et al., 1979). No permission is required to use the OCQ as the original author decided against copyrighting the instrument to encourage its use by others (Appendix 3).

There has been a longstanding debate in the literature as to whether the OCQ provides multidimensional or unidimensional measurement. In contrast to Porter et al's (1974) original

definition that included three distinct dimensions, Mowday et al. (1997) found that the fifteen-item OCQ returned a single factor; indicating measurement of just one dimension. Angle and Perry (1981) suggested a two-factor structure: ‘value commitment’ and ‘commitment to stay’, a finding that was replicated in later studies, which further attests to the multidimensionality of the OCQ (Akhtar and Tan, 1994, Tett and Meyer, 1993). Recent investigations by Fields (2002) and Manion (2004) have further revealed three different dimensions: ‘affective’, ‘normative’ and ‘continuance commitment’. Yet, Commeiras & Fournier (2001), who conducted a confirmatory factor analysis to test the structure of the OCQ, supported its unidimensional structure and also claimed that the factorial structure of the OCQ is unstable. Given that there is some uncertainty about the structure of the OCQ, it was essential that the present study, in developing this new version for use in Arabic speaking populations, investigated the factor structure of the translated instrument.

### **4.3. Method**

#### **4.3.1. Translation of the OCQ**

Brislin’s back-translation model was used to translate the OCQ from English to Arabic. The model, which is one of the most widely used models in questionnaire translation, involves four techniques: 1) back-translation; 2) bilingual technique; 3) committee approach; and 4) pre-test procedure (Brislin, 1970). Questionnaire translation is a technical procedure requiring several qualified individuals to work in the development of the translated instrument: qualified bilingual translators, bilingual translation reviewers, and translation adjudicators are involved collaboratively for the duration of the process (Harkness, 2003). In accordance with the Brislin model, the process undertaken for the present study was as follows:

- A group discussion was arranged with bilingual PhD candidates from different subject areas to ensure the cultural sensitivity of the questionnaire and its content equivalence.
- The questionnaire was translated into Arabic by a group of researchers (thereby adhering to the committee approach) who were fluent in both Arabic and English, the aim being to retain the conceptual meaning of the original version whilst simultaneously rendering it culturally explicable for the Saudi context, rather than seeking linguistic equivalence (WHO, 2011b).
- Any challenges that arose during this phase, such as problematic phrases or words, were brought to a group discussion. The work of Al-Muhtaseb and Mellish was followed to produce a natural Arabic text (Al-Muhtaseb and Mellish, 2008).
- Once the translation was completed, one professional translator and one healthcare professional reviewed the questionnaire for clarity and for cultural appropriateness.
- Both versions were sent to a panel of reviewers, along with a brief description of the study topic and design, to be assessed in terms of appropriateness, interpretation and intactness of measurement properties. The members of the panel were selected based on their bilingual abilities and expertise in the principles of questionnaire design and translation, and healthcare provision (Harkness, 2003, WHO, 2011b). The procedure was intended to improve the authenticity of the Arabic version and thus enhance the content validity of the instruments (Bannigan and Watson, 2009).
- Backward translation from Arabic to English was conducted by a native Arabic-speaking academic from a UK university who had not participated in the initial translation process. Afterward, it was reviewed by a native English speaker to ensure that the core meaning of each item was maintained between the two versions of the questionnaire. Result confirmed that the two versions were conceptually equivalent.

- A pilot study was conducted among a sample of 10 nurses (who are similar in characteristics to the intended respondents) using a test-retest technique to measure the validity and assess the reliability of the Arabic version (Parahoo, 2006). Participants were asked to provide comments on the clarity of purpose, logic, and suitability of vocabulary of the instrument. The time interval between the test and retest was one week. The Pearson product-moment correlation coefficient ( $r$ ) indicated a strong relationship ( $r=0.95$ ) between the test retest score, which indicated the stability of the Arabic version over time.
- The initial committee group reviewed the comments provided by the pilot study participants and agreed that no change to the questionnaire was required.

#### **4.3.2. Analysis**

A range of statistical packages was used to analyze the data, including SPSS version 19, which was used to calculate Pearson's  $r$  above, Chronbach's alpha and for descriptive statistics and the exploratory factor analysis. In SPSS, the structural equation modelling package AMOS was used to conduct the confirmatory factor analysis. To aid in the decision-making process about the number of factors to be extracted, Monte Carlo Parallel analysis was conducted using public domain software (Marley Watkins) and the congruence analysis was conducted using software obtained from Professor John Crawford (Department of Psychology, University of Aberdeen, Scotland). The Mokken Scaling Analysis procedure for Windows version 5.0 (Molenaar and Sijtsma, 2000) was used for Mokken scaling, and invariant item ordering was investigated using the Mokken package in the public domain software R (Van der Ark., 2007). To calculate Chi-square across the two samples, MedCalc ([www.medcalc.org](http://www.medcalc.org)) software was used.

### **4.3.3. Study Samples**

The main study sample (sample 2) and another sample that was recruited specifically for the development of an Arabic version of OCQ (sample 1) were composed of nursing staff based in Riyadh city, SA. The two surveys were entirely separate and data were collected several months apart. Both samples were subjected to exploratory factor analysis (EFA); sample 2 was, in addition, subjected to confirmatory factor analysis (CFA). The response rates for the two samples were 96% and 84%, respectively, which resulted in sample sizes of 193 and 219.

### **4.3.4. Exploratory Factor Analysis**

As the Arabic version of the OCQ had not been used in previous research, we used EFA to investigate the underlying factor structure of the instrument; ensure the Arabic version had the same psychometric properties as the English-language version, and to provide initial evidence of validity and reliability. As noted above, previous studies of the English-language version have variously suggested a single factor, a two-factor structure, and a three-factor structure. Using a sample of native Arabic-speaking nurses, we sought, in this study, to establish whether the structure of the Arabic version of the OCQ was consistent with previous research, and, in particular, with the work of Angle & Perry (1981) who had suggested a two-factor structure based on ‘value commitment’ and ‘commitment to stay’.

Factor analysis is a multivariate statistical method used for analyzing large numbers of variables in large samples, the principal aim of which is to reduce the number of variables to smaller underlying constructs (Watson and Thompson, 2006). There are multiple applications of factor analysis: to evaluate the construct validity of a scale or instrument; reduce the

number of variables; detect and assess the unidimensionality of a theoretical construct; examine the structure or relationship between variables; prove or disprove a proposed theory; develop theoretical constructs; address multicollinearity (the correlation of two or more variables  $r = 0.90$  and above), and develop a parsimonious analysis and interpretation of data (Williams et al., 2010). McDowell and Newell(1996)suggested three main guidelines in the performance of factor analysis: 1) items should be measured at the interval-scale level; 2) the data should be nearly normally distributed; 3) the sample to variable ratio should be at least five.

#### **4.3.5. Principal Components Analysis**

PCA, while not strictly a factor analytical procedure, is the most commonly applied method in nursing research for investigating underlying dimensions to multivariate data sets (Watson and Thompson, 2006). The output from PCA is relatively easy to interpret and, while its weaknesses relative to factor analysis are acknowledged, it generally gives very similar results to EFA (Schmitt, 2011) and is generally considered sufficient where the objective—as it was here—is data reduction (DeCoster, 1998).The number of factors to be rotated was determined based on the pilot sample using a combination of Eigenvalues  $>1$ ; inspecting the scree slope of the initial solution, and the application of the Monte Carlo Parallel analysis. Two factors were extracted, after which the extracted factor matrices were inspected for cross-loading and the removal of item 15 and repetition of the factor rotation. The data were suitable for factor analysis on the basis of the Kaiser-Meyer-Olkin, which was 0.91 and 0.87 for samples 1 and 2 respectively, and for both samples the Bartlett's test of sphericity was highly significant.

#### **4.3.6. Congruence Analysis**

The factor solutions obtained from the two extractions were compared for Wrigley and Neuhaus's (1955) coefficients of congruence.

#### **4.3.7. Confirmatory Factor Analysis**

CFA was conducted using AMOS software based on the outcome of the principal components analysis. A second-order model was constructed with two first-order factors related directly to the variables in the OCQ with a second-order factor to capture the shared variance between the first-order factors. Our procedure allowed for testing the fit of a model with no correlations between error terms followed by correlated errors terms based on large correlations between error variances detected by large modification indices related to specific pairs of variables (Byrne, 2001). Strictly speaking, correlation of error terms (however commonly applied in CFA) is not strictly CFA, this is actually using CFA in an exploratory fashion (Byrne, 2001) and should be seen as a limitation in our explanation of how well the data fit the model we proposed based on the PCA.

#### **4.3.8. Mokken Scaling**

Mokken scaling is a method for analyzing multivariate data for the existence of hierarchical scales (Watson et al., 2011). It is related to item response theory and selects sets of items based on the reproducibility of the ordering of the items, which is measured by Loevinger's coefficient (H); values  $> 0.30$  are considered acceptable (but weak), with values  $> 0.40$  and  $0.50$ , respectively, indicating moderate and strong Mokken scales. Scales should be reliable and values of a single sample test-retest coefficient ( $Rho$ )  $> 0.70$  are considered to indicate a

reliable scale. Scales should also be statistically significant, following Bonferroni correction for the multiple iterations involved in the procedure, and should show invariant item ordering (IIO) whereby the ordering of individuals by the mean score on the scale is the same as the order respondents endorse items on the scale. IIO is measured by a coefficient  $H_{trans}$  (denoted  $H^T$ ) with the strength of the IIO being weak, moderate and strong and  $> 0.30$ ,  $0.40$  and  $> 0.50$ , respectively.

#### **4.4. Results**

The demographic data are shown in Table 4.1. The two samples were substantially and statistically significantly different on all parameters except 'Position' (i.e. whether participants were 'staff' or 'nursing managers'). Sample 1 was more predominantly Saudi than sample 2, which had a younger age distribution. Sample 2 was more predominantly female than sample 1. In terms of educational qualifications, nearly half of respondents were educated to diploma level; a smaller number were educated to associate degree level, a smaller number again held a bachelor's degree, and the smallest proportion held a master's degree. In contrast, fewer participants in sample 2 held a diploma, associate degree or master's degree than participants in sample 1; however a higher proportion held a bachelors degree. The differences in educational attainment between the two samples is likely to be due largely due to the different age profile of the respondents in each sample, and might reflect the increasing tendency for nurses to be educated to Bachelor's level, particularly among non-Saudi nationals.

Table 4-1. Demographic characteristics of the two samples.

		Sample 1 (n=193)	Sample 2 (n=219)	
Demographic characteristics		Frequency (%)	Frequency (%)	Chi-Square
<b>Gender</b>	Male	98 (50.7%)	25 (11%)	
	Female	95 (49.2%)	194 (89%)	P<.0001
<b>Age</b>	≤ 30	119 (61.6%)	76 (35.0%)	
	31-40	60 (31%)	70 (32.3%)	P<.0001
	> 40	14 (7.2%)	71 (32.7%)	
<b>Nationality</b>	Saudi	170 (88%)	36 (16.4%)	
	Non-Saudi	23 (12%)	183 (83.6%)	P<.0001
<b>Marital status</b>	Single	70 (36.2%)	53 (24.2%)	
	Married	109 (56.4%)	153 (69.9%)	P=.017
	Divorced	12 (6.2%)	8 (3.7%)	
	Widow	2 (1%)	5 (2.3%)	
<b>Position</b>	Staff	130 (67.3%)	164(75%)	
	Nursing Manager	63 (32.6%)	55(25%)	P=.11
<b>Educational level</b>	Diploma	90 (46.6%)	59 (27.1%)	
	Associate's degree	47 (24.3%)	24 (11.0%)	P<.0001
	Bachelor's degree	31 (16%)	126 (57.8%)	
	Master's degree	25 (13%)	9 (4.1%)	

Table 4-2. Principal components analysis of the OCQ on two independent samples.

OCQ items			Sample	1			Sample	2	
				Factors				Factors	
No	Item	Com m	FPUC	1	2	Com m	FPUC	1	2
1	I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.	.47	.65	<b>.67</b>	-.13	.51	.70	<b>.71</b>	.09
2	I talk up this organization to my friends as a great organization to work for.	.60	.77	<b>.75</b>	-.23	.61	.77	<b>.77</b>	.14
3	I feel very little loyalty to this organization.	.42	-.28	.03	<b>.65</b>	.47	.55	.34	<b>.57</b>
4	I would accept almost any type of job assignment in order to keep working for this organization.	.42	.60	<b>.64</b>	-.09	.18	.35	<b>.40</b>	-.11
5	I find that my values and the organization's values are very similar.	.61	.76	<b>.77</b>	-.21	.75	.74	<b>.79</b>	.00
6	I am proud to tell others that I am part of this organization.	.75	.84	<b>.84</b>	-.21	.50	.85	<b>.86</b>	.11
7	I could just as well be working for a different organization as long as the type of work were similar.	.51	-.60	-.35	<b>.62</b>	.71	.20	- .04	<b>.71</b>
8	This organization really inspires the very best in me in the way of job	.68	.82	<b>.76</b>	-.33	.54	.82	<b>.84</b>	.09

	performance.								
9	It would take very little change in my present circumstances to cause me to leave this organization.	.65	-.49	-.13	<b>.79</b>	.61	.02	-.23	<b>.70</b>
10	I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.	.67	.80	<b>.79</b>	-.22	.59	.78	<b>.76</b>	.18
11	There's not too much to be gained by sticking with this organization indefinitely.	.58	-.67	-.41	<b>.63</b>	.34	.46	.23	<b>.73</b>
12	Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.	.50	-.56	-.29	<b>.64</b>	.47	.42	.26	<b>.52</b>
13	I really care about the fate of this organization.	.60	.73	<b>.76</b>	-.12	.50	.68	<b>.62</b>	.29
14	For me this is the best of all possible organizations for which to work.	.58	.75	<b>.73</b>	-.23	.56	.75	<b>.71</b>	.23
	Cronbach's alpha			.91	.75			.89	.69

Comm=communality; FPUC=first principal unrotated component; putative loadings on factors are shown in bold

The results of the EFA (actually, principal components analysis) are shown in Table 4.2. The communalities support the sufficiency of shared variance in the samples and also, from the first principal unrotated components, the existence of a general factor of organizational commitment in both samples. The two factor solutions in both samples are identical in terms of the factors that were identified by the loadings on the putative factors. The percentage of variance explained by the two factors was 57.5% and 53.5%, respectively in sample 1 and sample 2. Factor 1, labelled 'Value commitment' was composed of items 1, 2, 4, 5, 6, 8 and 10, and was exemplified by items such as 'I talk up this organization to my friends as a great organization to work for' and 'I am proud to tell others that I am part of this organization'. Factor 2, labelled 'Commitment to stay' was composed of the remaining items and was exemplified by items such as 'I could just as well be working for a different organization as long as the type of work were similar' and 'It would take very little change in my present circumstances to cause me to leave this organization.'. Congruence analysis supported the similarity between Factor 1 in both samples with a congruence coefficient of 0.90; the congruence coefficient for Factor 2 was 0.78.

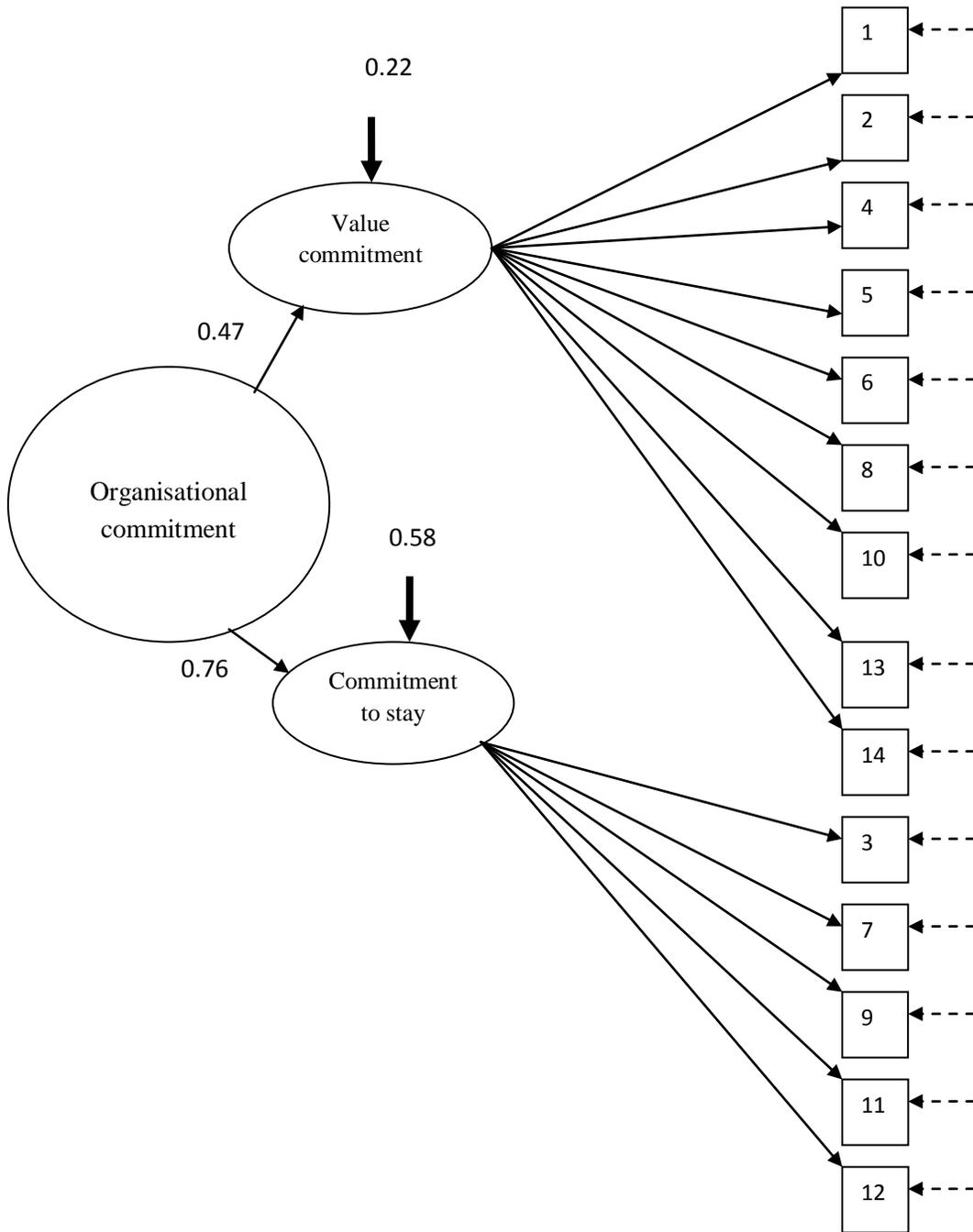


Figure 4-1. Factor structure of the OCQ scale.

The second order structural equation model for CFA of the two factor solution with a general factor of 'Organizational commitment' is shown in Figure 4.1. The model was set up to reflect precisely the same pattern of loadings of items on factors as shown in Table 4.2. Only part of the outcome of the CFA is shown in Figure 4.1., the remainder is shown in Tables 4.3., 4.4.and4.5. Inspection of the modification indices suggested intercorrelation of some error variances and this is shown in Table 4.3. Table 4.4.shows the loading of items on the first order factors, which supports the hypothesized model; high loadings on putative factors are hypothesized in CFA with zero loadings on non-putative factors and this very demanding aspect of CFA is upheld. Furthermore, there was no indication of cross-loading of items in the modification indices therefore no relaxation, in terms of intercorrelation between variables, was required. The fit indices, RMSEA and Chi-square are shown in Table 4.5. After restricting the model, the fit indices shown were acceptably high (<0.9) with the gain in restricting the model shown by showing unrestricted values in brackets. The RMEA (ideally < 0.06) shows better than mediocre fit of the data to the model. Likewise, the Chi-square value is acceptable: despite being high and statistically significant it is only approximately twice the size of the degree of freedom.

Table 4-3. Correlation between error variances of OCQ items.

<u>Error Pair</u>	<u>Correlation</u>
<u>OCQ 1 – OCQ 2</u>	<u>0.31</u>
<u>OCQ 7 – OCQ 9</u>	<u>0.40</u>
<u>OCQ 14 – OCQ 13</u>	<u>0.24</u>
<u>OCQ 8 – OCQ 9</u>	<u>-0.23</u>
<u>OCQ 8 – OCQ 10</u>	<u>0.27</u>
<u>OCQ 1 – OCQ 8</u>	<u>-0.22</u>

Table 4-4. Standardised regression weights of OCQ items on first-order factors and squared multiple correlations of error variances

<u>Item</u>	<u>Component 1</u>	<u>Component 2</u>	<u>Unique variance</u>
1	.76		.57
2	.78		.61
3		.72	.49
4	.35		.12
5	.76		.57
6	.88		.77
7	.75		.14
8	.83		.68
9		.29	.08
10	.75		.56
11		.77	.60
12		.52	.27
13		.63	.39
14	.73		.53

Table 4.6 shows the result of the Mokken scaling procedure. Nine items were extracted into a scale running, in terms of the mean values of the items, from ‘being willing to put in a great deal of effort to help the organization be successful’ (item 1; mean=6.09) to ‘being willing to do almost anything to keep your job’ (item 4; mean 4.69). The higher the mean score on an item, the more readily it is endorsed by participants.

Table 4-5. Fit indices for confirmatory factor analysis of the OCQ scale (values prior to restriction imposed on the model are shown in brackets).

<u>Fit index</u>	<u>Value</u>
GFI	.91 (.85)
CFI	.93 (.85)
RMSEA	.07 (.11)
Chi-Square	158.22 (267.24) (df=71) p<.0001

Table 4-6. Mokken scaling of the OCQ combined samples (n=412).

Item	Label	Mean Score	Item H	Items showing HIO
4	I would accept almost any type of job in order to keep working for this organization.	4.69	0.37	✓
5	I find that my values and the organization's values are very similar.	4.93	0.57	
8	This organization really inspires the very best in me in the way of job performance.	5.04	0.60	
14	For me this is the best of all possible organizations to work for.	5.23	0.54	✓
2	I talk up this organization to my friends as a great organization to work for.	5.34	0.57	✓
10	I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.	5.35	0.57	✓
6	I am proud to tell others that I am part of this organization.	5.65	0.63	✓
13	I really care about the fate of this organization.	5.73	0.50	
1	I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.	6.09	0.52	✓

H=0.54; Rho=0.91; p=0.00035; HT=0.26

#### **4.5. Discussion**

These results show that the Arabic version of the OCQ retained the established two-factor structure of the original English-language version. Although the two factors – ‘value commitment’ and ‘commitment to stay’ – repudiate the original developers’ single factor claim (Mowday et al., 1997), the results reported here are congruent with more recent studies that have found the English-language version of the OCQ to be a multidimensional measure (Angle and Perry, 1981, Koh et al., 1995, Cohen and Gattiker, 1993). The present study also confirms the reliability of OCQ across cultures: Cronbach’s  $\alpha$  coefficient ranges indicate that the Arabic version of OCQ has a good internal consistency.

The outcome of Mokken scaling provides a single scale composed entirely of items that load on Factor 1, the ‘Value commitment’ factor. The ordering of items is sensible and shows a hierarchy of value commitment from ‘being willing to put in the effort to help your organization succeed’, which is the most easily endorsed concept (i.e. least ‘difficult’ in item response theory terms), through a range of concepts related to value commitment, such as being ‘pleased and proud to work for your organization’ (less readily adopted than putting in effort), to ‘feeling that your values and the organization’s are congruent’, to the least endorsed concept of ‘being willing to do almost anything to remain with the organization’. Thus value commitment could be described as being ordered in a hierarchy of self-sacrifice with the ultimate self-sacrificing actions being the most difficult to endorse. The items here show IIO but not sufficiently strongly, suggesting that some of the items are, conceptually very close to the latent trait of value

commitment, and that there is the need for some further development of the scale, if IIO is considered a desirable property.

This study into an Arabic version of the OCQ provides information on the factorial validity of the OCQ and also contributes to the debates around EFA versus CFA (Hurley et al., 1997) and the combination of methods based on classical test (from which factor analysis is derived) and item response theories (Watson et al., 2011). The well-established and rigorous procedure outlined by Ferguson and Cox (1993) for conducting EFA was followed and, while EFA and CFA were conducted on the same larger sample, the initial EFA combined with the use of congruence analysis, pointed strongly to the existence of a two-factor structure that could be tested using CFA. EFA remains necessary to explore structures and, in that sense, remains adequate for establishing factorial validity. However, only CFA is sufficient to test hypothesized structures; the putative structures suggested by EFA were, in the present study, confirmed. New information about the structure of the OCQ has been provided by the application of Mokken scaling and, in this case, the outcomes of the factor analysis and the Mokken scaling have provided similar scales. The strength of the present analysis is further augmented by the congruence between the two samples in terms of the factor structure obtained, despite substantial demographic difference between the samples.

Given the advantages of the OCQ as a concise, reliable and easy to administer self-report questionnaire, it appears that the Arabic version of OCQ can be an effective assessment

tool for Arabic-speaking health-care organizations. The findings also support the cross-cultural generalisability of the OCQ to non-Western languages, cultures and populations. This adds further weight to evidence suggesting that Brislin's back-translation model is an effective method for ensuring conceptual equivalence in the translation of questionnaire instruments (Brislin, 1970).

#### **4.6. Summary**

This chapter has reported on the use of a version of the OCQ that has been translated from English to Arabic, and has demonstrated the applicability of the questionnaire to an Arabic-speaking population. Furthermore, it contributes to the debate on the dimensionality of the OCQ by endorsing those researchers who assert that the OCQ has a two-factor structure. Health-care organizations in the Arab world can make use of the OCQ in the knowledge that it has been proven to be an effective and reliable tool for the collection of data on employee commitment. Additional information on the relationship between items has been provided by the application of item response theory. In the next chapter, the result of the data analysis will be presented.

## **CHAPTER FIVE: RESULTS**

### **5.1. Introduction**

As the aim of this study was to examine the relationship between nurse managers' leadership style and nurses' organizational commitment in SA, both leadership style and organizational commitment were investigated in relation to several demographic variables, and to see if there was an association between the two. This chapter starts with brief explanation of data collection procedure including the response rate followed by a description of the demographic profile of the participants. It presents a brief description of the measurements used and then presents descriptive statistics on the perception of leadership style, and the perception of organizational commitment. It also identifies any relationship between leadership style and organizational commitment, and compares leadership style with participants' demographic profiles.

### **5.2. Procedure**

Two hundred and sixty participants were approached to complete the study. Of 260 participants, 223 agreed to participate and 219 completed the questionnaire. Thus, the response rate for the study was 84%. As indicated in Table 5.1., nurse managers were more cooperative than staff nurses. Likewise, the staff (both managers and staff nurses), were more cooperative at the KSMC than at the KFMC medical city.

Table 5-1. Number of participants and response rates of nursing staff across hospitals.

	Projected sample		No. of participants		Response rate	
	Manager	Staff	Manager	Staff	Manager	Staff
KFMC	30	100	26	74	87%	74%
KSMC	30	100	29	90	97%	90%
Leader / staff totals	60	200	55	164	92%	82%
Combined total	260		219		84%	

### 5.3. Participants

Of the 219 participants in the study, 55 (25%) participants were nurse managers and the remaining 164 (75%) were staff nurses. Detailed demographic information relating to the full sample and to nurse managers and staff nurses alone is presented in Table 5.2. In summary, the majority of participants were female (194; 89%), non-Saudi (183; 84%), married (153; 70%), educated to BSN level (126; 58%), had fewer than 7 years of experience (86; 39%) and were aged 30 or less (76; 35%). This trend also held for staff nurses. However, albeit similar trends were apparent for nurse managers, they tended to be older with the majority being over 40 (29; 53.7%), and most having between 7-12 years' experience (19; 34.5%). Further details are provided in Table 5.2.

Table 5-2. Demographic characteristics of study participants (N= 219).

Demographics	Number (%)		Total
	Managers	Staff	
	55 (25%)	164(75%)	
<b>Medical City</b>			
KFMC	26 (47.3%)	74 (45.1%)	100 (45.7%)
KSMC	29 (52.7%)	90 (54.9%)	119 (54.3%)
<b>Nationality</b>			
Saudi	8 (14.5%)	28 (17.1%)	36 (16.4%)
Non-Saudi	47 (45.5%)	136 (82.9%)	183 (83.6%)
<b>Gender</b>			
Male	8 (14.5%)	17 (10.4%)	25 (11%)
Female	47 (85.5%)	147 (89.6%)	194 (89%)
<b>Age</b>			
30 or less	7 (13.0%)	69 (42.3%)	76 (35.0%)
31-40	18 (33.3%)	52 (31.9%)	70 (32.3%)
> 40	29 (53.7%)	42 (25.8%)	71 (32.7%)
<b>Marital status</b>			
Single	10 (18.2%)	43(26.2%)	53 (24.2%)
Married	40 (72.7%)	113 (68.9%)	153 (69.9%)
Divorced	3 (5.5%)	5 (3.0%)	8 (3.7%)
Widowed	2 (3.6%)	3 (1.8%)	5 (2.3%)
<b>Level of education</b>			
Diploma	14 (25.5%)	45 (27.6%)	59 (27.1%)
Associate degree	6 (10.9%)	18 (11%)	24 (11.0%)
BSN	28 (50.9%)	98 (60.1%)	126 (57.8%)
MSN	7 (12.7%)	2 (1.2%)	9 (4.1%)
<b>Length of experience</b>			

< 7 years	18 (32.7%)	68 (41.5%)	86 (39.3%)
7-12 years	19 (34.5%)	40 (24.4%)	59 (26.9%)
13-18	4 (7.3%)	24 (14.6%)	28 (12.8%)
> 18	14 (25.5%)	32 (19.5%)	46 (21.0%)

## 5.4. Measures

### 5.4.1. The Multifactor Leadership Questionnaire (MLQ: Bass and Avolio, 1995)

The MLQ consists of 36 items which is composed of three main dimensions:

#### Transformational Leadership (20 items)

Idealized attributes (4 items)

Idealized behaviours (4 items)

Inspirational motivation (4 items)

Intellectual stimulation (4 items)

Individualized consideration (4 items)

#### Transactional Leadership (8 items)

Contingent reward (4 items)

Management-by-exception (active) (4 items)

#### Passive/Avoidant (8 items)

Management-by-exception (passive) (4 items)

Laissez-faire (4 items)

#### **5.4.2. The Organizational Commitment Questionnaire (OCQ: Mowday et al., 1979).**

Value commitment (9 items)

Commitment to stay (the remaining 6 negatively worded items)

### **5.5. Results**

#### **5.5.1. The perception of leadership style**

##### ***5.5.1.1. Staff nurses and leader nurses' perceptions of leadership styles***

This section provides an overview of nursing staff and nursing leaders' perception of different leadership behaviours in two clinical settings in SA. The transformational, transactional and passive-avoidant leadership styles were examined and described by both groups using the MLQ questionnaire.

As shown in Table 5.3., nursing leaders showed higher scores than staff nurses in the overall transformational leadership subscales: the highest scoring subscale for nurse leaders was the intellectual stimulation leadership style while, for staff nurses, the highest scoring subscale in this section was inspirational motivation. The differences between the nurse leaders and nursing staff in their perception of transformational leadership, where nursing leaders were consistently higher in their perception of all transformational subscales compared with nursing staff, were statistically significant, as shown by the independent t-test.

The same pattern was found in terms of the transactional leadership style: nursing leaders scored higher in the overall transactional leadership and all transactional leadership subscales compared with staff nurses' scores, showing statistically significant differences in means. However, nursing staff scored higher in perceiving the overall passive-avoidant leadership styles compared with nursing leaders, and the difference was statistically significant for the laissez-faire leadership style.

In general, nursing leaders and nursing staff concurred in their perception of different leadership behaviours: transformational leadership gained the highest mean score, followed by transactional leadership and passive-avoidant leadership respectively.

Table 5-3. . Nurse leaders and staff nurses' perceptions of leadership styles.

		Leaders (n=55)		Staff nurses n=164)		T	p
		Mean	SD	Mean	SD		
Transformational leadership		3.24	0.49	2.52	0.75	8.14	< 0.01
	Idealized influence (attribute)	3.06	0.70	2.57	0.80	4.04	< 0.01
	Idealized influence (behaviour)	3.20	0.56	2.57	0.80	6.46	< 0.01
	Inspirational motivation	3.33	0.59	2.65	0.86	6.51	< 0.01
	Intellectual stimulation	3.47	0.59	2.41	0.89	7.05	< 0.01
	Individualized consideration	3.16	0.60	2.42	0.86	10.10	< 0.01
Transactional leadership		2.96	0.58	2.50	0.73	4.22	< 0.01
	Contingent reward	3.22	0.57	2.54	0.93	6.48	< 0.01
	Active management-by-exception	2.70	0.92	2.46	0.86	1.74	0.83
Passive – avoidant leadership		0.84	0.67	1.36	0.87	-4.62	< 0.01
	Passive management-by-exception	0.97	0.85	1.41	0.92	-3.12	< 0.05
	Laissez-faire	0.71	0.75	1.31	0.97	-4.79	< 0.01
Score range: 0 (not at all) to 4 (frequently if not always).							
Significant at < 0.05 level.							

### ***5.5.1.2. The perception of leadership styles in the two medical cities***

Different leadership styles in two medical cities (King Fahad Medical City and King Saud Medical City) were compared. As shown in Table 5.4., transformational leadership gained the highest scores in both settings followed by transactional leadership and passive-avoidant leadership.

In all transformational leadership subscales, KFMC was ranked higher in all subscales scores compared with KSMC subscales scores and showed statistically significant differences in group means. However, the inspirational motivation leadership style was the highest in both cities. The transactional leadership showed the same pattern of transformational leadership findings where KFMC gained significantly higher scores compared with KSMC in all transactional leadership subscales. Similarly, although there was a significant difference in means, contingent rewards leadership style was the highest in both groups. In the passive-avoidant leadership, KSMC had a higher overall score comparing with KFMC scores, showing a significant difference in means between both cities. In addition, Passive Management-by-Exception was the highest in both cities.

Generally, both KFMC and KSMC showed consistent findings towards all leadership styles although KFMC gained higher scores in transformational and transactional leadership while KSMC gained higher scores in passive-avoidant leadership.

Table 5-4. Comparing leadership styles in the two medical cities.

		KFMC (n=100)		KSMC (n=119)		P value
		Mean	SD	Mean	SD	
Transformational leadership		2.96	0.72	2.48	0.71	< 0.01
	Idealized influence (attribute)	2.96	0.80	2.46	0.73	< 0.01
	Idealized influence (behaviour)	3.00	0.77	2.50	0.74	< 0.01
	Inspirational motivation	3.08	0.78	2.60	0.85	< 0.01
	Intellectual stimulation	2.93	0.83	2.46	0.98	< 0.01
	Individualized consideration	2.85	0.87	2.40	0.80	< 0.01
Transactional leadership		2.87	0.70	2.39	0.67	< 0.01
	Contingent reward	3.01	0.81	2.45	0.90	< 0.01
	Active management-by-exception	2.74	0.92	2.33	0.79	< 0.01
Passive – avoidant leadership		1.05	0.87	1.38	0.80	0.04
	Passive management-by-exception	1.17	0.96	1.40	0.86	0.70
	Laissez-faire	0.92	0.95	1.36	0.90	<0.01
Score range: 0 (not at all) to 4 (frequently if not always).						
Significant at < 0.05 level.						

### 5.5.1.3. The perception of organizational commitment

Three main items were included in the study to assess organizational commitment in the two medical cities: the overall organizational commitment questionnaire score; the value commitment subscale; and commitment to stay subscale. As shown in Table 5.5., there was a significant difference in scores for nurse managers ( $M = 5.49$ ;  $SD = 0.96$ ) and staff nurses ( $M = 4.97$ ;  $SD = 0.99$ ;  $t(217) = 3.44$ ,  $p = 0.01$ ) in relation to overall levels of organizational commitment. This suggests that the level of organizational commitment in the current sample

is higher for nurse managers. Further results pertaining to subscales are presented in Table 5.5.

Table 5-5. The Organizational Commitment Questionnaire subscales by occupational rank.

Group	Nurse managers (n=55)		Staff nurses (n=164)		T	P
	M	SD	M	SD		
Organizational Commitment Questionnaire	5.49	.96	4.97	.99	3.44*	<0.01
Value commitment subscale	5.76	1.12	5.48	1.16	1.54	0.120*
Commitment to stay subscale	5.10	1.22	5.48	1.16	4.79**	<0.01

Note. Non-significant differences are indicated by \*

In relation to overall levels of organizational commitment there was a significant difference in scores for KFMC staff ( $M = 5.40$ ;  $SD = 1.01$ ) and KSMC staff ( $M = 4.85$ ;  $SD = 0.94$ ;  $t(217) = 4.18$ ,  $p = 0.01$ ). This suggests that the level of organizational commitment in the current sample is higher for staff in the KFMC hospital. Results pertaining to subscales by medical city are presented in Table 5.6.

Table 5-6. The Organizational Commitment Questionnaire subscales by medical city.

Medical City	KFMC (n=100)		KSMC (n=119)		T	P
	M	SD	M	SD		
Organizational Commitment Questionnaire	5.40	1.01	4.85	.94	4.18	<0.01
Value commitment subscale	5.91	1.04	5.25	1.17	4.38	<0.01
Commitment to stay subscale	4.64	1.39	4.24	1.13	2.27	<0.05

The results suggest that the level of organizational commitment in the sample did not differ based on gender: in relation to overall levels of organizational commitment there was no

significant difference in scores for male staff ( $M = 4.86$ ;  $SD = 1.19$ ) compared with female staff ( $M = 5.13$ ;  $SD = 0.98$ ;  $t(217) = -1.24$ ,  $p = 0.215$ ). Further results pertaining to subscales and gender are presented in Table 5.7.

Table 5-7. The Organizational Commitment Questionnaire subscales by gender.

Gender	Male ( $n=25$ )		Female ( $n=194$ )		$t$	P	df
	M	SD	M	SD			
Organizational Commitment Questionnaire	4.86	1.19	5.13	.98	-1.24	0.215*	217
Value commitment subscale	5.37	1.43	5.57	1.12	-0.831	0.407*	217
Commitment to stay subscale	4.11	1.37	4.46	1.25	-1.33	0.185*	217

In relation to overall levels of organizational commitment there was a significant difference in scores for Saudi staff ( $M = 4.53$ ;  $SD = 1.33$ ) compared with non-Saudi staff ( $M = 5.21$ ;  $SD = 0.89$ ;  $t(41.39) = -2.93$ ,  $p = 0.01$ ). This suggests that the level of organizational commitment in the current sample is higher for non-Saudi staff. Further results pertaining to subscales and nationality are presented in Table 5.8.

Table 5-8. The Organizational Commitment Questionnaire subscales by nationality.

Nationality	Saudi ( <i>n</i> =36)		non-Saudi ( <i>n</i> =183)		t	P	d
	M	SD	M	SD			
Organizational Commitment Questionnaire	4.53	1.33	5.21	.89	-2.93	<0.01	41.39
Value commitment subscale	4.72	1.67	5.71	.95	-3.48	<0.01	39.56
Commitment to stay subscale	4.26	1.23	4.46	1.28	-.850	.396*	217

Note. Non-significant differences are indicated by \*

### 5.5.2. The relationship between leadership style and organizational commitment

This section provides an overview of the relationship between different leadership styles and organizational commitment among nursing leaders and staff nurses. Table 5.9. shows the correlation matrix between these variables using Pearson Product-Moment correlation. A positive relationship was found between the overall score of transformational leadership (TRL) and organizational commitments represented by value commitment and commitment to stay ( $r= 0.374, p <0.01$  &  $0.345, p <0.01$ , respectively). In addition, all transformational leadership subscales were positively correlated with organizational commitment. However, the strongest correlations were found between inspirational motivation when related with value commitments ( $r=0.387, p <0.01$ ) and between individual consideration subscale when related with commitment to stay ( $r=0.333, p <0.01$ ).

The overall transactional leadership was found to reflect positive correlations with both commitment forms. Transactional leadership seems to have a stronger relationship with commitment than transformational leadership. This is particularly evident in the relationship between the contingent reward and both value commitment and commitment to stay

( $r=0.409, p <0.01$  &  $0.355, p <0.01$ , respectively). In fact, this correlation was the strongest among all leadership styles and commitment.

In contrast, the overall correlations between passive avoidant leadership (PAL) and commitment were negative ( $r=-0.240, p <0.01$  and  $-0.240, p <0.01$ , respectively). Both management by-exception-passive and laissez-faire leadership styles were found to have negative correlations with both value commitment and commitment to stay, as can be seen in Table 5.9. Indeed, although there were significant correlations between different leadership styles and organizational commitment, these relationships appear to be uncertain because of the variations that exist between groups and cities in terms of perceiving leadership styles and organizational commitment, as shown in the previous sections. Therefore, the hierarchical multiple regression was proposed as follows:

Table 5-9. Correlations between MLQ subscales and OCQ subscales using Pearson Product-Moment.

	Total OCQ	Value Commitment	Commitment to stay
Transformational Leadership (TRL)	0.432**	0.374**	0.345**
(TRL) Idealized influence – attributes	0.332**	0.271**	0.288**
(TRL) Idealized influence – behavior	0.365**	0.314**	0.294**
(TRL) Inspirational motivation.	0.425**	0.387**	0.314**
(TRL) Individual consideration	0.402**	0.341**	0.333**
(TRL) Intellectual stimulation	0.391**	0.345**	0.304**
Transactional Leadership (TAL)	0.416**	0.391**	0.291**
(TAL) Contingent reward	0.461**	0.409**	0.355**
(TAL) Management-by exception-active	0.215**	0.228**	0.116
Passive/Avoidant leadership (PAL)	-0.286**	-0.240**	-0.240**
(PAL) Management-by-exception-passive	-0.226**	-0.210**	-0.162*
(PAL) Laissez-faire.	-0.293**	-0.225**	-0.273**
**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).  N=219. MLQ=Multifactor Leadership Questionnaire; OCQ=Organizational Commitment Questionnaire.			

To gain a better understanding of the absolute contribution of nurse managers leadership styles on staff nurses level of commitment, a further step was taken to investigate the unique contribution of leadership styles in explaining the level of organizational commitment above and beyond the effect of the nationality, type of medical city (hospital) manager/staff status. According to Dancey and Reidy (2011), multiple regression is used as a data-analytic strategy to explain or predict a criterion (dependent) variable with a set of predictor (independent) variables. Further examination of this issue suggested the use of a hierarchical regression procedure which allows the specification of a fixed order of entry for variables to control for the effects of covariates or to test the effects of certain predictors (Seber and Lee, 2003). Accordingly, hierarchical multiple-regression analysis was conducted, using just the default “Enter” method, to investigate the effects of leadership styles on organizational commitment,

controlling for medical city, manager/staff status and Saudi/non-Saudi nationality. Controlled variables were entered first into a model predicting organizational commitment followed by three consecutive models where the variables of transformational, transactional and passive avoidance leadership styles were added respectively to each model.

The first step of the hierarchical regression analysis showed that the controlled variables (medical city, manager/staff status, and nationality) explained only 16% of the variance in organizational commitment among hospital nurses in Saudi Arabia ( $R^2 = 0.16$ ,  $F = 13.2$ ,  $p < 0.01$ ). The second step of the hierarchical regression analysis showed that transformational leadership style variable was added to the regression equation, and explained 25% of the variance in organizational commitment ( $R^2 = 0.25$ ,  $F = 26$ ,  $p < 0.01$ ); that is, transformational leadership styles added 0.9 to the  $R^2$  that was explained by the demographic variables. The third step of the hierarchical regression analysis showed that transactional leadership style variable was added to the regression equation, and explained 26% of the variance in organizational commitment ( $R^2 = 0.26$ ,  $F = 3.3$ ,  $p = 0.07$ ). The final step of the hierarchical regression analysis showed that passive avoidance leadership style was added to the regression equation, and explained 28% of the variance in organizational commitment ( $R^2 = 0.28$ ,  $F = 6.6$ ,  $p = 0.11$ ). However, the addition of the transactional and passive avoidance leadership styles variables did not significantly improve prediction, as they added only 1% and 2% additional explanation to the  $R^2$  compared to the earlier model. The transformational leadership style produced a statistically significant increase in  $R^2$  ( $\Delta R^2 = 0.09$ ,  $F = 25.9$ ,  $p < 0.01$ ), suggesting that the transformational leadership style explains an additional 9% of the variance in organizational commitment, even when the effect for medical city, manager/staff status and Saudi/non-Saudi nationality variables were statistically controlled for, and

indicating that transformational leadership style has a unique effect in predicting the staff nurses' level of organizational commitment in Saudi Arabian hospitals.

Overall, the final model of hierarchical regression indicated that 28% of the variation in organizational commitment was explained by the demographic variables (medical city, manager/staff status, and nationality), transformational, transactional and passive avoidance leadership styles. A summary of the hierarchical regression analysis for the organizational commitment is presented in table 5.10 (below).

Table 5.10. Summary of the hierarchical regression analysis for variables predicting organizational commitment (n = 219)

		<i>B</i>	SE(B)	Std $\beta$	<i>t</i>	$R^2$	$\Delta R^2$
Model 1	Medical city	-6.7	1.9	-.22*	-3.4	.16	.16
	Professional status	-7.6	2.2	-.22*	-3.5		
	Nationality	-7.6	2.6	.19*	2.9		
Model 2	Transformational leadership	7.0	1.4	.35*	5.1	.25	.09
Model 3	Transactional leadership	5.1	2.1	.25*	2.5	.26	.01
Model 4	Passive avoidance leadership	-3.0	1.2	-.17*	-2.6	.28	.02

*B* = the unstandardized coefficient, SE (*B*) = standard error *B*, Std  $\beta$  = the standardized coefficient(beta),  $R^2$  = the R Square.,  $\Delta R^2$  = R square change. , *t* = *t*-test

\* Significant at 0.05.

### **5.5.3. Perceptions of leadership style and participants' demographic profile**

This section presents the results on the differences between leadership styles in relation to participants' demographic profile, namely marital status, age, level of education, and length of experience. The comparisons were carried out using One-way ANOVA statistics to compare groups with all leadership styles and their subscales.

#### ***5.5.3.1. Perceptions of leadership style and marital status***

As shown in Table 5.10., all marital statuses were compared with the different leadership styles. The distribution of participants across the four categories of marital status was not equal as the majority of participants were married and a substantial number were single, however very few of them were divorced or widowed. No significant difference in means was found between marital statuses in respect to leadership style and their subscales, indicating that marital status had no relationship with the perception of leadership style. However, this inference might change if there were a roughly equal distribution between groups, which would make the difference in means robust and increase statistical power.

#### ***5.5.3.2. Perceptions of leadership style and age categories***

Three main age groups were assessed in respect of perceiving leadership styles. In the overall transformational leadership, there was a significant difference in means between age groups ( $F=9.81$ ,  $p<0.01$ ) where means of perceiving transformational leadership constantly increased with age (the younger age, the lower the score, and *vice versa*). All transformational leadership subscales had the same pattern whereby the youngest participants

(younger than 31 years old) had the lowest scores while older participants (older than 40 years old) had the highest scores of having transformational leadership; there were statistically significant differences in means between age groups. However, the highest score recorded among all transformational leadership subscales was inspirational motivation which was also the highest among all age categories. These results are presented in Table 5.11.

Similarly, all age groups revealed the same pattern in terms of the transactional leadership style. The overall transactional leadership mean scores were significantly different between all age groups where means increased with age (similar to the previous description) ( $F=8.11$ ,  $p<0.01$ ). In all transactional leadership subscales, there was a consistent increment in means over age showing significant differences between age groups ( $p<0.01$ ).

In contrast, passive-avoidant leadership showed a significant decline in means scores over age (the younger the age, the higher score and *vice versa*). This trend was generally found in the overall passive-avoidant leadership scores and its subscales, considering statistical differences between groups means ( $p=0.038$  &  $0.013$ , respectively), as shown in Table 5.11.

Table 5-10. Comparing the perception of leadership style with marital status.

Leadership style	Marital status				F test	P value
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)		
	Single (n=53)	Married (N=153)	Divorced (n=8)	Widowed (n=5)		
Transformational leadership	2.73(0.75)	2.69(0.76)	2.48(0.77)	3.25(0.53)	1.12	0.34
Idealized Influence (Attribute)	2.82(0.78)	2.65(0.81)	2.44(0.79)	3.10(0.63)	1.35	0.26
Idealized Influence (Behaviour)	2.76(0.85)	2.71(0.78)	2.50(0.78)	3.30(0.78)	1.12	0.34
Inspirational Motivation	2.83(0.80)	2.81(0.87)	2.53(0.97)	3.60(0.42)	1.72	0.16
Intellectual Stimulation	2.61(0.99)	2.67(0.93)	2.47(0.95)	3.30(0.89)	0.93	0.43
Individualized Consideration	2.61(0.75)	2.60(0.91)	2.47(0.88)	2.95(0.65)	0.33	0.81
Transactional leadership	2.52(0.85)	2.64(0.69)	2.48(0.74)	2.95(0.48)	0.84	0.47
Contingent reward	2.70(0.96)	2.70(0.88)	2.37(0.88)	3.65(0.41)	2.21	0.08
Active Management-by-Exception	2.34(1.04)	2.59(0.80)	2.59(1.10)	2.25(0.59)	1.27	0.28
Passive – avoidant leadership	1.21(0.92)	1.25(0.82)	1.44(1.00)	0.62(0.35)	1.03	0.38
Passive Management-by-Exception	1.17(0.64)	1.36(0.90)	1.50(1.12)	0.35(0.42)	2.55	0.57
Laissez-faire	1.24(1.05)	1.13(0.93)	1.37(0.93)	0.90(0.76)	0.42	0.74

Table 5-11. Comparing the perception of leadership style with age categories.

Leadership style	Age			F test	P value
	Mean (SD)	Mean (SD)	Mean (SD)		
	Less than 31 (n=76)	31-40(n=70)	More than 40(n=71)		
Transformational leadership	2.49(0.70)	2.64(0.83)	3.00(0.65)	9.81	<0.01
Idealized Influence (Attribute)	2.53(0.82)	2.64(0.82)	2.92(0.73)	4.67	<0.01
Idealized Influence (Behaviour)	2.47(0.71)	2.70(0.91)	3.01(0.67)	8.99	<0.01
Inspirational Motivation	2.59(0.86)	2.73(0.94)	3.15(0.64)	9.18	<0.01
Intellectual Stimulation	2.43(0.89)	2.59(0.10)	3.01(0.85)	7.78	<0.01
Individualized Consideration	2.37(0.74)	2.54(0.97)	2.92(0.78)	8.15	<0.01
Transactional leadership	2.37(0.72)	2.67(0.75)	2.83(0.64)	8.11	<0.01
Contingent reward	2.48(0.93)	2.67(0.98)	2.99(0.71)	6.15	<0.01
Active Management-by-Exception	2.56(0.88)	2.67(0.84)	2.67(0.85)	5.68	<0.01
Passive – avoidant leadership	1.46(0.91)	1.09(0.82)	1.11(0.77)	4.62	<0.01
Passive Management-by-Exception	1.51(0.95)	1.14(0.90)	1.22(0.86)	3.33	<0.05
Laissez-faire	1.42(1.01)	1.04(0.95)	1.00(0.86)	4.43	<0.01

### ***5.5.3.3. Perceptions of leadership style and level of education***

Participants' level of education was identified to determine its influence on perceiving leadership style. Level of education was categorized into four main categories for the purposes of comparisons. However, participants' distribution into these groups was approximate so the findings gained from this comparison may not be accurate. As shown in Table 5.12., it appears that there was no significant difference between educational level and leadership styles ( $p>0.05$ ), although transformational leadership and transactional leadership styles scored higher in all educational levels compared with passive-avoidant leadership.

### ***5.5.3.4. Perceptions of leadership style and length of experience***

Leadership style was assessed in relation to participants' length of experience. Four main categories of clinical experience were used to identify changes in the perception of leadership style across clinical experience. The distribution of participants into these categories was fair enough to conduct such comparisons between means. As shown in Table 5.13., in general, there was no significant difference in means of transformational and transactional leadership styles and their subscales in regard to experience categories. However, there were significant differences when related to the passive-avoidant leadership styles. Participants with less experience (fewer than 7 years) and participants with longer experience (more than 18 years) scored higher in perceiving passive-avoidant leadership style and all its subscales (Laissez-faire & Passive Management-by-Exception) compared with participants whose experience fell between 7 and 18 years, revealing significant differences in means between experience groups ( $p=0.04$  &  $0.01$ , respectively).

Table 5-12. Comparing the perception of leadership style with level of education.

Leadership style	Level of education				F test	P value
	Mean (SD) Diploma(n=59)	Mean (SD) Associate's degree(n=24)	Mean (SD) BSN(n=126)	Mean (SD) MSN(n=9)		
Transformational leadership	2.70(0.63)	2.55(0.85)	2.73(0.78)	2.85(0.95)	0.46	0.70
Idealized influence (attribute)	2.64(0.73)	2.60(0.87)	2.72(0.81)	2.94(1.01)	0.53	0.65
Idealized influence (behaviour)	2.74(0.69)	2.50(0.83)	2.77(0.82)	2.94(0.91)	0.80	0.49
Inspirational motivation	2.79(0.76)	2.68(0.10)	2.87(0.86)	2.94(0.90)	0.42	0.73
Intellectual stimulation	2.75(0.85)	2.50(1.14)	2.66(0.93)	2.83(1.25)	0.49	0.68
Individualized consideration	2.59(0.72)	2.49(0.96)	2.62(0.92)	2.75(0.86)	0.25	0.86
Transactional leadership	2.56(0.67)	2.55(0.70)	2.65(0.70)	2.56(0.60)	0.30	0.82
Contingent reward	2.76(0.74)	2.59(1.06)	2.69(0.95)	2.88(0.70)	0.33	0.80
Active management-by-exception	2.36(0.89)	2.52(0.73)	2.62(0.89)	2.25(0.89)	1.49	0.21
Passive – avoidant leadership	1.15(0.77)	1.43(0.83)	1.24(0.90)	0.97(0.59)	0.89	0.44
Passive management-by-exception	1.28(0.84)	1.44(0.99)	1.27(0.94)	1.25(0.83)	0.24	0.86
Laissez-faire	1.03(0.89)	1.42(0.81)	1.20(1.01)	0.69(0.68)	1.76	0.15

Table 5-13. Comparing the perception of leadership style with the length of experience.

Leadership style	Length of experience				F test	P value
	Mean (SD) Less than 7 years (n=86)	Mean (SD) 7-12 years (n=59)	Mean (SD) 13-18 years (n=28)	Mean (SD) More than 18 years (n=46)		
Transformational leadership	2.60(0.77)	2.80(0.80)	2.70(0.69)	2.79(0.73)	1.04	0.37
Idealized Influence (Attribute)	2.66(0.82)	2.72(0.88)	2.82(0.67)	2.62(0.75)	0.39	0.75
Idealized Influence (Behaviour)	2.61(0.79)	2.79(0.84)	2.76(0.78)	2.87(0.72)	0.97	0.40
Inspirational Motivation	2.69(0.89)	2.88(0.93)	2.83(0.72)	2.97(0.74)	1.22	0.30
Intellectual Stimulation	2.54(1.01)	2.83(0.85)	2.58(0.80)	2.76(1.00)	1.32	0.26
Individualized Consideration	2.46(0.75)	2.75(0.96)	2.49(0.90)	2.75(0.88)	1.97	0.11
Transactional leadership	2.52(0.74)	2.66(0.79)	2.60(0.66)	2.74(0.62)	1.01	0.38
Contingent reward	2.56(0.93)	2.86(0.95)	2.70(0.83)	2.79(0.78)	1.49	0.21
Active Management-by-Exception	2.48(0.85)	2.45(0.96)	2.50(0.88)	2.69(0.80)	0.72	0.53
Passive – avoidant leadership	1.44(0.91)	0.98(0.73)	1.11(0.82)	1.22(0.80)	3.67	0.01
Passive Management-by-Exception	1.48(0.97)	1.04(0.81)	1.26(0.92)	1.31(0.86)	2.67	0.04
Laissez-faire	1.40(1.04)	0.92(0.80)	0.96(0.88)	1.14(0.90)	3.54	0.01

## **5.6. Summary**

Transformational leadership and transactional leadership styles were, respectively, the most dominant leadership style being affirmed by nursing managers and their staff in the two medical cities studied. Nurses' managers and staff nurses in both medical cities gave a higher rating for transformational leadership style followed by transactional leadership style.

In general, the level of organizational commitment was higher among nurse managers than among the nursing staff. However, the overall organizational commitment was higher in KFMC than KSMC. The relationship between transformational leadership and the commitment to stay was entirely positive. The transactional leadership revealed the same positive relationship with the organizational commitment and it is assumed that the stronger the formality the stronger the relationship. However, after controlling for the influence of manager/staff statues, nationality, and hospitals, transformational was stronger contributor to the organizational commitment than transformational leadership style.

The perceptions of both transformational leadership styles and transactional leadership styles constantly increased with age. In contrast, the perception of having passive-avoidant leadership was adversely associated with age, whereby the younger participants were more likely to perceive passive-avoidant leadership. However, there was no concrete relationship between the length of experience and the perception of leadership style. The next chapter will discuss these findings in relation to the existing literature and the theoretical framework.

## **CHAPTER SIX: DISCUSSION**

### **6.1. Introduction**

The aim of this study was to examine the relationship between nurse managers' leadership style and nurses' organizational commitment in SA. The conceptual framework that guided this study was Bass' transformational leadership model (Bass, 1985). This full range leadership model describes the characteristics of leaders on a continuum of styles ranging from transformational to laissez-faire styles. The transformational leadership model, which Bass developed, enables transformation of followers in one of three ways: by raising the followers' level of awareness or level of consciousness about the importance and values of desired outcomes and different ways of achieving them; by getting followers to transcend their own self-interest for the sake of the team or organization, and finally, by changing followers' need level or expanding their portfolio of needs (Bass, 1985).

This chapter discusses the findings from the study and the implications arising from it for nursing education, practice, policy, and for further research. The discussion relates the findings to theory, practice and research, as documented in the relevant literature.

### **6.2. Self Perception**

The study began by seeking an understanding of how nursing staff managers, in the two hospitals, perceived their own leadership styles. The results from the MLQ indicate that nurse managers perceived themselves as transformational leaders and transactional leaders at the same time. The 55 nurse managers who participated in the study rated themselves as using all

five transformational leadership factors (idealized influence (attributed), idealized influence (behaviour), inspirational motivation, intellectual stimulation, and individualized consideration) and, at the same time, using the two transactional subscales (contingent reward and management-by-exception (active)). The average score for transformational leadership (3.24 out of 4.0) indicates that nurse managers viewed themselves as using that style of leadership *fairly often to frequently if not always*, while the score for transactional leadership style (2.96) indicates that they considered that they used this style *fairly often*. This is in keeping with Bass' argument that leaders can demonstrate both transformational and transactional characteristics at the same time (Bass, 2008). However, in this study the transformational leadership styles were more evident than transactional leadership, which has also been noted in previous studies (Al-Hussami, 2008, Abualrub and AlGhamdi, 2012).

In terms of transformational leadership styles, the most frequently displayed transformational subscale behaviour was intellectual stimulation, which is characterized by the leader stimulating his or her followers to be creative and innovative, and involving them in the process of problem solving (Avolio and Bass, 2004). The transformational subscale that received the lowest average scores was idealized influence (attribute); this approach is characteristic of leaders who wield little power and influence over their followers (Avolio and Bass, 2004). Nurse managers' ability to practise the transformational leadership style fully could be affected by several factors including the culture of the working environment. For example, in most Saudi health organizations, the male physicians usually lead the medical team and sometimes do not always respect the boundaries between medical and nursing areas of responsibility in nursing procedures. This result is similar to that of an earlier Saudi study that assessed the leadership style of 23 nurse managers from two National

Guard Hospitals, which found that individualized consideration scored the highest mean (Omer, 2005).

A transformational leadership style can be important in effecting staff retention. A recent study to explore the correlations of leadership styles of nurse managers with outcomes, found that effective nursing leaders who demonstrated transformational leadership behaviours enhanced staff retention (Casida and Parker, 2011). Staff retention is one of the main issues that nurse leaders in SA hospitals face due to the high turnover rate among expatriate nurses (Walston et al., 2008). A leadership development programme that includes transformational leadership in its curriculum could help nurse managers to retain staff.

The result that nurse managers did not perceive themselves as using a passive – avoidant leadership style (a mean score of 0.84 indicating *not at all to once in a while*) is consistent with the results of Suliman (2009) and Failla and Stichler (2008), but is much lower than the results obtained by Omar (2006) and McGuire and Kennerly (2006). Passive – avoidant leadership is a negative non-preferred leadership style so it can be expected that nurse managers would not perceive their leadership style in this way but consider it to be more transformational or transactional. Previous research acknowledged that this type of self-report bias could take place in a correlational study (McGuire and Kennerly, 2006).

### **6.3. The Perception of Others**

Arguably, a more important question than the thoughts of managers on their own leadership style is what nurses think about the leadership style of their managers. The results from the

MLQ mirror the results for nurse managers in that they indicate that nursing staff perceived their managers' leadership style to be both transformational and transactional. It was reported that the transformational leadership style was used *sometimes to fairly often* (a mean score of 2.52). Among the five transformational subscales, idealized influence (attribute and behaviour) received the highest mean score: 2.57 for both subscales, which is an indication of leaders wielding power and influence over their staff. Avolio and Bass (2004) have argued that leaders with idealized influence who are socially oriented and are interested in improving long-term performance, inhibit their own use of power to develop an optimum level of performance, achievement and autonomy in their associates. Furthermore, they encourage development and change and, most importantly, the achievement of each employee's full potential. These leaders jeopardize their own role for the greater good of the development of staff members who are fully capable of modifying and contributing to the leader's overall goals and mission.

The results also show that staff nurses perceived their nurse managers as using transactional leadership *sometimes to fairly often* (mean 2.52). The contingent reward subscale got the highest score (mean 2.54) indicating that leaders provide meaningful rewards based on task completion. Although both groups indicated that nurse managers used both leadership styles, staff nurses' perceptions of how often managers used transformational and transactional leadership styles were rated lower than those of the nurse managers themselves. This result, that leaders' self-perceptions were higher than the perception of their raters, is similar to that of Failla and Stichler (2008); McGuire and Kennerly (2006); Omar (2006) and Tsaloukidis et al. (2012). Nursing staff perceived their nurses managers' use of the passive – avoidant leadership as *once in a while to sometimes* (mean 1.36). Passive management-by-exception, which scored the highest mean (1.41), describes leaders who react to situations after they

become serious. This result was higher than the nurse managers' perception of themselves. Furthermore, this result is similar to that of a study by Suliman (2009). Passive – avoidant leaders are unresponsive and offer no direction to their staff, resulting in low team performance. A meta-analysis of 45 studies of transformational, transactional and laissez-faire leadership styles showed that female leaders are more likely than men to be transformational and transactional in their style of leadership (Vinkenbug et al., 2011). Consequently, passive – avoidant leaders would not be expected to feature prominently in this study as the majority of the participant leaders were female (85%).

Differences between the perceptions of nurse managers and their staff as to their leadership style were apparent. Nurse managers' self-rating scores were higher than their nursing staff rating scores on all five transformational, and two transactional, leadership styles. Nurses managers believe that they use a transformational leadership style *fairly often to frequently if not always*, while the nursing staff believe that the nurse managers did so only *sometimes to fairly often*. Nurse managers perceived themselves as using a transactional leadership style *sometime to fairly often*, which is similar to the perception of their nursing staff. However, there was a significant difference between these two groups in all five transformational leadership subscales and in one subscale of transactional leadership (contingent reward). A recent study has suggested that contingent reward shares common characteristics with the transformational dimension (Andrews et al., 2012). With regard to passive-avoidance leadership, nurse managers rated themselves as using this negative style *not at all to once in a while*, although nursing staff rated them as using it *once in a while to sometimes*. This difference was confirmed by the significant difference between the perceptions of the two groups. Bass and Avolio (1990) reported that managers' self ratings tend to be higher than those of others who rate them. Whilst there are no reasons given in the literature to explain

the significant difference between the perceptions of nurse managers and the perceptions of their staff, it appears that staff nurses tend to underrate their managers, and/or that nurse managers tend to overrate themselves. However, despite their usefulness and applicability, self-reported questionnaires are referred to as representing one of the shortcomings of survey research (Polit and Beck, 2008).

#### **6.4. Leadership Style and Hospital Type**

Two contrasting types of hospitals were used as research sites for this study. To improve the efficiency of its 244 hospitals, the Saudi MOH has instituted a trial of an autonomous hospital system for a few hospitals, distributed across different geographical areas. This system, named the self-operation programme, gives those hospitals more autonomy and flexibility to manage their budget, health care quality and workforce (Almalki et al., 2011a). In this study, KFMC represents the self-operation programme hospitals, while KSMC represents the usual public hospitals.

The transformational leadership style received the highest score in both medical cities, followed by transactional and passive avoidance leadership styles respectively. However, the KFMC mean scores were substantially higher in all transformational subscales and all transactional subscales. In contrast, KSMC got the highest score for passive avoidance leadership style. Among the five transformational subscales, the inspirational motivation leadership style was the highest in both cities. Avolio and Bass (2004) described the inspirational motivational leader as a leader who motivates and inspires followers by providing meaning to, and challenges in, their work. It was found that there was a significant difference in means between KFMC and KSMC in all transformational and transactional

subscales. The greatest mean difference between the perception of managers' leadership styles at KFMC and at KSMC was in the transactional subscale (contingent reward), with mean scores differing by 0.56 (KFMC M = 3.01; KSMC M = 2.45;  $P < 0.01$ ). Contingent reward is when a leader obtains agreement on what needs to be accomplished and guarantees a reward for acceptably carrying out the assignment. The main explanation of the difference between the two cities might lie in the fact that KFMC has a newly developed self-operational programme where nursing managers can implement speedy promotions or salary increases, while nursing managers in KSMC do not play a major role in providing contingent rewards to nursing staff in terms of status, promotion, and salary, as these are decided centrally by the MOH.

The better resourced KFMC is distinguished from the KSMC in this respect, which supports the claim that hospitals with better financial support have better outcomes (El Amouri, 2010). Overall, nurse managers at KFMC demonstrated better transformational and transactional characteristics than did nurse managers at KSMC. Bass and Riggio (2006) have suggested that there is a positive relationship between effective leadership style (transformational and transactional) and employees' levels of satisfaction and motivation. With regard to the two subscales of passive avoidance leadership style, passive management-by-exception and laissez-fair subscales were found to have higher mean scores in KSMC than in KFMC, but a significant difference was found only in the laissez-fair subscale. Leaders who demonstrate laissez-fair leadership style tend to avoid responsibility by not making decisions or failing to take appropriate action on time. Unlike the newly established self-operational hospitals that have well-established information technology systems, which render all policies and procedures easily accessible, traditional hospitals, such as KSMC, do not have such systems and thus their policies and procedures tend to be less frequently updated and less easily

accessible. In cases of conflict, managers in such hospitals may thus tend to be conservative and draw on their clinical and educational experience to make decisions. Hospitals in SA that are affiliated to the MOH usually have a centralized structure with several layers of management that control the work flow; consequently nurses are not afraid of any disciplinary actions that might be enacted by their direct manager (Abualrub and AlGhamdi, 2012). In public hospitals, nurse managers thus do not have the authority to affect job security, salaries, or nurse retention.

### **6.5. Organizational Commitment**

The issue of commitment to the employing organization is significant in terms of several factors, including staff retention. It is particularly pertinent to the health care system in SA that is so dependent on a non-Saudi workforce whose loyalties and long-term commitment may lie elsewhere. The Organizational Commitment Questionnaire was used to measure the participants' loyalty and desire to remain with the hospital; their belief in, and acceptance of, the values and goals of the hospital, and the willingness to put in extra effort to help the hospital succeed. The mean score for organizational commitment in the current study was 5.1 out of 7.0, which indicates that participants in the sample had relatively high levels of organizational commitment. This result is in contrast to a previous study which reported low level of organizational commitment among Iranian nurses (Vanaki and Vagharseyyedin, 2009). Perhaps more pertinently, an earlier study conducted in SA concluded that nursing staff in Saudi hospitals were not loyal and would move if they could find a good opportunity elsewhere (Al-Aameri, 2000). However, the result of the current study regarding organizational commitment should be interpreted with caution due to the fact that the Arabic version of OCQ has newly translated and had not been validated previously.

Comparing the two medical cities in term of organizational commitment, KFMC nurses demonstrated more commitment than KSMC as indicated by mean scores (5.4; 4.8 respectively). Besides the difference in leadership styles, this higher degree of commitment at KFMC can also be explained by its flexible personnel system that allows nurse managers to make promotions among their staff. Additionally, hospitals under the newly established self-operation programme, such as KFMC, have better facilities and better accommodation options. They provide expatriate employees with recreation centres and more entertainment opportunities for their leisure time. As organizational commitment is an important predictor of, and consistently related to, nursing turnover, these hospitals may benefit from promoting organizational commitment to inform their efforts of staff retention. The MOH could consider generalizing the self-operation programme to all Ministry hospitals.

## **6.6. Leadership Style and Organizational Commitment**

Result from this study revealed a correlation between all MLQ subscales and organizational commitment. All transformational leadership subscales were correlated with organizational commitment. A statistically significant positive relationship was found between organizational commitment of staff nurses in the presence of a transformational leader. This means that when a manager displays more transformational characteristics, members of his staff become more committed to their hospital. Furthermore, it seems that transformational leadership was correlated more with the value commitment subscale ( $r=0.37, p< 0.01$ ) than the commitment to stay subscale ( $r=0.35, p< 0.01$ ). The value commitment subscale measures employees' commitment to support the goals of the organization while the commitment to stay subscale measures employees' commitment to retain their organizational membership.

The overall result supports the findings from Leach (2005) that transformational leadership has a positive influence on enhancing the level of commitment felt by nursing staff.

Additionally, this result is in keeping with the work of Laschinger et al. (2009) who found that effective leadership styles influence individual nurses' responses to the place of work and ultimately their organizational commitment. The transformational leadership style has positive and direct association with the level of organizational commitment and retention, all of which has a significant impact on patient outcomes and health organization viability (Casida and Parker, 2011).

This result also indicates that the transformational leaders in the study who displayed inspirational motivation characteristics, were more likely to lead committed nurses: the results showed that the correlation between the transformational leadership subscale (inspirational motivation) and organizational commitment as perceived by nursing staff was the most significant among all transformational subscales ( $r = 0.43$ ,  $P < 0.01$ ). Inspirational motivation is characterized by the leader generating a vision and developing a sense of both team spirit and individual autonomy. This finding is in line with the Multifactor Leadership Model that states that followers tend to be drawn to leaders who are naturally enthusiastic, optimistic, and can envision a more attractive future state (Bass, 1998). Moreover, Bass and Riggio (2006) suggest that emotional commitment can be built by using inspirational motivation leadership. The inspirational leader works to move followers to consider the moral values involved in their duties as members of their unit, organization, or profession. Given the strong positive association between effective leadership styles and organizational commitment, and the strong link between organizational commitment and staff turnover, this is an important finding in the light of the workforce shortage in nursing.

The Saudi health system, like many others, is encountering rapid and dramatic changes and needs a loyal and motivated nursing staff to reduce any negative consequences. A meta-analysis of 100 years of leadership intervention research conducted by the Gallup Leadership Institute (2004) concluded that attempts to change and develop leadership can indeed be effective. In-service training, personal counselling, and the use of case studies and leadership workshops are among those interventions that can effect change.

This study has also found a significant positive relationship between transactional leadership (which is composed of contingent reward and management-by-exception (active)) and organizational commitment of staff nurses ( $r = 0.43, p < 0.01$ ). Contingent reward was higher than management-by-exception (active), and increased the overall organizational commitment correlation score of the transactional style. This result is consistent with the work of McGuire et al. (2003) and Windsor (2009) who found that nurses did not indicate strong commitment with management-by-exception (active) style of leadership but did have a strong commitment with contingent reward leadership. Contingent reward, according to the Multifactor Leadership Model, is when a leader sets goals, plans direction and determines rewards (such as recognition and bonuses), or withholds rewards to control the situation and to achieve these goals. This result might be linked to the fact that the Saudi health system has still not adapted the workplace environment in such a way as to promote charismatic leadership styles, such as the transformational style. Marquis and Huston (2008) have suggested that leadership style arises from a combination of the values, beliefs, and preferences of the leader plus the culture and norms of the organization, which may support some leadership styles and discourage others. According to McGuire and Kennerly (2006),

there is a current emphasis in organizations on recognition and rewards as means to foster nursing retention.

The present study found a significant negative relationship between passive/avoidant leadership and organizational commitment ( $r = - 0.29, p < 0.01$ ), indicating that leaders with more passive avoidance characteristics lead less committed nurses and more nurses who desire to leave and who demonstrate more withdrawal behaviours. This is in keeping with the Multifactor Leadership Model, which has observed that passive/avoidant leaders do not create loyalty, and consequently this result in negative follower relationships (Bass & Avolio, 2000). Similar findings have been reported in a study to determine the relationship between nursing leadership style and the level of organizational commitment of foreign-educated nurses in America. A negative correlation was found between a laissez-faire leadership style and organizational commitment, which resulted in professional migration (Windsor, 2009). Saudi health organizations sometimes lack clarity in their regulations and legislations, which result in nursing leaders not applying the right decision at the right time.

Furthermore, the results of hierarchical regression analysis showed that the transformational leadership style explains 9% of the observed variability in organizational commitment, beyond and above the effect of medical city, manager/staff status and Saudi/non-Saudi nationality variables, all of which were statistically controlled for. Additionally, examining the model coefficient suggested that transformational leadership style was a significant predictor ( $\beta = .35, t = 5.1, p < 0.01$ ) of organizational commitment, indicating that transformational leadership style contributed positively and significantly to the prediction of

organizational commitment. In other words, transformational nurse leaders positively contributed to the growth of nurses' organizational commitment in Saudi Arabia hospitals.

The rationale for this result could be that one of the central themes of transformational leadership style is the availability of open and easily accessible channels and effective communication through on-going interaction between leaders and subordinates (Bass and Riggio, 2006). When nurse managers pay attention to their staff needs, show empathy and encourage professional and individual development, nurses are likely to be more interested in the organization (Force, 2005). Therefore, transformational leadership style could be a good predictor of the level of organizational commitment displayed by nursing staff, and hence it is reasonable to suppose that establishing more effective communication channels between nurse managers and nursing staff could foster nurses' organizational commitment. This result is broadly consistent with an earlier study, which concluded that visibility of and contact with nurse managers are evidently essentials for nursing staff retention (Kleinman, 2004).

In contrast to the previous findings, however, transactional and passive avoidance leadership styles were not found to have a significant effect on organizational commitment and accounted only for about 1% and 2% (respectively) of the variability in the organizational commitment. However, examining the model coefficient suggested that transactional and passive avoidance leadership styles were significant predictors ( $\beta = .25$ ,  $t = 2.45$ ,  $p < 0.05$ ;  $\beta = -.17$ ,  $t = -2.6$ ,  $p < 0.05$ , respectively) of the organizational commitment.

This finding corroborates the idea of Kimberly (Kimberly, 2009) who stated that leaders who display transactional leadership style are less successful in achieving significantly higher commitment levels than transformational leaders.

This finding lends reliability to the full range leadership model, which holds that transformational leadership style plays an influential role in generating commitment. Nurses who are committed are highly involved in their hospitals, are more willing to put in considerable effort at work, and possess a strong desire to remain in their hospitals.

Organizational commitment has been found to be a robust predictor of staff turnover behaviour (Wagner, 2007). As a recent Saudi study concluded that Saudi nurses were unsure whether they would stay or leave their jobs (Abualrub and AlGhamdi, 2012) and the findings of the present study indicate that the leadership style of nurse managers affects organizational commitment, hence staff retention, steps need to be taken to develop effective leadership in the Saudi hospital system.

In summary, correlation coefficient and regression were used to assess the relationship between leadership style and organizational commitment. Both statistical procedures were used simultaneously to confirm that association. Although both transformational and transactional leadership styles showed an obvious positive correlation with organizational commitment, transformational leadership style was the predominant to drive this relationship. This inference has also been affirmed by the regression analysis, whereby transformational leadership showed a unique and stronger contribution to providing higher commitment than other leadership styles. Both results are complementary despite disproportionate values that may be attributed to the controlling of some influential variables. However, the influence of

transformational leadership on the organizational commitment is now evident, suggesting that higher commitment to the Saudi health care organizations can be influenced by transformational leaders more than other leadership styles.

### **6.7. Leadership style and Demographic Characteristics**

Differences were sought between leadership styles in relation to participants' demographic profile, in terms of their marital status, their age, level of education, and length of experience. No significant difference was found between marital status and leadership style, thus indicating that marital status has no association with an individual's perception of leadership style. This result is similar to that of Omer (2006). However, there was a significant difference in means between age groups and transformational and transactional styles ( $F=9.81$  and  $8.11$ , respectively  $p<0.01$ ) where means of perceiving these leadership styles increased with age (the younger the age, the lower the score, and *vice versa*). All transformational leadership and transformational subscales had the same pattern whereby the youngest participants (younger than 31 years old) had the lowest scores while older participants (older than 40 years old) had the highest scores. The explanation for this may be that older nurses in SA have gained enough experience to build effective and professional relationships with their managers and to clearly recognize effective leadership behaviours. Another explanation could be that the nurse managers treat older nursing staff with considerable respect, which is in keeping with the Saudi culture where one respects those who are older than oneself. This attitude is illustrated in the very common saying in Arabic culture that, "he who is a day older than you, has a year's knowledge more than you". The results also show that passive-avoidant leadership declined in mean scores across age, which

indicates that younger nurses perceive their leader as more passive avoidant than do older nurses, and *vice versa*.

There was no significant difference between the level of education of the participants and the five transformational factors, the three transactional factors and the two passive avoidance factors. There was, however, a significant difference between length of experience and the passive avoidance leadership and laissez-faire subscales only ( $F=3.67; 3.54, p<0.01$ ).

Participants with less experience (< 7 years) scored higher in perceiving passive-avoidant leadership style and all its subscales (laissez-faire and passive management-by-exception) compared with participants whose experience fell between 7 and 18 years and those who had more than 18 years' experience. This reinforces the previous result related to age, as age is an indicator of experience, hence younger nurses are most likely to be less experienced and *vice versa*. While this result differs from that of Omer (2006) and Janseen (2004), who found that age and experience were not significantly related to leadership style, Bass and Avolio (1990) have pointed out that leadership style may be affected by many non-demographic factors.

## **6.8. Staff Retention**

The retention of staff is the most important and investigated consequence of organizational commitment (Vanaki and Vagharseyyedin, 2009). There is accumulating evidence that organizational commitment is a valid predictor of nursing retention (Angle and Perry, 1981, Ben-Baker et al., 1994, Wagner, 2007). It has been reported in nursing turnover studies, and its mediator variables such as intent to leave or intent to remain, that the OCQ has a robust predictive ability (Wagner, 2007). Therefore, the following discussion will be focused on the issue of the retention of nursing staff, and factors associated with it, as this is a central

challenge to the Saudi nursing workforce. The average commitment score of OCQ in the current sample was 5.1 out of 7.0 indicating a positive level of organizational commitment. It has been argued that increasing organizational commitment can play an essential role in retaining nurses and “stemming the outward flow of nurses to other careers” (Bartram et al., 2004, p. 294).

Findings in the current study support the conclusion that participants felt more committed to the whole organization with transformational leadership, as evidenced by the high correlation between transformational leadership subscales and organizational commitment and by the unique contribution of transformational in explaining the variance in organizational commitment. This result is supported by Bass and Riggio (2006) who stated that the emotional commitment of staff to an organizational mission or goal can be built using inspirational motivation characteristics of transformational leaders. Staff responsibilities, beliefs and values are all encouraged by such leaders. When transformational leaders display individualized consideration, staff will feel that their professional needs are being met. Moreover, transformational leaders who offer preceptorship and coaching sessions will provide their staff with a sense of increased competence to carry out orders (Bass and Riggio, 2006). The current findings add to the growing body of literature on transformational leadership style and its importance in generating and enhancing staff retention. A recent study to explore the correlations of leadership styles of nurse managers with outcomes, found that effective nursing leaders who demonstrated transformational leadership behaviours enhanced staff retention (Casida and Parker, 2011). Staff retention is one of the main issues that nurse leaders face in SA hospitals due to the high turnover rate among expatriate nurses and the rapid expansion of health services. A leadership development programme that includes

transformational leadership in its curriculum could help nurse managers to retain nursing staff.

This study produced results which corroborate the findings of a great deal of the previous work in the field of nursing retention. Transformational leadership style has been documented as the most commonly reported style among nurses' leaders in the Magnet Recognition Program® (Clavelle et al., 2012). A recent systematic literature review supports the positive relationship between the transformational leadership and staff retention. It concluded that leaders with transformational characteristics pay more attention to the individual needs of their staff, which results in more committed nurses, thereby ultimately promoting nursing retention (Cowden et al., 2011).

In the present study, the results also show that staff nurses perceive their nurse managers as using transactional leadership, for the contingent reward subscale received the highest score indicating that leaders provide meaningful rewards based on task completion. This finding has important implications in terms of generalizing the self-operation programme to all public hospitals in SA. This would eventually enable nurse leaders to offer encouragement and rewards for exceptional achievement to individuals and provide visible ways to enhance staff members' sense of belonging to their organization. Nurses in SA, and elsewhere, need to know that they are an integral part of the organization. Empowering nurses and nurse managers to respond to local challenges and make them aware that they are valued contributors will enhance organizational commitment and also, it is hoped, nursing retention.

A recent Saudi study has emphasized the significant role of effective nursing leaders in enhancing staff satisfaction and staff retention. It suggested innovative strategies to enhance staff satisfaction and retention, such as generating an open communication channel to encourage staff to participate in decision-making processes, and offering a competitive benefits package. Furthermore, it recommended that junior nurse leaders be supported by senior leaders and top management that they can support and empower their own followers and be able to offer more significant strategies that may enhance nursing retention (Abualrub and Alghamdi, 2012).

The result that nurse managers did not perceive themselves as using a passive – avoidant leadership style (a mean score of 0.84 indicating *not at all to once in a while*) is consistent with the results of Suliman (2009) and Failla and Stichler (2008), but is much lower than the results obtained by Omar (2006) and McGuire and Kennerly (2006). Passive – avoidant leadership is a negative non-preferred leadership style so it can be expected that nurse managers would not perceive their leadership style in this way but consider it to be more transformational or transactional. Previous research acknowledged that this type of self-report bias could take place in a correlational study (McGuire and Kennerly, 2006).

### **6.9. Implications of Findings**

The work presented in this thesis has implications for nursing education, nursing administration and practice, and health policy as well as for future research in nursing administration.

### **6.9.1. Implications for nursing education**

Although the results in the current study revealed no significant correlation between level of education and leadership style, this is in contrast to some previous investigations. For example, a study by Janssen (2004) identified a significant correlation between self-rated leadership style and hours of leadership training, and found that leaders perceived themselves as more transformational when they had received a greater amount of leadership training within the last three years. An earlier study found that higher transformational scores were found among leaders who possessed a higher educational degree (Dunham-Taylor, 2000). A more recent study found a correlation between effective leadership styles and educational achievement beyond a baccalaureate degree. This may explain why the present study found no significant correlation between leadership style and educational level as only 14% of the study sample had a Master's degree. Furthermore, as more than a third (36%) of the managers in the sample of the present study were not even educated to degree level, another explanation might be that the appointment of a member of staff to a position of leadership is not reliant on the candidate's educational achievement. It is also worth noting that nursing staff in SA come from more than 50 different nations with diverse education systems (Suliman, 2009) whereas previous studies that identified such a correlation have been of study populations whose members shared a similar educational background (Saccomano and Pinto-Zipp, 2011, Janssen 2004).

Although this study did not demonstrate a direct correlation between leadership style and educational level, nevertheless, as Saccomano and Pinto-Zipp (2011) have noted, the evidence indicates that leadership can be learnt. Their results confirmed the significant difference in training that diploma and associate degree nurses receive as compared with

those receiving training at a higher level. Training in the concepts of transformational leadership could usefully be included in the curriculum of in-service education programmes and leadership training designed for nurse managers within or outside academic settings (Casida and Parker, 2011). Furthermore, The pursuit of higher degrees in nursing may strengthen the individual's transformational characteristics (Force, 2005). The evidence from the literature, thus, broadly supports the recommendation by the WHO and the Nursing Technical Committee at the Gulf Countries' Council (AlMalki et al, 2011) that a Bachelor degree should be the minimum entry level to the nursing profession.

The findings of the current study need to be considered in the specific context of current nurse training in SA. The poor image of nursing in SA is a major barrier to high school students entering the profession which needs to be addressed (AlOmar, 2004, AbuAlrub and AlGhamdi, 2012). According to Omer (2006), nursing colleges in SA offer a leadership course in the fourth and fifth year of the course. To prepare national nurses for leadership roles, training in leadership could be offered earlier in the course and could include an analysis of transformational and transactional leadership styles.

According to Aldossary et al. (2008), only 28 Saudi nurses have graduated with a Master's degree and only 7 with a PhD (as of the end of 2007). Therefore, promoting overseas scholarship programmes will contribute greatly to the preparation of skilled Saudi leaders to face the challenges of the current and future Saudi nursing workforce.

Saudi Universities offer bachelor nursing level programmes in five years (exceeding international benchmarks), whereas the UK, Australia and several other countries that are regarded as main locations for recruiting nurses, including the Philippines and India, offer BSN in 3 years. The structure, content and length of nursing programmes could be addressed, especially in the light of the urgent need for a well-trained Saudi workforce.

Despite the new Saudi Nationalization Scheme that was established in 2011, which forces institutions and enterprises to fill their workforce with Saudi nationals, there is little chance of a predominantly Saudi nursing workforce unless there are well-prepared competent, and efficient Saudi nurses to take up posts. It is estimated that only 29% of the current nursing workforce in SA is Saudi (Almalki et al., 2011). Therefore, Saudi universities need to maximize their efforts to produce a high quality indigenous workforce.

### **6.9.2. Implications for nursing administration practice**

The findings of this study can strengthen nursing administration and practice as they show that transformational and transactional leadership styles have a positive contribution in generating organizational commitment, and, hence, on nursing retention. The study also gives an insight into the type of leadership that is best suited to the dynamic and changing health system in SA.

The study findings support the full range of leadership model, which includes transformational and transactional leadership styles. Saudi health organizations may benefit from these findings by selecting and recruiting leaders on the basis of their transformational

and transactional leadership attributes and behaviours. They can also mentor staff with potential characteristics of transformational and transactional leadership and prepare them for future posts.

It is clear that there is a serious shortage, and a high turnover rate, of nurses in SA (Omer, 2006; Almalki et al, 2011; AbuAlrub and AlGhamdi, 2012). The majority of the nurses working in Saudi health organizations are single, expatriate women, who are not allowed to live outside hospital accommodation. As long as the Saudi healthcare system is dependent on such a workforce, it would be prudent to ensure that the living accommodation and facilities for recreation are of a standard that will encourage them to stay.

Previous studies have determined that attempts to change and develop leadership are effective (Galloup Leadership Institute, 2004; Bass and Riggio, 2006). Therefore, a leadership orientation programme might be beneficial. Considering the high turnover rate of nursing staff in SA, nursing orientation programmes for new staff that include a module on the development of transformational leadership may be particularly valuable, as the transformational leadership style is one of five themes identified in a literature review as being of importance in enhancing retention (Force, 2005). Saudi hospitals need to support a positive working environment that fosters effective leadership characteristics.

In the Saudi health system, all health care professionals who practice for an extended time are entitled to an End of Service Benefit. If this benefit scheme could be organized on an accumulative basis it would serve as a positive reinforcement to remain longer and thus help

to promote nursing retention: nurses who have a greater number of working years would receive more benefit.

A large portion of newly graduated Saudi nurses seek to escape bedside duties to move to administrative or non-nursing positions, such as medical secretary. This exacerbates the nursing shortage. The reasons for this drift from the nursing profession need to be understood (exit interviews could provide useful insights) and appropriate interventions put in place: supportive orientation, continuing education and staff development programmes, as well as regulations and legislation, may be required.

A recent study showed that the status of nursing in SA should be enhanced to make it a worthwhile career (AlMalki et al., 2011). Promoting and organizing nursing activities such as nursing societies and international symposia will positively benefit Saudi nurses by building a sense of professionalism and providing them with opportunities to share knowledge with world leaders in nursing, and it may also attract new students to the profession. Contrary to expectations, a recent Saudi study of 217 Saudi and non-Saudi nurses found that their monthly income constituted only a small facet of job satisfaction compared with other factors (Al-Dossary et al 2012). Nevertheless, people often perceive their salary level as a proxy for the esteem in which their work is held. Therefore it is important that nursing pay is fair and equitable, and that the pay structure is transparent and applicable to all nurses regardless of their country of origin.

### **6.9.3. Implications for health policy**

Health policy in SA is changing dramatically. Transformational leaders can influence and induce positive changes toward nursing profession in the following ways: they can lobby for the nursing profession to be included in the public health decision-making process; they can participate in mobilizing issues of nursing in the areas of education, practice, and administration, and they can establish a collective voice for nursing practice in SA.

Nursing in SA has a poor image and is not generally viewed as a suitable profession for women, because of the long working hours and the family burdens carried by women, as well as the preference for the separation of genders in all spheres of life, including the workplace environment (Maben et al., 2010). Nursing leaders need to work together to improve the image of nurses (for example, by public campaigns) and facilitate the recruitment of women into the nursing profession. Reduced working hours, part time job could attract more Saudi schoolgirls into nursing profession. Supporting facilities like private transportation and on-site childcare may influence Saudi women positively toward nursing as a career. Raising the salaries and benefits of nursing staff would really encourage and motivate new local women to join nursing.

The Scientific Nursing Board, which is the leading national organizational body for Saudi nursing regulations (with responsibility for the development of the profession, regeneration and accreditation), was established in 2002 under the direct supervision of the Saudi Committee for Health Specialists. However, it would need to be fully autonomous for it to have the power and right to address the challenges of the Saudi nursing workforce. The current study found that the hospital that operated under the independent programme scored

higher for transformational and transactional leadership styles and had a higher level of organizational commitment compared with the hospital under the traditional central system.

#### **6.9.4. Implications for future nursing research**

There is a tremendous lack of empirical research into nursing in SA. The current study will add to the knowledge base of nursing in SA. Future research and additional investigation will improve our understanding of how to develop effective nursing leadership and to increase the organizational commitment in health organizations in SA.

The results from this study illustrate that the leadership style of nurse managers influences staff organizational commitment. It would be very helpful to investigate leadership style and organizational commitment across the whole hierarchy of nursing.

#### **6.10. Limitations of the Study**

- The cross-sectional nature of this study did not enable the identification of causal relationships between transformational and transactional leadership style and organizational commitment. While this study found a correlation between transformational and transactional and organizational commitment, it offers no proof of causation.
- Cultural differences may be an important factor in the study of leadership phenomena; however, this study only distinguished between Saudi and non-Saudi in terms of nationality.

- The study was conducted in two different medical cities from just one sector in SA, namely the MOH. Although the two medical cities included in the study run under two different operating systems, it would have been of value to compare the MOH sector with other sectors, such as National Guard and private Sectors. Some differences in nursing leadership styles and organizational commitment would be expected due to different organizational structure and policy.
- The study was conducted in Riyadh, the capital of SA and its largest city, which has a high population density, good nursing facilities compared with other regions, and it is where the majority of health care centres are located. However, the inclusion of a different geographical area with a different demographic profile might have produced rather different results.
- This study involves the self-report method of data collection that presents the potential for bias among participants (leaders) who have described themselves. Self-report perceptions may not be consistent with actual behaviors or individual experiences.

### **6.11. Communication of Findings**

- A copy of the results will be sent to the head of academic affairs of the two medical cities involved in the current study and another copy will be sent to the General Directorate of Nursing in the MOH.
- A copy of the results will also be sent to the Saudi Scientific Nursing Board/ Saudi Council for Health Specialists.

- The results of the study were presented at the 13th European Doctoral Conference (2012) in Nursing Science at the Medical University of Graz, Institute of Nursing Science, Graz, Austria.
- The Arabic translation process of the Organizational Commitment Questionnaire has been presented at the 6th Saudi Scientific International Conference (2012) at Brunel University, London, United Kingdom.
- This study will be published either in full or in abridged form in specialized nursing/management journals.

### **6.12. Summary**

This chapter has discussed the major findings of the study in the light of the literature and existing empirical evidence. It began by discussing the self perception of managers regarding their leadership styles and the perception of their staff regarding their managers' leadership style. It went on to discuss organizational commitment: while all the participants in the study had relatively high levels of organizational commitment, it was interesting to note that nurses from KFMC scored higher than KSMC nurses in all transformational and transactional subscales and demonstrated more commitment than nurses from KSMC. This appears to indicate that the new self-operation programme, which had been represented in the current study by KFMC, is more effective in this respect than the traditional one and can foster the retention of nurses. Transformational and transactional leadership subscales were positively associated with organizational commitment. Furthermore, both leadership styles positively contribute to the level of organizational commitment: when a manager displays transformational and transactional characteristics, members of his staff become more committed to their hospital.

The major part of the discussion, however, focused on the important issue of the retention of nursing staff, and factors associated with it, as this is a central challenge to the Saudi nursing workforce. The chapter ended with the implications arising from the study, the limitations of the study, and the ways where the results of the study have been, and will be, communicated. The next chapter includes the summary and conclusion for this thesis.

## CHAPTER SEVEN: CONCLUSION

### 7.1. Introduction

The aim of the study was to examine the relationship between nurse managers' leadership style and nurses' organizational commitment in SA. In doing so, it was hoped that the findings would benefit nursing educators, administrators, and policymakers in overcoming the challenges they are facing in the current competitive climate of a rapidly changing health care environment and a severe shortage of nurses. Nursing organizations in SA must develop strong, skilled, and visionary leaders who can manage all the diverse factors that have an influence on its health care systems.

The study used a quantitative research design. It was a non-experimental, cross-sectional, descriptive, comparative and correlational design, which used MLQ and OCQ survey tools to collect the sample data that was then analyzed using SPSS Version 17. Data were collected at two research sites in Riyadh: the KFMC and the KSMC.

The study made a substantive contribution to the body of knowledge in translating and validating the Arabic version of the OCQ, which has been proven to be an effective and reliable tool for the collection of data on employee commitment. The present study contributes to the debate on the dimensionality of the OCQ by endorsing those researchers who assert that the OCQ has a two-factor structure.

The main results were that the nurse managers perceived themselves as using both transformational and transactional leadership factors, with the transformational factors scoring higher than the transactional. The staff nurses also perceived their nurse managers as using both transformational and transactional factors, although there was a significant difference between nurse managers' perceptions and staff nurses' perceptions of nurse managers' leadership styles. A positive correlation was found between leadership style and organizational commitment. After removing the influence of manager/staff statuses, nationality, and type of hospital, transformational and transactional leadership styles still positively contribute to the level of organizational commitment. However, transformational accounted for more contribution. One of the significant findings to emerge is that there was a significant difference in results between the two different hospitals in this study. Nursing staff who worked in the hospital operating under the self operation programme (KFMC), scored substantially higher in all transformational subscales and all transactional subscales. The increased development of transformational leadership behaviours continues to increase the level of organizational commitment. The most obvious finding to emerge from this study is that nursing leaders can influence organizational commitment positively or negatively.

The study is also a contribution to the relatively scant body of work on leadership and organizational commitment that has been conducted in non-Western healthcare systems and cultures. The study is the first exploration of leadership styles and organizational commitment of nursing staff in the MOH, SA.

This study has pointed to several areas that require further research and has thrown up many questions in need of further investigation. In particular, research efforts could usefully be

directed at examining what environmental and work factors other than leadership style influence the retention of nurses in SA. In summary, the results from this study suggest that the increased development of transformational leadership behaviours increases the level of organizational commitment of nurses and thus can contribute to increasing the supply of nurses.

This study has increased our understanding of the leadership style of the current nursing leadership in SA; the relationship between leadership style and organizational commitment, and the relationship between organizational commitment and staff retention.

It is anticipated that the results of the study will be of interest to staff nurses, nurse leaders, and healthcare decision makers. Several recommendations - for nursing education, practice, policy, and for further research - have arisen from the work presented in this thesis and these are presented below:

## **7.2. Recommendations for Nursing Education**

- The nursing schools of the Saudi universities should increase their intake of students to address the problem of a shortage of nurses.
- Nursing colleges should use the results of this study and incorporate them into the curricula of leadership and management modules.
- Saudi universities should establish academic bridging programmes (top up) to enable nursing staff with pre-degree preparation to further their education in nursing.

- Distance learning and part-time programmes should be approved for nursing staff who want to develop their nursing skills and knowledge while working in hospitals.
- Saudi universities should encourage and sponsor nursing research, particularly into nursing staff development.
- Postgraduate programmes on nursing leadership should be established.
- Undergraduate nursing students should be enrolled in effective leadership workshops during their clinical placements.
- The current nationwide scholarship programme should be extended and enhanced to increase nursing education opportunities.

### **7.3. Recommendations for Nursing Administration Practice**

- Executive nursing leaders should make use of the MLQ to assess nursing leaders and identify those with less effective leadership characteristics.
- In-service leadership training sessions should be available for current nursing leaders to develop their leadership skills.
- A well-designed leadership orientation programme should be mandatory for new staff appointed to a position of management.
- Nursing staff to be involved in decision-making processes at all levels of the health organization, particularly where these affect their practice and profession.
- Nursing staff should learn about the vision, mission, and goals of their own health organization as this will increase their commitment to it.
- Expatriate nurses should be integrated with Saudi nurses in the health organizations and in the wider community: the establishment of Arabic language and social clubs could be very beneficial in this endeavour.

- Nurse leaders should create a productive working environment that enhances staff commitment by public recognition and appreciation of endeavour. This may include non-financial but tangible incentives, such as time off, preferred work, and extra holiday time, to intangible incentives such as recognition, visibility, and praise.
- Nursing education and training in rural and remote areas should be improved to avoid disadvantaging nurses in these regions.

#### **7.4. Recommendations for Health Policy**

- An independent nationwide nursing commission should be established to develop the nursing profession, outline the future plans of the Saudi nursing workforce, and act as advocate for its members' rights.
- The living accommodation and recreation facilities of expatriate nursing staff should be improved to make sure that the nurses enjoy their leisure time.
- The length of contracts for expatriates should be reviewed bearing in mind that short-term contracts that offer little job security tend to result in a low level of organizational commitment and retention.
- Nurse leaders should be given the right (from the legislative body for civil employees, namely the Ministry of Civil Affairs) to reward their own staff.
- A well-prepared professional nursing ladder should be established that clearly sets out relative positions and roles of nurses relating to experience and qualifications. Such a system will encourage staff development and eventually staff retention.
- Foreign nurses should be provided with a family visa so that they can bring their partner and children, as this will enhance the stability of the nursing workforce.

- Saudi Hospitals should be encouraged and supported to seek the Magnet Recognition Program® for Excellence in Nursing Services; this recognises quality patient care, nursing excellence, and innovations in professional nursing practice. Such recognition needs dedicated resources and targeted strategies.

### **7.5. Recommendations for Future Research**

- Future research should further investigate any direct link between nursing leadership and staff nurse turnover.
- The concepts of leadership and organizational commitment in other health sectors in SA, such as the National Guard, military hospitals, educational hospital and private hospitals should be investigated to compare the results across different sectors.
- The concepts of leadership and organizational commitment in other geographical areas in SA should be investigated.
- An intervention study to assess the changes in leadership perceptions before and after training in transformational leadership should be conducted.
- Further in-depth research is needed to investigate the impact of cultural belief of expatriate nurses who have come from different cultural backgrounds on their perception toward leadership and organizational commitment.
- A research study to examine the effectiveness of developmental training programmes of effective leadership should be conducted.
- The correlation of transformational and transactional factors with other organizational outcomes such as performance should be investigated.

- Further quantitative and qualitative research should be conducted to acquire a better understanding of retention issues among nurse managers and nursing staff, with the aim of developing appropriate and successful retention strategies.

## **7.6. Summary**

It is necessary to have a full understanding of the current situation of nursing in SA to be able to implement appropriate changes. Particular challenges that confront the health system are to do with the diversity of its nursing workforce and the high turnover of its staff. If the nursing workforce is well managed and the retention of nurses is enhanced, better health outcomes for patients will be the result. An understanding of the relationship between leadership and organizational commitment, which is a predictor of nursing retention, is paramount. From such a position, it will be possible to build a base for introducing the full range of leadership model that will help to prepare Saudi nurses for positions as nurse managers and leaders. This will not only develop and strengthen the health care system in SA but it will also contribute to the "Saudization" programme, the aim of which is to gradually replace expatriate workers with qualified Saudi nationals.

The health service in SA is developing at an increasing rate, which presents several challenges, foremost of which is the demand for a skilled workforce of health professionals. The nursing profession is particularly adversely affected by the low status of the profession in the kingdom, which limits the number of young people wanting to train as nurses, and its decreasing ability to recruit – and keep – expatriate nurses. The first challenge to the nursing profession is to increase the number of Saudi nationals who become nurses (which is in keeping with the policy of Saudization) and to reverse the decline in the recruitment of

expatriate nurses. The second challenge is to ensure that pay and conditions, including opportunities for advancement, are such that both Saudi nationals and expatriate nurses stay in the profession in SA and use their skills and experience to contribute to its continuing development

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## APPENDICES

### Appendix 1. Permission to use the Multifactor Leadership.

For use by Mansour AlYami only. Received from Mind Garden, Inc. on April 15, 2011



[www.mindgarden.com](http://www.mindgarden.com)

To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material;

Instrument: *Multifactor Leadership Questionnaire*

Authors: *Bruce Avolio and Bernard Bass*

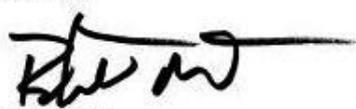
Copyright: *1995 by Bruce Avolio and Bernard Bass*

for his/her thesis research.

Five sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any other published material.

Sincerely,



Robert Most  
Mind Garden, Inc.

Appendix 2. Saudi MOH Ethical approval.

Kingdom of Saudi Arabia  
Ministry of Health  
King Fahd Medical City



المملكة العربية السعودية  
وزارة الصحة  
مدينة الملك فهد الطبية

March 16<sup>th</sup> 2011  
ERRC Number: 11-009  
IRB Number: 11-049

Dear Dr. Mansour Al Yamani,

It is my pleasure to inform you that the External Research Review Committee, a subcommittee of the Institutional Review Board, has approved your study titled: "**Leadership style and organizational commitment among nursing staff, Saudi Arabia: Mixed method**".

Please be informed that in conducting this study, you as the Principal Investigator are required to abide by the rules and regulations of the Government of Saudi Arabia and KFMC/ERRC. The approval of this proposal will automatically be suspended on **March 16<sup>th</sup> 2012** pending the reapplication to renew the approval. You also need to notify the ERRC as soon as possible in the case of:

1. Any amendments to the project;
2. Termination of the study.

Please observe the following:

1. Personal identifying data should only be collected when necessary for research;
2. The data collected should only be used for this proposal;
3. Data should be stored securely so that only a few authorized users are permitted access to the database;
4. Secondary disclosure of personal identifiable data is not allowed.

We wish you every success in your research endeavor

Sincerely,

**Dr. Mohamad Alfannir**  
Head of External Research Review Committee  
Institutional Review Board  
King Fahad Medical City  
Riyadh, KSA

المرفقات

الرقم :  
التاريخ :

Appendix 3. An indication that the OCQ doesn't need a formal permission.

From: **Rick Mowday** [rmowday@lcbmail.uoregon.edu](mailto:rmowday@lcbmail.uoregon.edu)

To: Mansour AL-Yamiyam2020@gmail.com

Date: Fri, Jan 28, 2011 at 6:02 PM

Subject: RE: Organizational Commitment Questionnaire

**Message body**

Mansour

I apologize for the delay in responding to your inquiry but I am just back in the office after being out of the country. The Organizational Commitment Questionnaire (OCQ) was originally developed by Professor Lyman Porter. He decided not to copyright the instrument to encourage its use in research by others. Thus, you are free to use the OCQ without formal permission.

I have attached a copy of the appendix to a book we published ("Employee-Organization Linkages") that contains the OCQ items and scoring instructions.

Good luck on your research.

Rick

Appendix 4. Ethical approval from the Ethical Committee of the University of Sheffield.

From: Lindsay Victoria Unwin [L.V.Unwin@sheffield.ac.uk](mailto:L.V.Unwin@sheffield.ac.uk)

To: Mansour AL-Yamiyam2020@gmail.com

Cc: Roger Watson <[roger.watson@sheffield.ac.uk](mailto:roger.watson@sheffield.ac.uk)>,

Paul Galdas<[p.galdas@sheffield.ac.uk](mailto:p.galdas@sheffield.ac.uk)>,

Jane Flint [j.flint@sheffield.ac.uk](mailto:j.flint@sheffield.ac.uk)

Date: Tue, Feb 22, 2011 at 3:40 PM

Subject: Re: Fwd: Ethical approval.

**Message body**

Dear Mansour,

Many thanks for your email and for providing this information. I'm pleased to confirm that the Saudi Ministry of Health IRB has been judged to be sufficiently robust in comparison to the University of Sheffield's ethics review procedure.

This means that you will not need to seek ethics approval from Sheffield as well. Once you have obtained approval from the IRB, please ensure that you provide a copy of the application documents, and confirmation of the approval, to the Ethics Administrator in the School of Nursing and Midwifery (Jane Flint, who I have copied in to this email).

If you have any further queries, just let me know.

Kind regards

Lindsay

## Appendix 5. Covering letter to potential participants

Dear colleague,

Please allow me to introduce myself: I am Mansour Alyami, a nursing PhD student at the University of Sheffield ([M.alyami@sheffield.ac.uk](mailto:M.alyami@sheffield.ac.uk)). I would like to invite you to voluntarily participate in a study, the aim of which is to examine the relationship between nursing managers' leadership styles and organizational commitment among nursing staff of two hospitals in Riyadh city, SA. You have been selected to participate because you are a staff nurse working in one of these hospitals in Riyadh City.

It will not take more than 30 minutes to complete the questionnaire. Your name does not appear on the questionnaire; only the researcher and his academic supervisor will have access to the information that you provide. Your name will not be revealed in any reports, in order to ensure confidentiality.

You have the right to ask any questions and you may withdraw from this study at anytime. There are no foreseeable risks to you, and no direct benefit from your participation is expected.

You can always obtain further information from the researcher. My contact details are provided below. If you agree to participate in the study, please complete the attached questionnaire and return it to the designated secure boxes provided in the hospital (exact locations) before (date). By completing the survey and returning it, you are giving permission for your information to be used for research purposes.

Thank you for your time and cooperation. If you have any questions, please feel free to contact me.

Sincerely,

**Mansour S AL-Yami,**

**P.O. Box 36312 Riyadh 11419**

**Mobile: Riyadh 00966555284423**

**Sheffield, UK 00447760693008**

**Email [M.alyami@sheffield.ac.uk](mailto:M.alyami@sheffield.ac.uk)**

Appendix. 6. The Arabic version of Organizational commitment Questionnaire (Porter and Smith, 1970).

فيما يلي قائمة من الجمل التي تمثل عدد من الخيارات المتعلقة بمشاعر الموظف تجاه منشأته (المستشفى) التي يعمل بها حالياً. الرجاء التأشير على الدرجة التي تعكس توافقكم من عدمه مع كل عبارة في الاستبيان من خلال وضع علامة (√) على المربع المناسب:

غير موافق اطلاقاً	غير موافق	غير موافق جزئياً	محايد	موافق جزئياً	موافق	موافق بشدة
1	2	3	4	5	6	7

7	6	5	4	3	2	1			
								1	انا على استعداد لبذل جهد اكثر من المعتاد من اجل نجاح هذه المنشأة
								2	أخبر زملائي ان هذه المنشأة توفر بيئة ممتازة للعمل فيها
								3	اشعر بقليل من الانتماء لهذه المنشأة
								4	غالباً ساقبلي عمل يوكل إلي، لكي أضمن استمرار عملي في هذه المنشأة
								5	اجد ان قيمي الشخصية شبيهة بقيم هذه المنشأة
								6	اشعر بالفخر عند ابلاغ الاخرين اني جزء من هذه المنشأة
								7	يمكنني العمل في اي المنشأة اخرى طالما ان نوع العمل متشابه
								8	هذه المنشأة تلهمني لاداء عملي بشكل أفضل
								9	اجد نفسي على مقربة من ترك هذه المنشأة في حالة وجود اي تغيير طفيف في ظروف عملي الحالية
								10	اجد نفسي سعيداً للغاية باختياري لهذه المنشأة عوضاً عن غيرها من الخيارات التي كانت متاحة لي حينها.
								11	ليس هناك الكثير من الفائدة المرجوة من المكوث مع هذه المنشأة على المدى البعيد
								12	غالبا اجد من الصعب الاتفاق مع انظمة هذه المنشأة في ما يخص الامور الهامة المتعلقة بموظفيها.
								13	انا اهتم فعلا بمصير هذه المنشأة.

								بالنسبة لي هذا فضل منشأة من بين جميع المنشآت المتاحة حالياً	14
								قراري بالعمل في هذه المنشأة كان قراراً خاطئاً	15

شكراً جزيلاً على تعاونكم

Appendix. 7. The original version of Organizational commitment Questionnaire (Porter and Smith, 1970)

Organizational commitment Questionnaire (Porter and Smith, 1970)

Listed below are a series of statements that represent possible feelings that individuals might have about the organization for which they work. With respect to your own feelings about the particular organization for which you are now working [Ministry of Health] please indicate the degree of your agreement or disagreement with each statement by checking one of the seven alternatives next to each statement.

		strongly disagree	moderately disagree	slightly disagree	neither	disagree nor agree	slightly agree	moderately agree	strongly agree
1	I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.								
2	I talk up this organization to my friends as a great organization to work for.								
3	I feel very little loyalty to this organization.								
4	I would accept almost any type of job assignment in order to keep working for this organization.								
5	I find that my values and the organization's values are very similar.								
6	I am proud to tell others that I am part of this organization.								
7	I could just as well be working for a different organization as long as the type of work were similar.								
8	This organization really inspires the very best in me in the way of job performance.								

9	It would take very little change in my present circumstances to cause me to leave this organization.							
10	I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.							
11	There's not too much to be gained by sticking with this organization indefinitely.							
12	Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.							
13	I really care about the fate of this organization.							
14	For me this is the best of all possible organizations for which to work.							
15	Deciding to work for this organization was a definite mistake on my part.							

Thank You,

Appendix. 8. The demographic sheet

Demographic survey

Code no. \_\_\_\_\_

Nurse demographic data

**Directions:** Please indicate the appropriate response with a check mark (✓).

**1. Nationality**

- Saudi
- Non Saudi

**2. Gender**

- Male
- Female

**3. Age**

- ≤ 20
- 21-25
- 26-30
- 31-35
- 36-40
- 41-46
- ≤ 47

**4. Marital status**

- Single
- Married
- Divorced
- Widowed

**5. Position**

- Nursing director
- Head nurse
- Nursing supervisor
- Outside nursing

**6. Level of education**

- Diploma
- Associate's degree
- Bachelor of Science in Nursing
- Master of Science in Nursing
- PhD

**7. Length of experience in the current organization (years)**

- ≤ 2
- 3-6
- 7-9
- 10-12
- 13-15
- 16-18
- 18-20
- ≥ 21