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Patients, nursing staff and patients’ relatives’ perceptions of ward atmosphere in four psychiatric hospitals in Jordan

Ahmad Al-Sagarat
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Patients, nursing staff and patients’ relatives’ perceptions of ward atmosphere in four psychiatric hospitals in Jordan

A thesis submitted in (partial) fulfillment of the requirements for the award of the degree

Doctor of Philosophy

from

University of Wollongong

by

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Faculty of Health and Behavioural Sciences

2012
Declaration

I, Ahmad AL-Sagarat, declare that this dissertation submitted in fulfillment of the requirements for the award of Doctor of Philosophy in Mental Health Nursing, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Ahmad AL-Sagarat
ABSTRACT

It has been recognized for decades that the ward atmosphere in which mental health care occurs has an impact on both treatment process and its outcomes. No studies have examined the perception of ward atmosphere in Arabic speaking countries and none that solely examined the perception of ward atmosphere in Jordan; therefore, the purpose of this descriptive non-experimental survey was to investigate the perceptions of ward atmosphere amongst nurses, patients and patients’ relatives in four Jordanian psychiatric hospitals. Purposive sampling was used to recruit 136 nurses, 104 patients and 27 patients’ relatives from AL-Rasheed private hospital, National Centre for Rehabilitation of Addicts (NCRA), Marka Military hospital and National Centre for Mental Health (NCMH).

The study instrument used was the Ward Atmosphere Scale (WAS) which was developed by Moos in 1968 and translated into Arabic by two bilingual translators in 2007. It measured both the Real (actual) and Ideal ward atmosphere. The data were analysed by using SPSS version 15 for windows.

The main findings of this study were that Jordanian patients and relatives were reasonably happy with the current ward atmosphere. However, Jordanian mental health nurses felt that some change was needed as they rated the three subscales of Involvement, Practical Orientation and Order and Organisation statistically significantly lower than patients and relatives. The findings also revealed that relatives and nurses rated the Ideal ward atmosphere significantly higher than patients on all subscales except Autonomy and Order and Organisation. In contrast with Western mental health facilities, comparisons were made which indicated that North American nurses rated significantly higher than the Jordanian nurses in all Real WAS subscales except Staff Control. In addition, the research indicated that North American patients rated significantly higher than the Jordanian patients in Autonomy and Practical Orientation and significantly lower than the Jordanian patients in Anger and Aggression and Staff Control as this was positively influenced by greater staff numbers.
Finally, all of the demographic variables tested in the current study were found to have no impact on the perceptions of ward atmosphere. This was true for nurses, patients and relatives but hospital ownership appeared to have an impact on ward atmosphere perceptions.

The findings of the current study conclude that it was the quality of service and the actual operational system of the hospital that directed the participants’ perceptions of ward atmosphere. In order to improve the ward atmosphere in Jordanian psychiatric hospitals, recommendations with regard to Jordanian mental health services, mental health nursing practice and mental health nursing education were made.
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Chapter 1

Introduction

This thesis is based on a non-experimental descriptive study undertaken in Jordan. It provides knowledge about the perceptions of ward atmosphere amongst nurses, patients, and patients’ relatives from four Jordanian Psychiatric Hospitals. The thesis is presented in seven chapters which build upon the previous, thus presenting a comprehensive picture of the study site (Jordan and the four Jordanian Psychiatric Hospitals), what was studied (perceptions of Real and Ideal ward atmosphere), what was found (findings) and what the results mean (discussion). Further to this, comparisons with similar research, via comprehensive links to the international literature, and applications for mental health clinical practice in Jordan is provided.

This chapter provides the background of the study. It describes the significance of the study, and identifies the aims of the study, including the research questions. At the end of the chapter, a more comprehensive structure of the thesis is outlined.

Background to the study

Treatment for people who are living with a mental illness is complex and has many components (Tuvesson, Wann-Hansson & Eklund 2011). These include therapeutic interventions, psychosocial education and support. The ward atmosphere itself is considered a crucial dimension in the treatment process of mental illness. The ward atmosphere of a mental health environment is composed of unique characteristics that give the setting unity and coherence (Beket & Zauszniewsk 2011). Characteristics of ward atmosphere arise from everyday events and from both the actual interactions and of the views and attitudes of those within it (Beazley & Gudjonsson 2011). The atmosphere of the ward strongly influences the therapeutic milieu.

The way that the ward atmosphere is perceived is critical because the ward atmosphere exerts a strong influence on people in a given setting and is known to impact on an individual’s morale, achievement and self-understanding (Beazley & Gudjonsson
By measuring the perceptions of ward atmosphere as this research has done, deep understandings can be identified which can lead to changes. Such changes could ultimately result in better patient outcomes.

Ward atmosphere has been well researched internationally over many years and in a variety of settings. Most studies have been carried out in Western countries such as the United States of America and the United Kingdom. However, no studies of ward atmosphere have previously been undertaken in Arabic speaking countries specifically Jordan. Therefore, this study which was focused on investigating the perceptions of ward atmosphere in four psychiatric hospitals in Jordan through the use of a non-experimental descriptive survey design fills an identified gap and provides a comprehensive understanding of the perceptions of ward atmosphere from the perspective of Jordanian nurses, patients and their relatives.

**Significance of the Study**

Research emanating from doctoral studies needs to be of significance (Calhoun 2012). This study is significant because it is the first of its kind and contributes new knowledge in an area of international and national importance. Indeed, mental health is a national and World Health Organization (WHO) research priority area (WHO 2011; Australian Institute of Health and Welfare 2011). Findings gleaned from this research have identified the degree of similarity and difference between the three participant groups in their perceptions of Real and Ideal ward atmosphere. This will help to identify areas in these psychiatric settings that are positive but also those that need refinement or change. In describing their Real and Ideal treatment environment, patients, relatives and staff provided information that can guide attempts to change the treatment orientation and facilitate more effective programme organisation. In addition, findings from this study will help explain how hospital ownership (Private or Public) can influence ward atmosphere’s perceptions. This information may enable health providers and planners to structure health organisations in such a way that encourages and maintains a therapeutic milieu and one that facilitates patient satisfaction.
Moreover, findings of this study add to the general knowledge of ward atmosphere perceptions in psychiatric facilities, but do so from a different perspective and offer a new context from those examined in the psychiatric nursing literature to date. As already stated this study represents the first to examine perceptions of ward atmosphere in Jordan but significantly this is the first study globally that includes patients’ relatives as participants.

**Aims of the study**

The aims of this study were to investigate participants’ perceptions of ward atmosphere in four Jordanian psychiatric hospitals, and to determine the extent to which the nurses, patients and patients’ relatives’ perceptions of ward atmosphere match or differ from each other. Further to this, this study aimed to compare the Jordanian ward atmosphere with the ward atmosphere as studied in North America. This study also investigated a possible relationship between demographic variables; hospital ownership and perceptions of ward atmosphere.

**The research questions**

The following questions were structured to guide the study:

**Question one**

How do nurses, patients, and patients’ relatives perceive the ward atmosphere as measured by the Real (WAS-R) and Ideal (WAS-I) subscales?

**Question two**

How do Real ward atmosphere (WAS-R) ratings in Jordan compare with the Moos normative sample of Real WAS (WAS-R)?
Question three

In what ways do demographic variables affect nurses’, patients’ and patients’ relatives’ perceptions of Real ward atmosphere in all WAS subscales?

Structure of the thesis

This thesis is presented in seven chapters. This chapter has provided an introduction, background and significance of the study.

Chapter Two presents the geosocialpolitical characteristics of Jordan; the geographical site, population, social structure, the economy, the health system in general and the mental health system particularly.

Chapter Three explores the research and conceptual literature related to the perceptions of ward atmosphere internationally.

Chapter Four presents the study’s methodology. It includes a detailed description of the research design; the population and the sampling frame, the methods of data collection, ethical considerations, the steps of data collection, the data collection settings and an overview of the methods of data analysis. It also includes a description of the data collection tool that was utilised in this study incorporating the steps outlined that were taken to ensure validity and reliability. Finally, Chapter Four summarizes the statistical analysis used to answer the research questions.

The results of the study are presented in Chapter Five where the main findings of this research are explained. Chapter Five presents the demographic variables of the participants and their impact on the Real ward atmosphere’s subscales. Tables and graphs are presented in this chapter to clearly present and summarize the findings of the research and further clarify the comparisons and contrasts among the variables and the norms.
Chapter Six presents the discussions and the interpretation of the results of the study in relation to the international ward atmosphere literature.

Chapter Seven which is the final chapter of the thesis presents the limitations of the study, implications for mental health nursing practice and recommendations for future research.

**Summary**

This chapter provided a brief introduction to this thesis. It described the background to the study, the contributions that ward atmosphere makes to mental health care and also identified the purpose of the research. The research questions and the significance of the study were also outlined and the structure of the thesis was offered, to enhance understanding of structural formatting.

Chapter 2 which follows presents a detailed geosocialpolitical context of the study site. It provides information about the geography, population, social structure and the economy. An outline of Jordan’s political framework is also provided as is a detailed description of the health system including the provision of mental health care.
Chapter 2

This chapter provides an overview of the geosocialpolitical characteristics of Jordan. The chapter’s structure will begin with information about the geography, population, social structure and the economy. An outline of Jordan’s political framework is also provided. The Chapter will then describe the health system more holistically before drilling down to discuss the mental health system in some detail. By presenting the information and discussion in this manner, Chapter 2 provides the contextual foundations upon which the thesis is built.

Jordan is a relatively small country in the Arab World situated in Western Asia and the Middle East. Jordan, which is landlocked, is bordered on the north by Syria, on the east by Iraq and Saudi Arabia, on the south by Saudi Arabia and the Gulf of Aqaba and on the west by Israel and the West Bank (see Figure 1). The surface area of Jordan is nearly 90,000 square kilometers (The Department of Statistics [DOS] 2011).

In 2011, the population was estimated to be approximately 6.2 million. Approximately 48.5 percent of the population are female and 51.5 percent are male (DOS 2011). More than 95 percent of the population are Muslim, and less than five percent are Christian. Jordanian Christian’s are part of the Eastern Orthodox complex of churches which fall under the patriarch of Jerusalem. Christians are not randomly distributed across Jordan, however they form strong, but usually small communities. The Christian communities in Jordan are mainly concentrated in the cities of Amman, Zarqa, Al- Karak, Madaba, Al- Salt, Mafraq and Ajlun. Only one city in Jordan has a Christian majority. This is the small town of Fuheis, west of Amman. Christians are well integrated in the Jordanian society and have a high level of freedom. They form a significant part of the kingdom's political and economic elite. Christians enjoy relatively high economic and social opportunities in Jordan compared to their counterparts in the rest of the Middle East. Christians are allotted eight out of 110 seats in the Jordanian parliament, and hold important ministerial portfolios, ambassadorial appointments, and positions of high military rank. Jordanian Christians are permitted by the public and private sectors to
leave their work to attend Sunday prayer. All Christian religious ceremonies are publicly celebrated in Jordan.

**British Rule**

The AMIRATE of Transjordan was created by the British in 1921. The British had divided the land of Transjordan into three local administrative districts, with a British ‘advisor’ appointed to each. The northern region of Ajloun had its administrative centre in the city of Irbid, the central region, and known as Balqa and was based in the city of Salt. The southern region was administered by the Moabite Arab Government and was based in Karak. The British proclaimed Emir Abdullah (later King) as the ruler of the three districts. The Emir established the first centralized government system in what is now modern Jordan on April 11, 1921.

On May 15 1923, Britain formally recognized the Emirate of Transjordan as a state under the leadership of Emir Abdullah. Between 1928 and 1946, a series of Anglo-Transjordanian treaties led to full independence for Transjordan on May 25, 1946. This year (1946) also saw the Transjordanian parliament proclaim Abdullah the King, and officially changed the name of the country from the Emirate of Transjordan to the Hashemite Kingdom of Jordan. The Hashemite Royal family is interwoven into the life of Jordan, having established the modern state in 1921. The Hashemites, or “Bani Hashem,” are descendants of the Arab chieftain Quraysh, a descendant of the Prophet Ismail, the son of the Prophet Ibrahim (Abraham).

After King Abdullah’s martyrdom in 1951, King Talal, his eldest son, ruled for a brief period. Due to King Talal’s illness, his eldest son, Hussein, was proclaimed King of the Hashemite Kingdom of Jordan on May 2, 1953. At the time of his passing on February 7 1999, His Majesty was the longest serving executive head of state in the world. Throughout his long and eventful reign, King Hussein worked hard at building Jordan and raising the living standard of each and every Jordanian. Early on, King Hussein concentrated on building an economic and industrial infrastructure that would complement and enhance the advances he wanted to achieve in the quality of life of his people. The passing away of His Majesty King Hussein on February 7 1999 saw King
Abdullah II the eldest son proclaimed King of the Hashemite Kingdom of Jordan. King Abdullah II rules to this day.

As outlined above, Jordan is a constitutional monarchy based on a constitution, which was adopted on January 8 1952 and amended on October 1 2011. Executive authority is vested in the King and his Council of Ministers. The King signs and executes all laws. His veto power may be overridden by a two-thirds vote of both houses of the parliament. He appoints and can also dismiss all judges by decree, approves amendments to the constitution, declares war, and commands the armed forces. Cabinet decisions, court judgments, and the national currency are issued in his name. The King, who may dismiss other cabinet members at the Prime Minister's request, appoints the Council of Ministers, led by a Prime Minister. Born in 1950, the current prime Minister is Awn Shawkat Al-Khasawneh. The cabinet is responsible to the lower house of parliament on matters of general policy and can be forced to resign by a two-thirds vote of "no confidence" by that body. Legislative power rests in the bicameral parliament. The lower house of parliament, elected by universal suffrage to a four year term, is subject to dissolution by the King. The King appoints the 55 member upper house for a four year term. Administratively, Jordan is divided into 12 governorates, each headed by a governor appointed by the King. They are the sole authorities for all government departments and they are responsible for developing projects in their respective geographical and administrative areas (King Hussein official website 2011).

The capital city of Jordan is Amman. This city is located toward the north of the country and nearly 30 percent of the total population, approximately 20 million people live there (International Monetary Fund 2008). Jordan is a developing country with a young population with more than 60 percent of its people being under 60 years of age (DOS 2011). The median age is 23.5 years for both genders (DOS 2011). Life expectancy at birth for males and females is 78.73 and 81.45 years respectively with a population growth rate of 2.41 percent (DOS 2011). The literacy rate is more than 92 percent for both genders, the highest in the region, with unemployment and population rates as being recorded below the poverty line at about 14 percent respectively (DOS 2011).
The social structure in Jordan can be described as complex. The nuclear family is the most predominant type of family structure, however the extended family is still viewed as the focal point of social interactions and community activities. Jordan’s people are a mixture of Arabs from different origins, Caucasians, Armenians, and other minorities. Despite contemporary Jordanian families now nuclear, the Jordanian social system was built on an extended family format with sub-tribes of Bedouin, Palestinian, and other tribes comprising the social support system for their members. This social structure is still well recognized by the government as well as the non-government organisations in the Kingdom.

The official language of the government and that spoken by the people is Arabic (Ministry of Education 2008). The second formal language and the language of education at both undergraduate and graduate levels is English.

Although surrounded by oil rich nations, ironically, Jordan has limited natural resources. Despite this, its citizens have managed to manipulate what they do have in order to boost the economy and other national aspects (Johnson & Stopskopf 2010).
per capita Gross Domestic Product (GDP) was US $4,900 in 2010 (IMF 2010). As mentioned earlier the total population of Jordan in 2011 is an estimated 6.2 million, of whom 2 million represented the labor force in the country (Ministry of Labor 2011). The public and service sector, consisting of government, tourism, transportation, communication and financial services, employs 60 percent of the workforce. The industrial sector which includes Potash, Phosphate and Gypsum mining, and the manufacturer of cement, fertilizers and refined petroleum, products, employs 17 percent of the workforce. Moreover, agriculture represents about 4 percent of the GDP and employs less than 3 percent of the workforce. In Jordan, the Armed Forces personnel represent seven percent of the workforce whilst that the private sector employs 13 percent of the workforce (MoL 2011).

The Jordanian economy is a service economy, not an oil-based one (Shanekat 2008). Jordan’s economy is dependent upon external sources of finance, which include assistance and loans from countries like the Kingdom of Saudi Arabia (KSA), the United Arab Emirates (UAE), Kuwait and numerous international institutions. Impediments to growing Jordan’s economy include the lack of natural resources, the ongoing Israeli Wars, the Gulf War of 1991 and 2003 and subsequent occupations of Palestine in 1984 and 1967. This occupation forced many people to flee Palestine and Iraq leading them to enter Jordan as refugees (Shanekat 2008). The International Monetary Fund (2011) described Jordan’s economy as standing up in the face of surrounding and internal drawbacks. Although continuing to pursue economic change and to increase trade, Jordan's economy remains vulnerable to external shocks and regional instability. Without settlement in the region, economic growth seems destined to stay below potential (IMF 2011).

Health Care

The health care system in Jordan is composed of three sectors: (1) Public, (2) Private, and (3) International. The public sector comprises The Ministry of Health (which is the principal provider), the Royal Medical Services (RMS), the Jordan University Hospital (JUH), King Abdullah Hospital and The Social Security Organisation, all of which has
its own financing and delivery systems. Each sector will now be discussed in greater detail.

The Public Sector

The Ministry of Health

The Ministry of Health (MoH) was established on December 14, 1950 by the late King Abdullah I. The MoH, which is the largest of the public healthcare providers, undertakes all health affairs in Jordan and its tasks and duties are reported to include:

- Maintaining public health by offering preventive, treatment and health control services;
- Organizing and supervising health services offered by the public and private sectors;
- Providing health insurance for the public within available means, and
- Establishing and controlling the management of health education and training institutes and centers according to relevant provisions of the legislations enacted. (Ministry of Health 2010).

The MoH operates 1,245 primary health-care centres and 30 hospitals, accounting for 37 percent of all hospital beds in the country. These primary health care centres are evenly distributed across the 12 governorates according to the population of each governorate (MoH 2010).

As revealed in the Annual Report of MoH (2010) over 76 percent of the MoH expenditures are financed by the government. 11 percent comes from service fees collected at health facilities and the reminder from donor assistance and World Bank loans. In 2010, the Jordanian government allocated a high percentage of its GDP (9.6 percent) to healthcare (MoH 2010). The mental health budget is incorporated within the
budget of the MoH and is not a dedicated or fixed amount. This will be discussed in greater detail later in this chapter.

**The Royal Medical Service**

The Royal Medical Service (RMS) is the second largest public health provider in Jordan. It was established in January 1942 by his majesty, the late King Abdullah I. Its main role is to provide primary and curative health care to armed forces personnel, their dependents and also to retired service personnel as well as their dependents (RMS 2010). The RMS runs 12 hospitals and 27 outpatient centres spread all over the country, providing 24 percent of all hospital beds in Jordan.

According to the annual report of RMS (2010), the RMS received most of its annual budget (61%) from the Ministry of Finance (MoF). The remaining funds come from other government entities including the MoH (27.5%) user fees (10.1%) and copayments (1.1%) based on army rank and status.

**The Jordan University Hospital**

The Jordan University Hospital (JUH) was established in 1973 and was originally called The Amman Grand Hospital. Its name was changed in 1975 after it became affiliated with Jordan University and its medical school (MOH 2010). With over 531 beds, the JUH accounts for three percent of total beds in the country. Located in the capital city of Amman, it serves as a teaching hospital to the Faculties of Medicine, Nursing, Pharmacy, Dentistry and Allied Health. In addition, it is a major referall hospital to the Ministry of Health, employees of Jordan University and their dependents, employees of private sectors with whom JUH has contractual agreement, as well as to independent private patients. Since its establishment, Jordan University Hospital has provided occasions of service to more than a quarter of a million people each year (MoH). The Jordan University Hospital is financed by the Ministry of Finance, the Ministry of Health and from service user fees.
King Abdullah University Hospital

King Abdullah Hospital (KAUH) was established in 2002 by the Jordan University of Science and Technology (JUST). The KAUH was established as a teaching hospital to the Faculties of Medicine and Nursing at JUST and as a referral hospital for all public sectors in the northern region of Jordan (KAUH 2010). The total capacity of the hospital is 650 beds. As a general hospital, KAUH provides various clinical health care services to other health care sectors in Jordan using a framework of mutual agreements and contracts. It is the largest hospital in northern Jordan, serving approximately one million inhabitants of the Irbid, Ajloun, Jerash, and Mafraq governorates. The King Abdullah Hospital is financed by the Ministry of Finance, Ministry of Health and from service user fees (KAUH, annual report 2010).

The Private Sector

The private sector plays an important role in terms of both the financing and delivery of health care services in Jordan. Many private firms provide health care coverage for their employees either through self-insuring or by the purchase of private health insurance. Many individuals including those with civil health insurance or military health insurance purchase health services privately through direct out of pocket payments. In terms of service delivery, the private sector accounts for 36 percent of all hospital beds which are distributed among 59 hospitals located all over the country. The private financial sources comprise of payments paid by people for private commercial insurance, expenditures incurred by self-insured companies such as Jordan Phosphate Mines, Arab Potash Company and Lafarge Jordan Cement Company who directly pay for health care services for their employees and out-of-pocket expenditure for health care and for medications at pharmacies. Twenty firms offer health insurance, and cover an estimated 138,815 beneficiaries, mostly middle and upper class professionals. Insurance companies and self-insured firms deal primarily with private sector physicians and hospitals. They use both contractual (the insurer pays providers) and indemnification (the insurer pays beneficiary) approaches and have contracts with providers, which are usually simple and primarily define the terms for payment.
Hospitals are paid mainly according to a fee for service method. The private hospitals determine their fee schedules in coordination with the MoH. The Cabinet determines the MoH hospitals fees. RMS, JUH and KAUH set their own fee schedules (MoH 2010).

**The International Sector**

The International Sector includes the United Nations Relief and Works Agency (UNRWA) for Palestine refugees in the Near East. The term “Near East” was first used in 1856, which was defined specifically against the Far East and refers to the region in Asia that is west of India. Today, the region of the Near East is imprecise and overlaps with the Middle East. It typically refers to southwest Asia, particularly Turkey, Lebanon, Syria, Iraq, Israel, Jordan, Saudi Arabia and other nations of the Arabian Peninsula. It is not as commonly used as “Middle East” (Oxford Dictionary 2010).

The UNRWA is a relief and human development agency that was established by the United Nations General Assembly in 1949 to carry out direct relief works programmes for Palestinian refugees (MoH annual report 2010). The UNRWA provides education, health care, social and emergency aid. UNRWA provides comprehensive health care to over 600,000 Palestinian refugees who reside in Jordan. Currently, the UNRWA operates 23 maternal and child health centres, 17 non-communicable disease clinics, 23 family health clinics, 13 specialist clinics, 21 laboratories and 21 dental clinics. For inpatient services, UNRWA has contracts with MoH, ROS and some private hospitals.

**Nursing in Jordan**

In Jordan there are a number of different types of nurses. The health care system comprises of Registered Nurses (RN) who hold a four year Bachelor of Science in Nursing (BSc). The first nursing baccalaureate programme commenced in 1972 with the establishment of the nursing faculty in the Jordan University (Sultan 1998). To be eligible for a baccalaureate degree a candidate must have successfully completed 134 credits points. These credits points includes theory, laboratory skills and clinical practice. It was linked to the college of medicine and was headed by a British medical doctor (Zahran 2010). The nursing school was established by Jordanian physicians and
British nurses (Abu Gharbieh & Suliman 1992) and closely followed the medical model of teaching nursing. The programme was medical and basic sciences based, and content adhered to that which was taught in diploma degree programmes in Britain (Abu Gharbieh & Suliman 1992). Though the first nursing programme was a British led training programme, the university sponsored a group of nurses who were sent to the USA to obtain their graduate nursing degrees. When the sponsored nurses came back, they were appointed to senior positions in the programme, including the Deanship (Shuriquie, While & Fitzpatrick 2007). These nurses, now senior and influential, emulated the American nursing education system, which they were taught and sought to adapt the curriculum to the new model (Abu Gharbieh 1993).

There was also other nursing programmes which were affiliated to the MOH and the Royal Medical Services (RMS). One such programme was eighteen months in length and graduated ‘practical nurses’. The graduates were people who successfully completed a high school degree in a science, literature, or nursing stream. A third programme, from which graduates were referred to as Associate Degree Nurse’s (ADNs), was a two-year degree programme. During the early 1980s and until the mid 1990s, three ADN programmes were running. One was sponsored by the RMS and the other two by the Allied Health Professions in Jordan. Entry to the Associate Degree in Nursing required applicants to have successfully completed high school in one of the three streams previously described; science, literature, or nursing. To be eligible for ADNs candidate must have successfully completed 54 credits points. Theses credit points includes theory, laboratory skills and clinical practice.

The Jordanian Nurses and Midwives Association (JNMA) fulfils the role of registering nurses and midwives upon completion of preparation at accredited institutions. Just like the Nurses and Midwifery Board (ANMB) in Australia this registration expires yearly with renewal upon payment of fee. A point of difference between the two countries is that nurses in Australia have to satisfy the Australian Nurses and Midwifery Competency (ANMC) annually whereas there are no requirements for ongoing professional development for the renewal of registration in Jordan (Shuriquie et al. 2007).
Mental Illness in Arabic Culture

Causes of Mental Illness

Like all preconceived ideas about mental illness, cultural and religious beliefs also influence people’s perceptions of causes of mental illness in Arabic culture (AL-Issa, 2002). Arab people tend to relate mental illness to possession by a supernatural force, such as demons (Jinn), the evil eye, (Nazr or Al Ein), or magic (Sihr) (Al-Kerenawi & Graham, 2000). Such beliefs are not restricted to Arab culture. A cross sectional study design using a pre-tested, semi-structured questionnaire was administered to 250 adults residing in Karfi village, northern Nigeria. This research by Kabir et al. (2004) revealed that in 19 percent of respondents mental illness was thought to be caused by divine wrath/ God's will and magic/spirit possession (18.0%). The belief in weakness of character as a cause of mental illness was a finding from a study undertaken by Nakane et al. (2005) and in 2007 The Mark of Shame: Stigma of Mental Illness and an Agenda for Change (Hinshawa 2007) revealed how beliefs about mental illness held by medical practitioners and religious leaders in different parts of the world and at different points in history have influenced persons suffering from mental illnesses and have contributed to their stigma (Kelly 2007).

Throughout history and even in contemporary society there are disparate opinions about what causes mental illness. Belief in supernatural forces as causes of mental illness is common in Arabic mental health research (AL-Kerenawi & Grahan 1999). A study of Negeve Arab Bedouin found that participants had an inherent belief in evil spirits which was also part of a strong pre-Islamic dogma cited in the Quran (AL-Kerenawi & Grahan 1999). The evil spirits for example Shaytan and Jinn are thought to be the sources of mental, physical and psychosocial suffering (AL-Kerenawi & Grahan 2000). Cultural and religious beliefs are likely to have a notable impact on Arab people’s ability to understand the modern concept of mental illness and its treatment (El-Islam 2010). This is an important understanding given that this research is situated in Jordan.
Mental Health Service Utilisation

Arabic people often hold strong Christian or Muslim religious principles that promote either emotional health or emotional strain in time of crisis or sickness (AL-Kerenawi 2002). Traditional and religious healers are considered a vital element within the Arab culture and complimentary to modern professional mental health resources. There are different healing rituals that Arabs (both Christian and Muslim) practice to find solutions to resolve their psychosocial, physical and mental health problems (AL-Kerenawi 2002). The success or not of treatment is related to acceptance, cultural beliefs and trust in the treatment programmes.

Mental health services in Jordan are not well recognized or understood, and many Jordanians lack knowledge about psychiatric illness and treatments (Daradkeh 2009). In Arab culture generally and the Jordanian culture particularly, people do not understand mental health services, and have limited familiarity with psychiatric treatment. In general people are unable to distinguish between different professions such as psychiatrists, psychologists, and other mental health professionals (AL-Krenawi, Graham & Kandah 2000). Furthermore, Arab people were found to be less familiar with what are considered as western mental health treatment models such as psychotherapy (AL-Krenawi et al. 2000; AL-Krenawi 2002). In professional Arab mental health services, western models of treatment and care are not widely used, and if they are used, they are typically assimilated with Islamic approaches to therapy (AL-Issa 2002).

Stigma

As indicated above, stigma remains strong in relation to people who have a mental illness (Daradkeh 2009). Consequently, as is the case in Jordan, resort is often made to faith healers and religious leaders before or even after visiting a psychiatrist. There is great ignorance about mental health in all sectors of society; rich, poor, illiterate and educated. Stigma also affects the status of psychiatry among the other medical specialties. This has restricted progress in the delivery of psychiatric services in Jordan (Daradkeh 2009).
The stigma of receiving psychiatric treatment has a profound effect, particularly among women who, in Jordan, represent the family’s honor. The lower attendance rates of women seeking help for mental health issues compared to men is consistent with cultural tradition that encourages them to be dependent on men (AL-Issa 2002). Stigma associated with psychiatric treatment has marked negative consequences for marital prospects among unmarried Arab women (AL-Krenawi & Grahan 1999). As a consequence of cultural barriers, women who have mental health issues may seek treatment from non-psychiatric specialties such general practitioners, gynecologists, and neurologists rather than mental health services (AL-Krenawi 2005).

It is only in the recent past that the Jordanian people have started to look at the stigma that is associated with mental illness in a new light. Slowly, Jordanians have begun to realize that mental health is as important as physiological health, and that mental health issues also need to be treated as the need arises. Therefore, since this taboo-like situation is slowly changing, the need for more and better psychiatric health care institutions is felt quite strongly (Daradkeh 2009) as is the need for research in the area of mental health. This research contributes to this knowledge gap.

**The family role**

Arabic families play a vital role in determining whether an individual will utilise mental health services. Traditionally, in Arab culture, an individual’s behaviour is perceived to be a reflection of the extent to which the whole family upholds social values, norms and expectations (Erickson & AL-Timimi 2002). Social reputation is believed to be a crucial factor that should not be compromised by any shameful threats (AL-Issa 2002). Arab families show preferences in providing support for family members when needed, but they are also very intolerant when dissatisfied with a family members’ behaviour. The family appears to be an important factor in shaping fundamental values and beliefs and influencing attitudes to help seeking (AL-Issa 2002). The decision to seek help for psychological problems is determined and predominantly made by males in the immediate family or by elders within the extended family (AL-Krenawi & Grahan
Help seeking is perceived as a “collective enterprise” and mental illness is considered a family matter (AL-Krenawi et al. 2000 p. 507).

This discussion outlines how religious beliefs, social stigma and a traditional family structure which is the main support system in Jordan, has a major influence in mental health care utilisation in the Arabic culture.

Mental health services in Jordan reflect the various changes in the history of the country. Until 1966, mental health services in Jordan were delivered through only one psychiatric hospital in Bethlehem, serving both East and West Banks. After the 1967 war, patients on the East Bank had no access to the services of this hospital. As a result of this the Ministry of Health established a 60-bed ‘mental hospital’ at Fuhies (East Bank), with a specialised clinic that operated three days a week. In 1987, the National Centre for Mental Health (NCMH) was opened to provide mental health services and a national committee was formed in 1988 to enhance the development and implementation of a national programme of mental health.

**Mental Health Service Delivery**

The mental health authority in Jordan is led by the head of mental health specialty within the Ministry of Health. The majority of the mental hospitals (accepted nomenclature in Jordan) are organisationally integrated with mental health outpatient facilities. This means that each mental health facility has a co-located outpatient clinic. There are no community based mental health services in Jordan. The main providers of mental health services in Jordan are the Ministry of Health, the Royal Medical Services and the private sector. In Jordan, all mental health beds are located within four mental hospitals two of which are operated by the Ministry of Health National Centre for Mental Health. These include AL-Fuhies public mental health hospital, a 250 bed facility located at Al-Fuhies in northwest Jordan, and AL-Karamah public mental hospital with 170 beds, at Na’our in southwest Jordan. Marka Military Hospital which is operated by the Royal Medical Services provides a 40 bed facility at Marka. Further to this, there is also a private mental health facility. This is known as the AL-Rasheed mental health hospital and has 120 beds at Abu Nusier in the North of Jordan.
There are 8.27 mental health beds per 100,000 population provided by Jordan’s mental hospitals. These facilities serve 45 patients per 100,000 population and have an occupancy rate of 97 percent (MoH 2010). The following section provides a more detailed description about Jordan’s psychiatric hospitals.

**National Centre for Mental Health**

The National Centre for Mental Health (NCMH) is the biggest psychiatric hospital in Jordan. According to Islamic regulations, which apply in Jordan, each public hospital is divided into female and male wards; they are separate from each other. The male ward in the NCMH consists of three acute psychiatric units and two sub acute psychiatric units as well as a unit for patients who have an enduring chronic mental illness. The female ward also has an acute psychiatric unit and two units for patients who have an enduring mental illness. All of the wards are located in one section of the hospital. There are a total of 78 beds for individuals with mental illness in forensic inpatient units located in NCMH. Theses beds account for 1.39 per 100,000 population. The NCMH has ten psychiatrists who work with one hundred and twenty five nursing staff. Three social workers and nine psychologists also provide clinical care. At capacity, the NCMH can house 250 inpatients. Within Jordan, the National Centre for Mental Health has a recognized teaching and training role, promoting the professional development of hospital medical officers, nurses, social workers, psychologists and medical students.

**AL-Karamah Public Hospital**

This hospital contains one hundred and fifty beds and specialises in the provision of care and treatment for patients who have enduring mental illness. AL-Karamah Public Hospital consists of three chronic units for people with long term mental health problems. The hospital is staffed by twenty five nursing clinicians (registered nurses and practical nurses) and has five psychiatrists, five social workers and two psychologists.
**AL-Rasheed Private Hospital**

AL-Rasheed Private Hospital is located at Abu Nusier in the northern part of Jordan. It was established in 1996. The major services that the hospital provides include a 24 hour crisis intervention and home service. As with other hospitals, genders are segregated. AL-Rasheed Private Hospital provides psychological care and rehabilitation services for psychiatric patients. The hospital has 120 beds and is managed by ten psychiatrists. There are over 38 nursing staff employed across a mix of nursing qualifications. The majority of nursing staff, 57.9 percent are Registered Nurses, 23.7 percent are Practical Nurses and 18.4 percent are Associate Nurses. Three social workers and three psychologists also work in the hospital. AL-Rasheed hospital boasts modern facilities ranging from contemporary catering services to treatment facilities including an Electro Convulsive Therapy (ECT) suite. This hospital has become one of the leading psychiatric centres in Jordan and has developed into an institution of choice for psychiatric study and research. The hospital provides specialised professional development for nurses and psychiatrists.

**Marka Military Hospital**

The psychiatric unit at Marka Military Hospital, part of the Royal Jordanian Medical Services, provides psychiatric services primarily to take care of problems faced by members of the armed forces and their families. Despite the military focus, civilians are also treated in the hospital. The specialist psychiatric unit was established in the mid 1960s in the Marka Military Hospital. Located at Amman, the unit has 20 beds for males and 10 beds for females. Most of the doctors in this hospital were sponsored to travel to the United Kingdom to receive training in psychiatry and to obtain their medical qualifications. This military hospital offers more professional development training programmes for both doctors and nurses than other hospitals.

The current psychiatric unit has 10 qualified specialists in psychiatry who hold registration with the Jordanian Board of Psychiatry, which is the highest qualification in this discipline in Jordan. Two of these specialists are also members of the Royal College of Psychiatrists in the United Kingdom. Two others have a diploma in forensic
psychiatry and a diploma in child psychiatry from the United Kingdom. Also at the unit, there are three clinical psychologists, a social worker and 17 trained psychiatric nurses.

**Residential Facilities**

There are three additional residential facilities (100 beds in total) specifically for individuals with alcohol and substance abuse problems in Jordan. The main facility is the National Centre for Rehabilitation of Addicts which belongs to the NCMH. There is also a drug and alcohol abuse unit administered by the Ministry of Interior, Security Department. Three residential facilities, totaling 417 beds administered by the Ministry of Social Development, provide services for individuals aged 12-40 years who have mental disabilities (mainly mental retardation – also accepted nomenclature in Jordan). There are a total of 64 outpatient mental health facilities in Jordan. 37 (58%) are MoH facilities, seven (11%) are RMSs facilities and 18 (28%) are private. Only three (5%) outpatient facilities provide specialist care for children and adolescents. These include two outpatient clinics at RMSs and one at Jordan University hospital. These outpatient clinics provide services to an estimated 305 patients per 100,000 head of population.

**Mental Health Human Resources**

There are an estimated 1.09 psychiatrists, 0.54 medical doctors (not specialised in psychiatry), 3.95 nurses, 0.27 psychologists, 0.3 social workers and 0.09 occupational therapists per 100,000 head of population in Jordan. This compares to 3.07 psychiatric beds, 11.3 psychiatrists, 63.4 mental health nurses and 23.3 psychologists, social workers and occupational therapists in Australia (Australian Bureau of Statistics 2011). Jordan has about 61 psychiatrists including 16 in the MoH, 12 in RMSs, 25 in the private sector and eight in the universities. There are about 15 psychologists registered in Jordan, 210 psychiatric nurses, 17 social workers and five occupational therapists. There are more than 300 educational psychologists who are working in association with the Education Ministry and these clinicians also provide support to students who develop mental health issues (MoH 2010).
Nursing Education

There are twelve nursing schools in Jordan, seven governments and five private, which graduate bachelor degree general nurse practitioners. Nursing students undertake 12 hours per week for 16 weeks clinical training in the government and private mental health facilities in the third year of a four year bachelor degree programme. The focus of the education is the therapeutic use of self when providing nursing care to people who have a mental health issue. The student is expected to be able to integrate their clinical practice with content learned in their theory courses and to apply the nursing process within the therapeutic nurse patient relationship with the emphasis being on a humanistic, holistic approach. Further, they are expected to be able to develop good communication skills with other members of the health care team so as to facilitate the patient’s healing process in a structured environment. Within the Baccalaureate programme four percent of the course is devoted specifically to mental health (Ministry of Higher Education 2010).

Medical Education

There are four medical schools in Jordan. These are located at the University of Jordan, in Amman, the University of Science and Technology in Irbid, the Hashemite University in Zarka and at the Mu’tah University in Karak. Medical students undergo one month of clinical training in the government and private mental health facilities in their 5th year. The Universities have their own undergraduate syllabus. Postgraduate teaching is accredited by the Jordan Medical Council, which is the medical body that administers all academic issues. The council has a psychiatric division that guides the theoretical and clinical aspects of psychiatry. After a four year training programme, which covers basic science and clinical experience, the candidate sits the psychiatric board examination. This board provides doctors who pass board examinations with a certificate of specialty in psychiatry (MoHE 2010).
**National Mental Health Programme**

In 1988, a national programme for mental health was discussed at a national workshop held in Amman. The programme’s objectives were: maintaining socio-economic growth for the improvement of citizens’ quality of life; improving public health services and integrating mental health services therein; preventing mental disorders and promoting public awareness in this respect and treating mental illness in a more efficient and less costly way (MoH 2010). The national mental health programme also outlined the service strategies, training strategies, management strategies and strategies required for mental health promotion.

**Mental Health Policy and Legislative Framework**

Until recently, there was no mental health policy in Jordan. In 2008 the Ministry of Health and the National Steering Committee for mental health was established by the Ministry of Health, representing the main mental health stakeholders in Jordan (i.e. The Ministry of Health, The Royal Medical Services, The Ministry of Social Development, The Ministry of Education, The Ministry of Higher Education, the Universities, The Private sector and the International sector) to develop a policy and an action plan to initiate and support mental health reform in Jordan. There is no mental health legislation; however, four articles *Art 13, 14, 15, 16* about mental health and substance abuse are included in the General Health Act. While specific mental health legislation does not presently exist in Jordan, there are a number of laws that pertain to individuals living with mental illness including access to mental health care incorporating voluntary and involuntary treatment and enforcement and other judicial system issues for people with mental illness.

**Article 13**

In any general hospital, a ward can be allocated for those who suffer from mental illness or substance abuse, as long as one psychiatrist or more is hired in the hospital and is assisted by as many resident physicians or other staff as needed for that practice (Jordanian Official Gazette 2008, no. 4924).
Article 14

A- People who are suffering from mental illness or any substance abuse can be admitted to the hospitals or specialised wards voluntarily or involuntarily. Involuntary admission can be allowed in the following cases:

1) If the patient or the substance abuser calls for a treatment that cannot be provided in any place other than the hospital or the specialised ward.

2) If the patient or the substance abuser is harmful for self or others whether physically or emotionally; and

3) If a court’s order was issued for involuntarily admission, the court order should be based on medical consultation.

B- for the involuntarily admission mentioned (1) (2) (3) from article 14 (A), the following conditions should be provided:

1) A formal application should be submitted to hospital’s director;

2) A psychiatrist’s report should be made that confirms the application submitted to the hospital’s director; and

3) An approval for the admission should be obtained from the hospital’s director or his deputy. (Jordanian Official Gazette 2008, no. 4924).
Article 15

If admission was involuntary, the Minister can decide whether to refer the patient to a specialised committee of mental health to confirm the reasons that led to that involuntary admission, and based on that, the Minister can delegate the committee to decide whether the patient should be discharged, or the admission should be continued, except for the case mentioned in point (3) from Article 14 (A) (Jordanian Official Gazette 2008, no. 4924).

Article 16

If the patient was treated or was stabilized and can be discharged from the hospital, the physician, along with the hospital’s director of approval, can write the discharge order and notify the discharge date to the family. The court should be notified if the admission was made by a court order (Jordanian Official Gazette 2008, no. 4924).

The previous chapter outlined the socio and the geopolitical context of Jordan. It provided for the reader, a contextual understanding of the country, health care system and the provision of mental health services, including legislation. Vastly different from that of Australia, the chapter also demonstrated differences in accepted nomenclature. Based on this chapter the reader now has an understanding of the nature of mental health care in Jordan and can appreciate the site specific perspectives as they relate to this study.

Chapter 3 which follows, will describe in detail literature related to the perceptions of ward atmosphere globally.
Chapter 3

Introduction

The previous chapter explained the cultural and sociogeopolitical characteristics of Jordan. It also discussed in detail the general health system and mental health system inclusive of occasions of service as well as institutional funding arrangements. The purpose of Chapter 3 is to continue to build the thesis and to provide a context for this study. This chapter will therefore provide an in-depth literature review relevant to the perceptions and measurement of ward atmosphere; the focus of the research.

This chapter is organised into six main sections. The first section explains the process of the literature review that was undertaken to review the studies related to the perceptions of ward atmosphere. The second section provides background information about the importance of the therapeutic milieu and includes a review of Irving Goffman’s seminal works as they relate to implications of the psychosocial environment. The third section presents the scales that were used to measure ward atmosphere prior to the adoption of the Moos Ward Atmosphere Scale (WAS). In addition, this section presents the historical development of Moos WAS which includes the creation of the dimensions of the WAS and the definitions of WAS’s subscales. The fourth section presents the main themes that emerged from the retrieved articles. These themes include a) definitions pertaining to atmosphere b) factors that may impact on the perceptions of ward atmosphere c) the importance of ward atmosphere d) the scales and statistical analysis commonly used for these scales e) significant patterns observed in responses about perceptions of ward atmosphere and themes and f) a translation issue raised by researchers from some European countries and the revision of WAS in these countries. This is important given that the site for this study was Jordan and the scales had to be translated to Arabic. Section five addresses the gaps that were found after analysis and review of the retrieved articles with the final section providing a summary of the chapter.
Systematic Analysis of the Literature

Databases which contained nursing, social sciences and psychological literature were searched. Four large and extensive databases were accessed. Specifically, through EBSCO, a site dedicated for efficiently searching through multiple scientific and academic databases simultaneously, Health Source – Nursing and Academic Edition, Medline, CINAHL and the Psychology and Behavioural Sciences collections were utilised as the sources of literature for the study. These databases were selected because aspects such as relevance and key areas are covered and the availability of relevant articles obtainable through such databases was enhanced.

The main topic of the search was the perception of ward atmosphere in psychiatric hospitals. Therefore, the keywords used in the search were ‘ward’, ‘atmosphere’, ‘milieu’, ‘environment’, ‘milieu therapy’, ‘therapeutic milieu’ ‘environment’ ‘hospital environment’, ‘social climate’, ‘perception’, ‘measure’ ‘mental health’ ‘mental illness’ ‘psychiatric illness’ and ‘ward atmosphere scale’. These keywords were found to be used interchangeably with ward atmosphere as some studies used them as surrogate terms. The literature publication years ranged from 1990 to present, although some seminal works (e.g. Goffman) were also included. The search was delimited to articles written in English to ensure proper understanding and analysis. As a result, around 130 articles were identified. The articles were then comprehensively and systematically reviewed in order to apply the following inclusion and exclusion criteria.

The first inclusion criterion was studies conducted in hospital settings to investigate the perceptions of ward atmosphere. The second inclusion criterion was all research designs. The third inclusion criterion was studies that investigated the ward atmosphere and included staff, patients and significant others in psychiatric hospital settings as participants. Literature that was excluded incorporated studies which were not primary research articles, and studies not conducted in hospital settings.

All documents retrieved from the search were reviewed for relevance and coverage by closely examining the aim of the studies. Consequently, the relevant documents were
fully read, analyzed and extensive notes were taken to summarize the main ideas, including the research purpose, methodology, tools, main findings and recommendations. Based on the above procedures, 29 peer reviewed articles were deemed relevant. The retrieved articles included studies conducted in the United States of America, the United Kingdom, Sweden, Norway and India. Participants within these studies consisted of different types of staff in psychiatric settings such as Registered Nurses (RNs), Licensed Practical Nurses, Social Workers and Psychiatrists. Some studies also included patients. In addition to the above, one study included professional visitors such as medical students and psychiatrists. Nearly half (n=13) of the articles included nurses and patients within their sample; 10 articles included patients only; six articles included nurses only and only one article included a mix of nurses, patients and others. It is important to point out that amongst the 29 retrieved articles all of these studies used Moos WAS. However, none of the articles explained the historical development of Moos WAS. Therefore, additional sources indicating the scales that were used to measure the perceptions of ward atmosphere prior to Moos and the historical development of Moos WAS throughout the decades were also considered necessary. These sources were obtained by examining the reference lists of the 29 retrieved articles and also by broadening the search to include historical commentary.

The importance of the therapeutic milieu

The term milieu is a French word meaning “middle place.” The English translation of the word is “surrounding” or “environment” (Bekhet & Zauszniewski 2011). In psychiatric and mental health nursing, milieu refers to the people and other social and physical factors in the environment in which a patient interacts (Shives 2008). In psychiatry, therapy involving the milieu or environment may be called milieu therapy, therapeutic community, or therapeutic environment (Bekhet & Zauszniewski 2011).
The term “milieu therapy” has long been used in psychiatric and mental health nursing to denote the purposeful use of people, resources and events in the immediate environment (ward or unit) to ensure the patient’s safety, promote optimal functioning in daily activities, develop or improve interpersonal skills and foster the capacity to manage outside the institutional setting (Kneisel, Wilson & Trigoboff 2004). As early as 1958 Redl (2010) described the value of the therapeutic milieu and how this value was even represented in Freud’s conditions of a psychoanalytic hour. Milieu therapy has been defined as the use of the total environment as a therapeutic agent, while therapeutic milieu implies a more healing environment (Shives 2008). The goal of milieu therapy is to manipulate the environment so that all aspects of the patient’s hospital experience are considered therapeutic. A therapeutic setting is said to enhance the patient’s ability to learn adaptive coping, interaction and relationship skills, that can then be generalized to other aspects of his/her life (Bekhet & Zauszniewski 2011).

**Evolution of milieu therapy**

Milieu therapy is rooted in the moral therapy movement, which began in late 1700s and flowered in the 19th Century (Oeye et al. 2009). Norton and Bloom (2004) describe how this movement emphasizes the patients’ up-bringing and re-socialization. At the turn of the 20th Century, Maxwell Jones established a psychiatric treatment environment that was radically different from the authoritarian custodial approach to patient care that was very prevalent at that time (Jones 1953). Recognising that the milieu could serve as a healing force in the treatment of psychiatric patients, Jones established a therapeutic community, which emphasized open communication, patient involvement in the treatment planning and decision making and open discussions of interpersonal conflicts. The “therapeutic community” movement, which proliferated following the Second World War through the writings of Maxwell Jones, transformed the concept of the ward milieu from a background variable to the very centerpiece of treatment. The ward community was seen as the agent of therapeutic (or, anti-therapeutic) change. For a period of time, the most fashionable goal of inpatient mental health programmes was the creation of a therapeutic milieu (Mahoney et al. 2009). During that period, milieu therapy has been reported to have served a variety of purposes. First, milieu therapy is
said to have a practical orientation by organising daily life activities for patients to be able to learn practical and psychosocial skills (Oeye et al. 2009). Second, milieu therapy has characteristics that emphasize patients’ autonomy and active participation in their therapy (Shives 2008). Finally, milieu therapy is a relationship-based intervention in which one emphasizes the interpersonal interactions between the nurse and the patient, to gain therapeutic effects (Vatne & Hoem 2008). This approach nests comfortably with contemporary mental health nursing practice that is based upon the idea of Recovery. Contemporary notions of recovery are that it is a journey in which the consumer takes pride of place and actively participates in decisions regarding their own treatment (Provencher & Keyes 2011).

**Therapeutic milieu processes**

In the late 1970s Gunderson (1978) identified five processes needed for a milieu to be therapeutic: containment, support, structure, involvement and validation. Containment referred to meeting the basic needs and providing physical care and safety to the people within the environment. Support meant giving kindness as the basis for a structure that fostered predictability and control. Structure referred to having a predictable organisation of roles and responsibilities. Involvement related to processes in which the patient attended to and interacted with the social environment and validation meant affirming a patient’s individuality (Mahoney et al. 2009).

**Characteristics of a therapeutic milieu**

Shives (2008) proposed that a therapeutic milieu is characterized by eight characteristics. These are that the milieu should:

1. Be purposeful and planned to provide safety from physical danger and emotional trauma;

2. Promote interaction and communication among clients and personnel;

3. Provide a testing ground for new patterns of behaviour while still allowing clients to take responsibilities for their actions;
(4) provide for consistent limit setting and ensure clients are treated as equally as possible with respect to restrictions, rules and policies;

(5) encourage participation in group activities and free flowing communication;

(6) provide for client respect and dignity;

(7) Convey an attitude of overall acceptance and optimism and

(8) Allow for continual assessment and evaluation of clients’ progress, with modifications in treatment and nursing interventions as needed.

Shives (2008) who notably uses the word client and not patient, suggests that each component is a necessary part of the whole and that all are required if the ward or unit is going to be therapeutic and not just a place of containment.

The role of the nurse in the therapeutic milieu

Milieu therapy can take place in a variety of inpatient and outpatient settings. In the hospital, nurses are generally the only members of the health team members who spend time with the patients on a 24-hour basis, and it is often the nurse who assumes responsibility for management of the therapeutic milieu. In all settings, the nursing process is used for the delivery of nursing care (Bekhet & Zauszniewski 2011). Ongoing assessment, diagnosis, outcome identification, planning, implementation and evaluation of the environment are necessary for the successful management of the therapeutic milieu (Bekhet & Zauszniewski 2011). In-patient environments should be dynamic places, ones that are constantly assessed and then re-assessed for their therapeutic value.

Nurses are involved in all day to day activities that pertain to patient care. Suggestions and opinions of nursing staff are therefore given serious consideration in the planning of care for individual patients (Mahoney et al. 2009). These days, care planning and treatment should also involve the consumer (Beazley & Gudjonsson 2011) who in Australia, is largely in the community. Information from the initial nursing assessment
informs the development of the collaborative health plan. Nurses have input into therapy goals and participate in the regular updates and modification of treatments plans in a therapeutic milieu (Shives 2008). Nurses are responsible for also ensuring that the patient's physiological needs are met. It is nurses who encourage patients to perform as independently as possible in fulfilling activities of daily living whilst simultaneously undertaking ongoing assessments of ability. They use their clinical judgments and provide assistance for those who require it. Assessing physical status is an important nursing responsibility that must not be overlooked in a psychiatric setting that emphasises holistic care (Shives 2008); NSW Health 2009).

**Contemporary use of the therapeutic milieu**

Milieu therapy, as a clinical intervention, appears to be disappearing from mental health practice since deinstitutionalization has shifted the focus of treatment from institutional care into the community (Chang & Horrocks 2006). Muir-Cochrane (2000) suggested that the traditional setting for the delivery of mental health care was the psychiatric hospital, an environment which she argues is highly structured and one in which both nurse and patient adhere to prescribed role behaviours. The conditions of the current psychiatric treatment environment (in-patient wards) are very different from the treatment environment where the therapeutic community concept was first established, particularly in terms of the shortened length of hospital stay and emphasis on pharmacological rather than psychotherapeutic methods of treating patients with acute psychiatric symptoms (Verhaeghe & Bracke 2008). For example, the average length of stay in hospital for psychiatric patients in the United States of America in 2011 was eight days (National Hospital Survey 2011). While in United Kingdom in 2011 it was five days (Porter 2012), Australia in 2011 was 14.1 days (Australian Institute of Health and Welfare 2011), Norway in 2012 was 37 days (Oiesvold et al. 2012) and finally Jordan in 2011 was 47 days (MoH 2011). Despite the deinstitutionalization movement, in-patient care still plays a very important role in mental health care delivery and treatment.
This is particularly so in Jordan where this study was conducted. A biomedical approach to the treatment of psychiatric in-patients dominates in Jordanian psychiatry (Daradkeh 2009). The biomedical model is an approach that seeks to identify the cause and course of illness which through the lens of medicine is understood as a pathological entity (Skorpen et al. 2009). Through this identification of pathology, it is medicine who defines mental illness, decides which members of society have a mental illness and who can be considered healthy (Skorpen et al. 2009). The biomedical model requires that the patient be seen in light of his or her psychiatric illness and that the person’s symptoms and presentations are seen as indications of this.

**The ward atmosphere**

In the 1950s the psychosocial environment of in-patient settings became of increasing interest. There was a major re-evaluation of the traditional disease model and the idea that psychological disturbances reside in the individual alone (Erikson 1950). Observations and naturalist descriptions showing the importance of the ward social structure with regard to patient outcomes were made by Stanton and Schwartz (1954) and Caudill (1958). The contribution of Stanton and Schwartz was important because it revealed that different patient symptoms could be understood by the idea that the “environment may cause the symptom” (Stanton & Schwartz 1954, p.343).

Assessing ward atmosphere began in earnest in the 1960s. Research at this time suggested that some treatment environments produce extremely negative effects on patients. Goffman’s work on *Asylums* (1961) which was one of the first sociological examinations of the social situations of patients and the hospital as subjectively experienced by the patient (Lived Experience) is an example. Goffman claimed mental hospitals had harmful effects on patients and described them as authoritarian systems which forced patients to define themselves as their illness, to change their thinking and behaviour, to suffer humiliations, accept restrictions and adjust to institutional life. Goffman derived these notions from his examination of total institutions in which he placed mental hospitals in the same category as concentrations camps, prisons, homes for the aged, blind, orphans and poor, abbeys, monasteries and military organisations. In
Asylums (1961), Goffman explored the idea of the total institution as an environment filled with encompassing tendencies. These tendencies result in deliberate disintegration with society by ensuring that inmates are segregated behind institutional walls and gates in imposing buildings that are often located on outskirts of towns.

Goffman went on to argue that the people in these total institutions were split into two groups. The larger cohort, “inmates” (now patients) were often incarcerated in the institution against their own will but at the will of society. The smaller management cohort, “the staff”, undertook the surveillance, treatment and control of the larger but less powerful inmate cohort. Each grouping, he argued within the total institutions tends to hold narrow and negative stereotypical views of the other group. The inmates’ thoughts about the staff included that they are highhanded and mean and condescending, whilst staff view the inmates as untrustworthy, bitter and secretive. Goffman suggested that as a result of these beliefs, the interactions and social mobility between the two groups is severely restricted and often only occurs under formally prescribed circumstances.

Goffman believed that people arrived at these institutions with a presenting culture. When people first come to a total institution he says, they already have a well-defined personality, moral character and sense of self which has been developed over many years. Their personality developed as a result of being in their “home world”. This “home world” environment has therefore strongly shaped the person’s way of life and thinking which in turn characterizes their every habit, value, attitude, speech and all the activities of daily living in which they may engage.

Upon arrival at or admission to the total institution, according to Goffman, the presenting culture is systematically challenged and modified. This is achieved by staff systematically and consistently extinguishing behaviours and ideas that they deem as inappropriate and also by ensuring that person does not keep up to date with changes that occur on the outside in society. Upon entering the institution, processes are set in motion to destroy the inmate’s old self and create a new self. Goffman contended that it was the environment, which included the staff, which did this.
Goffman was then, at this time a major catalyst to the flourish of research which set out to answer such questions as: Which treatment setting characteristics relate to treatment outcomes? What influence do staff have over patients? What type of programme is best for a particular patient? Are patients affected by the ward? and How much impact does the treatment setting have on treatment outcome? (Tuvesson et al. 2011).

In order to answer these questions, researchers wanted to establish ways of ‘measuring’ ward atmosphere. Measuring ward atmosphere and hospital performance was the subject of much research. For example, the Opinions on the Mental Illness Scale was constructed by Cohen and Struening (1963). In 1965 The Philosophy of Treatment Form was proposed by Barrell, Dewolfe and Cummings (1965) and Pugh et al. (1969) constructed Staff Opinion Scales.

During this era of scale development, The Ward Evaluation Scale (WES) was first proposed by Rice and his co-workers in 1963. The WES contains 69 statements in true-false format. In this scale for the first time, patients were invited to have an opinion and evaluated the ward and the impact that the ward had on them. Kellam et al. (1967) developed the Ward Information Form (WIF) to assess several relatively easily observable dimensions related to ward atmosphere (e.g. bizarre behaviour, aggressive behaviour and patient-staff ratio). It consists of 72 statements concerning the immediate environment of a patient who is in a psychiatric hospital. By using WIF, Kellam et al. (1967) reported that better treatment outcomes occur when the patient to staff ratio is low, as well when there are lower levels of aggressive behaviour. In order to remove the vagueness in the earlier scales connected with the opinions and perceptions of the individuals, a new scale was proposed by Jackson (1969), known as the Characteristics of Treatment Environment Scale. It consists of 72 statements with 11 points of agreement to measure the attitude of staff. Similarly, a Perception of Ward (PoW) Scale was designed by Ellsworth et al. (1971) to identify the impact of patient involvement in ward management within psychiatric hospitals. PoW consists of 111 statements with a five point Likert type scale. From this scale, Spiegel and Spiegel (1971) developed the Ward Climate Inventory (WCI), which consists of 23 statements taken from the PoW and placed in a six point agreement scale.
From these efforts, Insel and Moos (1974) called the study of human milieu’s “social ecology” and posited several basic assumptions:

1) Human behaviour cannot be understood apart from the environmental context in which it occurs. This statement implies, for example, that accurate predictions of behaviour or of treatment outcome cannot be made solely from information about individuals; information about their environment is essential;

2) Physical and social environments must be studied together, since neither can be fully understood alone. For example, both architectural design and psychosocial treatment milieu can significantly influence patient and staff; and

3) Social ecology has an explicit applied value orientation in that it gathers and utilises knowledge for promoting maximally effective human functioning. The field utilises basic research and practical techniques for the application of knowledge derived from this research toward the end of increasing the quality of the human environment

(Moos 1974).

In 1973, Moos described six major methods of relating characteristics of environments to indices of human functioning. These are:

1) ecological dimensions, which include geographical and architectural/physical design variables;

2) behaviour settings, the only units thus far proposed that possess both ecological and behavioural properties;

3) dimensions of organisational structure;

4) dimensions identifying the collective, personal, and/or behavioural characteristics of the milieu inhabitants;
5) dimensions related to psychosocial characteristics and organisational climates; and

6) variables relevant to the functional analyses of environments.

These dimensions are nonexclusive, overlapping and interrelated. Their common relevance is that each appears to have an important and sometimes decisive impact on individual and group behaviour (Moos 2007).

**The historical development of Moos WAS**

The concept of ward atmosphere and environmental demands or expectations has a long history. Murray (1938 cited in Moos & Houts 1968, p.595) developed the concept of environmental press to describe the ‘force’, or ‘press’, of the environment as affecting the person’s individual needs. Murray (1938, p.121) spoke of the ‘press’ when referring to the unique and private perception that each person has of the events in which he takes part. Murray (1938) suggested that the environment may frustrate or satisfy these individual needs. Thus Murray’s model, which recognized individuality, focuses on how the interplay between an individual’s needs and an environment’s demands influences the individual’s cognition and behaviour.

Moos (1968) believed that behaviour is an interactive function of individual needs and environmental demands. For this purpose and based on Murray’s (1938) needs/press model, Moos (1968) developed a scale to measure the atmosphere of psychiatric wards by asking both the patient’s and staff individually, about the usual patterns of behaviour on their ward. In order to develop this scale, different approaches were used by Moos and Houts (1968). First, two trained behavioural observers with over a year’s experience in working on psychiatric wards observed three different wards for several weeks. These observers, who were instructed to note standard patterns of behaviour which they thought might discriminate between different wards, generated several hundred descriptive items (these included things like:- patients here are encouraged to be independent and there is very little emphasis on what patients will be doing after they leave etc).
Second, the College Characteristics Index (CCI) was employed to generate additional ideas about items which might discriminate between psychiatric wards (Stern 1963). The CCI was constructed by Stern (1963) to measure the global college environment by asking students to answer true or false to items covering a wide range of topics about their college, such as student-faculty relationship, rules and regulations, classroom methods, facilities, etc. Third, Moos examined several books. These included Maxwell Jones’ (1953) Therapeutic Community and Ken Kesey’s (1962) One Flew Over the Cuckoo’s Nest. These were read in an effort to identify different ward atmospheres. The fourth approach which was more qualitative in nature, interviewed patients and staff who had been on different wards to identify differences amongst the wards. Items collected from these four approaches resulted in a collection of 500 items. This large data set was then scrutinized for any overlapping items. The details of the three steps used to undertake this scrutiny are now described.

The items were sorted into categories by agreement between two raters. Twelve dimensions were identified (Spontaneity, Support, Practicality, Affiliation, Order, Insight, Involvement, Aggression, Variety, Clarity, Submission and Autonomy) which were considered adequate to cover all the content areas mentioned in the initial data set. The considerable overlapping of items in each 12 dimensions were eliminated and an attempt was made by Moos and Houts (1968) to equally balance the number of items scored true and the number of items scored false within each of the dimensions. This was done in order to control for acquiescence response set. As a result, the initial 500 items were reduced to 206 items and Moos named this initial collection the Form A of WAS.

Moos dimensions of ward atmosphere

Three sets of ward atmosphere dimensions were formulated based on these 206 items. These dimensions are Relationship, Personal Growth and System Maintenance. The Relationship dimension identifies the nature and intensity of personal relationship within the environment. It assesses the extent to which individuals are involved in the environment and the extent to which they support and help each other (Moos 2007).
Personal Growth considers the potential or opportunities within the environment for personal growth and the development of self-esteem (Moos 2007). System Maintenance assesses the extent to which the environment is orderly and clear in its expectations, maintains control and is responsive to change (Moos 2007). The formulations of these three ward atmosphere dimensions guided the choice and wording of more specific items. More explicitly, each item had to have an emphasis on a dimension. Eg) Relationships dimension (Involvement), Personal Growth dimension (Autonomy), or on System Maintenance dimension (Order and Organisation).

A further explanation of how emphasis to each dimension occurs is provided following:-

Involvement is derived using:-

- patients put a lot of energy into what they do around here
- this is a lively programme
- the patients are proud of this programme

Autonomy is derived using:-

- patients are expected to take leadership here
- patients here are encouraged to be independent
- patients can leave the ward without saying where they are going

Order and Organisation is derived using:-

- patients’ activities are carefully planned
- this is a very well organized programme
- the staff make sure that the ward is always neat

(Moos & Houts 1968, p.597).
In order to test the Form A of the WAS, Moos and Houts (1968) administered the form to both patients and staff on 14 psychiatric inpatient wards in the United States of America. These wards were selected to obtain a sample of a variety of different kinds of wards in different types of institutions. The 14 wards included:

- Three Veterans Administration hospital wards of relatively acute patients; two were all male and one was mixed male and female;
- Two Veterans Administration hospital wards of chronic male patients;
- Two state hospital wards for criminally insane male patients;
- Two regionalized state hospital wards for female patients;
- One state hospital ward for female patients diagnosed with chronic schizophrenia;
- One private inpatient psychiatric ward for acute male and female patients;
- Two psychiatric wards in general medical community hospitals, both of which had both male and female patients; and
- One acute university service ward.

The total number of patients and staff tested on the 14 wards was 365 and 131, respectively. Items were then selected for Form B of the WAS by using the following criteria:

- **(a)** The item should significantly discriminate among wards. Over 90 percent of the items selected did significantly discriminate among wards for patient responses and over 80 percent did so for staff responses;

- **(b)** The overall item split should be as close to 50/50 as possible. This criterion was used in order to avoid items which were characteristic only of extreme wards; and

- **(c)** Each of the 12 subscales should have 10 items, five scored true and five scored false.

The use of these three criteria resulted in a basic 120 item survey. This was titled Form B of the WAS. This survey consists of 12 subscales each measured by 10 items. Moos used this 120 item form with patients and staff in 160 psychiatric programmes in the United States of America and Canada, and constructed the 100-item Real Form (Form R) from these data.
To select items for the Form R of WAS, Moos and Houts (1968) applied four psychometric criteria to the data:

1) No more than 80 percent of respondents should answer an item in one direction (either true or false). This criterion eliminates items characteristic only of unusual treatment programmes. Overall, 90 percent of the items met this criterion for patients or staff or both;

2) Items should correlate more highly with their own subscale than with any other. All of the final items met this criterion;

3) Each subscale should have a nearly equal number of items scored true and scored false to control for acquiescence response set. Of the seven 10 item subscales, two have five items scored true and five scored false; five subscales have six items scored true and four scored false. Two of the nine item subscales have five items scored true and four scored false and one has four items scored true and five scored false; and

4) The subscales should have low to moderate correlation. In fact, the average subscale correlations are 0.25, indicating that the subscales measure relatively distinct characteristics of treatment programmes.

(Moos & Houts 1968 p.597).

Based on these criteria, Moos and Houts (1968) developed the WAS. The WAS scale was designed to be administered to both patients and nurses. Specific details of the WAS will now be discussed.

The WAS is divided into three major dimensions and consists of three forms that measure the 1) actual, 2) preferred and 3) the expected treatment environments of hospital based psychiatric programmes. The Real Form (Form R) measures patients’ and staff members’ views of their current treatment programme, the Ideal Form (Form I) measures individuals’ preferences about ideal treatment programmes and the
Expectations Form (Form E) measures individuals’ expectations about the treatment programme which they are about to enter.

Moos and Houts (1968) developed the WAS Ideal Form (Form I) to enable patients and staff to describe the type of the programme that they would prefer. Form I was developed to measure the goals and values about treatment programmes from patient and staff perspectives. The researchers wanted to identify areas in which both patients and staff members have similar or different goals and to find out how much staff members’ goals vary from programme to programme. The researchers also wanted to compare actual and preferred programmes and to give patients and staff an opportunity to identify areas that they want to change.

Form I and Form E are parallel to Form R. That is, each of the 100 items in Form I and Form E corresponds to an item in Form R. For example, the first item in Form R, ‘patients put a lot of energy into what they do around here’ is rephrased in Form I and Form E as ‘patients will put a lot of energy into what they do’. The scoring key and answer sheet for the three forms are identical (Moos 1996). Form I can be used together with Form R to identify areas in which patients and staff want to change their programme. Form I can be used alone to assess individuals’ current preferences and to monitor changes in preferences among patient and staff.

**Definitions of WAS’s subscales**

Ten subscales of the WAS are used to identify the extent to which the hospital is considered as satisfactory. As indicated earlier, every one of these subscales is used in all three forms which are the Real Form R the Ideal Form I, and the Expectation Form E. Table 1 below presents the WAS' subscales and their definitions as adopted from Moos (2007).
<table>
<thead>
<tr>
<th>WAS Subscales</th>
<th>Definition of the Subscales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>Involvement is a part of the relationship dimension and assesses how active and energetic patients are in the day to day social functioning of the ward. Patient attitudes, such as pride in the ward, feelings of group spirit and general enthusiasm are assessed in this subscale.</td>
</tr>
<tr>
<td>Support</td>
<td>Support measures how helpful and supportive patients are towards other patients, how well the staff understand patient needs and are willing to help and encourage patients and how encouraging and considerate doctors are towards patients.</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>Spontaneity measures the extent to which the hospital environment permits patients to express their feelings towards other patients and staff in the hospital. Spontaneity is considered a part of the relationship dimension.</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Autonomy is related to the treatment programme and is a measure of how self-supporting and independent the patient is with their personal affairs and with reference to their relationship with staff. This measure is essentially dependent on the freedom given by the hospital to the patients.</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>Practical Orientation measures the extent to which a person is able to take care of him or herself once they are discharged from the hospital. This measure involves training for jobs and their ability to set up practical goals.</td>
</tr>
<tr>
<td>Personal Problem</td>
<td>The extent to which the patients’ feelings are respected is measured by the Personal Problem Orientation subscale. Personal Problem Orientation can only result from the extent to which the patient could openly discuss their issues with other patients concerning their feelings and emotions.</td>
</tr>
<tr>
<td>Orientation</td>
<td></td>
</tr>
<tr>
<td>Anger &amp; Aggression</td>
<td>Anger and Aggression measures the extent to which the patients are allowed to enter into argument with other patients and with the staff of the hospital. It also measures the extent to which they are allowed to openly show or display anger and other forms of anger or aggression.</td>
</tr>
<tr>
<td>Order &amp; Organisation</td>
<td>Order and Organisation is a component of the System Maintenance part of the scale. This is a measure of the order in the hospital and the extent to which the patients follow these. It measures the extent to which a schedule is laid down and to what extent these are adopted in the hospital.</td>
</tr>
<tr>
<td>Programme Clarity</td>
<td>The extent to which programmes are congruent with the needs of the patients and whether the programmes are clearly explained to the patients is measured by Programme Clarity. This subscale also measures the extent to which patients understand and practice the programme.</td>
</tr>
<tr>
<td>Staff Control</td>
<td>Staff Control measures the extent to which staff restrict patients. That is, the strictness of rules and schedules. This subscale measures steps that are taken to keep patients under effective control.</td>
</tr>
</tbody>
</table>
Moos and Houts (1968) developed the WAS to measure the social climate of wards within psychiatric institutions and to capture various aspects of the ward environment. The WAS, as discussed earlier, is based on the theory posited by a number of people including Goffman, that the social environment, where people work, is composed of the inter-relationships and the environment.

The WAS is divided into three dimensions:

1) The Relationship Dimension, which includes the subscales of Involvement, Support and Spontaneity. All of which measure characteristics of relationships between staff members and clients.

2) The Personal Growth Dimension, which encompasses the subscales of Autonomy, Practical Orientation, Personal Problem Orientation and Anger and Aggression. These measures the degree to which treatment programmes stress or utilise specific therapeutic approaches.

3) The System Maintenance Dimension which is composed of the Order and Organisation, Programme Clarity and Staff Control sub-scales. These measure the degree of order, organisation and clarity, as perceived in treatment units.

(Moos 2007).

Emergent Themes

Defining ward atmosphere

Several studies attempted to offer a definition of ward atmosphere. The terms ward atmosphere, social climate and social milieu were though used interchangeably. Brunt and Rask (2005) conceptualized the ward atmosphere as the social climate of the ward unit. According to Brunt and Rask (2005 p.640) the ward atmosphere is the ‘personality’ of a setting, in this case a psychiatric ward/s. Rigby, Leach and Greasley (2001) described ward atmosphere as being composed of a set of unique characteristics that give the setting unity and coherence. Such characteristics they argue, arise from
everyday events and from both the interactions and the views of those within it. This concept concurs with the idea described by James, Milne and Frith (1990) that no patient can remain uninfluenced by the environment in which s/he is residing. More specifically, ward atmosphere consists of both tangible and non-tangible materials which can be found inside the psychiatric ward and which are presumed to influence and affect the activities of the hospital staff and attitude of the patients (James et al. 1990). A similar definition was found in the study by Morrison, Burnard and Phillips (1997, p.422), who used Ajdukovic’s (1990) definition of ward atmosphere as ‘a set of properties relating to the internal environment of an organisation, as they are perceived by its members”. These properties are assumed to have a major influence on behaviour. Another definition of ward atmosphere, this time offered by Melle et al. (1996) is ‘the final common pathway of certain treatment programme and setting characteristics, including the amount of group exposure and group quality, the amount of individual support and care, and the number of patients in the ward (p.169)’.

In light of the above, ward atmosphere incorporates the impact of not merely the structure of a building or physical environment, but also of the people that make up that environment. The ward atmosphere is influenced by both the patients and the staff and how they relate to each other, how accessible and receptive the staff are, whether there are therapeutic programmes, how well staff interact with each other and how they interact with the patients. The morale of staff and the patients can also be seen to affect the atmosphere of the ward.

The definitions of ward atmosphere provided in nursing literature generally share the main dimensions of the concepts, but not all of them. However, they could not provide a comprehensive view of ward atmosphere that would allow for an empirical testing of the concept. Brunt and Rask (2005) cited that Moos as one of the leading investigators of ward atmosphere has offered one of the most thoughtful definitions of this concept. According to Moos, ward atmosphere is ‘the personality of a setting or environment which gives it unity and coherence’ (Brunt & Rask 2005, p.640). The personality of a setting is similar to the personality of a person in that it can be friendly, relaxed and open, or rigid and controlling. The way that the ward atmosphere is perceived is critical.
because the ward atmosphere exerts a strong influence on people in a given setting (Moos, 1974 cited in Brunt and Rask 2005). The influence of the ward atmosphere has an impact on an individual’s morale, achievement and self-understanding (Moos, 1974a cited in Brunt & Rask 2005). This definition provides a comprehensive scope of ward atmosphere as it defines the ward atmosphere in a clear, detailed yet precise manner.

To summarize then, ward atmosphere deals with not only the physical walls that make up the building but the people contained within those walls. Each ward’s social climate is different and dynamic as the social climate derives from everyday events from both patients and staff. These individual and changeable factors make the ‘atmosphere’ unique to that ward. How people communicate with each other also adds to the social climate or milieu of that ward. Social perception in general is a product of the interaction between personal and environmental factors, with perceived social climate and specifically, perceived ward atmosphere, being a specific type of social perception (Moos 2007).

The author of this thesis will use the ward atmosphere’s definition, which was offered by Moos. That is ‘the personality of a setting or environment which gives it unity and coherence.’ This definition was chosen because it is comprehensive, clear, straightforward and uncomplicated (Moos, 1974a cited in Brunt & Rask 2005).

**Factors that impact on the perceptions of ward atmosphere**

There are many factors that influence the perceptions of ward atmosphere. These can be divided into internal and external factors. These factors are the concern of medical providers, patients, nurses, allied health professionals and patient’s relatives and they all seek ways to confront the negative effects of these factors in order to maximise favourable outcomes for the patients.

Internal factors associated with ward atmosphere are described as a set of non-physical and non-tangible characteristics (Brunt & Rask 2008). They are specifically composed of the attributes, which influence the interpersonal relationships inside the psychiatric ward as supported by the conveyance of empathy, sensitivity, ability to listen, patience
and the avoidance of negative traits such as dullness, narrow-mindedness, being intolerant and spiteful mentalities (Brunt & Rask 2008). These factors include staff attitude and approach to treatment (Rigby et al. 2001) support profile and programme clarity (Johansson & Eklund 2004).

The first internal factor that influences the ward atmosphere is staff attitude and approach to treatment. Researchers agree that the manner in which staff deal with the patients indirectly influences the outcome of the ward atmosphere in the psychiatric ward (Tuvesson et al. 2011). A more detailed explanation of which lies in the idea that an interactive relationship between the hospital staff and patients allows the development of healthy interaction, which in turn results in a therapeutic environment inside the psychiatric ward (Tuvesson et al. 2011). Furthermore, it is believed that ‘patients are more likely to improve in programmes in which staff are more satisfied with their job and thus establish a more therapeutic environment’ (Tuvesson et al. 2011).

The second internal factor that influences the ward atmosphere is support profile. This factor is about the network of people that provide encouragement and inspiring thoughts to the patient in order for him or her to continue with the treatment procedures that are intended to improve their medical and psychological status (Provencher & Keyes 2011). This factor also includes practical orientation, which facilitates the flow of information, and instructions from the medical staff to the patient and vice versa (Beazley & Gudjonsson 2011). Furthermore, this factor is characterised by the type of people, patient relatives, doctors and other specialists that can present positive motivation to psychiatric patients (Beazley & Gudjonsson 2011).

The other internal factor that is said to influence the ward atmosphere is programme clarity. This factor includes introducing a structured programme of individualized activity for patients, and also includes aspects of enthusiasm and group spirit (Sharac et al. 2010). Moreover, this measure of ward atmosphere describes the strength and integrity of the treatment programme and determines the effectiveness of each in producing favorable responses to patients (Brunt & Rask 2008). These three
aforementioned internal factors directly and indirectly influence the ward atmosphere of an in-patient hospital environment.

External factors on the other hand, describe the physical features of the ward that influence the outcome of the treatment, the daily activities inside the facility and other staff and patient characteristics (Brunt & Rask 2008). More specifically, the external factors focus on the descriptors of hospital staff efficiency, patients’ psychiatric diagnosis and other demographic variables such as age, gender, specific treatment activities, daily actions of patients inside the ward setting including the performance of communal games and other relationship stimulating activities and the cleanliness and physical acceptability of the ward environment for patients (Brunt & Rask 2008).

In the following sections, the sets of the external factors that appear to be influential in shaping the ward atmosphere in psychiatric hospitals and other types of settings will be discussed in greater detail.

**The impact of individual characteristics on the perception of ward atmosphere**

Individual characteristics are another important aspect in relation to research pertaining to ward atmosphere. In fact, several studies have been conducted to assess the impact of certain characteristics upon the individuals’ perceptions of ward atmosphere. Jansson and Eklund (2002a) for example conducted a study about the possible impact of gender upon perceptions of ward atmosphere. Throughout a period of two years patients of different gender and psychiatric conditions, were assessed in terms of their ward atmosphere perceptions through the use of the Community Oriented Programme Environmental Scale (COPES) (Jansson & Eklund 2002a). The COPES is a 100-item 10 subscales rating scale for evaluating the social environment in community based psychiatric programmes. It was developed from WAS by Moos (1974b) and exists in two forms COPES-R, in which the unit’s real environment is measured and COPES-I, in which the respondents describe the Ideal environment. This scale is designed as a self-rating instrument on which the respondents rate statements about the setting as true or false (Jansson & Eklund 2002a). The findings of the study were that variations in ward atmosphere perception may be present among patients with distinct psychiatric
diagnosis such as schizophrenia, schizoaffective disorders and mood disorders but gender did not appear to have had any notable effect upon ward atmosphere perception (Jansson & Eklund 2002a).

From the results of this study, it may be revealed that gender as a demographic variable does not appear to have any impact upon a person’s perception of ward atmosphere. Another study, undertaken by Pedersen and Karterud (2007) attempted to gain further understanding about the interconnections between ward atmosphere ratings and several individual characteristics. The patient characteristic variables in this study were gender, age and education level (Pedersen & Karterud 2007). The results emphasized that the perceptions of ward atmosphere were not found to be significantly affected by age, gender, or by educational level (Pedersen & Karterud 2007). In this sense, such findings as they relate to gender are consistent with the findings of the previously discussed study conducted by Jansson and Eklund (2002a) in which gender was found to have no impact on perceptions of ward atmosphere.

Strasser, Falconer and Martino-Saltzman (1992) conducted a study to compare the perceptions of the rehabilitation environment among staff, younger patients (<65 years) and older patients (>65 years) at the Rehabilitation Institute of Chicago, United States of America. The WAS was used to measure the patient’s and staff’s perceptions of the ward atmosphere and its suitability, quality and effectiveness in aiding the rehabilitation process (Strasser et al. 1992). The results of this study revealed that older patients had rated lower scores in the subscales of Involvement, Support, Spontaneity, Autonomy, Practical Orientation, Personal Problem Orientation and Anger and Aggression than younger patients and staff. However, older patients rated Staff Control higher than staff and younger patients. Younger patients scored between older patients and staff on the subscales of Involvement, Support, Spontaneity, Autonomy, Practical Orientation, Personal Problem Orientation and Anger and Aggression. Given such data, it may be that the perception of ward atmosphere can be affected by age.

The results of the Strasser et al. (1992) study, proved consistent with a later study conducted by Squier (1994) to assess the relationship between staff characteristics and
ward atmosphere ratings. Fifty eight psychiatric nurses rated their four psychiatric units using the WAS Form-R. A Multivariate Analysis of Variance showed significant relationships between staff characteristics, such as age, qualifications and experience and ratings of ward atmosphere. The results suggest that staff characteristics such as age, qualifications and experience and their perception of ward atmosphere are highly likely to affect positively the way in which they actually interact with the patients on the ward.

Caldwell, Gill and Grandison (2006) conducted a survey in the United State of America to examine the relationship between the perceptions of ward atmosphere and the academic achievements of nurses (Non College Graduate, Undergraduate Degree holder and Graduate Degree holder). A sample of 79 staff in a state- operated psychiatric facility were completed the survey. Analysis of Variance (ANOVA) tests were used to analyse the data. The results of this study revealed that there were significant differences among the academic achievement groups (Non College Graduate, Undergraduate Degree holder and Graduate Degree holder). Non college graduates perceived less Anger and Aggression than undergraduate and graduate degree staff. Non-college graduates also perceived higher Order and Organisation than either undergraduate or graduate degree holders. These results indicate that the perceptions of Anger and Aggression and Order and Organisation subscales were found to be significantly different among the levels of academic achievement. This may be the result of the time spent on the ward and the level of sensitivity to the ward atmosphere by each group.

The above study concluded that personal characteristics such as the presence of younger patients and staff, promote supportive treatment environments that have higher expectations for patients’ performance, and thus impact WAS by having higher level of Involvement, Support, Spontaneity, Autonomy, Practical Orientation, Personal Problem Orientation, Anger, and Aggression than older patients have. However, older patients perceived more Staff Control than did staff respondents and the younger patients. More experienced and more highly educated staff may be especially important in raising the emphasis on lower levels of Anger and Aggression and higher level Order and Organisation subscales of WAS.
The impact of physical environment on the perception of ward atmosphere

The physical environment of wards plays a major role in creating and conveying a therapeutic ward atmosphere (Long et al. 2011). These factors include the location of the ward with respect to other facilities, the size of the ward and whether overcrowding occurs. It also includes its physical layout including bedrooms, bathroom and recreational areas as well as the security measures required (Long et al. 2011).

In this vein, a study conducted by Gross et al. (1998) focused on the role of the ward as a healing environment, which in part is determined through the presence of appropriate physical structures or designs. To further explain, the study was an attempt to develop a psychiatric hospital with enhanced features in terms of design and functionality so as to enhance the condition of both patients and staff. Particularly, the rationale behind such a claim emanated from previous studies which identified that beneficial effects, in relation to the healing process, may be induced through an enhanced physical structure (Gross et al. 1998). In this sense, the study was in fact, an actual attempt to design a healthcare facility according to information on how structural aspects should be developed so as to provide a positive environment for healing. The results of this study suggested that creating some improvements to psychiatric hospital design such as applying a porch or verandah that provides improved accessibility to the lawn, a ceiling that provides lighting through natural means, as well as a spacious and welcoming main entrance can provide an important and effective factor to create better healthcare environments with positive effects on the healing process. The study supported the prediction that a planned environment may favorably impact both patients and staff (Gross et al 1998).

Ulrich and Zimring (2004) argue that just as medicine has increasingly moved toward an evidence base, where clinical decisions are informed by research, healthcare design is increasingly guided by rigorous research linking the physical environment of hospitals to patients and staff outcomes and is moving toward “evidence-based design”. They found that ward design characteristics, such as single-rooms versus multi-bed rooms, reduced noise, improved lighting, better ventilation, better ergonomic designs, supportive workplaces and improved layout that can help reduce errors, reduce stress,
improve sleep, reduce pain and drugs and improve other outcomes. A growing scientific literature is confirming that the conventional ways that hospitals are designed contributes to stress and danger, or more positively, that this level of risk and stress is unnecessary. Improved physical settings can be an important tool in making hospitals safer, more healing, and better places to work (Ulrich and Zimring 2004).

Many studies have been conducted to ascertain if renovating the ward environment will change the ward atmosphere (Mistral, Hall & McKee 2002). The goals of these studies have been to produce data that will inform the creation of a more caring environment for people with a mental illness. The studies took into account that people who are acutely unwell may have heightened senses about their environment. In this sense, Hansen and Slevin (1996) conducted a survey on an inner-city psychiatric hospital in the USA to investigate the effects of the therapeutic community principles upon milieu treatment variables using the WAS as a measure. Therapeutic community principles can be defined as a comprehensive treatment system, which provides a highly structured daily routine, group activities, psychoanalytically oriented psychotherapy, resident participation in decision making, co-operation with the surrounding society and active staff interaction (French et al., 2002, pp 137).

Data were collected from 40 patients who voluntarily agreed to participate in the WAS survey. T-tests were conducted to determine if programming changes had a significant impact on patients’ ratings of ward atmosphere. The results of this survey found that there were significant differences between experimental and control units on several subscales of the WAS following the introduction of therapeutic community principles. These findings indicated that the introduction of these principles in treatment programmes and enhanced ward atmosphere factors are important to patient recovery.

Smith and Roberts (1996) conducted a study to measure the effects of planned changes on a therapeutic environment for patients who were living with long term mental illness. Twenty two patients completed the WAS. The Mann-Whitney U test was used to analyse the data. Findings indicate that the patients initially had a relatively negative view of the ward atmosphere. They felt uninvolved and unsupported, found little help
with practical tasks and personal problems and found the ward badly organised with unclear treatment programmes. On the positive side, patients experienced low levels of Staff Control and felt that they were encouraged to be Autonomous and Spontaneous. The expression of Anger and Aggression on the ward was at a low level. A year after implementation of a therapeutic rehabilitation programme, this view had changed markedly and was maintained over the next two years. These findings demonstrated that a ward atmosphere could be changed for the better relatively quickly and there are emerging indications of the kind of environment, which should be aimed for. It is also notable that the patients themselves are able to give meaningful opinions about aspects of their treatment environment, which they find helpful or unhelpful.

Mistral et al. (2002) conducted a study to assess the effects of interventions within a high care psychiatric ward, based upon the principles of a therapeutic community. Interventions included an enhanced physical environment such as renovations to the ward kitchens and bathrooms, new carpets were installed and fresh paint was applied to all bedrooms and communal areas. Further to these physical changes there was improved communication, the introduction of clear rules and aims as well as improved safety procedures. An assessment using the WAS, Attitude Scale measured the staff attitude regarding skill and knowledge adequacy and feeling of self-esteem in this work, and interviews with staff indicated an improvement in ward atmosphere and staff attitudes. The results also showed that when the ward records and patient notes, were examined, a substantial reduction in the use of seclusion for aggressive patient behaviour and a 62 percent reduction over two years in short-term staff illness was revealed. Levels of staff absenteeism are an indicator of work morale and commitment (Rantanen & Tuominen 2011; Schalk 2011; Totman et al. 2011). Mistral et al. (2002) concluded that if the patients were treated with respect and given a decent environment then they in turn would treat their environment with more respect. The aforementioned findings point to some important determinants of the ward atmosphere. In general, factors taken into account when assessing the ward atmosphere are staff attitude and approach to treatment, support profile, programme clarity, patients and staff characteristics, physical environment and daily activities inside the facility.
The significance of measuring ward atmosphere

As discussed earlier in this chapter it has been recognized for decades that the ward atmosphere, the environment in which health care is delivered has an impact on both treatment process and its outcomes (Middelboe et al. 2001). Several studies, including those discussed previously in this chapter, have shown that ward atmosphere is related to patient satisfaction (Middelboe et al. 2001). Most of the studies in the area have used patients’ satisfaction as their main dependent variable with patients’ satisfaction demonstrated as a valid measure of the quality of treatment (Druss, Rosenheck & Stolar 1999 cited in Rossberg et al. 2006).

A Danish study was conducted by Middelboe et al. (2001) to investigate patients’ perceptions of the environment in acute psychiatric wards, covering both locked and open units. Participants were recruited during a three month period where all consecutive patients who were admitted to the ward were invited to participate in the study. A total of 101 (56%) patients voluntarily consented to participate. Thirty patients from locked units participated along with 71 from open units formed the participant group. The 101 recruited patients were asked to complete the WAS (Real and Ideal forms) and satisfaction questionnaire.

The satisfaction scale used consisted of five items concerning satisfaction with other patients, medication, other treatment modalities and with the staff and patients' satisfaction in general. All items were scored on a five point scale ranging from 1 (very dissatisfied) to 5 (very satisfied). The scale was an adaptation of the Good Milieu Index developed by Moos (1974a). The Good Milieu Index (GMI) was calculated from scores based on the following five questions:

- In general, how satisfied are you with this ward?
- In general, how much do you like the patients on this ward?
- In general, how much do you like the staff on this ward?
- In general, does what you do on the ward give you a chance to see how good your abilities really are?
• In general, does what you do on the ward help you to have more confidence in yourself?

(Rossberg & Friis 2004).

As indicated the questions were scored on a five point scale with scores proving to be strongly co-related. The sum of the scores constituted an index, which Moos (1974b), found to give reliable and valid information about how patients and staff appreciated a ward atmosphere. Patients in the Middelboe et al. (2001) study were, if necessary, assisted by the staff to fill in the forms. The results of this study found that patients in locked wards perceived more Anger and Aggression and that patients subjected to high level of control by nurses, perceived less Autonomy and Practical Orientation than patients who were not subjected to such control measures. Patient’s satisfaction was predicted by higher scores on the WAS Relationship and System Maintenance dimension. In particular, Support, Order and Organisation predicted satisfaction. This study also revealed that a perceived lack of Support, Autonomy and Order and Organisation were related to dissatisfaction with the ward environment.

Eklund and Hansson (2001) conducted a study in Sweden to investigate the ward atmosphere of a psychiatric work rehabilitation unit and its relationship to patients’ motivation and their satisfaction with the unit. The COPES was used and 52 patients participated. The respondents’ mean satisfaction with the unit was 3.7 (SD=0.7) on a scale where five indicated maximum satisfaction. A stepwise multiple regression analysis showed that more optimal levels of Order and Organisation and Support subscales were related to higher levels of patient’s satisfaction.

These results were consistent with the results of a later study conducted by Rossberg and Friis (2004). This research which was conducted in Norway, examined the extent to which patients’ and staff’ perceptions of the psychiatric ward atmosphere and working conditions of staff influence patient and staff satisfaction. A total of 640 staff members on 42 wards completed the WAS and Work Environment Scale (WES-10). The WES-10 is also a self report questionnaire. The staff rated the items on a five point scale ranging from 1 totally disagree, to 5 totally agree. The WES-10 measures four clinically
meaningful subscales. The four subscales include: 1) Self-realization (a measure of the extent to which the staff members feel supported and whether they feel that they are able to use their knowledge working on the ward);

2) Workload (a measure of the number of tasks imposed on the staff members and the extent to which they feel that they should have been in several places at the same time);

3) Conflict (a measure of the extent to which the staff members experience conflicts and loyalty problems); and

4) Nervousness (a measure of the extent to which staff are worried about going to work and the extent to which they feel nervous or tense on the ward.

A total of 424 patients on the same wards completed the WAS. Both patients and staff members also responded to three questions to capture general satisfaction. Questions such as How satisfied are you with this ward? How much do you like the patients on this ward? and How much do you like the staff on this ward? were asked in order to elicit a response. The questions were rated on a five point scale ranging from 1 very unsatisfied, to 5 very satisfied.

The results indicated that patient satisfaction was strongly correlated with patients’ WAS scores particularly with respect to the Order and Organisation subscale. However, no significant correlation was found between patients’ and staff’s scores on the three satisfaction questions.

Through their use of a Standardized Patient Satisfaction Questionnaire developed by the Swedish Institute for Patient Records (SPRI) and WAS, Gjerden and Moen (2001) examined whether measuring patient satisfaction and ward atmosphere can be used as a means of evaluating an assumed decline in quality of care during a crisis in an open psychiatric ward in Sweden. A convenience sample was used to select 10 patients who were admitted to the ward during the four evaluation periods. The evaluation took place in November and March from the Autumn of 1998 to the Spring of 2000 four times in all. Every patient discharged from the ward from November 1 was asked to fill out the
SPRI questionnaire on their day of departure until the ten questionnaires were obtained. The same procedure was repeated from March 1 until the ten SPRI questionnaires were obtained from the Spring period. A chi-square test was used to assess differences between proportions. Gjerden and Moen (2001) found that the SPRI questionnaire confirmed the decline in patients’ perceived quality of care on six of the 41 questions, while the WAS was markedly lower on five of the ten subscales. These results revealed that WAS and SPRI were able to detect the implications of a crisis that occurred on a ward unit owing to a combination of more patients with serious illness combined with poorer staffing levels.

Rossberg et al. (2006) used the WAS and General Satisfaction Index (GSI) to examine to what extent the different subscales of WAS were related to patient satisfaction on wards for psychotic patients in Norway. A total of 129 patients completed the WAS and the GSI. Z-scores were calculated to describe the fluctuations in the GSI and the WAS subscales. Four WAS subscales: Involvement; Practical Orientation; Anger and Aggression; and Staff Control; were all strongly related to patient’s satisfaction. This study confirms that changes in these WAS subscales seem to be paralleled by changes in patient satisfaction in the expected direction.

The above mentioned findings strengthen the idea that there are important connections between ward atmosphere and patient satisfaction. The results confirmed that patients in programmes that place more emphasis on the Autonomy, Practical Orientation, Order, Organisation, and Programme Clarity subscales and less emphasis on Staff Control tend to be associated with patients being more satisfied with their treatment programme.

Few studies have focused on outcome measures other than patient satisfaction. Melle et al. (1996) studied an intervention that increased the levels of Order and Organisation and decreased the level of Anger and Aggression in a psychiatric ward for patients who had been diagnosed with schizophrenia, after the re-organisation of a general hospital psychiatric ward in Oslo Norway, in 1981. The intervention involved reducing the number of beds and decreasing the number of admissions of patients with non-psychotic disorders. An experienced psychiatrist reviewed the medical charts of 40 patients who
were admitted in 1980 (the year before the re-organisation) and 51 patients who were admisssed in 1983 (two years after the re-organisation). Multiple regression analyses were used to examine treatment outcomes for both groups. Outcomes were measured indirectly by the length of stay, level of functioning at discharge and whether the patient was re-hospitalized during the following seven years. They found that after the reorganisation in the environment was made, length of stay was reduced while level of functioning was increased. This is suggestive of a more rapid improvement in psychiatric symptoms. This study confirms that the atmosphere on short term wards influences the outcomes of patients who were suffering from schizophrenia.

Timko and Moos (1998) conducted a large study of 89 psychiatric and substance abuse programmes in the United States of America and found that high levels of Support, Practical Orientation and Personal Expression were related to positive patient outcomes. The outcome measures used in the study were patient functioning, level of activity and use of programme services. These results indicated that supportive treatment climates that engage patients in personal disclosure and learning practical skills are positively associated with psychiatric and substance abuse patients’ functioning, activity levels and with their use of services.

Another study conducted by Eklund and Hansson (1997) investigated the relationship between the ward atmosphere and treatment outcomes in a psychiatric daycare unit where the programme was based on occupational therapy. A convenience sample was used to select the 19 patients who participated in this study. The ward atmosphere was rated using the COPES and outcome variables included psychiatric symptoms, global mental health, quality of life and functioning in daily life. The results revealed that a low level of Anger and Aggression was significantly associated with improvement in global mental health and functioning in everyday life and that a low level of Staff Control and high level of Practical Orientation were significantly associated with improvement in psychiatric symptoms. The characteristics of the ward atmosphere at the end of the treatment period significantly correlated with various aspects of functioning in daily life. This study demonstrated associations with outcome variables.
not previously linked with ward atmosphere characteristics, e.g. functioning in daily life and quality of life.

Johnsson and Eklund (2004) conducted a study to investigate how patients in psychiatric wards perceived the therapeutic relationship and the ward atmosphere and the interrelations between these variables. They found that all subscales of the COPES except that of Staff Control were significantly correlated with levels of helping alliance or bonds between the patient and the staff (Anger and Aggression being negatively correlated). Support was reported to be the most important subscale. The authors of this study concluded that appropriate and effective helping alliances, or bonds between the patient and the staff, may provide beneficial effects such as enhanced results throughout the course of mental health treatment. Such a crucial finding indicates the significance of understanding the ward atmosphere perceptions of both staff and patients. Specifically, certain subscales have been associated with the possibility of forming such beneficial alliances between the patient and the nurses. To clarify, the effectiveness of helping alliance between nurses and patients, subscales of Support and Spontaneity have been noted to have the most considerable effects in the formation of such alliance (Johansson & Eklund 2004).

The studies presented earlier demonstrated that a relationship between ward atmosphere and treatment outcomes of psychiatric patients exists. Patients in supportive programmes which emphasize self-direction, the development of work and social skills and those which enhance self understanding tended to be more satisfied with their treatment programme. They also reported that their treatment enhanced their self-confidence more so than did patients in non-supportive programmes. Patients in well organised and clear programmes that do not emphasize Staff Control also do better on these programme’s outcomes. Programmes that placed more emphasis on Support and Spontaneity tended to facilitate a therapeutic relationship between patients and staff. Overall, these findings showed that a supportive, well organised ward atmosphere that is somewhat self directed contributes to better treatment outcomes.
Measurement scales and statistical analysis

A common approach within the literature that was analysed was that ward atmosphere was measured via the use of a scale. Twenty five studies employed the Moos WAS. However, four studies employed different scales developed by Moos. These scales are called COPES (Eklund & Hansson 1997; Timko & Moos 1998; Eklund & Hansson 2001; Jansson & Eklund 2002b) and the Correctional Institute Environmental Scale (CIES) (Morrison, Burnard & Philips 1997). Moos developed these scales to assess the perceptions of ward atmosphere of the community settings and the correctional institutions respectively. These studies, although different from most, were included in the retrieved literature because the investigators used these scales to assess the perceptions of ward atmosphere in rehabilitation wards and forensic wards respectively.

In the studies which employed the WAS, the authors intended to measure the patients, staff and professional visitors’ perceptions of ward atmosphere in a variety of psychiatric settings in different countries. Both the Real and Ideal forms of Moos’ WAS were used in the majority of the studies to measure the participants’ perceptions of ward atmosphere.

The researchers in the retrieved studies used many statistical measures to analyse the data that was collected as a result of responses to the scales. The statistical analytical approaches included: independent t-test, Multivariate Analysis of Variance (MANOVA) and Analysis of Variance (ANOVA). These statistical tests analyse the differences between patients and staff’s scores of the subscales of WAS. In addition to these statistical tests a few studies (Moffett & Flagg 1993; Melle et al. 1996) used Duncan’s multiple range tests and Correlation Regression tests respectively to analyse the differences between the participant groups of WAS scores. Some studies such as Morrison et al. (1997) and Smith and Roberts (1996) used the Mann-Whitney U-test to analyse the differences between patient and staff perceptions of ward atmosphere. This statistical test was used since the variables had non-parametric distributions.

It was concluded from the studies examined above that MANOVA, ANOVA and t-test were the most common statistical analysis used to analyse the differences between
patients and staff perceptions of ward atmosphere. Based on this the current study used similar statistical analysis tools as they provided the researcher with the required flexibility in determining the relations and the significance among variables under examination.

**Significant patterns of ward atmosphere scale responses**

Upon close examination, there were distinctive patterns found in the reporting of these studies. These patterns indicated that staff and patients perceived their ward atmosphere differently on most of the WAS subscales. Staff scored significantly higher than patients on nearly all WAS subscales. These studies therefore suggest that staff tend to view ward atmosphere more favorably than patients do. Additionally, perhaps obviously, staff’s perceptions were higher on the subscales that represent positive aspects of their roles and lower in areas that could have negative implications. The most significant disagreement between staff and patients was notably seen in the subscales of WAS occurred in Anger and Aggression and Staff Control. The nurses had a higher level of Anger and Aggression perceptions, meaning that they perceived that the patients had a higher degree of freedom to argue with them and express aggression. Nurses also rated the lowest level for the Staff Control subscale. This was attributed to the fact that as employees of the hospital, they recognise that they have little use of control measures to maintain the stability on the ward. In addition, the variations in response patterns reflect that the concept of ward atmosphere can vary between each patient since each patient’s perception is different. It was also noted that the nursing staff’s perception varied in contrast to the patient’s perceptions, suggestive of the notion that patients and nurses have different roles but are in the same hospital.

In summary, as demonstrated above, the WAS, which was developed by Moos, a prominent psychologist of his time, is the most widely used instrument for measuring the ward atmosphere of psychiatric settings. Both Real (R) and Ideal (I) forms of Moos WAS are typically used to measure the perceptions of ward atmosphere from the perspectives of nurses and patients, and in one case ‘professional’ visitors. Only four studies used scales other than WAS to measure the perceptions of staff and patients.
Statistical analyses such as independent t-test, Multivariate Analysis of Variance and Analysis of Variance were used in the majority of the studies to analyse the data collected from these scales. On the other hand, the Mann-Whitney U-test was used to analyse the data in few studies as the variables had non-parametric distributions. The favored analytical tests however were the MANOVA, ANOVA and t-test.

**Translation issues and revisions of WAS**

As demonstrated by the depth of discussion in this chapter the Moos WAS is the most widely used instrument for measuring the ward atmosphere of in-patient units. The WAS has been standardized in large normative North American and British samples and has shown outstanding psychometric characteristics.

Thompson (1994) addressed significant cultural changes that have taken place in most Western countries. Changes such as the deinstitutionalization movement in Australia in the 1980s led to decreases in hospital beds and staff ratios, shorter inpatient admissions and more community based services (Thompson 1994). Such changes could imply that some of the WAS items which were developed by Moos in 1968 might be considered outdated and no longer clinically relevant. Such cultural changes also influenced the relationship between doctors, staff members and patients. Pedersen and Karterud (2007) found that items like ‘It is a good idea to let the doctor know that he is the boss’ (Staff Control) and ‘Patients can wear what they want’ (Autonomy), do not necessarily measure the same today as they did when they were developed some decades ago. Consequently, several attempts to revise and modify the WAS have been made (James et al. 1990; Pedersen & Karterud 2007). Another critique that is evident within the literature is the length of the WAS. With its 100 items, it is time consuming to complete and its length can cause dropout, especially among patients (Middelboe et al. 2001). In addition to that, the original WAS used the rating options of true or false. This has been criticized in the literature for being too narrow and it has been argued that it is almost impossible to describe some of the statements as either true or false (Rossberg & Friis 2003a).
In response to such criticism, Pedersen and Karterud (2007) conducted a study to revise the Norwegian version of the Real Form of the 100 item WAS for use in the Norwegian Network of Psychotherapeutic Day Hospitals. The WAS was administered to 602 patients who were admitted to five different day hospitals in the southern part of Norway in the period January 1991 to June 1998. Thematic contents and internal consistency were used to analyse the WAS. The internal consistency analysis revealed that the original WAS failed to show any satisfying psychometric properties within the sample in this study (Pedersen & Karterud 2007). A thematic analysis of the items within each subscale revealed two reasonable causes for the weak psychometrics. Firstly, some of the items referred to social structures that are no longer prevalent in Western psychiatry, e.g. ‘Patients may interrupt when doctor is talking’, ‘Staff do not order the patients around’ and ‘Patients can wear whatever they want’. Secondly, many of the items were not representative of the treatment profiles of the psychotherapeutic environments of the present decade, e.g. ‘Very few patients ever volunteer around here’ and ‘Patients never know when they will be transferred from this programme’. As a result, the Original 100 item WAS was revised and 52 items were removed. The 48 item revised inventory which has been labeled Ward Atmosphere Scale for Therapeutic Programme (WAS-TP), has shown better psychometric qualities. One original subscale, Autonomy, was removed completely due to both poor psychometric and thematic substance.

This study suggested that the WAS-TP could be recommended for day hospitals and possibly other therapeutic communities for non psychotic patients. The main limitations of this study were the restricted patient population, and the researchers do not know how WAS-TP will respond when administered to psychotic patients or within other cultural areas. The other limitation to this study was using a seven point Likert Scale rather than a dichotomous response format. This approach is cognitively more complex and may be difficult for patients who have difficulty concentrating or who are unwell. Thus, more studies are needed in order to find out how well the WAS-TP works in other treatment programmes.
Rossberg and Friis (2003a) conducted a study in Norway to examine the psychometric properties of the two subscales of WAS, Spontaneity and Anger and Aggression, which measured the level of expressed emotion. In addition, this study aimed to examine if the items of these subscales (Spontaneity and Anger and Aggression) measure attitude and behaviour from different dimensions. A total of 550 patients in 54 different psychiatric wards for psychotic patients completed the WAS. The internal consistency of the subscales was calculated by Cronbach’s alpha. The Corrected Item Total subscales Correlation (CITC) was also calculated. The results revealed that by removing respectively, four items from the Spontaneity subscale, and three items from the Anger and Aggression subscale the psychometric properties improved. The two revised subscales were named Spontaneous Behaviour (SB) and Angry, Aggressive Behaviour (AAB). A new attitude subscale, comprising three items, was named Staff Attitude to Expressed Feelings (SAEF). The findings of this study confirmed that the perceptions of behaviour and attitudes do not seem to measure a common dimension concerning either Spontaneity nor Anger and Aggression.

Rossberg and Friis (2003b) conducted another study to re-evaluate the psychometric properties of the other eight subscales of WAS after they have reviewed the Spontaneity and Anger and Aggression subscales as discussed earlier. Data collection took place at 54 psychiatric wards for psychotic patients. 550 patients and 822 staff members completed the WAS and GMI. Cronbach’s alpha, the CITC, subscale Intercorrelations and the correlation between subscales and GMI were calculated. The results of this study showed that by removing 16 items, the psychometric properties also improved. The revised subscales had acceptable psychometrics and gave a clearer picture of the relationship between the perceived level of patient satisfaction and the WAS subscales scores. This study also confirms that the Norwegian version of the revised WAS modernized several of the subscales and made it more contemporaneous in its use. Further, the study confirmed that the revised version was useful for examining the ward atmosphere in psychiatric care. The results of the previously mentioned studies indicated that the improvements of the WAS subscales made for use in these studies appeared to make the WAS a more clinically meaningful instrument to use for evaluation and research in today’s psychiatric wards.
Tuvesson et al. (2010) conducted a study to test a Swedish version of the revised WAS in terms of its internal consistency, content, construct, validity and usability. A total of 31 patients and 34 staff at four psychiatric hospitals completed the WAS as well as the content and construct validity questions. The internal consistency of the subscales was calculated using Cronbach’s alpha including CITC. The results showed that the WAS had acceptable to satisfactory internal consistency for all subscales, except for Autonomy. Moreover, the results of the content validity and usability questionnaires indicated that the WAS is easy to understand and complete, but some of the items were difficult for respondents to understand and that some of the respondents were missing aspects of the physical environment. The findings of this study confirmed that the Swedish version of the revised WAS is useful for examining the ward atmosphere in psychiatric care. However, more studies are needed in order to further test the psychometric properties of the WAS, and the results of the usability questionnaire indicated a need to use supplementary instruments in order to capture the physical ward environment as well.

More recently, Sorlie et al. (2010) conducted a study to evaluate the psychometric properties of the WAS in a Russian psychiatric hospital. A total of 212 patients and 96 staff at five psychiatric hospitals for acute psychiatric patients were completed using the WAS. The internal consistency of the subscales was calculated using Cronbach’s alpha including CITC and items revised subscales intercorrelations. The results showed that by removing 32 items, the psychometric properties for all subscales except Autonomy, reached an acceptable level. The findings of this study confirmed that the Russian version of the revised WAS appeared applicable within the Russian psychiatric hospital context. Several of the items that were removed appeared inapplicable because of differences between Russian and Western culture and psychiatry.

The comprehensive literature review showed that no studies have been conducted in Jordan and/or the Middle East to investigate perceptions of ward atmosphere. Therefore, this study is the first study to address the ward atmosphere perception in these settings. This Jordanian study then, contributes another understanding of perceptions of ward atmosphere. The study contributes to the gap in the literature and
further tests the validity of the WAS Moos in another cultural context. The study establishes an empirical framework that describes perceptions of ward atmosphere in Jordanian psychiatric hospitals. In addition, this literature revealed that only one study, which was conducted by Moffett and Flagg (1993) used the professional visitors to the psychiatric ward in addition to nursing staff and patients to rate their Real and Ideal ward atmosphere. These visitors were medical students and psychiatrists and they were not patients’ relatives. This study presents the first study to examine the perceptions of ward atmosphere amongst nurses, patients and patients’ relatives in four psychiatric hospitals in Jordan.

The Moos WAS is written and constructed in English. This study is therefore also the first study to use the Arabic version of Moos WAS. During the translation process of the scale, the researcher tried to follow the American formulations as closely as possible as this made it possible to compare the results of this study with the earlier results from the United States of America.

Throughout the literature review, various informational gaps or points of concern have been identified. While there has been agreement about the significance and role of the ward atmosphere, as indicated from the studies that have been previously discussed, certain aspects regarding the perceptions of ward atmosphere still require further evaluation.

**Summary**

The ward atmosphere has been recognized as an important factor associated with positive patient outcomes. The chapter highlighted characteristics that have an impact on the sub scales as well as the analytical approaches used to formulate findings. In addition, the discussion recognized that staff, patients and patients’ relatives are also affected by, as well as have influence over, the ward atmosphere. Hence, establishing a sound understanding of the ward atmosphere of the healthcare facility is indeed a vital topic for research if better care is to be provided to patients who have a mental illness. In this sense, the psychiatric hospitals in Jordan which are the subject of this research
were assessed in terms of the patients’, nursing staff, and patients’ relatives’ perceptions of the ward atmosphere.

The next Chapter (Chapter 4) builds upon that which was described in Chapter 3 and outlines the methodology adopted in this study. It demonstrates for the reader the approaches taken to conduct this research.
Chapter 4

Introduction

The preceding chapter presented a comprehensive review of the literature relevant to various aspects of this study. This included seminal works by Goffman, the development and modification of the WAS and research pertaining to ward atmosphere. This chapter describes and justifies the methodology used to explore the study questions, which are outlined below. The content of this chapter includes the research design, ethical considerations pertaining to this study, the research setting, sampling frame and preparations to conduct this study. This chapter also includes a further description and detailed justification of the data collection tool that was used as well as their validity and reliability. Further to the above, the data collection process, the data analysis procedures and data are presented.

The research question

The aim of this study was to investigate the perceptions of the ward atmosphere in four Jordanian psychiatric hospitals.

The following questions were structured to guide the study:

Question one

How do nurses, patients, and patients’ relatives perceive the ward atmosphere as measured by the Real (WAS-R) and Ideal (WAS-I) subscales?

Question two

How do Real ward atmosphere (WAS-R) ratings in Jordan compare with the Moos normative sample of Real WAS (WAS-R)?
Question three

In what ways do demographic variables affect nurses’, patients’ and patients’ relatives’ perceptions of Real ward atmosphere in all WAS subscales?

Research design

This study was constructed so as to implement a non-experimental descriptive survey design. According to Creswell (2009) a survey design provides a quantitative description of trends, attitudes or opinions of a population by studying a sample of that population. The survey is a non-experimental, descriptive research design which can be a powerful and useful way to collect information.

There are several different ways to conduct a survey. The most common methods are sending written surveys through the mail, asking survey questions over the telephone and conducting face-to-face interviews. Surveys have traditionally involved pencil – paper methods but the proliferation of computers and access to the World Wide Web has led to the internet being a popular means of collecting survey type data (Couper 2011; Teddlie & Tashkkori 2009). In surveys, participants may be studied using a cross-sectional or a longitudinal approach. In cross-sectional survey’s, participants are studied at one point in time where as longitudinal surveys follow participants over an extended period of time (Nieswiadomy 2011). The most important advantages of survey research are as follows:

- Surveys are relatively inexpensive (especially self-administered surveys);
- Surveys are useful in describing the characteristics of a large population. No other method of observation can provide this general capability;
- They can be administered from remote locations using mail, email or telephone and
- Consequently, very large samples are feasible, potentially making the results statistically significant even when analysing multiple variables

(Nieswiadomy 2011, p. 158).
On the other hand, one of the biggest disadvantages of research that is based on a survey is the type of data that is obtained. The data collected in a survey can be biased which means that the answers to some kinds of questions like those related to measurement or frequency of event occurrence, may not be reliable as the respondents may answer these questions superficially especially if the survey takes a long time to complete (Nieswiadomy 2011; Vocino & Polonsky 2011). Moreover, by completing a survey there is no way to tell how truthful a respondent is being. In other words, respondents may read differently into each question and therefore respond based on their own interpretation of the question (i.e. what is ‘good’ to someone may be ‘poor’ to someone else) therefore there is a level of subjectivity that is not acknowledged. The reliability of survey data may depend on the following:

- Respondents' motivation, honesty, memory, and ability to respond:
  - Respondents may not be motivated to give accurate answers;
  - Respondents may be motivated to give answers that present themselves in a favorable light, and
  - Respondents may not be fully aware of their reasons for any given action (Nieswiadomy 2011).

After conducting the extensive review of literature and examining the efficacy of the Moos WAS, undertaking a non-experimental descriptive survey design was considered the most appropriate method for acquiring the data necessary to answer the research questions for this particular topic.

**Rationale for using a non-experimental descriptive survey design**

This study was designed using a non-experimental descriptive survey for three main reasons. Firstly, a survey was deemed an economical and efficient way of covering a study population that was geographically dispersed across Jordan. This was important for this study which is a PhD – part of a research training scheme (RTS), where costs and time cannot be excessive yet adequate data is required. Secondly, the choice of using surveys gave the participant full anonymity and confidentiality (Burns & Grove...
2011) which is an important ethical consideration. Finally, the choice of using surveys gave the participants an opportunity to choose the time and place that was most convenient to them, to complete the survey. In order to answer the research questions, the researcher reviewed all existing relevant tools as demonstrated in the previous chapter and discussed the appropriate tool with his supervisors. After careful consideration, the researcher decided to use Moos WAS (2007) as the means of data collection. The Moos WAS is a well established valid and reliable tool, which has been used to measure perceptions of ward atmosphere all over the world (see Table 1 in Chapter 3).

**Ethical considerations**

At the commencement of the research ethical considerations were postulated. There were a number of issues that required consideration, some of which included culture, gender and the health professional hierarchy within the study site. An ethics application to conduct this research was submitted to the University of Wollongong Human Research Ethics Committee (HREC). Permission was granted by the HREC enabling the study to be conducted (HREC approval number HE2007/116 see Appendix 1). A further research proposal was submitted for ethical review to the Jordanian Ministry of Health, Royal Medical Services Human Research Ethics Committee and AL-Rasheed Hospital management. Approval from these institutions was also received and can be viewed in Appendices two, three and four respectively.

It could be argued that the strength and utility of research starts with a sound understanding of ethical considerations as they relate to the study. Ethical principles that were embedded from the beginning of this study and those against which the HREC made their judgment (NHMRC 2007) include Respect for Persons, Autonomy; Justice; Nonmaleficence (do no harm) and Beneficence (do good). These are set out in the following table (Table 2) and then discussed in greater detail.
Table 2. Ethical principles

<table>
<thead>
<tr>
<th>Respect for Persons/Autonomy</th>
<th>Acknowledge a person’s right to make choices, to hold views, and to take actions based on personal values and beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justice</td>
<td>Treat others equitably, distribute benefits/burdens fairly.</td>
</tr>
<tr>
<td>Nonmaleficence (do no harm)</td>
<td>Obligation not to inflict harm intentionally; In medical ethics, the physician’s guiding maxim is “First, do no harm.”</td>
</tr>
<tr>
<td>Beneficence (do good)</td>
<td>Provide benefits to persons and contribute to their welfare. Refers to an action done for the benefit of others.</td>
</tr>
</tbody>
</table>

(Beauchamp & Childress 2008).

**Respect**

Respect of participants involved in this research was maintained by ensuring that their privacy and confidentiality was maintained. The research design also had regard to the right to participate in the study or the right to refuse to participate, individual beliefs and perceptions and importantly the customs and cultural sensitivities of the participants and where relevant, of their communities. Participation in the current study was entirely voluntarily. Participants from all hospitals were informed in the information sheet that they were under no obligation to take part in this study. Participants were also informed that their response would be kept confidential and only de-identified grouped data would be reported. They were assured that no individual would be identified in the thesis or any other reports or publications and that their opinions and beliefs were not considered right or wrong. Instead, individual perceptions were valued and form the basis of this research.
Non maleficence

It was not expected that being in this study would be harmful to participants. However, the researcher informed the participants via the information sheet that if they became distressed as a result of participating in the research they could contact a specialised counselor who was available in each hospital and that if they accessed this counselor their discussions would remain private and confidential. All participants were also assured in writing and in person, that there were no ramifications for them if they chose not to participate. The fact that patients were approached via their relatives was considered a mitigating factor against feelings of coercion.

Participants were informed that if they required any help or assistance to complete the survey, fully briefed research assistants were available in all hospitals to offer help and assistance. The research assistants were available in the wards to offer help and again all responses and conversations would remain strictly confidential. All participants were informed about the research assistants' presence and availability when receiving the research package. Potential participants who could not read or write were also able to participate if they wished as anyone requiring help in completing the forms could seek confidential help from the research assistants. To conduct this study an anonymous survey was used and later coded by using different numbers for each group and hospital for data entry purpose into SPSS.

Confidentiality

Confidentiality was maintained by requesting that participants not include their names or other identifying marks anywhere on the survey or in their responses. Also, the questionnaires were only coded by the numbers one to four to differentiate between the four hospitals. The sealing of the envelopes containing the completed surveys ensured that only the researcher viewed the actual surveys. Hospital administration or staff did not have access to the completed surveys.

All aspects of the study, including results, were and remain strictly confidential. Only the researcher and his supervisors have access to information from participants but
survey responses are all anonymous. Data obtained from this study will also be used for the purpose of publication however no identifying information will be disseminated. All data collected was stored in the researcher’s personal password protected computer while in Jordan. After returning to Australia they were kept in a locked filing cabinet in the locked office at the University of Wollongong, Australia. Only the researcher and the supervisors could access the data which will be destroyed according to the Code of Conduct for Ethical Research after five years post recent publication of this thesis (NHMRC 2007).

**Beneficence**

This study was not expected to have any direct benefits for individual participants although there is an emerging body of literature that suggests participating in research may be itself cathartic, especially if the participants are in a group that is not usually given a voice (Taylor et al. 2010; Dyregrov 2004).

In describing their actual and ideal treatment environment, participants were providing information that could guide attempts to change the ward atmosphere, treatment orientation and facilitate more effective programme organisation. As such, this will hopefully enhance the experience of future patients should they have a need for hospitalization.

The results of the study will contribute to the body of literature describing the perception of Jordanian psychiatric nurses, patients, and patients relatives of the ward atmosphere. In addition, the results of this study may have practical implications for changing the environments of the facilities under study, hopefully for the better. At the very least, benefits include giving people a voice and raising the consciousness of the effects of the ward atmosphere on treatment outcomes.
Research settings

This study was carried out in four Jordanian psychiatric health care facilities. As described in detail in Chapter Two these were the National Centre for Mental Health (NCMH); the National Centre for Rehabilitation of Addicts (NCRA); Marka Military Hospital and AL-Rasheed Psychiatric Hospital. These facilities were chosen to represent various models of psychiatric provision in Jordan namely the Government, the Military and the private sector. Firstly, the Government sector is represented in this study by the NCMH and NCRA hospitals, which belong to the Ministry of Health. The Military sector is represented in this study by Marka Military Hospital and the private sector is represented in this study by AL-Rasheed Psychiatric Hospital.

Sampling Frame

Participants in the study were purposively selected because of the nature and aim of the research. This sampling method enabled the researcher to obtain specific and relevant information about ward atmosphere in the afore mentioned hospitals from the perspective of nursing staff, patients and their relatives. The selection process can be described as purposive, judgmental or opportunity sampling as participants were not randomly selected. This particular sample was best suited to address the research question (Hennink, Hutter & Bailey 2011).

Purposeful sampling is a non-random method of sampling where the researcher selects information for an in-depth study (Creswell & Clark Plano 2011). Information rich cases are those from which one can learn a great deal about an issue of central importance to the purpose of the research (Parahoo 2006). In purposeful sampling, the researcher specifies the characteristics of a population of interest and then tries to locate individuals who fit those characteristics (Polit & Beak 2008).

In purposive sampling, the researchers sample with a purpose in mind. They usually have one or more specific predefined groups they are seeking (Polit & Beck 2008). Purposive sampling is useful for situations where you need to reach a targeted sample quickly and where sampling for proportionality is not the primary concern (Tappen
Purposive sampling is employed when random sampling is not appropriate, feasible or desirable or only one of a limited number of relevant sites or groups are available (Houser 2012). Purposeful sampling was therefore chosen by the researcher as it fitted the aim, purpose, budget and timeframe of this study.

Specific characteristics for selection criteria were considered. Following the process granted in the ethical approval, a meeting was conducted in each hospital to reassure the participants that their potential involvement in the study was entirely voluntarily and that they were under no obligation to take part. Participants who could not attend the meetings were given this assurance via the information sheet. The researcher selected this group of Jordanian psychiatric patients, their relatives and nurses because this study was aimed at exploring their perceptions of their current and ideal ward atmosphere. This was achieved by the completion of the Real form (R) of the ward atmosphere scale (WAS-R) and their ideal ward atmosphere by completing the Ideal form (I) of the ward atmosphere scale (WAS-I). This could only be achieved by such a sample. The setting for the research can be referred to as a natural setting, as the researcher did not manipulate the setting in any way (Polit & Beak 2008).

**Preparations to conduct the survey**

Prior to commencing data collection and adhering to Jordanian cultural and health hierarchical practices, Directors of Nursing (DoN) and Nurse Unit Managers (NUMs) in all selected hospitals were informed of the research and all relevant issues were discussed. Copies of the questionnaire, information sheet, ethical approval letters and consent forms were made available to them. Questions and feedback were encouraged from the DoNs and the NUMs.

Prior to commencing the survey, four external professional nurses who had no relation with the selected hospitals or the researcher were approached to assist the researcher to conduct this study. Each held a Bachelor’s degree in nursing, had professional nursing experience of between five to eight years and were enrolled in a Master of Nursing at the University of Jordan. They were recruited through the Jordanian Nursing Council.
During an official meeting with the Vice President of the Jordanian Nursing Council, the researcher was advised to use the research assistants to avoid any possible bias in the answers the participants might give to the survey questions. The Vice President of the Jordanian Nursing Council also advised the researcher to advertise the study and request for research assistants at the Nursing School in the University of Jordan in order to obtain skilled and qualified candidates to help the researcher conduct this study in Jordanian Psychiatric hospitals. Four female applicants were selected to assist the researcher to conduct this research. They attended two separate training sessions, both sessions totaled 90 minutes. The first session was conducted in the Nursing Council conference room. The purpose of the research, expectations of participants, settings, timing and the data collection tool were all explained. All inquiries and concerns were answered immediately during the session. The second session was held in the same venue on the following working day. It was conducted for the purpose of reiterating what was explained in the previous session and answering any arising questions.

The research assistants’ role was to distribute the questionnaires, ensure that participants understood the questions and they could complete the questionnaires. They also offered assistance to potential participants who needed help in completing the questionnaires.

**Nursing staff**

The NUMs supported the researcher and the research assistants in several ways. Firstly they arranged a meeting with their nursing staff, they encouraged the staff to attend these meetings and thirdly, even organized meeting times for the researcher to talk to groups of staff. The NUMs also advertised the project to potential participants on the hospital notice boards and on the notice boards in the staff’s tea rooms. Meetings were held with nurses from each of the four hospitals at mutually convenient times. These meetings were held during the ‘handover’ period between morning and afternoon shift and also at handover between night and morning shift in order to make contact with the largest possible number of staff.
Nursing staff who did not attend the ward meetings were each mailed a package that included the surveys, a participant information sheet, a consent form (see Appendix 5 & 8 for the information sheet for nurses in English and Arabic respectively and Appendix 11 & 14 for the consent form for nurses in English and Arabic respectively) and a confidential postage paid return addressed envelope. The return envelope was addressed to a post office box in Amman hired by the researcher.

All nursing staff employed in the target hospitals were invited to participate in the study. Specific inclusion criteria for staff were:

- A minimum period of working in the ward of one month so that the potential respondent would have enough experience of the ward atmosphere to complete the questionnaires.
- Able to understand Arabic language as this study was conducted in the Arabic language and Jordanian people converse in Arabic.

176 nursing staff fulfilled the inclusion criteria and 136 (77.2%) signed the consent form, completed the questionnaires and returned them to the sealed boxes provided in each hospital or to the researcher’s mail box in Amman.

**Patients’ relatives**

Following discussions and support from the NUMs, Clinical Nurse Educators and Social Workers invited the patients’ relatives to attend an information session about the study. This session was conducted in the meeting room in each hospital. Relatives were assured that attending and participating in this study was entirely voluntarily and there would be no consequences for them or their family member who was an in-patient. The study’s purposes expectations of participants, settings, timing, ethical considerations and data collection tools were explained to them in detail. All inquiries and concerns that they had regarding the study were answered immediately during that session.

All patients’ relatives in the afore mentioned hospitals were invited to assess the ward atmosphere. Specific inclusion criteria were:
• A minimum period of visiting the ward for one month.
• Able to understand Arabic language.

Fifty patients’ relatives attended the sessions and 27 (54%) chose to sign the consent form (see Appendix 7 & 10 for the relatives’ information sheet in English and Arabic respectively and Appendix 13 & 16 for the relatives’ consent form in English and Arabic respectively), completed the questionnaires and returned them to the sealed boxes. The remainder of patients’ relatives chose not to participate in the study.

Patients

Prior to commencing the data collection process, the researcher requested the next of kin’s permission to approach the patients and ask them to participate in this study (this process is considered as culturally appropriate in Jordanian society). After gaining relatives approval the researcher met the patients and discussed with them the purpose of the research, expectations of participants, settings, timing, ethical considerations and data collection tools. As with other potential participant groups, all inquiries and concerns regarding participation were answered immediately during that meeting.

One-hundred and eighty six patients staying in the hospitals fulfilled the following inclusion criteria:

• A minimum period of staying in the ward for one month. The average length of stay was 44 days at the time of data collection (MoH 2010).
• Able to understand Arabic language.
• Able to participate cognitively.

Cognitive ability was assessed as the patient being identified as clinically stable by a psychiatrist and the NUM. Patients who had a developmental disability were excluded from this study as the focus was on patients who had a psychiatric disorder.

One hundred and four (56%) patients signed the consent form (see Appendix 6 & 9 for patients’ information sheet in English and Arabic respectively and Appendix 12 & 15
for the patients’ consent form in English and Arabic respectively), completed the questionnaires and returned them to the sealed boxes provided in each hospital.

The surveys were administered and returned over a two month period from all participating hospitals. Completed questionnaires were returned by the participants to the sealed boxes provided in each hospital or to the researcher’s mailbox in Amman. Stamped self-addressed envelopes were used to minimize the effort involved in returning the questionnaire.

**Data Collection instrument**

The Arabic version of Moos WAS was used as the data collection instrument for this study. As detailed in the previous chapter, the Moos WAS is a self-report questionnaire comprising 100 true/false type questions related to the ward. It is divided into 10 subscales that are arranged in three major dimensions. Firstly, the Relationship Dimension which includes Involvement, Support and Spontaneity subscales. Secondly, the Personal Growth Dimension, which includes Autonomy, Practical Orientation, Personal Problem Orientation and Anger and Aggression subscales. Finally, the System Maintenance Dimension, which includes Order and Organisation, Programme Clarity and Staff Control (see Table 1 in Chapter 3). Participants were asked to complete two forms of the Moos Ward Atmosphere Scale (WAS). These were the Real form (WAS-R) and the Ideal form (WAS-I). The Real form required participants to rate the ward as they perceived it whereas the Ideal form required participants to rate the ward on how they would like to see it (see Appendix 17 & 18 for the English version of Real and Ideal forms of WAS respectively and Appendix 19 & 20 for the Arabic version of Real and Ideal WAS respectively).

This instrument enabled the researcher to ascertain whether a perception of the ward atmosphere in Jordan is congruent amongst patients, relatives and nurses expectations and satisfaction. In order to conduct this study, the English version of WAS was translated into Arabic by a bilingual Jordanian translator and then translated back to English by another bilingual Jordanian translator. These two translators worked
independently to ensure rigor and no information was exchanged between them during the translation processes.

**Reliability and Validity**

Reliability and validity in research refers specifically to the measurement of data, as they will be used to answer the research question (Polit & Beck 2012). In most cases, the instrument that measures the research variables is the central issue in determining the reliability and validity of the data (Houser 2012). Reliability of a research instrument is ‘the extent to which it (the instrument) yields the same results on repeated measures (Creswell & Clark Plano 2011). It is then concerned with consistency, accuracy, precision, stability, equivalence and homogeneity (LoBiondo-Wood & Haber 2011, p. 319). In addition, the researcher needs to be assured that the measurement technique used to collect data actually measures what it is supposed to measure.

Validity refers to the degree to which an instrument or a study accurately reflects or assesses the specific concept that the researcher is attempting to measure (Burns & Grove 2011). Thus, while reliability is concerned with the accuracy of the actual measuring instrument or procedure, validity is concerned with the study's success at measuring what the researcher sets out to measure (Wood & Ross-Kerr 2011).

**WAS Reliability and Validity**

A measurement instrument provides values that are observed measures (Burns & Grove 2011). The reliability measurement though, identifies the ratio between the measured and the true value (Wood & Ross-Kerr 2011). The maximum value in reliability measurements is 1.00. The Kuder- Richardson formula 20 was used in this study to measure the internal consistency of the subscales. The Kuder- Richardson formula 20 was detected to be the suitable scale to provide a psychometric reliability measurement of the internal consistency of the WAS. The Kuder –Richardson 20 produces a mean of all reliability co-efficients of an instrument’s internal consistency particularly regarding a dichotomous (continuous) scale like WAS (Burns & Grove 2011). It determines the
values of each particular subscale and allows for comparison and correlation with other tools.

The basic principal of reliability in the WAS is that if several persons score their perceptions of an environment, the mean of these scores may be regarded as a fairly reliable estimate of nearly all of these persons’ perceptions (Friis 1986a).

The internal consistency of the WAS was established with a Kuder- Richardson 20. The internal consistency of each subscale was also determined. The Kuder- Richardson’s values for both patients and nurses in this study and the original scales as reported by (Moos 1973) are shown in Table 3.

**Table 3. The Real WAS subscales and scale reliability values on Kuder Richardson 20 scale ($\alpha=0.01$)**

<table>
<thead>
<tr>
<th>Real WAS’s Subscale</th>
<th>Kuder-Richardson 20 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Patients this study</td>
</tr>
<tr>
<td>Involvement</td>
<td>.60</td>
</tr>
<tr>
<td>Support</td>
<td>.61</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>.58</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.38</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>.53</td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>.52</td>
</tr>
<tr>
<td>Anger and Aggression</td>
<td>.42</td>
</tr>
<tr>
<td>Order and Organisation</td>
<td>.68</td>
</tr>
<tr>
<td>Programme Clarity</td>
<td>.71</td>
</tr>
<tr>
<td>Staff Control</td>
<td>.42</td>
</tr>
</tbody>
</table>

In accordance with the literature the researcher considered a Kuder Richardson 20 of 0.70 or higher as satisfactory, allowing for comparisons on an individual level (Helmstadter 1964) and a Kuder Richardson 20 higher than 0.50 as acceptable, allowing for comparisons on the ward level (Streiner & Norman 2008).
The internal consistencies of the subscales in this Arabic version of WAS were only satisfactory for the subscale of Programme Clarity for patients and the subscales of Involvement and Order and Organisation for nurses and acceptable for Support, Spontaneity, Practical Orientation and Personal Problem Orientation. However, the subscales of Autonomy, Anger and Aggression and Staff Control showed poor internal consistency for both patients and nurses. As can be seen from Table 3 for the majority of the subscales except for Support and Spontaneity, the nurses’ ratings rendered higher Kuder-Richardson’s values than did the patients.

To assess content validity two versions (Arabic and English) of WAS were sent to a panel consisting of three Associate Professors who specialised in mental health nursing teaching in three Jordanian universities to make suggestions for the adequacy and relevance of the WAS’s statements. This process was to ensure that the two versions of WAS matched as closely as possible and to check if any differences were found between these versions. Minor modifications were made in the wording of the WAS questions to make the text more applicable and suitable for the Jordanian culture, without losing the intended key concepts.

**Process of data collection**

The WAS survey’s were administered and returned over a two months period. Data collection about perceptions of ward atmosphere by using both Real and Ideal Moos WAS occurred in all hospitals. Participants were asked to complete the Real form of Ward Atmosphere Scale (WAS-R) first. They were given a 30 minute break and then requested to complete the Ideal Ward Atmosphere Scale (WAS-I). Any participant who required assistance was helped by the research assistants to complete the surveys.

Completed surveys were received from 136 nurses from all hospitals, 104 patients and 27 relatives who fulfilled the inclusion criteria. (see Table 5 in Chapter 5 for the numbers of nurses, patients and relatives who responded from each hospital).
Data analysis

Analysis was undertaken using the Statistical Package for the Social Sciences version 15 (SPSS-15) for Windows. This electronic statistical programme offers a wide range of descriptive, inferential, correlation and reliability analysis options (Allen & Bennett 2008). The functional capabilities offered by the SPSS-15 were sufficient to achieve the aims of this study. Hence, use of the programme provided the researcher with flexibility with regard to determining relations and significance among the variables under consideration.

Basic descriptive statistics were conducted and presented for the three research questions. For research question one, ANOVA was performed to determine the differences between the nurses, patients’ and relatives’ perceptions of Real and Ideal ward atmosphere. Paired sample t-test was also performed to determine the differences between the Real and Ideal Ward atmosphere for all participant group. Using the Tukey HSD analysis the alpha level of .005 was used to avoid inflation of Type 1 error. For research question two descriptive statistics were conducted to compare the differences between the Jordanian sample and the North American sample. For research question three, MANOVA analysis were conducted to test if there was any relationship between the demographic variables and the ward atmosphere subscales.

In order to appraise the levels of subscales rated by respondents, Moos’ methods which utilise the term ‘above or below average’ are used in the discussion chapter (Brunt & Rask 2008 p.228). By using this analytical method, the mean scores were converted to standard scores, thereafter; the cut-off point of 50 was applied.

Data presentation

The analysed data in this study are presented in tables, figures and through descriptive texts. The major findings of this research are presented in seven sections, which are:-

1) the characteristics of the sample;
2) the descriptive results, statistical analysis and the interpretation of the Real ward atmosphere Scale (WAS-R) scores for all participant groups (nurses, patients, relatives);

3) the descriptive results, statistical analysis and the interpretation of the Ideal ward atmosphere (WAS-I) rating scores for all participant groups;

4) the comparison between the Real ward atmosphere and the participants’ Ideal ward atmosphere;

5) the comparison between the Jordanian nurses in this study and the Moos’s normative sample;

6) the comparison between the Jordanian patients in this study and the Moos’s normative sample, and

7) the impact of certain demographic variables and the hospital ownership on WAS scores for all participant groups.

**Summary**

The preceding chapter provided a detailed description of the research design and the data collection methods. Data analysed using SPSS-15 programme was also described including the use of descriptive statistics. Further to this the ANOVA, Paired sample t-tests, one sample t-tests and MANOVA were identified which were used to address each specific research questions. The next chapter will present the findings of this study.
Chapter 5

Introduction

The previous chapter described why this non-experimental descriptive survey design was the most appropriate approach for this study and also provided a rationale for the decision to use this methodology. The previous chapter also described the data collection method used in the study along with detailed descriptions of how that method was employed.

This chapter presents the findings of the study, which aimed to examine patients’, nursing staff and relatives’ perceptions of ward atmosphere in four Jordanian psychiatric hospitals. As indicated in the previous Chapter, but repeated here for ease of recollection, the study was guided by three research questions. These were:

Question one
How do nurses, patients, and relatives perceive the ward atmosphere as measured by the Real (WAS-R) and Ideal (WAS-I) subscales?

Question two
How do Real ward atmosphere (WAS-R) ratings in Jordan compare with the Moos normative sample of Real WAS (WAS-R)?

Question three
In what ways do demographic variables affect nurses’, patients’ and relatives’ perceptions of Real ward atmosphere in all WAS a subscale?

Based on the above research questions the following hypotheses were formulated.
Research Hypotheses

The hypotheses of the study are summarized in Table 4. Hypotheses one to five as well as numbers eight and nine are presented as null hypotheses. Formulation of null hypotheses in this study were established to ascertain if there were significant differences between the Real and Ideal ward atmosphere subscales and demographic variables among the participant groups. The null hypotheses speculate that there are no significant differences between the participant groups regarding perceptions of the Real and Ideal ward atmosphere. A significant statistical test, as described in detail in the previous chapter, tested whether the null hypothesis should be either accepted or rejected. Results of these tests are revealed later in this chapter.

Table 4. The Research questions and their relationship to hypotheses

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Related Hypothesis</th>
</tr>
</thead>
</table>
| **Question 1**: How do nurses, patients and relatives in four Jordanian psychiatric hospitals perceive the Real and Ideal ward atmosphere in all WAS subscales? | **H1**: There are *no* differences between nurses, patients and relatives regarding their perceptions of Real ward atmosphere subscales.  
Alternate Hypothesis 1a – **H1a**: There *are* differences between nurses, patients and relatives regarding their perceptions of Real ward atmosphere subscales. |
| **H2**: There are *no* differences between nurses, patients and relatives regarding their perceptions of Ideal ward atmosphere subscales.  
Alternate Hypothesis 2a – **H2a**: There *are* differences between nurses, patients and relatives regarding their perceptions of Ideal ward atmosphere subscales. |
| **H3**: All participants will perceive Real ward atmosphere as being *lower* than the Ideal in all WAS subscales.  
Alternate Hypothesis 3a – **H3a**: All participants will perceive Real ward atmosphere as being *higher* than the Ideal in all WAS subscales. |
**Question 2:** How do Real ward atmosphere ratings in Jordan compare with the North American Real WAS norms?

<table>
<thead>
<tr>
<th><strong>H4:</strong></th>
<th>There are <em>no</em> differences in Real WAS scores between Jordanian nurses and North American nurses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Hypothesis 4a – <strong>H4a:</strong></td>
<td>There <em>are</em> differences in Real WAS scores between Jordanian nurses and North American nurses.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>H5:</strong></th>
<th>There are <em>no</em> differences in Real WAS scores between Jordanian patients and North American patients.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Hypothesis 5a – <strong>H5a:</strong></td>
<td>There <em>are</em> differences in Real WAS scores between Jordanian patients and North American patients.</td>
</tr>
</tbody>
</table>

**Question 3:** How do demographic variables and hospital’s ownership affect nurses’, patients’ and relatives’ perceptions of Real ward atmosphere in all WAS subscales?

<table>
<thead>
<tr>
<th><strong>H6:</strong></th>
<th>The nurse’s perceptions of Real ward atmosphere <em>are</em> influenced by demographic variables (age, gender, educational level and work experience) in the Jordanian sample.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H7:</strong></td>
<td>The patient’s perceptions of Real ward atmosphere <em>are</em> influenced by age, gender, nature of admission, length of stay or by their psychiatric diagnosis.</td>
</tr>
<tr>
<td><strong>H8:</strong></td>
<td>The patient’s relatives’ perceptions of Real ward atmosphere are <em>not</em> influenced by age, gender, relationship to patient and frequency of visiting.</td>
</tr>
<tr>
<td>Alternate Hypothesis 8a – <strong>H8a:</strong></td>
<td>The patient’s relatives’ perceptions of Real ward atmosphere <em>are</em> influenced by age, gender, relationship to patient and frequency of visiting.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>H9:</strong></th>
<th>There are <em>no</em> differences in the perceptions of Real ward atmosphere scale according to the hospital’s ownership (private or public) for all participants groups.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Hypothesis 9a – <strong>H9a:</strong></td>
<td>There <em>are</em> differences in the perceptions of Real ward atmosphere scale according to the hospital’s ownership (private or public) for all participant groups.</td>
</tr>
</tbody>
</table>

This chapter initially describes the characteristics of the participant sample and the WAS scoring process, and then describes the process used to test each hypothesis.
Sample characteristics

Nursing staff (n=176), psychiatric patients (n=186) and relatives (n=50) at four Jordanian psychiatric hospitals were invited to participate in the study. Completed questionnaires were received from 77.2 percent (n=136) of nurses; 55.9 percent of (n=104) patients and 54 percent of (n=27) relatives.

Table 5 outlines the number of nurses, patients and relatives responding from each hospital.

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Nurses</th>
<th>Patients</th>
<th>Relatives</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL-Rasheed</td>
<td>38</td>
<td>11</td>
<td>2</td>
<td>51</td>
</tr>
<tr>
<td>NCRA*</td>
<td>9</td>
<td>23</td>
<td>9</td>
<td>41</td>
</tr>
<tr>
<td>Marka Military</td>
<td>12</td>
<td>11</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>NCMH**</td>
<td>77</td>
<td>59</td>
<td>15</td>
<td>151</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>136</td>
<td>104</td>
<td>27</td>
<td>267</td>
</tr>
</tbody>
</table>

* NCRA: National Centre for Rehabilitation of Addicts  
** NCMH: National Centre for Mental Health

Nursing Staff

As mentioned earlier, the final nurses’ sample was comprised of 176 nurses working in the participating hospitals. This number represents all nurses working in psychiatric hospitals in the Private, Government and Military mental health care sectors in Jordan. One hundred and thirty six nurses from four hospitals fulfilled the inclusion criteria and completed the questionnaires, providing a 77.2 percent response rate. The mean age of the participating nurses was 32 years (SD = 8.21), ranging from 22 to 59 years. Notably,
the proportion of male staff was more than the female staff. Unlike Australian nursing schools who graduate more female nurses (Australian Institute of Health and Welfare 2010) this ratio is reflective of male and female nurses graduating in Jordan. The ratio was almost 60/40 (Jordanian Nurses & Midwives Council 2009). As indicated in Table 6 the majority of nurses (61%) were male, 54 (39.7%) had a Bachelors degree in nursing and 66 (48.5%) were Registered Nurses.

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22-32</td>
<td>80</td>
<td>58.8</td>
</tr>
<tr>
<td>33-41</td>
<td>36</td>
<td>26.5</td>
</tr>
<tr>
<td>42-52</td>
<td>17</td>
<td>12.5</td>
</tr>
<tr>
<td>&lt;52</td>
<td>3</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Mean age (SD)</strong></td>
<td>32 (8.21)</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>83</td>
<td>61.0</td>
</tr>
<tr>
<td>Female</td>
<td>53</td>
<td>39.0</td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>54</td>
<td>39.7</td>
</tr>
<tr>
<td>Diploma</td>
<td>79</td>
<td>58.1</td>
</tr>
<tr>
<td>Secondary</td>
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<td>0.7</td>
</tr>
<tr>
<td>Lower than secondary</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Professional Title</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor</td>
<td>7</td>
<td>5.1</td>
</tr>
<tr>
<td>Associate Nurse</td>
<td>17</td>
<td>12.5</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>66</td>
<td>48.5</td>
</tr>
<tr>
<td>Practical Nurse</td>
<td>44</td>
<td>32.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>136</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Patients

The total number of patients who were eligible to participate in the study from the participating hospitals was n= 186. Of those eligible to participate, one hundred and four patients (n=104) fulfilled the inclusion criteria and chose to complete the questionnaire providing a 55.9 percent response rate. As identified in Table 7 the majority of the patients (82.9%) were male, 56.2 percent had an addiction as a psychiatric diagnosis and 55.2 percent were admitted voluntarily.

Table 7. Demographic characteristics of patient participants.

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-30</td>
<td>37</td>
<td>35.6</td>
</tr>
<tr>
<td>31-40</td>
<td>37</td>
<td>35.6</td>
</tr>
<tr>
<td>41-50</td>
<td>25</td>
<td>24.0</td>
</tr>
<tr>
<td>&lt;51</td>
<td>5</td>
<td>4.8</td>
</tr>
<tr>
<td>Mean Age (SD)</td>
<td></td>
<td>35 (9.8)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>87</td>
<td>82.9</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>17.1</td>
</tr>
<tr>
<td>Psychiatric Diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Addiction</td>
<td>59</td>
<td>56.2</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>24</td>
<td>22.9</td>
</tr>
<tr>
<td>Depression</td>
<td>20</td>
<td>19.0</td>
</tr>
<tr>
<td>Nature of Admission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voluntary</td>
<td>58</td>
<td>55.2</td>
</tr>
<tr>
<td>Involuntary</td>
<td>46</td>
<td>43.8</td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Patients’ relatives

Fifty patients’ relatives from all hospitals were approached to participate in this study. Twenty-seven (54%) relatives chose to participate and completed the WAS during the period of the data collection. As identified in Table 8 the majority of the relatives
(70.4%) were male, 66.70% visited their relatives on a weekly basis and 40.7% were the brothers of those in hospital. There were no mothers, sisters or daughter in this sample and only a small number of wives. When the research team asked the patients’ relatives who could complete the WAS they typically explained that they preferred the ward atmosphere scales to be completed by a male relative and not by a female. This represents traditional Jordanian cultural views given that Jordanian society is male dominated (AL-Husban & Abuarub 2009). This situation also reflects usual visiting patterns in that fewer female visitors came to the hospital.

Table 8. Demographic characteristics of relative participants.

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-30</td>
<td>7</td>
<td>25.9</td>
</tr>
<tr>
<td>31-40</td>
<td>8</td>
<td>29.6</td>
</tr>
<tr>
<td>41-50</td>
<td>2</td>
<td>7.4</td>
</tr>
<tr>
<td>&lt;51</td>
<td>10</td>
<td>37.1</td>
</tr>
<tr>
<td><strong>Mean Age (SD)</strong></td>
<td>43 (14.2)</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>70.4</td>
</tr>
<tr>
<td>Female</td>
<td>8</td>
<td>29.6</td>
</tr>
<tr>
<td><strong>Relationship to patient</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Son</td>
<td>2</td>
<td>7.4</td>
</tr>
<tr>
<td>Friend</td>
<td>2</td>
<td>7.4</td>
</tr>
<tr>
<td>Brother</td>
<td>11</td>
<td>40.7</td>
</tr>
<tr>
<td>Father</td>
<td>10</td>
<td>37.0</td>
</tr>
<tr>
<td>Wife</td>
<td>2</td>
<td>7.4</td>
</tr>
<tr>
<td><strong>Frequency of visit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>18</td>
<td>66.7</td>
</tr>
<tr>
<td>Monthly</td>
<td>9</td>
<td>33.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>27</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**WAS scoring process**

Participant groups were asked to answer the statements on the Real ward atmosphere (WAS-R) subscales by marking them as true or false. Every subscale had ten
statements. When the respondent marked *true* to a statement which matched the related answer on the scoring key, a score of one was given. (See Appendix 17 for the tool). When the respondent marked *false* to a statement that matched the related answer on the scoring key, a score of one was given. Following this, the subscales’ scores were calculated by summing the scores for statements contributing to the individuals’ subscales. To compare the nurses’, patients’ and relatives’ perceptions of ward atmosphere the researcher calculated the mean scores for each group on the 10 subscales of WAS. These mean scores were then used to produce the profile outlined in Figure 2. The following section addresses the process which was used to test each hypothesis.

**Hypothesis one (H1)**

There are *no* differences between nurses, patients and their relatives regarding their perceptions of Real ward atmosphere subscales.

In order to test Hypothesis 1 (H1) data analysis was carried out in three steps. In the first step, the analysis commenced with comparing the mean scores of the Real WAS subscales between all participant groups (nurses, patients and relatives). In the second step, ANOVA was used to determine the significance of the differences between the participant groups, *if* any differences were found after applying the first step. In the final step, post hoc analysis was conducted to determine where the significant differences lie *if* any difference was found, but this time after conducting the second step.

As can be seen from Figure 2 for the subscales of Involvement, Support, Autonomy, Practical Orientation, Order and Organisation and Programme Clarity, the relatives rated these subscales the highest, the nurses rated them lowest and the patients rated them in-between.

Figure 2. Mean scores of Real WAS subscales for nurses (n=136), patients (n=104) and relatives (n=27).

On the subscales of Spontaneity and Personal Problem Orientation, both nurses and patients rated the Real ward atmosphere the lowest while the relatives rated them the highest. On the Anger and Aggression subscale, both nurses and relatives rated it the highest while the patients rated it the lowest. On the Staff Control subscale, both nurses and relatives rated it the lowest while the patients rated it the highest, noting that their ratings on this subscale are directly opposite to their rating on Anger and Aggression subscale.

Findings of this study between the mean scores’ comparisons of the participant groups regarding the perception of Real WAS showed that the nurses at all hospitals rated the lowest level in Involvement, Support, Autonomy, Practical Orientation, Order and Organisation and Programme Clarity subscales. Results indicated that nurses rated their Real Ward atmosphere as that of being less involved and less supportive for the patients and their relatives and also for themselves; less Autonomy than other participants did and less emphasis on planning and learning practical skills. The nurses
also rated lower level of Programme Clarity than the other participants. These results indicate that nurses may not be familiar with the rules and regulations in these hospitals and that they did not communicate these clearly to the patients. Moreover, the nurses perceived lower level on Order and Organisation than the other participants, which also indicated that the nurses may not be familiar with the ward routine and what to expect from the patients on the daily basis. The practical implications of the differences between the participants group will be examined in the discussion chapter.

When the comparisons of the mean scores of Real WAS subscales between the nurses, patients and relatives identified some differences, a one-way ANOVA was performed to determine if these differences between the means of the three participant groups, were of statistical significance or not.

At an alpha level of .05, the results of the ANOVA indicated that there were significant differences between all participant groups in all subscales of Real ward atmosphere except for Spontaneity and Personal Problem Orientation.
Table 9. Results of one way ANOVA for all participant groups (nurses, patients and relatives) from all hospitals for the Real WAS subscales.

<table>
<thead>
<tr>
<th>Ward atmosphere Subscales</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>107.799</td>
<td>2</td>
<td>53.899</td>
<td>10.892</td>
<td>.001*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1306.456</td>
<td>264</td>
<td>4.949</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1414.255</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>50.956</td>
<td>2</td>
<td>25.478</td>
<td>6.753</td>
<td>.001*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>996.078</td>
<td>264</td>
<td>3.773</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1047.034</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spontaneity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>12.390</td>
<td>2</td>
<td>6.195</td>
<td>1.548</td>
<td>.215</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1056.673</td>
<td>264</td>
<td>4.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1069.064</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>61.869</td>
<td>2</td>
<td>30.934</td>
<td>12.939</td>
<td>.002*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>631.165</td>
<td>264</td>
<td>2.391</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>693.034</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practical Orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>43.491</td>
<td>2</td>
<td>21.745</td>
<td>4.969</td>
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</tr>
<tr>
<td>Within Groups</td>
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<td>4.377</td>
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<td>Total</td>
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<td>266</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Personal Problem Orientation</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>4.886</td>
<td>2</td>
<td>2.443</td>
<td>.604</td>
<td>.548</td>
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<tr>
<td>Within Groups</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Anger and Aggression</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>26.556</td>
<td>2</td>
<td>13.278</td>
<td>4.923</td>
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</tr>
<tr>
<td>Within Groups</td>
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<td>264</td>
<td>2.697</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
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<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order and Organisation</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>116.424</td>
<td>2</td>
<td>58.212</td>
<td>10.972</td>
<td>.003*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1400.639</td>
<td>264</td>
<td>5.305</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1517.064</td>
<td>266</td>
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<td></td>
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<tr>
<td>Programme Clarity (R)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>35.355</td>
<td>2</td>
<td>17.677</td>
<td>4.022</td>
<td>.019*</td>
</tr>
<tr>
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<td>1160.375</td>
<td>264</td>
<td>4.395</td>
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<tr>
<td>Total</td>
<td>1195.730</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Staff Control</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>35.683</td>
<td>2</td>
<td>17.841</td>
<td>6.305</td>
<td>.002*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>746.991</td>
<td>264</td>
<td>2.830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>782.674</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant differences at \(p<.05\)
Outcomes related to the one-way ANOVA statistical analysis in this study are presented in Table 9. The Sig. column represents the probability level for this analysis. Any value in this column that is less than 0.5 is considered significant. However, values in the Sig. column which are greater than 0.5 are considered not significant.

As the ANOVA identified, there were significant differences in perceptions of Real WAS between all participant groups. Further to this though, Tukey HSD post hoc tests were conducted to determine where the differences lay. The following section presents the results of the post-hoc analysis. Post hoc Tukey HSD (Honestly Significant Difference) analysis identified further differences between the participant groups (nurses, patients and relatives). This test was considered appropriate as it is a test that compares groups with similar variances and is also valuable where the researcher has no specific information about which group(s) will differ from the others (Allen & Bennett 2008).

Table 10 presents the results of this more comprehensive analysis regarding the one way ANOVA with the Post hoc Tukey analysis for nurses, patients and relatives from all hospitals for the Real WAS subscales.
Table 10. Results of one-way ANOVA with the Post Hoc analysis for all participants groups (nurse, patients and relatives) from all hospitals on the Real WAS subscales.

<table>
<thead>
<tr>
<th>WAS Subscales</th>
<th>Nurses M (SD)</th>
<th>Patients M (SD)</th>
<th>Relatives M (SD)</th>
<th>Significance difference between Nurses and Patients</th>
<th>Significance differences between Nurses and Relatives</th>
<th>Significance differences between Patients and Relatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>3.93 (2.31)</td>
<td>5.08 (2.24)</td>
<td>5.56 (1.65)</td>
<td>*</td>
<td>*</td>
<td>NS</td>
</tr>
<tr>
<td>Support</td>
<td>5.03 (1.89)</td>
<td>5.57 (2.08)</td>
<td>6.44 (1.63)</td>
<td>NS</td>
<td>*</td>
<td>NS</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>4.73 (2.01)</td>
<td>4.66 (2.04)</td>
<td>5.41 (1.82)</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Autonomy</td>
<td>3.91 (1.62)</td>
<td>4.90 (1.52)</td>
<td>4.74 (1.26)</td>
<td>*</td>
<td>*</td>
<td>NS</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>4.64 (2.24)</td>
<td>5.33 (1.89)</td>
<td>5.74 (2.09)</td>
<td>*</td>
<td>*</td>
<td>NS</td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>5.19 (2.16)</td>
<td>5.05 (1.79)</td>
<td>5.52 (2.05)</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Anger and Aggression</td>
<td>6.17 (1.58)</td>
<td>5.50 (1.68)</td>
<td>5.96 (1.83)</td>
<td>*</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Order and Organisation</td>
<td>5.13 (2.38)</td>
<td>6.36 (2.26)</td>
<td>6.74 (2.07)</td>
<td>*</td>
<td>*</td>
<td>NS</td>
</tr>
<tr>
<td>Programme Clarity</td>
<td>5.38 (2.02)</td>
<td>5.52 (2.25)</td>
<td>6.63 (1.82)</td>
<td>NS</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Staff Control</td>
<td>5.18 (1.64)</td>
<td>5.96 (1.72)</td>
<td>5.48 (1.72)</td>
<td>*</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

* Significant differences at p < .05.
NS = no significant difference at p > .05

The post hoc analysis demonstrated that the nurses had statistically significantly lower rating scores for the Involvement, Autonomy, Practical Orientation and Order and Organisation subscales than patients and relatives did (see Table 10). Therefore, These results indicate that both patients and relatives reported that the Jordanian patients in their Real ward atmosphere were active and energetic in the day to day social functioning of the ward; they were self- sufficient and independent in their personal
affairs and in their relationships with staff; they were able to take care of themselves once they were discharged from the hospital and finally, that they could follow regular schedules and that the ward was well kept. More specifically, they rated these ‘attributes’ significantly higher than nurses did.

When both the patients and nurses ratings were further compared, significant differences were found for the subscales of Anger and Aggression and Staff Control (Table 10). These results indicate that the nurses perceived that the patients in Jordanian Psychiatric hospitals could enter into arguments with other patients and with the staff of the hospital and that they were also encouraged to display other expressions of anger. Perhaps as a result of this, nurses perceived lower levels of Staff Control than did the patients and the relatives. This means that nurses rated the Real ward atmosphere at these hospitals as an atmosphere that was not so strict with regard to rules and schedules. With regard to the Support subscale, the post hoc tests results demonstrated that a significant difference was found between the nurses and the relatives. This indicates that relatives rated the Real ward atmosphere as much more supportive for the patients than the nurses did.

Comparisons between the mean scores of the Real WAS subscales for the nurses, patients and relatives, through ANOVA tests and post hoc analysis demonstrated that there were disparities between how the Real WAS subscales were perceived by the nurses, the patients and the relatives. As presented earlier, the mean scores for nurses were lower than those for patients and relatives on the following subscales: Involvement, Support, Autonomy and Order and Organisation. On the following subscales however, relatives scored significantly higher than both nurses and patients: Involvement, Support, Spontaneity, Practical Orientation, Order and Organisation and Programme Clarity. Results indicate then, that both patients and relatives tended to rate their Real ward atmosphere as being characterized by more Involvement, Support (especially relatives), Autonomy, Practical Orientation, Order and Organisation, Programme Clarity, Staff Control and much less Anger and Aggression than did nurses. In other words, both relatives and patients tended to be more positive about the Real ward atmosphere than the nurses.
The comparisons of mean scores of the Real WAS subscales between the nurses, patients and relatives, using ANOVA tests, post hoc analysis and independent sample t-tests demonstrated that there were significant differences in Real WAS Subscales scores. These significant differences lead to the rejection of Null Hypothesis 1 (H1) and acceptance of the Alternative Hypothesis 1 (H1a).

Therefore, there are significant differences between nurses, patients and relatives in their perceptions of Real ward atmosphere subscales, and they have been outlined above.

**Hypothesis two (H2)**

There are no differences in the perceptions of Ideal ward atmosphere subscales between nurses, patients and relatives.

In order to test Hypothesis 2 the three-step data analysis method, which was used to test H1 and described in detail above, was also utilised to test this hypothesis. Results are presented in Figure 3 which presents the nurses’, patients’ and relatives’ responses on the Ideal form of WAS.

As shown in Figure 3, with regard to the subscales of Involvement, Support, Spontaneity, Practical Orientation, Personal Problem Orientation, Anger and Aggression and Programme Clarity, the patients’ relatives rated the Ideal WAS highest, the patients rated it lowest and the nurses in between. On the subscales of Autonomy and Order and Organisation, the nurses rated these subscales the highest, the relatives rated them the lowest and the patients rated them in between. On the Staff Control subscale, both nurses and relatives agreed and results were very close. However, both of these groups rated it lower than the patients.
Given that comparisons of the mean scores of the Ideal WAS subscales between the nurses, patients and relatives showed some differences, a one-way ANOVA was performed to determine if these differences between the means of the three participant groups were significant or not. Statistical analysis, using one-way ANOVA, showed that there were significant differences at $p<0.05$ in all subscales of Ideal ward atmosphere except for Involvement and Staff Control (Table 11).
Table 11. Results of one way ANOVA for all participant groups for the Ideal WAS subscales.

<table>
<thead>
<tr>
<th>Ward atmosphere Subscales</th>
<th>Sum of Squares Between Groups</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>16.382</td>
<td>2</td>
<td>8.191</td>
<td>1.878</td>
<td>.155</td>
</tr>
<tr>
<td></td>
<td>1151.648</td>
<td>264</td>
<td>4.362</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1168.030</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>45.350</td>
<td>2</td>
<td>22.675</td>
<td>5.274</td>
<td>.006*</td>
</tr>
<tr>
<td></td>
<td>1134.987</td>
<td>264</td>
<td>4.299</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1180.337</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spontaneity</td>
<td>88.123</td>
<td>2</td>
<td>44.061</td>
<td>11.011</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>1056.424</td>
<td>264</td>
<td>4.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1144.547</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>32.486</td>
<td>2</td>
<td>16.243</td>
<td>4.906</td>
<td>.008*</td>
</tr>
<tr>
<td></td>
<td>874.015</td>
<td>264</td>
<td>3.311</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>906.502</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>86.271</td>
<td>2</td>
<td>43.135</td>
<td>13.523</td>
<td>.002*</td>
</tr>
<tr>
<td></td>
<td>842.096</td>
<td>264</td>
<td>3.190</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>928.367</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>50.224</td>
<td>2</td>
<td>25.112</td>
<td>7.001</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>946.944</td>
<td>264</td>
<td>3.587</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>997.169</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger and Aggression</td>
<td>81.776</td>
<td>2</td>
<td>40.888</td>
<td>14.110</td>
<td>.003*</td>
</tr>
<tr>
<td></td>
<td>765.018</td>
<td>264</td>
<td>2.898</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>846.794</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order and Organisation</td>
<td>47.103</td>
<td>2</td>
<td>23.551</td>
<td>4.084</td>
<td>.018*</td>
</tr>
<tr>
<td></td>
<td>1522.380</td>
<td>264</td>
<td>5.767</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1569.483</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programme Clarity</td>
<td>42.895</td>
<td>2</td>
<td>21.448</td>
<td>6.723</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>842.184</td>
<td>264</td>
<td>3.190</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>885.079</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff Control</td>
<td>15.958</td>
<td>2</td>
<td>7.979</td>
<td>2.748</td>
<td>.066</td>
</tr>
<tr>
<td></td>
<td>766.454</td>
<td>264</td>
<td>2.903</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>782.412</td>
<td>266</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant differences at p < .05
As with Hypothesis 1, the ANOVA showed significant differences in perceptions of Ideal WAS between all participant groups. As such, Tukey HSD post hoc tests were again conducted to determine where the differences lay. Post hoc Tukey HSD analysis revealed that the nurses and relatives had significantly higher scores on the following subscales: Support, Spontaneity, Practical Orientation Personal Problem Orientation, Anger and Aggression and Programme Clarity than did the patients (Table 12). These findings indicate that nurses and relatives reported that they felt the patients to be supportive of both themselves and of the nurses, that patients were free to express their feelings to nurses, that patients were being given adequate training in practical skills which enabled better discharge planning and that patients were able to approach staff and feel comfortable in expressing their feelings. In the subscale of Anger and Aggression, the nurses and patients’ relatives rated this subscale higher than patients did. This indicates that the nurses and relatives felt that the nurses were giving the patients adequate time and opportunity to express themselves with the staff, without displaying disruptive behaviour. Programme Clarity also rated significantly higher in all hospitals which indicates that nurses and relatives felt that patients were familiar with the explicitness of rules and regulations and that they knew what to expect in their daily routine.

The low level of Autonomy in the Ideal form rated by both patients and relatives indicate that these participants perceived they are not self sufficient and independent in their personal affairs and nor in their relationships with staff and that they are not given enough freedom in the hospitals.

Finally, the relatives in this study rated lower level on Order and Organisation than did nurses and patients. Relatives perceived that patients were not following regular schedules, that the wards were not well kept and that activities were not carefully planned.

The following table (Table 12) presents the results of one-way ANOVA with the Post Hoc analysis for nurses, patients and relatives from all hospitals in Ideal WAS subscales.
### Table 12. Results of one-way ANOVA with the Post Hoc analysis for all participants groups (nurses, patients and relatives) from all hospitals in Ideal WAS subscales.

<table>
<thead>
<tr>
<th>WAS Subscales</th>
<th>Nurses M (SD)</th>
<th>Patients M (SD)</th>
<th>Relatives M (SD)</th>
<th>Significance difference between Nurses and Patients</th>
<th>Significance differences between Nurses and Relatives</th>
<th>Significance differences between Patients and Relatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>6.53(2.27)</td>
<td>6.07(2.03)</td>
<td>6.74(1.06)</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Support</td>
<td>6.82(2.09)</td>
<td>6.03(2.15)</td>
<td>7.04(1.63)</td>
<td>*</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>6.36(2.00)</td>
<td>5.37(1.98)</td>
<td>7.04(2.08)</td>
<td>*</td>
<td>NS</td>
<td>*</td>
</tr>
<tr>
<td>Autonomy</td>
<td>4.76(2.05)</td>
<td>4.12(1.65)</td>
<td>3.85(0.99)</td>
<td>*</td>
<td>*</td>
<td>NS</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>6.28(1.63)</td>
<td>5.43(1.96)</td>
<td>7.26(1.81)</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>6.53(1.86)</td>
<td>5.73(2.00)</td>
<td>6.89(1.63)</td>
<td>*</td>
<td>NS</td>
<td>*</td>
</tr>
<tr>
<td>Anger and Aggression</td>
<td>5.80(1.79)</td>
<td>5.03(1.58)</td>
<td>6.85(1.63)</td>
<td>NS</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Order and Organisation</td>
<td>7.71(2.59)</td>
<td>7.21(2.30)</td>
<td>6.30(1.79)</td>
<td>NS</td>
<td>*</td>
<td>NS</td>
</tr>
<tr>
<td>Programme Clarity</td>
<td>7.14(1.83)</td>
<td>6.30(1.76)</td>
<td>7.22(1.50)</td>
<td>*</td>
<td>NS</td>
<td>*</td>
</tr>
<tr>
<td>Staff Control</td>
<td>5.26(1.66)</td>
<td>5.77(1.59)</td>
<td>5.33(2.29)</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

* Significant differences at p<.05  
NS: no significant difference has been detected at P >.05

Comparing the mean scores of the Ideal WAS subscales between the nurses, patients and relatives, conducting ANOVA tests and by the use of post hoc analysis, it was revealed that there were significant differences in Ideal WAS scores between nurses, patients and relatives. These significant differences lead to the rejection of Null Hypothesis 2 (H2) and acceptance of Alternative Hypothesis 2 (H2a).
Hence, there were significant differences between nurses, patients and relatives in their perceptions of Ideal ward atmosphere subscales and these were outlined above.

**Hypothesis three (H3)**

All participants will perceive Real ward atmosphere as being lower than the Ideal in all WAS subscales.

Comparisons between the Real WAS scores and the Ideal WAS were conducted for all participant groups (nurses, patients and relatives). The mean scores are presented in Figure 4 for nurses, Figure 5 for patients, Figure 6 for relatives and appendix 21.

**Nurses**

![Figure 4. Mean scores of Real and Ideal ward atmosphere subscales for nurses (n=136)](image)

As can be seen from Figure 4 nurses perceived their Ideal ward atmosphere as higher in all subscales than the Real ward atmosphere except Anger and Aggression, which was perceived as slightly lower than the Real form.
Table 13. Results of Paired sample t-test for all nurse participants.

<table>
<thead>
<tr>
<th>Patients</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Involvement R) Involvement (I)</td>
<td>-2.59559</td>
<td>3.52426</td>
<td>.30220</td>
<td>-3.19325 -1.99792</td>
<td>-8.589</td>
<td>135</td>
<td>.001</td>
</tr>
<tr>
<td>Pair 2 Support (R) Support (I)</td>
<td>-1.79412</td>
<td>2.84701</td>
<td>.24413</td>
<td>-2.27693 -1.31131</td>
<td>-7.349</td>
<td>135</td>
<td>.002</td>
</tr>
<tr>
<td>Pair 3 Spontaneity (R) Spontaneity (I)</td>
<td>-1.63235</td>
<td>2.92830</td>
<td>.25110</td>
<td>-2.12895 -1.13575</td>
<td>-6.501</td>
<td>135</td>
<td>.001</td>
</tr>
<tr>
<td>Pair 4 Autonomy (R) Autonomy (I)</td>
<td>-0.84559</td>
<td>2.55569</td>
<td>.21915</td>
<td>-1.27900 -.41218</td>
<td>-3.859</td>
<td>135</td>
<td>.002</td>
</tr>
<tr>
<td>Pair 5 Practical Orientation (R) Practical Orientation (I)</td>
<td>-1.63971</td>
<td>2.96316</td>
<td>.25409</td>
<td>-2.14222 -1.13720</td>
<td>-6.453</td>
<td>135</td>
<td>.003</td>
</tr>
<tr>
<td>Pair 6 Personal Problem Orientation (R) Personal Problem Orientation (I)</td>
<td>-1.33824</td>
<td>2.88860</td>
<td>.24770</td>
<td>-1.82810 -.84837</td>
<td>-5.403</td>
<td>135</td>
<td>.001</td>
</tr>
<tr>
<td>Pair 7 Anger and Aggression (R) Anger and Aggression (I)</td>
<td>-0.36765</td>
<td>2.37832</td>
<td>.20394</td>
<td>-.03568 .77098</td>
<td>1.803</td>
<td>135</td>
<td>.074</td>
</tr>
<tr>
<td>Pair 9 Programme Clarity (R) Programme Clarity (I)</td>
<td>-1.75735</td>
<td>2.71210</td>
<td>.23256</td>
<td>-2.21729 -1.29742</td>
<td>-7.557</td>
<td>135</td>
<td>.001</td>
</tr>
<tr>
<td>Pair 10 Staff Control (R) Staff Control (I)</td>
<td>-0.07353</td>
<td>1.93461</td>
<td>.16589</td>
<td>-.40161 .25455</td>
<td>-.443</td>
<td>135</td>
<td>.658</td>
</tr>
</tbody>
</table>
Table 13 shows significant differences with a p level at < .005 (using a Bonferroni adjusting for multiple tests) for all subscales of the WAS except Anger and Aggression and Staff Control.

These results indicate that the nurses rated their Ideal ward atmosphere as that which offered more help and support to the patients and was more tolerant of different personality types and of the needs of the patients to express their emotions. Finally, nurses perceived that the rules and the regulations were clearer and better organized and that the patients would be fully aware about what to expect in their daily routines. Nurses therefore, in their Ideal ratings were indicating that things should be better in Ideal ward than they actually are in the Real ward.

Patients

![Graph showing mean scores of Real and Ideal ward atmosphere subscales for patients (n=104)](image)

Figure 5. Mean scores of Real and Ideal ward atmosphere subscales for patients (n=104)

Figure 5 above shows that patients from all participating hospitals perceived their Ideal Ward atmosphere differently from their Real ward atmosphere in all WAS subscales.

Figure 5 also demonstrates that patients perceived their Ideal ward atmosphere as higher in all subscales than the Real ward atmosphere except for Autonomy, Anger and
Aggression and Staff Control which were rated at a lower level than how they rated them in the Real form.

(Table 14) showed significant differences with p level at .005 (using a Bonferroni adjusting for multiple tests) for all subscales of the WAS except Support, Practical Orientation, Anger and Aggression and Staff Control.
Table 14. Results of Paired sample t-test for patient participants.

<table>
<thead>
<tr>
<th>Patients</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Involvement R)</td>
<td>-0.99038</td>
<td>2.34622</td>
<td>.23007</td>
<td>-1.44667 - .53410</td>
<td>-4.305</td>
<td>103</td>
<td>.000</td>
</tr>
<tr>
<td>Involvement (I)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 2 Support (R)</td>
<td>-0.46154</td>
<td>2.51567</td>
<td>.24668</td>
<td>-.95077 - .02770</td>
<td>-1.871</td>
<td>103</td>
<td>.064</td>
</tr>
<tr>
<td>Support (I)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 3 Spontaneity (R)</td>
<td>-0.70192</td>
<td>1.92015</td>
<td>.18829</td>
<td>-1.07534 - .32850</td>
<td>-3.728</td>
<td>103</td>
<td>.000</td>
</tr>
<tr>
<td>Spontaneity (I)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pair 4 Autonomy (R)</td>
<td>0.78846</td>
<td>2.17074</td>
<td>.21286</td>
<td>.36631 - 1.21062</td>
<td>3.704</td>
<td>103</td>
<td>.000</td>
</tr>
<tr>
<td>Autonomy (I)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Pair 5 Practical Orientation (R)</td>
<td>-0.10577</td>
<td>1.95045</td>
<td>.19126</td>
<td>-.48508 -.27354</td>
<td>-0.553</td>
<td>103</td>
<td>.581</td>
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<tr>
<td>Practical Orientation (I)</td>
<td></td>
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<tr>
<td>Pair 6 Personal Problem Orientation (R)</td>
<td>-0.68269</td>
<td>2.30771</td>
<td>.22629</td>
<td>-1.13148 - .23390</td>
<td>-3.017</td>
<td>103</td>
<td>.003</td>
</tr>
<tr>
<td>Personal Problem Orientation (I)</td>
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<td></td>
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<td></td>
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<tr>
<td>Pair 7 Anger and Aggression (R)</td>
<td>0.46154</td>
<td>1.92037</td>
<td>.18831</td>
<td>.08807 .83500</td>
<td>2.451</td>
<td>103</td>
<td>.016</td>
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<td>Anger and Aggression (I)</td>
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<td></td>
</tr>
<tr>
<td>Pair 8 Order and Organisation (R)</td>
<td>-0.85577</td>
<td>2.40315</td>
<td>.23565</td>
<td>-1.32312 -.38842</td>
<td>-3.632</td>
<td>103</td>
<td>.000</td>
</tr>
<tr>
<td>Order and Organisation (I)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 9 Programme Clarity (R)</td>
<td>-0.77885</td>
<td>2.43341</td>
<td>.23862</td>
<td>-1.25208 -.30561</td>
<td>-3.264</td>
<td>103</td>
<td>.001</td>
</tr>
<tr>
<td>Programme Clarity (I)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 10 Staff Control (R)</td>
<td>0.19231</td>
<td>2.01488</td>
<td>.19758</td>
<td>-.19954 .58415</td>
<td>.973</td>
<td>103</td>
<td>.333</td>
</tr>
<tr>
<td>Staff Control (I)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The paired samples t-test revealed that the largest differences between the Real and the Ideal forms of WAS as rated by the Jordanian patients were found in the following subscales: Autonomy, Order and Organisation and Programme Clarity. Patients also described their Ideal ward atmosphere as having more Involvement and more Spontaneity. However, the differences between Real and Ideal were not as great as those for Order and Organization and Programme Clarity. This indicates that the patients from all hospitals perceive that ideally the ward atmosphere would offer more therapeutic activities for which to engage, rather than passing their time passively in hospital than was the case in reality. In addition, the patients perceived that ideally the ward atmosphere would be more tolerant of different personality types and of the needs of the patients to be able to express their emotions than in reality. Furthermore, the Jordanian patients perceived that they would be more able to express their feelings and personal problems to nursing staff and other health team members in an ideal ward atmosphere. Finally, patients perceived that the rules and the regulations in the Ideal ward atmosphere would be clearer and better organized and that they would be fully aware about what to expect in their daily routines.

**Relatives**

![Figure 6. Mean scores of Real and Ideal ward atmosphere subscales for patients’ relatives](image-url)
As demonstrated in Figure 6 above, patients’ relatives perceived their Ideal ward atmosphere as having higher levels in Involvement, Support, Spontaneity, Practical Orientation, Personal Problem Orientation, Anger and Aggression, Programme Clarity and at a lower level in Autonomy, Order and Organisation and Staff Control than they did when they rated the Real form.

Paired sample t-test (see Table 15) showed significant differences with p level at .005 (using a Bonferroni adjusting for multiple tests) for all subscales of Ideal ward atmosphere scale except Support, Practical Orientation, Anger and Aggression, Order and Organisation, Programme Clarity) and Staff Control.
Table 15. Results of Paired sample t-test for relative participants.

<table>
<thead>
<tr>
<th>Patients' relatives</th>
<th>Paired Differences</th>
<th></th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Involvement (R)</td>
<td>-1.18519</td>
<td>1.46857</td>
<td>.28263</td>
<td>-1.76613 - .60424</td>
<td>-4.193</td>
<td>26</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>Involvement (I)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 2</td>
<td>Support (R)</td>
<td>-0.59259</td>
<td>1.92672</td>
<td>.37080</td>
<td>-1.35478 .16959</td>
<td>-1.598</td>
<td>26</td>
<td>.122</td>
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<tr>
<td></td>
<td>Support (I)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 3</td>
<td>Spontaneity (R)</td>
<td>-1.62963</td>
<td>2.55927</td>
<td>.49253</td>
<td>-2.64204 -.61722</td>
<td>-3.309</td>
<td>26</td>
<td>.003</td>
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<tr>
<td></td>
<td>Spontaneity (I)</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Pair 4</td>
<td>Autonomy (R)</td>
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<td>1.42325</td>
<td>.27390</td>
<td>.32587 1.45191</td>
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<td>Pair 5</td>
<td>Practical Orientation (R)</td>
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<td>-2.64475 -.39228</td>
<td>-2.771</td>
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<tr>
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<td>Pair 6</td>
<td>Personal Problem Orientation (R)</td>
<td>-1.37037</td>
<td>2.20398</td>
<td>.42416</td>
<td>-2.24224 -.49850</td>
<td>-3.231</td>
<td>26</td>
<td>.003</td>
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<tr>
<td></td>
<td>Personal Problem Orientation (I)</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Pair 7</td>
<td>Anger and Aggression (R)</td>
<td>-0.88889</td>
<td>1.96769</td>
<td>.37868</td>
<td>-1.66728 -.11050</td>
<td>-2.347</td>
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<tr>
<td></td>
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<td>Pair 8</td>
<td>Order and Organisation (R)</td>
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<td>1.50214</td>
<td>.28909</td>
<td>-.14978 1.03867</td>
<td>1.537</td>
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<td>.136</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Pair 9</td>
<td>Programme Clarity (R)</td>
<td>-0.59259</td>
<td>1.88637</td>
<td>.36303</td>
<td>-1.33882 .15363</td>
<td>-1.632</td>
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<td>.115</td>
</tr>
<tr>
<td></td>
<td>Programme Clarity (I)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pair 10</td>
<td>Staff Control (R)</td>
<td>0.14815</td>
<td>2.23097</td>
<td>.42935</td>
<td>-.73439 1.03069</td>
<td>.345</td>
<td>26</td>
<td>.733</td>
</tr>
<tr>
<td></td>
<td>Staff Control (I)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
The paired samples t-test (see Table 15) showed that the largest difference between the Real and the Ideal forms of WAS as rated by the Jordanian relatives occurred in the following subscales: Involvement, Spontaneity and Personal Problem Orientation. This indicates that relatives perceive that the patients in the Ideal ward atmosphere would be more actively involved in therapeutic activities, and also that the nurses would be more involved in organizing these activities for the patients. They also felt that the patients would be given more freedom to express their feelings and their emotions to the nurses in comparison to the real ward atmosphere.

Conversely, patients’ relatives perceived the Ideal ward atmosphere as characterised by a lower level of Autonomy and Order and Organisation. This could indicate that the relatives perceived that the patients’ autonomy could not be improved in such a restrictive environment and that the patients would be not following regular schedules.

The relatives rated the Ideal ward atmosphere higher on the following subscales: Involvement, Support, Spontaneity, Practical Orientation, Personal Problem Orientation, Anger and Aggression and Programme Clarity subscales. On the other hand, relatives rated the Ideal ward atmosphere lower on Autonomy and Order and Organisation. These results indicate within some subscales that relatives tended to perceive the Ideal ward atmosphere more positively.

Once again, paired sample t-tests was performed to determine if there were significant differences between the Real and Ideal forms of WAS. The results showed that there were in fact significant differences between the Real and Ideal forms of WAS in most of the WAS subscales as rated by all participant groups.

The findings of this study then, provide support for Hypothesis 3 (H3) with regard to the following subscales: Involvement, Support, Spontaneity, Practical Orientation, Personal Problem Orientation and Programme Clarity, but not for the subscales of Autonomy, Anger and Aggression, Order and Organisation and Staff Control as the participant groups rated these subscales on the Ideal form of the WAS lower than the
Real form. These significant differences lead to rejection of Null Hypothesis 3 (H3) and partial acceptance of Alternative Hypothesis 3 (H3a).

**Hypothesis four (H4)**

There are no differences in Real WAS scores between Jordanian nurses and North American nurses.

In order to test Hypothesis 4, a comparison between the profiles of ward atmosphere in this present study with that of the Moos’ normative sample (Moos 1997) was performed. The North American normative sample is composed of research involving 160 programmes in 44 hospitals located in 16 states in the United States of America. It includes 28 programmes in 14 university and teaching hospitals, 22 programmes in community and private hospitals, 55 programmes in 14 Department of Veteran’s Affairs medical centres and 55 programmes in 10 state hospitals. A total of 3,575 patients and 1,958 staff completed the WAS (Moos 1997).

In a descriptive comparison with Moos’ normative sample the North American nurses perceived their Real ward atmosphere as being characterised by higher level in the Involvement, Support, Spontaneity, Autonomy, Practical Orientation, Personal Problem Orientation, Anger and Aggression, Order and Organisation and Programme Clarity subscales than did the Jordanian nurses. On the other hand, the North American nurses perceived that their ward atmosphere was characterised by lower level of Staff Control than did the Jordanian nurses.
Figure 7. Mean scores of Real ward atmosphere subscales for North American nurses (n= 1958) and Jordanian nurses (n= 138)

Figure 7 provides an overview of mean scores of Real ward atmosphere highlighting the most striking differences in the subscales of Involvement (I), Autonomy (A), Practical Orientation (PO) and Staff Control (SC). In addition, one sample t-tests were performed to determine whether there were significant differences between the North American and the Jordanian samples. Results are presented in (Table 16). As can be seen from Table 16 then, the North American nurses rated significantly higher than the Jordanian nurses in all Real WAS subscales except that for Staff Control, which they rated lower than the Jordanian nurses. The largest significant differences were found in the subscales of Involvement, Autonomy, Practical Orientation and Staff Control.

When testing Hypothesis 4, the comparison between nurse participants in the USA and in Jordan demonstrated that the existing ward perceptions are different. For the Jordanian wards, nurses perceive significantly lower levels on the subscales of Involvement, Support, Autonomy and Practical Orientation than the North American nurses do. The results suggest that North American hospitals are perceived to offer more therapeutic activities, more support, more freedom for patients to express their
feelings openly and more help for patients to become self sufficient and more independent. North American nurses also deliver their care in an environment characterized by lower levels of Staff Control.
Table 16. Results of one-sample t-tests for nurses and patients in comparison with North American research.

<table>
<thead>
<tr>
<th>WAS Subscales</th>
<th>Mean scores for North American Nurses</th>
<th>Mean scores and (SD) for Jordanian nurses</th>
<th>T</th>
<th>P*</th>
<th>Mean scores for North American Patients</th>
<th>Mean scores and (SD) for Jordanian Patients</th>
<th>t</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>6.62</td>
<td>3.93 (2.31)</td>
<td>-13.5</td>
<td>.001</td>
<td>5.41</td>
<td>5.08 (2.24)</td>
<td>-1.52</td>
<td>.130</td>
</tr>
<tr>
<td>Support</td>
<td>6.72</td>
<td>5.03 (1.89)</td>
<td>-10.4</td>
<td>.001</td>
<td>5.72</td>
<td>5.57 (2.08)</td>
<td>-.749</td>
<td>.461</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>5.57</td>
<td>4.73 (2.01)</td>
<td>-4.89</td>
<td>.002</td>
<td>4.52</td>
<td>4.66 (2.04)</td>
<td>-.749</td>
<td>.461</td>
</tr>
<tr>
<td>Autonomy</td>
<td>6.32</td>
<td>3.91 (1.62)</td>
<td>-17.3</td>
<td>.002</td>
<td>5.23</td>
<td>4.90 (1.52)</td>
<td>-2.19</td>
<td>.003</td>
</tr>
<tr>
<td>Practical orientation</td>
<td>7.52</td>
<td>4.64 (2.24)</td>
<td>-15.0</td>
<td>.003</td>
<td>5.97</td>
<td>5.33 (1.89)</td>
<td>-3.47</td>
<td>.002</td>
</tr>
<tr>
<td>Personal Problem</td>
<td>5.91</td>
<td>5.19 (2.16)</td>
<td>-3.87</td>
<td>.001</td>
<td>4.79</td>
<td>5.05 (1.79)</td>
<td>1.47</td>
<td>.143</td>
</tr>
<tr>
<td>Orientation</td>
<td>6.52</td>
<td>6.17 (1.58)</td>
<td>-2.59</td>
<td>.001</td>
<td>4.94</td>
<td>5.50 (1.68)</td>
<td>3.40</td>
<td>.003</td>
</tr>
<tr>
<td>Anger and Aggression</td>
<td>6.07</td>
<td>5.13 (2.38)</td>
<td>-4.60</td>
<td>.001</td>
<td>6.20</td>
<td>6.36 (2.26)</td>
<td>.703</td>
<td>.483</td>
</tr>
<tr>
<td>Order and Organisation</td>
<td>6.69</td>
<td>5.38 (2.02)</td>
<td>-7.54</td>
<td>.002</td>
<td>5.30</td>
<td>5.52 (2.25)</td>
<td>.993</td>
<td>.321</td>
</tr>
<tr>
<td>Programme Clarity</td>
<td>3.48</td>
<td>5.18 (1.64)</td>
<td>12.1</td>
<td>.30</td>
<td>5.28</td>
<td>5.96 (1.72)</td>
<td>4.03</td>
<td>.001</td>
</tr>
</tbody>
</table>

* Using Bonferroni adjustment for multiple tests, alpha (p) level of < .005 was used for comparisons.
Descriptive statistics and one-sample t-test were performed to test Hypothesis 4. The results revealed that there were significant differences in Real WAS scores between the Jordanian nurses and the North American nurses. These significant differences lead to rejection of Null Hypothesis 4 (H4) and acceptance of Alternative Hypothesis 4 (H4a).

Hence, there are differences in Real WAS scores between Jordanian nurses and North American nurses and they are outlined above.

**Hypothesis five (H5)**

There are no differences in Real WAS scores between Jordanian patients and North American patients.

Descriptive statistics were conducted to compare the mean scores of Real WAS subscales for the patients in the present study with the mean scores of Real WAS subscales for the patients in Moos’s normative sample (Moos 1974). As can be seen from Figure 8, the Jordanian patients rated the subscales of Personal Problem Orientation, Anger and Aggression, Programme Clarity (as well as Staff Control higher than the North American patients. On the other hand, Jordanian patients rated the levels of Involvement, Autonomy and Practical Orientation marginally lower than the North American patients. The ratings for Support and Order and Organisation were relatively similar for both the Jordanian and for the North American patients.
In addition, one-sample t-tests were performed to determine whether there were significant differences between North American and Jordanian patients. Results are presented in (Table 16) significant differences between the Jordanian patients and the North American patients were found in the following subscales: Autonomy, Practical Orientation, Anger and Aggression and Staff Control.

When testing Hypothesis 5, the comparison between the existing North American wards and wards in the Jordanian hospitals, results demonstrated that there were significant differences in Real WAS scores between the Jordanian patients and the North American patients. These differences occurred in the following subscales: Autonomy, Practical Orientation, Anger and Aggression and Staff Control. These results indicate that the North American patients perceived their Real ward atmosphere as offering them more ways to be self sufficient and independent and as having higher levels of practical skills to help them with their transition back into the community. Moreover, North American patients perceived that nurses dedicated more time to enable them to express their feelings openly. The North American patients perceived their Real ward atmosphere as being less strict and controlling of the patients than the Jordanian patients did. In summary, descriptive statistics and one-sample t-test were performed to answer

Figure 8. Mean scores of Real ward atmosphere subscales for American patients (n=3575) and Jordanian patients (n=104).
Hypothesis 5. The results revealed that there were significant differences in Real WAS scores between the Jordanian patients and the North American patients in the subscales of Autonomy, Practical Orientation, Anger and Aggression and Staff Control. These significant differences lead to the rejection of Null Hypothesis 5 (H5).

Hence, there are differences in Real WAS scores between Jordanian patients and North American patients and they are outlined above.

**Hypothesis six (H6)**

The nurse’s perceptions of Real ward atmosphere are influenced by demographic variables (age, gender, educational level and work experience) in the Jordanian hospital.

MANOVA tests were used to examine the effects of demographic variables on the perception of Real ward atmosphere for each group of participant nurses. The demographic variables were entered as independent variables while the Real ward atmosphere’s subscales were entered as dependent variables for each analysis. In order to use the MANOVA test successfully, assumptions for MANOVA such as Deviation from Normal Distribution; Homogeneity of Variances and Co Variances were tested and no violation of these assumptions were found. Given this, MANOVA tests were considered appropriate and subsequently used.

The MANOVA testing for age (see Table 17) Pillai’s Trace = 5.132 (F{270,260} =1.02, p=.45), gender Pillai’s Trace = .232 (F{10,17} =.52, p=.86), educational level Pillai’s Trace = .299 (F{10, 17} =.30, p=.69) and work experience in the current hospital Pillai’s Trace = 3.373 (F{140, 256} =1.05, p=.38) was found to not be significant. This data indicates the absence of any influence of these variables on the Real ward atmosphere’s perception in the Jordanian psychiatric hospitals from the nurses’ perspective.
The findings as outlined above indicate that the perception of the Real ward atmosphere is not influenced by the nurses’ age, gender and educational level. Nor is it influenced by the work experience in the current hospital.

Hence, Hypothesis 6 is *not* supported.
Hypothesis seven (H7)

The patient’s perceptions of Real ward atmosphere are influenced by age, gender, nature of admission, length of stay in the current hospital or by their psychiatric diagnosis.

In order to test Hypothesis 7, MANOVA analysis was used to examine the effects of the patients’ age, gender, nature of admission, length of stay in the current hospital and of the psychiatric diagnosis.

The MANOVA test for age (See Table 18) Pillai’s Trace = 7.130 (F{320, 100}= .776 p= .948), gender Pillai’s Trace = .609 (F{10, 1}=.16, p= .97), psychiatric diagnosis Pillai’s Trace = 1.839 (F{20, 2}=1.53, p= .47), length of stay Pillai’s Trace = .333 (F{10,1}=50, p= .99) and type of admission Pillai’s Trace = .993 (F{10,1}= 14.14 p= .20) was found to be not significant. This finding indicates that these variables are not influential on the perception of the Real ward atmosphere in the Jordanian psychiatric hospitals from the patients’ perspectives.

The findings of this study reveal that the perception of the Real ward atmosphere was not influence by age, gender, type of admission, length of stay in the current hospital or by the psychiatric diagnosis from the Jordanian patients’ perspective.

Hence, Hypothesis 7 is not supported.
Table 18. The results of Multivariate tests for patient participants.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
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<tr>
<td>Wilks' Lambda</td>
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<td>1150.061*</td>
<td>10.000</td>
<td>1.000</td>
<td>.023</td>
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<tr>
<td>Hotelling's Trace</td>
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<td>1150.061*</td>
<td>10.000</td>
<td>1.000</td>
<td>.023</td>
</tr>
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<td>Roy's Largest Root</td>
<td>11500.606</td>
<td>1150.061*</td>
<td>10.000</td>
<td>1.000</td>
<td>.023</td>
</tr>
<tr>
<td>Age</td>
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<td>320.000</td>
<td>100.000</td>
<td>.948</td>
</tr>
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<tr>
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<td>.999</td>
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<tr>
<td>Roy's Largest Root</td>
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<td>.050a</td>
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<td>1.000</td>
<td>.999</td>
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<td>.204</td>
</tr>
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<td>Wilks' Lambda</td>
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<td>14.138a</td>
<td>10.000</td>
<td>1.000</td>
<td>.204</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
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<td>14.138a</td>
<td>10.000</td>
<td>1.000</td>
<td>.204</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>141.379</td>
<td>14.138a</td>
<td>10.000</td>
<td>1.000</td>
<td>.204</td>
</tr>
</tbody>
</table>
Hypothesis eight (H8)

The patient’s relatives’ perceptions of Real ward atmosphere are not influenced by age, gender, relationship to patient and frequency of visiting.

The MANOVA analysis (see Table 19) for age Pillai’s Trace = .982 (F{14,1}=3.93, p=.38), gender Pillai’s Trace = .500 (F{1, 1}=1, p=.050), relationship to the patients Pillai’s Trace = 1.00(F{1,1}=1, p=.50) and frequency of visiting Pillai’s Trace = .883 (F{1, 1.00}= 7.53, p=.22) were found to be not significant. Like the variables described previously, these demographic variables on the Real ward atmosphere’s as perceptive in the Jordanian psychiatric hospitals from the relatives’ perspectives are not influential.

MANOVA analyses were performed to test Hypothesis 8. The results revealed that the age, gender, frequency of visiting and the relationship to the patients have no impact on the perceptions of Real ward atmosphere from the patients’ relatives’ perspectives. Therefore the null Hypothesis 8 was accepted.

Hence, the patient’s relatives’ perceptions of Real ward atmosphere are not influenced by age, gender, relationship to patient and frequency of visiting.
Table 19. Results of Multivariate tests for relative participants.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>Pillai's Trace</td>
<td>.999</td>
<td>1219.137a</td>
<td>1.000</td>
<td>.018</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.001</td>
<td>1219.137a</td>
<td>1.000</td>
<td>.018</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>1219.137</td>
<td>1219.137a</td>
<td>1.000</td>
<td>.018</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest Root</td>
<td>1219.137</td>
<td>1219.137a</td>
<td>1.000</td>
<td>.018</td>
</tr>
<tr>
<td>Age</td>
<td>Pillai's Trace</td>
<td>.982</td>
<td>3.929a</td>
<td>14.000</td>
<td>.378</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.018</td>
<td>3.929a</td>
<td>14.000</td>
<td>.378</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>55.000</td>
<td>3.929a</td>
<td>14.000</td>
<td>.378</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest Root</td>
<td>55.000</td>
<td>3.929a</td>
<td>14.000</td>
<td>.378</td>
</tr>
<tr>
<td>Gender</td>
<td>Pillai's Trace</td>
<td>.500</td>
<td>1.000a</td>
<td>1.000</td>
<td>.500</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.500</td>
<td>1.000a</td>
<td>1.000</td>
<td>.500</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>1.000</td>
<td>1.000a</td>
<td>1.000</td>
<td>.500</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest Root</td>
<td>1.000</td>
<td>1.000a</td>
<td>1.000</td>
<td>.500</td>
</tr>
<tr>
<td>Relation</td>
<td>Pillai's Trace</td>
<td>1.000</td>
<td>1.000a</td>
<td>1.000</td>
<td>.500</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>1.000</td>
<td>1.000a</td>
<td>1.000</td>
<td>.500</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>1.000</td>
<td>1.000a</td>
<td>1.000</td>
<td>.437</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest Root</td>
<td>1.000</td>
<td>1.000a</td>
<td>1.000</td>
<td>.437</td>
</tr>
<tr>
<td>Visiting</td>
<td>Pillai's Trace</td>
<td>.883</td>
<td>7.529a</td>
<td>1.000</td>
<td>.222</td>
</tr>
<tr>
<td></td>
<td>Wilks' Lambda</td>
<td>.117</td>
<td>7.529a</td>
<td>1.000</td>
<td>.222</td>
</tr>
<tr>
<td></td>
<td>Hotelling's Trace</td>
<td>7.529</td>
<td>7.529a</td>
<td>1.000</td>
<td>.222</td>
</tr>
<tr>
<td></td>
<td>Roy's Largest Root</td>
<td>7.529</td>
<td>7.529a</td>
<td>1.000</td>
<td>.222</td>
</tr>
</tbody>
</table>
Hypothesis nine (H9)

There are no differences in the perceptions of Real ward atmosphere scale according to the hospital ownership for all participant groups.

Table 20 below, presents the mean, standard deviations (f) and significance (p) for Private, Government and Military mental health hospitals.

Table 20. Means, standard deviations (f) and significance (p) for private, government and military mental health hospitals

<table>
<thead>
<tr>
<th>WAS Subscales</th>
<th>Private Mean (SD)</th>
<th>Governmental Mean (SD)</th>
<th>Military Mean (SD)</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>5.41 (2.00)</td>
<td>4.26 (2.35)</td>
<td>4.96 (2.11)</td>
<td>5.64</td>
<td>.001*</td>
</tr>
<tr>
<td>Support</td>
<td>5.37 (1.57)</td>
<td>5.32 (2.09)</td>
<td>5.88 (1.83)</td>
<td>.83</td>
<td>.44</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>5.39 (1.69)</td>
<td>4.53 (2.01)</td>
<td>5.38 (2.24)</td>
<td>5.06</td>
<td>.001*</td>
</tr>
<tr>
<td>Autonomy</td>
<td>4.73 (1.55)</td>
<td>4.28 (1.60)</td>
<td>4.46 (1.82)</td>
<td>1.56</td>
<td>.21</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>5.90 (1.60)</td>
<td>4.71 (2.21)</td>
<td>5.58 (1.77)</td>
<td>7.60</td>
<td>.002*</td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>5.24 (1.72)</td>
<td>5.10 (2.07)</td>
<td>5.54 (2.15)</td>
<td>.539</td>
<td>.584</td>
</tr>
<tr>
<td>Anger and Aggression</td>
<td>5.65 (1.55)</td>
<td>5.86 (1.71)</td>
<td>6.63 (1.41)</td>
<td>2.95</td>
<td>.005</td>
</tr>
<tr>
<td>Order and Organisation</td>
<td>6.55 (2.18)</td>
<td>5.54 (2.46)</td>
<td>6.00 (1.87)</td>
<td>3.82</td>
<td>.002*</td>
</tr>
<tr>
<td>Programme Clarity</td>
<td>5.76 (1.97)</td>
<td>5.49 (2.18)</td>
<td>5.67 (1.99)</td>
<td>.357</td>
<td>.70</td>
</tr>
<tr>
<td>Staff control</td>
<td>4.90 (1.73)</td>
<td>5.72 (1.68)</td>
<td>5.12 (1.60)</td>
<td>5.56</td>
<td>.001*</td>
</tr>
</tbody>
</table>

Significant differences * p <.05

As can be seen from Table 20 the participants from the Private hospital rated the Real WAS higher than those from the Government or the Military hospital in the subscales of Involvement, Spontaneity, Autonomy, Practical Orientation, Order and Organisation and Programme Clarity. On the other hand the participants from the Military hospital rated the subscale of Support, Personal Problem Orientation and Anger and Aggression higher than both the Private and the Government hospitals. With regard to the Government hospital, the participants rated Staff Control higher than did the Private and the Military hospitals.
MANOVA tests were also performed to examine the effect of the hospital ownership on the perceptions of the Real ward atmosphere. As can be seen in Table 20, significant differences between the three hospitals were found in the following subscales: Involvement, Spontaneity, Practical Orientation, Order and Organisation and Staff Control. The MANOVA testing of the effects of hospital type (see Table 21) Pillai’s Trace = (F{30,768} = 2.50, p= .001) was found to be significant, indicating there was an influence of hospital ownership on the perceptions of ward atmosphere in this study (refer to Table 21).

Table 21. Results of Multivariate tests for all hospitals types.  

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>.965</td>
<td>704.286a</td>
<td>10.000</td>
<td>254.000</td>
<td>.000</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.035</td>
<td>704.286a</td>
<td>10.000</td>
<td>254.000</td>
<td>.000</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>27.728</td>
<td>704.286a</td>
<td>10.000</td>
<td>254.000</td>
<td>.000</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>27.728</td>
<td>704.286a</td>
<td>10.000</td>
<td>254.000</td>
<td>.000</td>
</tr>
<tr>
<td>Hospital</td>
<td>.267</td>
<td>2.504</td>
<td>30.000</td>
<td>768.000</td>
<td>.001</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.752</td>
<td>2.532</td>
<td>30.000</td>
<td>746.216</td>
<td>.002</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.304</td>
<td>2.557</td>
<td>30.000</td>
<td>758.000</td>
<td>.001</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.182</td>
<td>4.648b</td>
<td>10.000</td>
<td>256.000</td>
<td>.002</td>
</tr>
</tbody>
</table>

The results shown above indicate that the participants from the Private hospital rated Real WAS higher than the participants from the Government and the Military hospitals in Involvement, Spontaneity, Autonomy, Practical Orientation, Order and Organisation and Programme Clarity subscales. This indicates that the participants from the Private hospital described the ward atmosphere as more involved, more spontaneous and less argumentative. They also rated their ward atmosphere higher in terms of being clearer and better organized than participants from the Government and the Military hospitals. The participants from the Government hospitals rated the Staff Control) higher than
those from both the Private and the Military hospitals. This indicated that participant’s perceived staff in the Government hospital exercised more control over the patients.

MANOVA test were performed to examine the effect of the hospital ownership on the perceptions of the Real ward atmosphere. The results revealed that there were significant differences in the perceptions of Real ward atmosphere according to hospital ownership. These significant differences lead to the rejection of Null hypothesis 9 (H9) and acceptance of Alternative Hypothesis 9 (H9a).

Hence, there are significant differences in the perceptions of Real ward atmosphere according to the hospital ownership for all participant groups.

**Chapter Summary**

Descriptive analysis, ANOVA, independent sample t-tests, Paired sample t-tests and MANOVA, were used to test the research hypotheses. When a significant difference with the ANOVA was found, the Post hoc Tukey HSD analysis was also performed to determine where the differences existed.

The main findings of this study were as follows:

1) Jordanian nurse participants rated three subscales of Real ward atmosphere (Involvement, Practical Orientation and Order and Organisation) statistically significantly lower than did patients and relatives.

2) On the Real ward atmosphere subscales of Support, Spontaneity and Programme Clarity, Jordanian relatives scored significantly higher than both nurses and patients.

3) The relatives and nurses rated the Ideal ward atmosphere significantly higher on the subscales of Involvement, Support, Spontaneity, Practical Orientation, Personal Problem Orientation, Anger and Aggression and Programme Clarity subscales than patients.
4) The relatives rated the Ideal ward atmosphere significantly lower on Autonomy and Order and Organisation than did nurses and patients.

5) North American nurses rated the Real ward atmosphere scales significantly higher than the Jordanian nurses in all subscales except for that of Staff Control.

6) North American patients rated the subscales of Autonomy and Practical Orientation significantly higher than the Jordanian patients and rated Anger and Aggression and Staff Control significantly lower than the Jordanian patients.

7) All of the demographic variables tested in the current study were found to have no impact on the perceptions of ward atmosphere for nurses, patients or the relatives.

8) The hospital ownership did appear to have an influence on the perceptions of Real ward atmosphere amongst nurses, patients and relatives.

The next chapter will discuss these results by drawing together the findings of this study in light of the known literature. It will also discuss the implications of the study’s findings against the research questions and hypothesis as outlined earlier.
Chapter 6

Introduction

The previous chapter presented the results of this study, which was undertaken in four Jordanian psychiatric hospitals and used a non-experimental descriptive survey design. The aim of this chapter is to present a discussion based on the key findings as offered in the previous chapter.

This chapter then, discusses the main findings from the current study in light of existing literature. The questions that will be addressed here are:

- How might the findings be interpreted and utilised by mental health nursing scholars and researchers?
- What implications might be generated and applied to mental health nursing practice to improve ward atmosphere?

In order to answer these questions, a careful examination of the findings with regard to the aim, the research questions and hypotheses, has been undertaken.

The aims of this research, as detailed in Chapter 1 were, to investigate the participants’ perceptions of Real and Ideal ward atmosphere in four Jordanian psychiatric hospitals, and to determine the extent to which the nurses, patients and patients’ relatives’ perceptions of ward atmosphere match or differ from each other. Moreover, this study aimed to compare the Jordanian ward atmosphere with the ward atmosphere as studied in North America. This study also investigated a possible relationship between the demographic variables of hospital ownership and perceptions of ward atmosphere.

Eight key findings were identified, the answers to which satisfy the above-mentioned aims. These are:
1- Jordanian nurses rated the three subscales of Involvement, Practical Orientation and Order and Organisation statistically significantly lower than did patients and relatives.

2- On the Real ward atmosphere subscales of Support, Spontaneity and Programme Clarity, Jordanian patients’ relatives scored significantly higher than both nurses and patients.

3- The relatives and nurses rated the Ideal ward atmosphere significantly higher on the subscales of Involvement, Support, Spontaneity, Practical Orientation, Personal Problem Orientation, Anger and Aggression and Programme Clarity subscales than patients.

4- The relatives rated the Ideal ward atmosphere significantly lower on Autonomy and Order and Organisation than both nurses and patients.

5- North American nurses rated the Real ward atmosphere subscales significantly higher than the Jordanian nurses in all Real WAS subscales except the subscale of Staff Control.

6- North American patients rated the subscales of Autonomy and Practical Orientation significantly higher than the Jordanian patients and rated Anger and Aggression and Staff Control significantly lower than the Jordanian patients.
7- All the demographic variables tested in this study were found to have no impact on the perceptions of ward atmosphere for nurses, patients and relatives.

8- The hospital ownership variable appeared to have had an impact on the perceptions of Real ward atmosphere amongst nurses, patients and relatives.

Discussion

Jordanian nurses’ perceptions of Real ward atmosphere

Jordanian nurses rated the three subscales of Involvement, Practical Orientation and Order and Organisation, in the Real WAS statistically significant lower than did patients and relatives.

As mentioned earlier in Chapter 4, Moos’s methods which utilise the term ‘above or below average’ are used in this discussion (Brunt & Rask 2008 p.228). By using this analytical method, the mean scores were converted to standard scores, thereafter; the cut-off point of 50 was applied. For example, the standard scores of Involvement subscale in this study was 39, 52 and 54 as rated by the nurses, patients and relatives respectively. Thus, the nurses’ standard score can be considered ‘below average’ while the patients’ and relatives’ standard score can be considered ‘average’ according to Moos’s appraisal method (refer to the WAS standard scores as presented in Appendix 22).

The current study showed that participating nurses rated the Involvement subscale, of Real WAS, at a significantly lower level, than patients and relatives. The nurses rated the Involvement subscale below average, while patients and relatives rated it as average, when using Moos’ cut-off point of 50 on the standard scores. Similar results were found in two studies BootsMiller et al.’s (1997) and Langdon, Swift and Budd (2006).
BootsMiller et al. (1997) conducted a study to investigate the atmosphere of three types of wards (specialised, extended care and acute care) within a large urban psychiatric hospital in the United States of America (USA). These wards were classified into these groups according to the type of treatment that was provided. The specialised ward included those that provided more intensive services beyond what was considered standard acute psychiatric treatment. For instance, a specialised ward may have provided specialised drug treatment, additional security for criminal offenders, or transitional treatment for people preparing to leave the hospital. The extended care ward included the provision of extended psychiatric and rehabilitative treatment for those people who required more time to recover from their illness. The acute wards were those that provided ‘typical’ acute psychiatric treatment. These wards provided brief stabilisation to patients who needed a short recovery and quick return to the community (BootsMiller et al. 1997). Using the Moos WAS, 113 nurses and 130 patients on three types of wards, specialised, extended and acute were surveyed. This study found that nurses rated the acute wards significantly lower than the specialised and extended psychiatric wards in most of the Real WAS subscales.

The second study which was more closely aligned to the current study was conducted by Langdon et al. (2006) to investigate the ward atmosphere of two types of secure units: a low secure unit and a medium secure unit. The study revealed that the nurses rated the Real ward atmosphere significantly lower than the patients on the four subscales of Involvement, Support, Personal Problem Orientation and Staff Control.

Thus the rating on Involvement subscales in BootsMiller’s (1997) and Langdon et al.’s (2006) studies were consistent with the results of the current study, suggesting that nurses in all three studies felt that patients did not engage and become involved in the social life of the ward and consequently patients did not invest a lot of energy and activity in it. However, the results of the current study are inconsistent with the majority of previous studies, which found that the nurses’ perception of Real ward atmosphere tend to be higher than the perceptions of patients on all subscales, with the exception of
‘Staff Control’, which nurses tended to rate lower than patients (Main, McBride & Austin 1991; Caplan 1993; Morrison 1997; Middelboe et al. 2001; Rossberge & Friis 2004; Brunt 2005; Rossberg et al. 2006; Rossberge et al. 2008; Brunt & Rask 2008; Merete et al. 2009). In all of these previous studies, nurses’ rated higher than patients on subscales which represent positive aspects of nursing roles (e.g. Practical Orientation) whereas nurses rated lower than patients in areas which have negative connotations of nursing roles (e.g. Staff Control).

Based on BootsMiller’s classification of the psychiatric ward which was explained earlier, the wards which were included in the current study can be categorised into two types. These are specialised wards and acute wards. Specialised wards were those who provide treatment to criminal offenders (AL-Rasheed Hospital) and wards from NCRA which treats patients who have drug and alcohol misuse issues. The acute wards were selected from all participating hospitals that provide pharmacological treatment to stabilize acute psychiatric patients in the Jordanian hospitals.

There are some possible explanations as to why Jordanian nurses rated the Involvement subscale significantly lower than patients and relatives. The literature review identified three main reasons that explain the findings; 1) the response bias in answering WAS’s questions (Middelboe et al. 2001), 2) the lack of motivation exhibited by patients during the acute stage of mental illness (BootsMiller et al. 1997) and 3) a general lack of social activities for patients across the Jordanian research site (Daradkeh 2009). The following discussion will consider these three possible reasons respectively.

The first possible reason that might impact on the rating scores of Involvement subscale is the response bias in answering WAS’s question. One reason may have been as a result of asking the patients and the relatives about their perceptions of the ward during their stay in the treatment environment. This bias may have led the patients and their relatives to give an overly positive picture of the ward. This may have occurred because the majority of patients and relatives who participated in the current study came from the public hospitals and said that they were satisfied with the treatment and services that they received from these public hospitals. This is explained by Mohit
(2006) who indicated that the psychiatric treatment in the Jordanian public hospitals is free of charge, whereas the treatment costs are relatively high in private hospitals, and the majority of the psychiatric patients in Jordan cannot afford this due to their low socio-economic circumstances. Consequently, the response bias in answering WAS’s questions could have contributed to low level of Involvement subscale amongst Jordanian nurses.

A lack of motivation during the acute stage of mental illness is another possible reason that may explain why nurses in the current study rated Involvement subscale lower than both patients and relatives. Beazley and Gudjonsson (2011) found that psychiatric patients when in inpatient wards are commonly poorly motivated to engage with their treatment often because either they have little insight into their condition or they are frustrated by being the recipient of mandated treatment. To further explain, Sorensen (2006) and Ussher et al. (2007) indicated that patients with acute mental illness have many barriers that prevent them from participating in the daily activities of the wards when they are admitted to the hospitals. These barriers include low self-worth and self-confidence, loss of energy, interest and motivation, generalized fatigue, poor physical fitness, social fear and helplessness and hopelessness. In the current study, most of the patients admitted were acutely ill and may not have been motivated to participate in the wards’ daily activities. This could have been as a result of their illness or medication side effects. As indicated in Chapter 2, Jordanian psychiatric hospitals primarily adhere to the medical model of treating people with a mental illness which focuses on pharmacological treatment methods (Daradkeh 2009). Numerous authors (Munch & Hamer 2010; Muir-Cochrane, Barkway & Nizette 2010; Usher, Foster & Bullock 2009) have identified that psychotropic medications can result in movement disorders, fatigue and sedation, metabolic syndrome such as increased appetite, weight gain and the development of Type 2 diabetes mellitus, sexual dysfunction and postural hypotension.

Moreover, Healy (2009) found that psychotropic medications negatively influence how a person perceives pleasurable sensations, causing a severe reduction in feelings of desire and motivation. BootsMiller et al. (1997) also explained the lower rating of acute
psychiatric wards in their study, which is also relevant to the current study, as related to the fact that when acute patients entered the ward they did not have the capacity or energy to become involved with the ward’s activities. Also, the nurses at this stage of the patient’s illness were more focused on containment, rather than offering and encouraging involvement in daily activities. Therefore, the lower rating of Involvement subscale amongst Jordanian nurses could also be explained by a potential lack of patient motivation during the acute stage of their mental illness.

A lack of social activities on offer in the surveyed Jordanian psychiatric hospitals is also proposed as an explanation for the lower rating of the Involvement subscale by the nurses. It appears from the findings of previous studies that the availability of social activities in the ward allows for the development of interactive relationships between nurses and patients. Such relationships in turn lead to the development of therapeutic relationships which thus influence the therapeutic environment inside psychiatric wards (Rigby et al. 2001). This is explained by Moos (2007) who clearly indicated that when a ward is characterized by having few social activities and when there is little emphasis on involving patients in a programme, nurses tend to perceive the ward atmosphere as having a low level of Involvement. Furthermore, even when patients’ activities are operating, a lack of careful planning of these activities can cause the same effect. In a recent literature review, several studies were found that investigated involvement and patient activity in psychiatric inpatient care (Sharac et al. 2010). Sharac et al. (2010) found that reducing the formal observations on an acute psychiatric ward and introducing a structured programme of individualized activity for patients led to a reduction in, for example, self-harm and violence and an increase in patient reported quality of care, as well as a reduction in staff sickness. Therefore, the lack of social activities in mental health wards may have impacted on the Jordanian nurses’ rating of Involvement subscale.

Regarding the Jordanian nurses’ perceptions of Practical Orientation subscale, the results showed that the nurses tended to rate the Practical Orientation subscale in the Real ward atmosphere as below average, whilst both patients and relatives rated this
subscale as above average. Again, this was calculated using Moos’ cut off point of 50 on the standard scores.

The current study showed that the Practical Orientation subscale scored ‘43’, ‘54’ and ‘52’ by the nurses, patient participants and the relative participants respectively. The lower score of Practical Orientation as rated by the Jordanian nurses can be seen in the light of group activities not planned and incorporating essential living skills such as cooking, shopping, housing and dealing with government agencies. The results of the current study were inconsistent with the results of other studies by Pratt et al. (1977), Moos (1996), Eklund and Hansson (1997) and Timko and Moos (1998), as the treatment programmes in the Jordanian hospital’s were found to lack practical teaching skills, which might impact on the nurses’ perception of the ward atmosphere. The same results as those discovered by the listed authors might also occur if the Jordanian hospitals offered a greater level of practical activities and used them in combination with pharmaceutical methods as part of the treatment regime.

The differences between the characteristics of the treatment environments in Jordanian hospitals and the content of the Practical Orientation subscale is a possible explanation as to why nurses in the current study rated Practical Orientation subscale lower than patients and relatives. Moos (2007) indicated that the Practical Orientation subscale is the extent to which a person is able to take care of him or herself once they are released from the hospital and to train for the future. This would involve training for jobs and setting up practical goals. The result of the previous studies indicated that supportive treatment climates that engage patients in learning practical skills are positively associated with psychiatric patients’ functioning, activity levels and use of services (Eklund & Hansson 1997). As Moos (1997) found, well-organised programmes that emphasize the development of work and social skills such as cooking, shopping and dealing with government agencies, also facilitate patients’ positive interpersonal behaviour, especially being friendly to other patients and trying to enhance their self-esteem. Moreover, Eklund and Hansson (1997) found that functioning in daily life, especially with regard to communication and interpersonal skills, was closely associated with the ward atmosphere. High levels of Practical Orientation and Support contributed
to a good outcome in this respect. In a more recent study, Sharac et al. 2010 changed the structure of an inner city acute care ward by introducing treatment planning meetings, practical teaching programmes, group therapy and community meetings. Two months after implementation, patients on the ward reported significantly higher scores of Involvement, Support and Practical Orientation. It should be noted that such practical teaching programmes as described by Moos (2007) are not available in Jordan. This is explained by Daradkeh (2009) who found that Jordanian psychiatric hospitals are currently lacking in practical activities which can prepare patients for vocational adjustment and jobs training. The paucity of practical teaching programmes can be related to the strong emphasis on pharmacological methods of treatment rather than on psychotherapeutic methods of treatment. Thus, the lack of practical teaching programmes across Jordanian psychiatric hospitals offers an explanation for the lower level of Practical Orientation subscale as rated by Jordanian nurses.

Regarding the Jordanian nurses’ perceptions of Order and Organisation subscale in the Real ward atmosphere, the current study showed that the nurses tended to rate the subscale of Order and Organisation in the Real ward atmosphere as below average, while patients and relatives rated this subscale as above average; again when using Moos’s cut-off point of 50 on the standard scores. The lower level of Order and Organisation as rated by nurses could suggest that the nurses felt that patients were not familiar with the routines on the wards and what to expect in their daily life in these hospitals.

The below average level of Order and Organisation as rated by the nurses in the current study is consistent with the result of Graves (1994) who conducted a descriptive correlational study in a short-term acute care unit in a psychiatric hospital in a mid Atlantic city of the United States of America. Graves’ (1994) study aimed to assess the relationship between privacy satisfaction of psychiatric patients and the ward atmosphere. Data were collected from a convenience sample which included 68 hospitalised psychiatric patients and 20 staff members by using WAS and Privacy Rating Form (PRF) over a two and half month period. The results found that nurses rated Order and Organisation subscale lower than patients. Graves’ (1994) results
indicated that when the nurses made a decision to resign, they perceived a loss of control and they were less demanding about Order and Organisation in the wards.

The results of the current study though, were not consistent with Brunt and Rask’s (2005) study which described and compared patient and staff perceptions of the ward atmosphere of a maximum security forensic psychiatric hospital in southern Sweden using the WAS. One hundred and four nurses and 35 patients completed the WAS. The results of Bruant and Rask’s (2005) study revealed that on eight of the 10 Real WAS subscales the perceptions between staff and patients considerably differed. For the relationship dimension, the staff reported that there was more spontaneous personal expression, that the patients were more involved and that the staff and patients were more supportive more than patients did. In the personal growth and the system maintenance dimensions, the staff reported more Autonomy for the patients and that the ward was more practically orientated, orderly and organised and the programme more explicit. In contrast the patients perceived greater levels of control by the staff.

The literature review identified that the lack of regular meetings between members of the health team and the patients in a psychiatric ward influenced perceptions of Order and Organisation. Warren and Beadsmoore (1997) described how if a ward is rated as low Order and Organisation the atmosphere is characterized by mistrust between patients and staff, the rate of violent incidents is increased and that meetings and activities are irregular. On the other hand, Warren and Beadsmoore (1997) found that a ward atmosphere that is therapeutic, had trustful relationship between the nurses and patients, low rates of violent incidents and that there were scheduled meetings and activities. Finnema, Dassen and Halfens (1994) found that there is strong evidence that overcrowded environments that lack structured activities and organisation are associated with patients’ aggressive behaviour. Finally, Moos (1997) stated that when the treatment programmes had less emphasis on Autonomy, Order and Organisation and Anger and Aggression, patients showed more aggressive behaviour.
As mentioned in Warren and Beadsmoore’s (1997) study, there is a relationship between the level of Order and Organisation and the frequency of meetings between the nurses and patients. Moos (1974) found that some aspects of the treatment environment are associated with participation in group meetings. In order to investigate Moos’s suggestion, Friis (1986b) developed an interaction score that reflected the amount of time patients spent each week in patient-staff group meetings. Friis (1986b) found that when programmes were higher on Involvement, Autonomy, Order and Organisation and lower on Staff Control, patients spent more time and participated more actively in group meetings. Holding a regular meeting in a psychiatric ward was identified in the literature as the way to create a therapeutic ward atmosphere (Lang 2001). These meetings can be used to discuss ward management, psychiatric treatment and to talk about factors which can improve the ward atmosphere. In more recent study, Tuvessson et al. (2011) found that Order and Organisation subscale explained almost one fourth of the variance in organisational climate. The organisational climate, as measured in their study, assesses aspects such as perceived levels of encouragement, support and comfort in the organisation. It also involves levels of appraised communication within teams and between group members. In their study, ratings of the Order and Organisation subscale were positively related to nursing staff perceptions of the organisational climate. The Tuvessson et al. (2011) study thus identified that high level of Order and Organisation could stimulate staff communication and increase support between co-workers. Furthermore, with high levels of Order and Organisation staff are more likely to keep arrangements and appointments with patients and do this on time. It is possible that this may lead to a reduction in tension between colleagues, as well as to improved communication and support (Tuvessson et al. 2011). Therefore, in light of the literature described above and the findings of this research, the lack of regular activities and meetings in the Jordanian psychiatric wards could explain the lower level of Order and Organisation subscale as rated by the Jordanian nurses.

The findings of the current study as discussed above revealed that Jordanian nurses rated the Involvement, Practical Orientation and Order and Organisation subscales of Real ward atmosphere statistically significant lower than did patients and relatives. This
may be further explained by the approach to mental health nursing care Jordan which is based upon a heirarchical medical model.

**Jordanian’s nurses’ perceptions of Ideal ward atmosphere**

The nurses from participating Jordanian psychiatric hospitals rated Ideal WAS significantly higher in seven out of ten subscales (Involvement, Support, Spontaneity, Practical Orientation, Personal Problem Orientation, Anger and Aggression and Programme Clarity) than patients. This means that their perception of an Ideal ward were relatively more positive in favor of these subscales compared to the patients’ perceptions, that is, they had higher expectations or aspirations.

The Involvement subscale, which nests within the Relationship Dimension, was rated by nurses as low in the Real WAS. Nurses then felt that the patients were not involved. This may indicate that the patients are passively passing their time due to the current lack of therapeutic activities. In the Ideal WAS however, Jordanian nurses felt that patients should be provided with therapeutic activities in order to improve the ward atmosphere. This is explained by Moos (1996) research findings, that the availability of a broad range of social and/or recreational activities in the wards can contribute to harmonious relationships by facilitating patients’ participation in these activities. Similarly, Hoffman and Miller (1993) found that patients who participated in the health and treatment services that are available for them in the form of social and recreational activities had better treatment outcomes which included aspects such as higher rates of abstinence from alcohol or drugs.

The Support and the Spontaneity subscales which also nest within the Relationship Dimension were rated by nurses higher than in the Real WAS. This may indicate that although the nurses believe they already offer adequate support for the patients and encourage them to support each other. Nurses may feel that only small changes need to occur in regard to the patients’ support and patients’ expression of feelings in order to improve the ward atmosphere. These results are consistent with Timko and Moos
(1998) findings, in that policies that allow patients to participate more in the governance of psychiatric programmes help to establish a more supportive, self-directed treatment climate that encourages patients’ self-understanding and skills development. Also, these results are consistent with Ninng’s (2010) study who found that consumer and carer participation in mental health services planning delivery and evaluation has been government policy in Australia for about two decades. Consumer and carer participation is about consumer and carer in all facets of the mental health services, thereby providing meaningful impact on services planning, delivery and evaluation (Australian Institute of Health and Welfare 2010).

In the Ideal WAS ratings, all nurses rated all subscales belonging to the Personal Growth Dimension higher than the Real WAS; except Autonomy. The lower rating of Autonomy is consistent with ratings associated with higher levels of Staff Control as the Jordanian nurses felt that the Ideal ward atmosphere should not give more independence and choice to patients. The Jordanian nurses rated in the Real WAS that the patients already had enough independence and [perhaps felt that if the patients were given more Autonomy in the Ideal ward atmosphere this could lead to more disruptive behaviours. Thus, the Jordanian nurses rated lower Autonomy and higher Staff Control on the Ideal WAS. This result is consistent with Moos (1997) findings. According to Moos (1997) hospital programmes that allowed patients more choice were higher on Autonomy and lower on Staff Control. In facilities for older adults, more choice was also associated with more independence and less Staff Control.

There was no statistical significant difference in the current study between the rating of Practical Orientation and Personal Problem Orientation subscales in Real form and Ideal form. Although not statistically significant, there was some level of difference in the rating level of these subscales between the Real and the Ideal forms of WAS. Results indicate that Jordanian nurses felt that the patients should have a say in making their own decisions and be more self-efficient and be able to express their feelings. Further, they felt that greater emphasis should be placed on discharge planning to ensure that the patients are prepared to leave the hospital. Jordanian nurses felt that patients were free
to express their Anger and Aggression on the current wards, however, they felt that this freedom could be reduced to improve the Ideal ward atmosphere.

The Order and Organisation, Programme Clarity and the Staff Control subscales nested within the System Maintenance Dimension, were rated by nurses higher in the Ideal WAS than the Real WAS. This indicates that Jordanian nurses perceived the ward would be clearer and better organized and that adequate explanations would be provided to the patients regarding what to expect in their daily routines in the hospital. They also felt they needed to be stricter in controlling the patients’ behaviour. These results are consistent with the results of research by Schjodt et al (2002) who also found that there were significant differences on six of the WAS subscales between both Real and Ideal WAS as rated by nurses. To conclude, Jordanian nurses described their Ideal ward atmosphere as more involved, much more spontaneous and much less argumentative, organized and clear than the Real WAS. However, nurses placed less emphasis on Autonomy than other participants did.

**Jordanian relatives perceptions of Real and Ideal ward atmosphere**

The current study showed that relatives from all participating hospitals tended to rate the Real and Ideal ward atmospheres significantly higher than the nurses and patients. These higher ratings were related to seven subscales of Involvement, Support, Spontaneity, Practical Orientation, Personal Problem Orientation, Anger and Aggression and Programme Clarity. The lower ratings were in regard to the two subscales of Autonomy and Order and Organisation.

**Relatives’ perceptions of Real WAS**

The Jordanian patients’ relatives rated the Real WAS higher than other participant groups. This indicates that the relatives responded positively and that they tended to be more satisfied with the current ward atmosphere than patients and nurses.

The higher rating of the Involvement, Support and Spontaneity subscales which are nested within the Relationship Dimension as rated by the relatives from all participating
hospitals may indicate that relatives felt their in-patient family members were actively involved in therapeutic activities and in the formation of their treatment regime and also are supportive for both themselves and nurses. The Spontaneity subscale which rated slightly high in all hospitals, may indicate that relatives perceive that the wards were tolerant of all personality types and the need for patients and nurses to be able to express themselves.

The Jordanian relatives rated all the subscales that belong to the Personal Growth Dimension at higher levels than patients and nurses except Autonomy which was rated at low level for all hospitals. The low Autonomy score in the eyes of the relatives may reflect the status of the patients, given that a greater percentage of the patients who participated in this study were admitted on an involuntary basis. The nature of the hospital wards in terms of whether it is restrictive or not, could also be influential. That is, if the environment is perceived as restrictive then the relatives felt that the patients and nurses have little Autonomy in the wards. The subscale of Practical Orientation is rated high in all hospitals by the relatives. This suggests that relatives are satisfied about patients being taught practical skills and ensuring adequate discharge planning.

The high level of Personal Problem Orientation can be interpreted as being at a positive level in all hospitals. This is indicative of relatives perceiving that the staff offer sufficient time to understand the feelings and personal problems of the patients. The Anger and Aggression subscale is slightly high across all hospitals. The use of Anger and Aggression on this scale refers to the expression of emotion and does not necessarily refer to the expression of violence.

The Jordanian relatives rated all the subscales that belong to the System Maintenance Dimension at higher levels than patients and nurses except for Order and Organisation in the Ideal WAS which was rated at low levels across all hospitals. The low level of Order and Organization may suggest that the relatives feel the rules and procedures are unclear and that the wards may not be well organised. The Programme Clarity rates at the high level, which suggests that relatives perceive the patients to be familiar with the
explicitness of rules and regulations. The Staff Control also rates at the high level, indicating that relatives feel nurses are able to control the patients.

**The relatives’ perception of Ideal WAS**

The findings of the current study showed that the relatives rated all subscales of Relationship Dimension very high in the Ideal form, which indicates that relatives perceive that the patients are actively involved in activities and also that the nurses are involved in organizing these activities for the patients. In the area of Support and Spontaneity, relatives at all hospitals rated these subscales very high, indicative of the perception that relatives see the patients support themselves and the nurses but feel however that there should be more support for both patients and the staff. Within the Ideal WAS the relatives also felt that patients are free to express their feelings to nurses.

As revealed from the results, the relatives at Jordanian psychiatric hospitals rated Autonomy subscale lower in the Ideal WAS than in the Real form. Relatives feel that changes my not be able to be made in order to improve the Autonomy of the ward in such a restrictive environment.

The subscales of Practical Orientation and Personal Problem Orientation were rated high by relatives in all hospitals indicating all patients are perceived as being given adequate training in practical skills which enable better discharge planning. Further to this, it was felt that patients are able to approach staff and that they feel comfortable in expressing their feelings. Anger and Aggression is rated high in all hospitals in Real WAS. The relatives in all hospital sites felt that Anger and Aggression could be minimized in the Ideal ward and that the ward atmosphere would improve if the expression of anger was minimized.

There are no significant differences from the results of data analysis in the subscale of Order and Organization and Staff Control between the Real form and the Ideal form as rated by the relatives. This suggests that relative’s perceive there is Order and Organization and that patients know what to expect in their daily routine. Relatives also felt that Staff Control is adequate and that the Ideal ward atmosphere would be
improved if staff control was minimized. Programme Clarity in the Real WAS rates high in all hospitals by relatives, indicating that relatives perceive that patients and nurses are familiar with the explicitness of rules and regulations. Relatives though, felt that this subscale could also be improved in the Ideal ward atmosphere.

The patients’ relatives rated the Real and Ideal WAS subscales higher than the nurses and higher than the patients. This result cannot be explained by simply saying that patients’ relatives perceived the ward atmosphere more positively than did the nurses and patients. Since this is the first study involving the patients’ relatives in ward atmosphere perceptions’ research, comparing and contrasting the results of the current study with the previous studies is not possible. This is obviously a positive for a PhD thesis in some respects as it is breaking new ground but as indicated, does not allow for comparisons at present. A different approach is therefore needed to interpret this phenomenon. As such, the following sections discuss the relatives’ perceptions of Ideal ward atmosphere in the four surveyed psychiatric hospitals from this perspective.

As presented earlier in this chapter, the Jordanian patients’ relatives were more satisfied with the current ward atmosphere than the nurses and patients; but the question here is that while they were seemingly more satisfied with the current ward atmosphere, why did they rate the Ideal WAS higher than the nurses and the patients? In order to answer this question and as previously explained due to the paucity of literature about perceptions of mental health care and services by patients’ families in Jordan or globally with WAS, the literature that investigates the perceived needs of the Jordanian families of hospitalized critically ill patients with physical health concerns was examined.

The higher rating scores on the Ideal WAS as rated by the relatives could be explained by the desire of the relatives to have their family members treated within a ward that had the best possible atmosphere. It seems reasonable to assume that the relatives rating of the Ideal WAS were influenced by their cultural values and concerns about their family member’s future treatment programmes and their recovery and that this emotional connection influenced their perceptions about an Ideal ward atmosphere. This
interpretation is consistent with the results of AL-Hassan and Hweidi (2004) who conducted a descriptive cross-sectional study to identify the needs of Jordanian families of hospitalized, physically critically ill patients. 158 family members from four different hospitals in Jordan participated in this study. The results revealed that the most important needs of the families were to receive adequate information about the patients’ treatment programme and to have this information given in simple and understandable terms. Since relatives are not allowed to be with the patient during the physician’s rounds, they might not have obtained enough information about the patient’s condition. Furthermore, the Jordanian relatives need to be assured about the quality of care that their family members receive as they want to be certain about the progress of their family member. Such assurances might help them to alleviate the stress and uncertainty that could arise as a result of not being sure about their family members’ condition. It might also promote the hope for better expectations about the patient's condition (AL-Hassan & Hweidi 2004). These findings indicate that the major concern of the Jordanian families was the health condition of their critically ill relatives. They wanted to be assured that their family member was receiving the best care possible. Jordanian people place total trust in the healthcare team (Omari 2009) and most of the time rely solely on the health team to make decisions related to their relatives’ health problems (Omari 2009).

It should be noted that the nature of a critical physical illness is different from the nature of a psychiatric illness. A critical illness is often a life-threatening event that comes without warning, allowing little time for families to come to terms with what happened or how to cope. Mental health issues however are not usually life threatening and are often chronic. Despite this, Jordanian families’ needs and expectations regarding the well being of their relatives remain high.

Another aspect possibly influencing relatives’ perceptions is the family structure. As described in detail in Chapter 2, Jordanian people live in an extended family structure, where family kinship is both strong and highly valued (Khalaf & Callister 1997). Therefore, visiting sick people (patients in hospital) represents a favorable social act
that is culturally encouraged by the Qur’an and Sunnah (sayings, deeds and sanctions of the Prophet Mohammed) regardless of the type of disease (AL-Shahri 2002). Moreover, Jordanian families need to be near the patient in order to obtain certain information about their progress and their condition. These results were consistent with those of others such as Wallace et al. (1999) who conducted a study to assess peoples’ expectations and satisfaction with mental health and social services. The findings of Wallace et al.’s (1999) study showed that the families expect to be able to give their opinion about the quality of care and services that their relative had received and to identify important strategies for continuous quality improvement. Firstly, the patients’ families want adequate information about the illness and its treatment and further to this they want to know what they can do to help their relatives in simple and clear language free from medical terminology. Secondly, they want their relatives to receive treatment from competent staff, to be treated with courtesy and to receive continuous and coordinated care. Finally, they want the care to be given in an environment that is clean, bright, well furnished and functional.

These results from the research alluded to above, are consistent with prior research which was conducted by Hanson and Rapp (1992) to measure the families’ perspective of their experience with community mental health programmes. Thirty four family members of people who have a mental illness completed the survey. The findings of this study indicated that families of people who have a severe mental illness actually want their family members to have a decent, safe place to live. In addition to a decent place to live, families would like their relatives to be able to participate in meaningful and time structured activities. Finally, families would like programmes provided for their relatives to be more accepting, accessible, caring and flexible (Hanson & Rapp 1992).

Moreover, these results are consistent with a previous study which was conducted by Gigantesco et al. (2002) to assess the satisfaction of patients and their relatives with psychiatric care and to identify variables associated with any dissatisfaction. The previously validated questionnaire was used to collect data from 890 patients and 270 relatives in psychiatric hospitals in Italy. This questionnaire consisted of 12 items. The items were scored on a six point Likert scale, with higher scores denoting greater
satisfaction. The results of this study showed that the satisfaction with services expressed by patients and their relatives was fairly good, with the exception of poor satisfaction regarding information about treatment and involvement in the treatment programme.

In summary, and in concert with the above research outcomes, findings from the current study revealed that it was the quality of care and the patients’ welfare that directed the relatives’ expectations of Ideal ward atmosphere.

North American nurses’ perceptions of Real ward atmosphere versus Jordanian nurses’ perceptions of Real ward atmosphere

The results of the current study showed that North American nurses rated the Real WAS at a statistically significantly higher level in the seven subscales of Involvement, Support, Spontaneity, Practical Orientation, Personal Problem Orientation, Order and Organisation and Programme Clarity, than did Jordanian nurses. This can be explained by the adherence of North American nurses to the western principles of care that are more focused on therapeutic relationships with patients and a more active, inclusive and liberal form of treatment (Cortvriend 2005). In so doing, North American hospitals offer a wide range of therapeutic activities, more support and more freedom to patients to express their feelings (Cortvriend 2005). This reflected that North American hospitals upheld patient satisfaction more than Jordanian hospitals did. This is also supported by Rossberg and Friis (2004) who pointed out that patients tended to be more satisfied with their treatment when they were in programmes that gave more emphasis on the Relationship dimensions, particularly on Practical Orientation, Order and Organisation and Programme Clarity and less on Staff Control.

The results of the current study were consistent with Brunt and Rask’s (2005) study who found that Swedish nurses rated lower level on six subscales and higher on the other four subscales than the North American nurses. The most significant differences being lower means of Autonomy, Anger and Aggression, Order and Organisation and Programme Clarity subscales. The consistency is that there is a difference in the rating of scales.
The existing literature offered some potential explanations as to why the Jordanian nurses rated the Real WAS lower than the North American nurses. This might be related to the attitude and the approach by which the Jordanian nurses treat psychiatric patients. Mansour and Wardam (2009) conducted a descriptive correlational study to examine Jordanian psychiatric nurses’ attitudes toward patients with psychiatric illness and psychiatric illness itself. Data were collected from 92 psychiatric nurses in Jordan. The results of the Mansour and Wardam (2009) study revealed that the Jordanian nurses had negative attitudes toward patients with psychiatric illness and of psychiatric illness itself. Psychiatric patients were perceived as dangerous, pessimistic, immature, cold hearted, harmful and as having low personal hygiene. Psychiatric illness itself was perceived at a lower priority level than physical illness by these psychiatric nurses (Mansour & Wardam 2009).

The above research cannot be ignored when considering the perceptions of the ward atmosphere, as Squier (1994) reported that the attitude and the manner by which the nurses deal with the patients’, influences the outcome of the atmosphere in a psychiatric ward. A more detailed explanation of this lies in the idea that an interactive relationship between the nurses and patients allows the development of a healthy interaction which thus results in a therapeutic environment inside the psychiatric ward (Sharce et al. 2010). Furthermore, it is believed that patients are more likely to improve in programmes in which staff are more satisfied with their job and thus establish a more therapeutic environment (Moos 2007).

A further explanation might be connected to cultural stigmatization of psychiatric illness among the Jordanian population as discussed in Chapter Two. This corresponds with the results of a previous study by AL-Krenawi et al. (2000) who found that stigma is felt particularly keenly among Arab women, who represent the family’s honour and may delay treatment to prevent the family stigma and to maintain their family’s reputation. In this study then, nurses, who are a product of their culture might also stigmatize patients with psychiatric illness. According to Endrawes, O’Brien and
Wilkes (2007) stigma against psychiatric illness is considered to be the biggest barrier in the development of effective mental health care.

A third explanation could be related to the lack of training among Jordanian psychiatric nurses, particularly related to the importance of milieu therapy as part of the treatment of psychiatric patients in the Jordanian facilities. The findings of Nesset et al. (2009) revealed that Norwegian nurses who received specialized training and lecturing in milieu therapy were more satisfied and were more positive in their attitudes than those who did not and hence likely improved the quality of care.

The final explanation could be related to the fact that the Jordanian nurses spend less of their time interacting with patients and developing a therapeutic relationship and more of their time on non patient activities such as administrative duties. Such additional activities can lead to overload and exhaustion resulting in a decrease in nurses’ effectiveness and generating negative perceptions of ward atmosphere (Garcia et al. 2005). Sharac et al. (2010) suggested that clinical outcomes are associated with patient activity and social interaction. If this is the case, then devoting more staff time to direct patient activities and treatments could have a positive effect on patient care and may be cost-effective (Sharac et al. 2010). This is supported by findings from research undertaken by Chinman et al. (1999). These researchers found that when the treatment team have more time to listen to the patients’ views and understand the patients’ needs concerning their treatment and activities on a daily basis, patient motivation and self-esteem is enhanced which contributes positively to their treatment outcomes.

In conclusion, the findings of the current study revealed that there were significant differences between the Jordanian nurses and North American nurses in the perceptions of Real ward atmosphere.
North American’s and Jordanian patients’ perceptions of Real ward atmosphere.

The North American patients rated significantly higher than the Jordanian patients when they completed the Real WAS in Autonomy and Practical Orientation and significantly lower than the Jordanian patients in Anger and Aggression and Staff Control.

This finding suggests that North American patients viewed their ward atmosphere to actually have more self-direction, independence, more freedom to express their feelings and as having opportunities to participate in practical skills that would help them transition back into the community (Moos 2007). These results are consistent with the perceptions of their nurse counterparts. The statistically significantly lower rating of Autonomy and Practical Orientations as rated by Jordanian patients in the current study could be explained by the notion that the Jordanian patients revealed that they have less opportunities for exercising responsibility and self-direction than the North American patients did. They also pointed out that they lacked practical skills that could have prepared them for discharge.

Regarding Anger and Aggression and Staff Control subscales the North American patients rated these significantly lower than the Jordanian patients. These results indicate that the North American patients perceived their ward atmosphere as having more freedom to express their anger and to display their arguments openly. The North American patients also perceived their ward atmosphere to be less strict and controlling of them. In contrast, the Jordanian patients described the Real ward atmosphere as that with less opportunity to engage in arguments and displays of anger and that there was more use of limit setting and restrictions by the Jordanian staff in order to control them, as compared to the United States setting.

The results of the patient responses in the current study are consistent with the results of Brunt and Rask (2005) when compared with the North American normative sample in all WAS subscales except for Order and Organisation and Staff Control subscales. This was because the Jordanian patients rated them higher than the patients from the Brunt and Rask (2005) study and Moos (1997) normative sample.
The potential explanation as to why the Jordanian patients rated the Real WAS significantly lower than the North American patients did, might be related to the nature of admission for the patients as nearly half of the Jordanian patients were admitted involuntarily. As discussed earlier, in the acute stage of mental illness the patients in the Jordanian hospitals were not free to make their own decisions and the main focus of the treatment programme is that of containment and immediate stabilization (BootsMiller et al. 1997). This is done in strict adherence to the medical model.

The second potential explanation why the Jordanian patients rated the Real WAS significantly lower than the North American patients, might be related to the fact that Jordanian hospitals do not offer adequate occupational therapy to enhance the patients’ practical skills. Daradkeh (2009) conducted a study about the reality of mental health services in the public and military sectors in Jordan. According to Daradkeh (2009), the Jordanian hospitals lack a contemporary approach to occupational therapy. Offering an activity such as table tennis is considered to be occupational therapy, therefore, no other forms of occupational therapy, such as rehabilitation programmes, were offered.

The final potential explanation why the Jordanian patients rated the Real WAS significantly lower than the North American patients could be because Jordanian patients have fewer outlets for expressing their emotions. This was demonstrated by the differential degrees of ratings for Real ward atmospheres for Anger and Aggression and Staff Control. This indicates that the Jordanian patients perceived that they were not free to express their emotions within this strict environment. This explanation is supported by research undertaken by Finnema et al. (1994) and Flannery, Hansen and Penk (1994) who found that there is strong evidence that contextual factors, such as lack of structured activities, was associated with patients’ aggressive behaviour. To examine the programme level associations between the treatment climate and patients’ aggressive behaviour Moos and his associates obtained information about the number of patients who engaged in aggressive behaviour in a thirty day interval in 143 hospital programs (Moos 1974b). When programmes had less emphasis on autonomy, self-understanding and the open expression of angry feelings, more aggressive behaviour was identified.
According to Lanza et al. (1994) most physical assaults by patients were located in ward corridors and day rooms and the frequency of assaults coincided with a low score on Autonomy and high scores on Staff Control as measured by the ward atmosphere scale (Moos 2007). These results were consistent with Morrison’s et al. (1997) findings which reported that the attitude of the staff was closely linked with the pattern of assaults by patients and that increased staff control coincided with an increase in the frequency of patients’ assaults.

In another study of 23 programmes, Moos (1997) tabulated the number of behaviour incidents in each programme over a four month interval. He also examined the associations between the treatment environment using the WAS and such incidents. Findings indicated that when programmes lacked Involvement and were low on Practical Orientation, patients engaged in more aggressive behavior. This was also true in programmes that staff saw as less clear and less well organized. These findings reflect the importance of supportive and well structured programmes, as well as the difficulty in organizing such programmes for more disturbed patients.

It could be observed that due to therapeutic activities that North American patients were subjected to, they rated significantly higher levels for Autonomy, Practical Orientation and lower levels for Anger and Aggression and Staff Control than their Jordanian counterparts. This suggests that North American patients were subjected to a more therapeutic atmosphere. Therefore, the passivity observed by the Jordanian patients could be explained by the lack of Jordanian healthcare facilities offering therapeutic activities which involve the patients in the running of the ward and the lower levels of therapeutic relationship between the nurses and patients.

In conclusion, the findings of the current study revealed that there were significant differences between the perceptions of Jordanian patients and those of the North American patients for the Real ward atmosphere. Possible explanations for these differences could be related to the current lack of occupational therapy and patient inclusiveness within the Jordanian health care facilities as observed in the passivity that the patients experienced, the low levels of psychosocial interactions between nurses and
patients and the lack of necessary practical skills that help the patients be prepared to leave the hospital.

The impact of demographic variables on the perceptions of Real ward atmosphere

All the demographic variables tested in the current study were found to have no impact on the perceptions of ward atmosphere for all participants.

A thorough examination of the literature that addressed the impact of the participants’ demographic variables on the perceptions of ward atmosphere scale was undertaken (Pedersen & Karterud 2007; Moos 2007; Jansson & Eklund 2002b; Middelboe et al. 2001). The perception of ward atmosphere among nurses was hypothesized to vary according to their age, gender, educational level and professional status. While the perception of ward atmosphere from the patients’ perspective was hypothesized to vary according to their age, gender, psychiatric diagnosis, length of stay and type of admission. As mentioned earlier in the introduction chapter, this study was the first study to be conducted in Jordan and in the Middle East to examine ward atmosphere’s perception among nurses, patients and patients’ relatives. Importantly, this study also examined the impact of the demographic variables on the perceptions of ward atmosphere in order to ascertain if these demographic variables have an impact on the perceptions’ of the Jordanian participant groups; similar to what was identified in the literature globally.

The results of the current study showed that there were no statistically significant relationships between ward atmosphere scale responses and demographic variables. Overall, it appeared that demographic variables exerted no impact on ward atmosphere scale scores. Thus, this study offers new perspectives from the Jordanian participants’ perspective generally and from the relatives’ perspective specifically. This study offers the first empirical evidence to report on these differences. The following sections discuss the demographic variables that were examined for each participant group.

Outcomes from the demographic variables that were measured differed amongst the participant groups. In the nurses group the variable of age, gender, hospital ownership,
educational level and work experience were included. In the patients’ group age, gender, hospital ownership, psychiatric diagnosis, length of stay and nature of admission were included. In the relatives’ group age, gender, hospital ownership, frequency of visiting and relationship to the patient were included (see Table 22).

Table 22. Demographic variables measured in this study for each participant group.

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<td>Educational level</td>
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<td>Work experience</td>
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The findings of the current study found that all of the demographic variables measured in each participating group except that of hospital ownership did not have any significant influence on the perception of the Real ward atmosphere. Since it was only hospital ownership that influenced the perceptions of Real WAS in all participating groups, this will be discussed separately in finding five.

Nurses demographic variables on the perceptions of Real WAS

The findings of the current study revealed that educational level, work experience, age and gender, did not have a significant impact on their perceptions of Real ward atmosphere. The findings of the current study were consistent with Middelboe et al (2001) who argued that the perception of the patients and the nurses could be influenced through the provision of a better working environment for the nurses and a setting that caters to the needs of the patient and their family. Demographic variables were also found not to be significant in Middelboe et al’s (2001) study. Thus they are not considered the primary factors to evaluate a healthcare institution. On the other hand, Chandler, Rachal and Kazelskis (1986) found that better educated nurses tended to exhibit a more positive attitude towards patients, which also included their overall perception of their workplace. Moos’ (2007) study revealed that staff training and experience were expected have a bearing on the ward atmosphere of the facility,
because education and experience had an impact on the nursing staff’s perception of their job and their behavioural attitudes regarding it. However, this could not be proved in the current study, as these variables had no impact on the perceptions of Real ward atmosphere.

Age is another variable which was considered to be of possible influence on the perceptions of ward atmosphere. Wright (1988) suggested that older staff members tend to have a more positive attitude than younger staff. The current study though, revealed that age did not have a significant influence on the perceptions of the nurses.

In terms of gender, Goldmeier and Silver (1988) revealed that patients in a forensic hospital programme with more female staff perceived more Involvement and Support, as well as a higher level of Order and Organisation and Programme Clarity, in comparison to programmes with fewer female staff. Most of the staff members in the Jordanian hospitals were male. An explanation for this gender ratio was offered in Chapter 2 when the ratio between male and female nurses graduating in Jordan revealed that there were more male nurses. The findings from the current study did not reveal any significant relationship between gender and perceptions of Real ward atmosphere.

**Patient’s demographic variables on the perceptions of Real WAS**

The findings of the current study revealed that gender, psychiatric diagnosis, age, type of admission and length of stay, did not have a significant impact on the patients’ perceptions of Real ward atmosphere.

In terms of gender, the findings of the current study supported the findings of Jansson and Eklund (2002b) who conducted research to assess the possible implications of gender on the perceptions of the Real ward atmosphere. They found that there was no relationship between gender and the perception of ward atmosphere.

Regarding the psychiatric diagnosis, Friis (1986b) claimed that programmes which had higher proportions of psychotic patients tended to be less involving, less supportive, less
autonomy oriented and high in staff control. In contrast, the current study did not confirm Friis’s findings and again offers new knowledge.

Furthermore, Pedersen and Karterud (2007) attempted to find connections between ward atmosphere ratings and demographic characteristics such as gender and age. Pedersen and Karterud (2007) found that gender and age have no impact on the perception of ward atmosphere. Thus, the findings from the current study concurred with their findings because it also did not find any significant relationship between gender and age and the perceptions of ward atmosphere. However, Strasser et al’s (1992) study found a different scenario in terms of age, because Strasser et al (1992) declared that age played a significant role in influencing the ward atmosphere perceptions of patients in a rehabilitation environment. While they identified that older patients perceive more staff control than younger patients, the current study did not conclude that age had any significant influence on the perception of the ward atmosphere subscales.

Regarding the type of admission, Morrison (2001) found that involuntarily admitted patients rated the Involvement subscale of Real ward atmosphere lower than voluntarily admitted patients. Patients who are admitted involuntarily such as the participants of the current study are thought more likely to have little or no insight into their illness (Morrison 2001). According to Katz and Kirkland (1990) these patients might not benefit from participating in activities early in their admission and may even hold delusional beliefs about engaging in such activities or in communication with other patients and/or nurses (Katz & Kirkland 1990). Thus, the perception of an involuntarily admitted patient was found to be different to the perceptions of a voluntarily admitted patient in relation to their involvement in the ward atmosphere. Moreover, Hansson (1989) found that there were significant differences between patients who were admitted in a voluntary capacity and those patients compulsorily admitted to psychiatric hospitals in Sweden. She found that patients showed a lower level of satisfaction than those who were voluntary. This study though, did not find any differences in the perceptions of ward atmosphere according to the type of admission.
In terms of length of stay, this was the first study which examined the impact of the length of stay on the perception of ward atmosphere, again contributing new knowledge therefore, there were no studies available to confirm or refute the influence of the length of stay on the perception of the ward atmosphere in Jordan. However, there is literature addressing the impact of the length of stay on patients’ satisfaction with the quality of nursing care available. If the quality of service and the patients’ satisfaction with the nursing care determines their perceptions of the ward atmosphere, it is beneficial to discuss the possible relationship between patients’ satisfaction and the perceptions of ward atmosphere.

Moos (1997) conducted a study in the USA examining the associations between the treatment environment in 23 psychiatric hospitals and patients’ satisfaction with the treatment programme. In his study, Moos (1997) found that when patients were cared for in clear and well organised programmes that emphasised Autonomy and Practical and Personal Problem Orientation, these patients had more satisfaction with their treatment programme. Moos (1997) noticed that patients in these programmes were more likely to discuss their personal problems openly and less likely to be submissive to staff. In contrast, Moos (1997) found that when patients were in environments where there was a high degree of staff control, these patients expressed dissatisfaction about their treatment programme. Moreover, Rossberg and Friis (2004) found that patients’ perceptions of ward atmosphere is correlated with patient satisfaction to a higher degree than nurses’ perceptions, indicating that patients’ responses may be more relevant for assessing quality of care. Based on the Rossberge and Friis’s (2004) findings, the Jordanian patients’ perceptions of ward atmosphere might depend on their experience and satisfaction with their nursing care.

Patients’ perceptions about the care they receive are highly influenced by their experiences during hospitalization (Thomas et al. 1996). After an exhaustive search of the existing literature, nothing could be found that addressed patients’ satisfaction with the psychiatric arena in Jordan. Therefore, studies conducted in Medical-Surgical and Gynecological wards in Jordan will be discussed.
AL-Husban and Abulrub (2009) conducted a cross-sectional descriptive study in order to examine the relationship between patient satisfaction and nursing care in a Jordanian public hospital and a teaching (semi-private) hospital. This study assessed the level of patient’ satisfaction with nursing care and identified the important aspects that enhance satisfaction among 300 Jordanian patients. The Newcastle Satisfaction with Nursing Scale (NSNS) was used to collect the data. The findings of this study indicated that the level of satisfaction of Jordanian patients with nursing care was moderate. Female patients were more satisfied with nursing care than male patients. Gynecological patients were more satisfied than Medical-Surgical patients and patients in the teaching hospital were more satisfied than those in the public hospital. These results were consistent with the results of Ahmad and Alasad (2004) who conducted a survey using a cross-sectional design to investigate patients’ satisfaction with nursing care among 266 Jordanian patients. The NSNS was also used for data collection. Their findings indicated that females were more satisfied with nursing care than males; patients with a high educational level were less satisfied than patients with a lower educational level, and patients in Medical or Gynecological wards were more satisfied than patients in Surgical wards ( Alasad & Ahmad 2003).

Moreover, Ahmad and Alasad (2004) conducted another study to explore the patients’ opinion of nursing care among 255 patients recruited from Medical and Surgical wards in a teaching hospital in Jordan. The results of this study showed that spending sufficient time with patients and showing respect to their family members were perceived by patients as positive. On the other hand, the inadequacy of received information was perceived as a negative experience. In a descriptive cross-sectional study conducted by Mrayyan (2006) it was found that Jordanian patients were most satisfied with nurses’ availability and least satisfied with continuity of care.

In terms of the relationship between the patients’ length of stay in psychiatric hospitals and their satisfaction about the nursing care, the previous studies showed that patients who stayed longer in the hospital tended to be less satisfied than those who stayed for a short time as they felt frustrated and distressed about the treatment programme (Bodil 1999).
Indeed, it has been identified that patients’ satisfaction with nursing care alters according to their demographic variables. Since the patients’ satisfaction is influenced by a number of important factors that create their perceptions of ward atmosphere, the following section attempts to discuss a possible link between patients’ satisfaction and the perception of ward atmosphere.

Many studies have been conducted to assess the relationship between the perception of ward atmosphere and patient satisfaction (Friis 1986a; Eklund & Hansson 2001; Middelboe et al. 2001; Rossberg & Friis 2003b). Eklund and Hansson (2001) conducted a study in Sweden to investigate the ward atmosphere of a psychiatric rehabilitation unit and its relationship to patient satisfaction with the unit and patients’ motivation. The results of this study showed that the Support and Order and Organisation subscales were important for patients’ satisfaction for people diagnosed with psychotic disorders. This finding was replicated in Denmark by Middelboe et al. (2001) who investigated the patient’s perception of the environment in an acute psychiatric ward, covering both locked and open units. As a result of this study, Middelboe et al. (2001) found that only the two subscales of Support and Order and Organisation were important for patient satisfaction.

In a cross-sectional study of 11 wards for psychotic patients, Friis (1986a) found that the four subscales of Support, Practical Orientation, Anger and Aggression and Order and Organisation were strongly correlated with patient satisfaction. In a large cross-sectional study comparing 54 psychiatric wards for psychotic patients, Rossberg and Friis (2003b) also found the five subscales of Involvement, Support, Practical Orientation, Order and Organisation and Staff Control were most strongly correlated with patient satisfaction. In terms of the influential subscales found in each study, the two subscales of Support and Order and Organisation appeared to be common in all studies.

The patients’ perceptions of ward atmosphere led to a possible relationship to patients’ satisfaction with the quality of care across the Jordanian hospitals surveyed. The implication of this finding is that without offering high quality care and services that
satisfy the Jordanian patients, the ward atmosphere will be perceived poorly by the majority of patients. Therefore, it is posited that the Jordanian patients’ perception of ward atmosphere is related to their satisfaction with the services and quality of psychiatric care in the participating hospitals.

Patients’ relatives demographic variables on the perceptions of Real WAS

The findings of the current study revealed that age, gender, frequency of visiting and relationship to patients did not have a significant impact on the relatives’ perception of Real ward atmosphere. Furthermore, there were no previous studies that investigated the perceptions of Real or Ideal ward atmosphere amongst patients’ relatives. Thus, there were no studies that proved or disproved that the demographic variables of frequency of visitation and relationship to patients influenced the patient’s relative’s perception of Real ward atmosphere. Although this study found that there was no significant impact, this is itself another new contribution to knowledge in this area.

As already discussed, patients’ welfare is one of the important interests of the relatives. This could explain why the particular demographic variables examined in the current study did not play a significant role in influencing their perceptions of the ward atmosphere. Findings addressed by Gigantesco et al. (2002) confirm, it is not the demographic variables but rather it is the helpfulness of the hospitalization, along with staff kindness and availability which are more closely linked to patients’ welfare as rated highest by the relatives.

Since the patients’ welfare and the concern about the patients’ health determine the Jordanian relatives perceptions of the Real ward atmosphere, the previous studies showed that there was a relationship between the demographic variables and the relatives’ burden (the relatives’ worry about and are concerned for a family member who has a severe mental illness). The adverse consequences of psychiatric disorders for relatives are known as family or caregiver burden (Ostman, Wallsten & Kjellin 2005). This issue has attained increasing attention since the 1950s (Harvey et al. 2002).
Ostman et al. (2005) conducted a longitudinal study to investigate differences in family burden and participation in care between relatives from subgroups of patients with psychosis, affective disorders and other diagnoses and between subgroups of relatives. 455 close relatives of both compulsorily and voluntarily admitted patients were interviewed about different aspects of their burden, their need for support and their participation in the actual care situation. The results of this study showed that the relatives of patients with affective disorders more often had to give up leisure time. Spouses showed more burden and more often participated in the patients’ treatment than did parents, siblings and friends. Findings also indicated that siblings more seldom experienced burden and more seldom felt that their own needs for support had been met by the psychiatric services.

Regarding the relatives’ frequency of visiting the psychiatric hospital, a randomized control trial conducted by Harvey et al. (2002) examined which characteristics predict patient relative contact. A United Kingdom (UK) 700 trial data were used to determine baseline predictors of frequent contact and establish whether relatives experience of baseline predicted continued frequent contact two years later. The results of this study showed that female patients were more likely to have frequent contact with relatives than were male patients and that older patients were less likely to have frequent contact with a relative than younger patients. Moreover, this study showed that the patients who spend more time in the hospital were less likely to have frequent contact with their relatives than the patients who stayed for a short time. Finally, this study showed that patients who had schizophrenia were less likely to have frequent contact with their relatives than patients with Affective Disorders. Therefore, based on the discussion in the previous section, relatives concern about the patients’ welfare is considered the most important factor that influenced their perceptions of ward atmosphere.

**The impact of hospital’s ownership on the perceptions of Real ward atmosphere amongst nurses, patients and relatives.**

Hospital ownership appeared to have an impact on the perceptions of Real ward atmosphere amongst nurses, patients and relatives.
The results of the current study showed that the participant groups from the Private hospital rated the four subscales of Involvement, Spontaneity, Practical Orientation and Order and Organisation significantly higher than the Government and the Military hospitals. The participant groups from the Private hospital indicated that they experienced a more involved, spontaneous, clear and organised environment. They exhibited a similar perception to North American hospitals as exhibited in Moos’ (1974b) study. These results though, were inconsistent with Arrington and Haddock’s (1990) study who found that for profit psychiatric hospitals had a tendency to provide fewer services than not for profit facilities (Arrington et al. 1990; Culhane & Hadley 1992). This allowed not for profit facilities to have special physical features for patients that would help them experience recreational activities that were therapeutic in nature. Not for profit organisations also provided additional facilities such as more services, more staff resources to patient care and more staff training (Culhane & Hadley 1992). Timko and Moos (1998) found that not for profit psychiatric facilities placed more emphasis on the development of patients’ social and vocational skills and were better organised compared with for profit psychiatric facilities. The differences in the hospital’s ownership could be attributed to their differential structures and organisations, as affected by the different ownership types. Gulak (1991) attributed that the design of the hospital was more in line with the ease of administration and monitoring, rather than for the betterment of the patients. Nevertheless, the type of organisation, structure of the building and the design influences the patients’ recovery (Timko, 1995).

The differences between the public (military and government) hospitals and the private hospital in the participant’s perceptions of Real ward atmosphere in the current study can be explained by the following factors. Firstly, the hospital’s organisational structure. As explained in Chapter 2 the health care system in Jordan consists of public (government and military) hospitals which are mainly funded by the Ministry of Health and the private hospitals which are funded by investors. The public hospitals are not for profit organisations, while private hospitals are for profit organisations (AL-Husban & Abuarub 2009). Public psychiatric hospitals in Jordan are large in size and suffer from staff shortages and have low nurse to patient ratios, whereas private psychiatric hospital
are smaller in size, well staffed and had higher nurse to patients ratios than the public hospitals (Daradkeh 2009).

To explain further, Moos (1997) found that the size of the hospital and the number of patients in the hospital were found to have a negative influence on the patients’ satisfaction. At the same time, a higher number of staff seems to add a positive influence on the patients’ satisfaction. It was found when the numbers of patients in every programme were fewer, the programme had a positive effect on the patients (Nissen 1985). Hellman et al. (1985) observed that the larger size of the hospital and the greater the number of patients in every programme had a negative influence on the patients. Hospitals that were smaller in size were found to have a positive impact on the patients’ satisfaction (Hellman et al. 1985). Finally, Moos (1997) found that a lower staff patient ratio was associated with less Support and Spontaneity and more Staff Control. The above mentioned differences in the organisational structure between the Jordanian public and private hospitals affecting nurses’ performance may have affected the patients’ satisfaction.

In Jordanian private psychiatric hospitals a greater emphasis is placed on patients’ satisfaction, more so than in the public hospitals. Nurses in private hospitals have to provide the best of nursing care such as offering more physical features in order to please the patients. Without offering the best care and good services to the patients in the private hospitals these hospitals will lose their patients and these patients will go to the public hospitals because the services in the public hospitals are free of charge (Mohit 2006). As explained by previous studies conducted by Collins et al. (1985) and by Ellsworth et al. (1979) when the physical environment offered more social and recreational facilities (e.g., seating arranged in groups rather than along walls, reading materials etc) and fewer opportunities to withdraw from social interactions (e.g., there was no separate television room), patients were better adjusted (Collins et al. 1985; Ellsworth et al. 1979). Similarly, substance abuse treatment centres’ provision of social and recreational aids such as games and game tables, exercise equipment, a volleyball court and a garden, positively promoted patient interaction and activity (Younge et al. 1991).
The second factor that can explain the differences in the perceptions of Real ward atmosphere between the Jordanian participating groups can be related to the motivations to satisfy the patients. In private hospitals nursing staff and renewal of contracts are based on staff performance and are linked to patient satisfaction. The fear of losing one’s job may be a strong motivator to ensure patient satisfaction. Satisfied patients in the private hospitals mean that more patients are admitted to the hospital which work on a for-profit basis. On the other hand, the public hospitals do not operate in this manner and as such there is not such a strong imperative to satisfy patients. Whether a patient is satisfied or not will have no effect on a nurses’ job in a public hospital. Moreover, the private hospital included in this study was accredited by local and national agencies, whereas the public hospitals included in this study were not accredited at all. Hospitals which seek accreditation are striving to enhance their quality of care as well as the patient outcomes (AL-Husban & Abuarub 2009). Patient satisfaction data as a measure of care quality are routinely collected and used for accreditation purposes (Joint Commission for Accreditation of Healthcare Organisations 1991). Since the private hospital included in this study was accredited locally and nationally this means that this hospital placed more emphasis on training and continuing education programmes to enhance their staff’s skills more so than the public hospitals (AL-Husban & Abuarub 2009). This result was consistent with Irurita’s (1999) findings who found that the quality of care correlated with nurses’ knowledge, skills and values. Furthermore, nurses’ salaries in private hospitals in Jordan are higher than those in public hospitals which might also motivate nurses to work in such hospitals, which in turn could result in nurses offering good care to satisfy the patients in order to secure an ongoing employment contract (AL-Husban et al. 2009).

The third factor that offers an explanation for the differences in the perceptions of Real ward atmosphere between the Jordanian participating groups can be related to the patients’ expectation. Patients in the private hospitals have to pay for their medical treatment and they expect a higher quality of care and services than the patients in the large, public hospitals. Services from the patients’ perspective relate to cost. In the public hospitals services are provided free, so patients were satisfied with the services
and whatever they received was acceptable (Mohit 2006) or they did not feel they could complain.

In summary, the organisational structure of the hospital, motivations to satisfy the patients and patients’ expectations were identified as explanations for the differences between the Jordanian public and the private hospitals’ participants in the perception of Real ward atmosphere.

Summary

This discussion chapter outlined the key findings of the current study and included commentary on why Jordanian nurses from participating hospitals rated the three subscales of Involvement, Practical Orientation and Order and Organisation as statistically significantly lower than did patients and relatives.

The chapter also discussed results of the Real ward atmosphere Subscales of Support, Spontaneity and Programme Clarity and why patients’ relatives may have scored significantly higher than both nurses and patients did and the fact that the relatives and nurses rated the Ideal ward atmosphere significantly higher on the following subscales Involvement, Support, Spontaneity, Practical Orientation, Personal Problem Orientation, Anger and Aggression and Programme Clarity subscales than patients did.

Further to the above, the chapter discussed why the relatives rated the Ideal ward atmosphere significantly lower on Autonomy and Order and Organisation than nurses and patients did and that the North American nurses rated significantly higher than the Jordanian nurses in all Real WAS subscales except Staff Control.

Finally, a discussion ensued regarding why the North American patients rated significantly higher than the Jordanian patients in Autonomy and Practical Orientation, and significantly lower than the Jordanian patients in Anger and Aggression and Staff Control. All the demographic variables tested in the current study were found to have no impact on the perceptions of ward atmosphere for nurses, patients and relatives but that hospital ownership did appear to have had an impact on the perceptions of Real ward atmosphere amongst nurses, patients and relatives. Explanations for possible
reasons regarding, this were offered. This chapter therefore, has identified the creation of new knowledge in a number of areas.

The following chapter concludes this thesis and outlines the limitations and recommendations of the study.
Chapter 7

This chapter acknowledges the limitations of the study and identifies recommendations for future research. It begins with an identification of the limitations and then based on consideration of the extensive literature review, and of the research findings, recommendations are made which are categorized into four areas: nursing management, nursing practice, nursing education and nursing research.

Limitations

Although some significant findings resulted from this study, which were identified in Chapter 5 and discussed in detail in Chapter 6, every research project has limitations (Hammoud 2012). There are four main limitations in the current study. Three limitations revolve around the instrument itself, and one issue arose in relation to potential response bias. These issues will be reported below.

First, the Moos WAS which was developed in 1968, was translated into Arabic and then used in this study. The Moos WAS was the instrument of choice as it is a well developed tool and is a universally acceptable instrument (Moos 2007). However, some questions in the Moos WAS found to be outdated and no longer clinically relevant in the contemporary mental health settings. Further refinement of the Moos WAS will enhance the psychometric properties of the instrument when used for future research.

Second, participants of this study felt that using the rating options ‘true/false’ was too narrow for some questions. Forced answer questions often elicit comments from participants such as this (Rossberg & Friis 2003b). Participants suggested that they were unable to select either true or false when they felt their answer didn’t belong to neither.

Third, many participants said that they felt the Moos WAS was too long and contained too many statements. This might be one of the reasons for some participants not appearing to answer the questions as carefully as they might. This limitation was explained by Nieswiadomy (2011) and Vocino and Polonsky (2011) who found that one
of the disadvantages of the survey is that respondents may answer questions superficially if the survey takes a long time to complete.

Finally, a possible response bias might have occurred due to concern that participants might have answered questions from a biased point of view. They may have answered in certain ways to protect their position (in the case of nurses) or to provide answers with favoritism (in the case of patients or patients’ relatives). All surveys run the risk of response bias, as the respondents reply based on their own interpretation of the question (Nieswiadomy 2011; Vocino & Polonsky 2011)

**Recommendations**

As with all research, although aims are achieved and questions are answered, new opportunities arise for further study. This study is no different in this regard and provides recommendations that are important to mental health nursing management, mental health nursing practice, mental health nursing education and mental health nursing research.

**Mental Health Nursing Management**

The findings of the study identified that Jordanian hospital managers would be well placed to provide more attention to the following areas: Involvement, Support, Autonomy, Spontaneity, Personal Problem Orientation and Practical Orientation.

Treatment programmes would be enhanced by engaging the patients and their relatives more fully in the planning and delivery of care (Sharac et al. 2010). The interpersonal relationships between patients and staff have a significant impact on treatment outcomes (Rossberge & Friis 2003b) and promoting positive patient and staff relationships is necessary in order to provide therapeutic activities. Therefore, Jordanian mental health nurses are encouraged to include people diagnosed with a mental illness to be more fully involved and included in their care (Roper & Edan 2011).
Several authors suggest that consumers of mental health services should be involved in their treatment (Roper & Edan 2011; Dorrer & Schinkel 2008; Spaniol 2008; Happell, Manias & Pinkahana 2008; Roberts & Wolfson 2004). Spaniol (2008) asserts that the patient should be able to participate in all aspects of their treatment and considers him/her a partner in nursing practices. Several strategies are suggested as a result of this research for mental health care in Jordan. These include engaging patients personally in the process of care planning; using their expressed needs to develop a personalized care plan and finding agreement with them about their care plan (Anthony & Crawford 2000).

In order to improve the ward atmosphere it is also recommended that the Jordanian hospitals provide more therapeutic activities for patients to engage in during their in-patient admission. This is also recommended by Moos (1996) who found that the availability of a broad range of social-recreational activities in the wards may contribute to harmonious relationships. Similarly, Hoffman and Miller (1993) found that patients who participate in the health and treatment services that are available for them in the form of social-recreational activities have better treatment outcomes such as higher rates of abstinence from alcohol or drugs. In addition, the Jordanian hospitals should identify ways and means of managing and stimulating patients who may be lethargic or amotivated because of negative symptomatology or from adverse medication side effects.

More support from doctors and nurses to the patients in Jordanian mental hospitals is also recommended. Support and encouragement were identified in the literature as very important components of treatment programmes for psychiatric patients (Eklund & Hansson 1997). Ensuring that sufficient numbers of staff are available so as to deal with the patients’ needs is necessary to provide adequate support and encouragement for the patients and their relatives in the ward (Tuvesson et al. 2011). This in turn, allows nursing staff to devote more time to supporting and listening to the patient and their relatives. In addition, hospitals’ managers should ensure a safe and therapeutic working environment in order to enhance the quality of patient care.
More independence in the patients’ personal affairs should also be encouraged as Autonomy enhances self sufficiency and independence. Moos (1974b) recognized the need for patient Autonomy some decades ago. The Jordanian mental hospital ward environment could be enhanced by the provision of extended Autonomy for the patients and their relatives. It would also be beneficial for the Jordanian hospitals to focus on therapies and activities that facilitate less disruptive behaviors which could significantly reduce the necessity for the staff to restrict the patients Autonomy in the first place Moos (1996). It could also hasten patient recovery.

More freedom for the patients to express their feelings should also be encouraged in the Jordanian psychiatric hospitals. As discussed in previous chapters many researchers have suggested that Spontaneity is a part of the healing process. Moos and Lemke (1994) confirmed this when they noted that the more freedom that was provided to the patients, the better treatment outcomes and that recovery was quicker.

Regarding Personal Problem Orientation, the Jordanian hospitals are encouraged to facilitate opportunities for patients to discuss their problems amongst each other and openly with the staff of the hospital. As Walsh, Griak and Price (2000) argued, allowing more Personal Problem Orientation in the treatment environment will enhance the overall treatment outcomes of the patient.

In the case of Practical Orientation, the Jordanian hospitals are encouraged to offer practical teaching programmes and recruit more staff to teach the patients a vocation that would help them to earn a living upon discharged. This intervention is supported by results of previous studies which indicated that supportive treatment climates that engage patients in learning practical skills are positively associated with psychiatric patients’ satisfaction with the treatment and staff and a better chance to benefit from treatment (Moos 2007).

Lastly, a Jordanian national mental health strategy is recommended to be written to guide future service development and recruitment and retention issues. Such a strategy or plan
might include issues such as mental health education, preventive, early intervention and curative community mental health care services and rehabilitation services.

**Mental Health Nursing Practice**

Recommendations to improve the ward atmosphere include increasing nurse’s awareness of factors that impact on perceptions of ward atmosphere. Bowers et al. (2009) reported that many nurses perceive that peer relationships and the therapeutic relationship with patients was an important factor influencing perceptions of ward atmosphere. Reflective practice that promotes interactive relationships between nurses themselves and between nurses and patients in the hospital environment are strongly encouraged (Bowers et al. 2009).

The results of this study may have practical implications for changing the environments of the facilities for the better. By describing their current and ideal treatment environments, participants have provided information that can guide interventions to change the ward atmosphere and thus help foster better patient treatment outcomes. Since participants’ perceptions of the ward atmosphere has provided feedback regarding the quality of services within healthcare institutions, this study should also be considered as an evaluation of the nature of the quality of care that Jordanian hospitals exhibited (Brunt & Rask 2008).

The quality of care given to patients is affected by the nurses’ perception. As such, it is important to promote among healthcare staff members, a positive orientation about the importance of ward atmosphere in the treatment programme of psychiatric patients (Nesset et al. 2008). This could be facilitated by providing a more positive work environment within psychiatric facilities.

Furthermore, since the Jordanian patients’ relatives’ perception of ward atmosphere was determined by the quality of the services they received and the welfare of the patient, the Jordanian hospital environments would be enhanced by engaging more with the patients’ relatives and providing them with adequate information about the illness and its treatment. This needs to be communicated in simple and clear language free from
medical terminology. Jordanian mental health facilities should reflect on the treatment programmes offered and the physical environment provided to patients, as this is considered to be one of the main factors that impact on the relatives’ perceptions of ward atmosphere.

**Mental Health Nursing Education**

For nurse educators, regardless of the areas of practice, professional development opportunities related to group interactions, therapeutic milieu, conflict management and leadership skills are highly recommended. Increasing and updating mental health clinical skills are important for nurses to feel prepared for their area of practice (Tuvesson et al. 2011). More consideration should be given to teaching skills and knowledge that promote the importance of the ward atmosphere in the nursing curricula. Nursing curricula in Jordan are encouraged to provide opportunities for nurses’ to engage in reflective practice and to examine national and international standards of care for patients with a mental illness. Positive attitudes towards mental illness can be improved by providing information and education about mental health issues to people in the broader Jordanian society (Hocking 2003). This also promotes connections between people with mental illness and others in the community (Corrigan & Wassel 2008). Educational programmes about psychiatric illness and their treatment, reducing the stigma about psychiatric illness and how to integrate psychiatric patients into society should be included in school and university curriculum. These recommendations are consistent with Sartorius (1998) who suggested that mental health professionals should 1) examine their personal ability for and attitude toward working with people with a mental illness 2) understand how they are advocates for protecting the rights of people with mental illness 3) focus on factors that improve the quality of life for people with mental illness and 4) work effectively with the community to address myths and change false perceptions and attitudes toward mental illness.
Further Research

A replication of the study with a sample representing the various multidisciplinary health team members would be a valuable addition to the knowledge in this area. Also, a replication of the study using a revised instrument as suggested by participants and alluded to above, would enable a broader measure rather than using a true/false format.

In order to develop a culturally sensitive instrument this study can be considered a baseline with which to compare future studies. This study has produced much new knowledge and provides a benchmark from which future studies can compare and build upon. The need though for Jordanian norms to be established for the WAS if this instrument is to be used again in Jordan would be beneficial.

Future research is also recommended to be undertaken which examines the structural or organisational factors that impact on Real ward atmosphere perceptions in Jordan. This study revealed that the hospital ownership had an influence on the perceptions of ward atmosphere, however it did not assess other factors as independent variables, such as: nurse-patient ratio, job satisfaction and work-related stress. Research in these areas will provide information for hospitals’ managers to provide infrastructure that support the establishment of therapeutic work environment.
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Appendix 1. University of Wollongong ethics committee approval

AMENDMENT APPROVAL

To reply please quote: HREC100516
Further Information Phone: 4221 4457

1st April 2005

Mr A Al-Saggar
231 Specace St
Lakemba
NSW 2195

Dear Mr Al-Saggar,

I am pleased to advise that the amendment request dated 28 March 2005 to the following Human Research Ethics Application has been approved. The University of Wollongong's Sydney and Illawarra Area Health Services (HRBSC) Ethics Committee in accordance with the NHMRC National Statement on Ethical Conduct in Human Research.

Ethics Number: 1052/116

Project Title: Patients, nursing staff and patients' relatives perceptions of ward atmosphere in four psychiatric hospitals in Jordan.

Name of Researcher: Mr Ahmad Al-Saggar, Professor Patricia Crockett, A/Professor Hazel Cavan

Amendments: Amendment to title and inclusion of the Military Hospital.

Amendments Approval Date: 3 April 2005

Approval Date: 2 May 2005

Please remember that in addition to reporting proposed changes to your research protocol the NHMRC requires that researchers immediately report:
- adverse or unexpected adverse events or participants
- unforeseen events that might affect continued ethical acceptability of the project.

You are also required to complete monitoring reports annually and at the end of your project. These reports are due not approximately 6 weeks prior to the date your ethics approval expires. The reports must be completed, signed by the appropriate Head of School, and returned to the Research Services Office prior to the expiry date.

Yours sincerely,

A/Professor Ahmad Al-Saggar
Chairperson
Human Research Ethics Committee

Professor P. Crockett, Faculty of Health and Behavioural Science
Appendix 2. Jordanian Ministry of Health Ethics Approval
To:
Mr. Ahmed AL-Sagerut

I am pleased to inform you that your application/ study proposal

Title:
Patients, Nursing staff and patients’ relatives perceptions of ward atmosphere in some psychiatric hospitals in Jordan.

Has been approved by the Royal Medical Services Human Research Ethics Committee on 34-4-2007.

Dr. Kassab M. Harfouschi
Chairman of the Ethics committee
King Hussaus Medical Center

G. E. O. Jordan Armed Forces
DIRECTORATE
ROYAL MEDICAL SERVICES
Human Research Ethics Committee
Aman – Jordan

Date: 2-3-2008.
Appendix 4. AL-Rasheed hospital Ethics approval

Al - Rashid Hospital Center
(Psychiatry)

DATE: 6/7/2006
RHO/7/2/2006

Dear professor J. Curtis ...,

Thank you for your letter regarding Mr. Ahmad AlSagarat who is currently a phD Student at the university of the Wollongong.
I am glad to tell you that we welcome him to conduct the study, which includes distribution of ward atmosphere scale at Al Rashid Private Hospital for mental health and addiction.

Sincerely yours

Medical Manager
Consultant Psychiatrist
Radwan A. Enimustafa

[Contact information]

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Appendix 5. Information Sheet for Nursing Staff

TITLE: Patient and Staff Perceptions of Ward atmosphere in Three Psychiatric Inpatients Units in Jordan.

PURPOSE OF THE RESEARCH

This is an invitation to participate in a study conducted by researchers at the University of Wollongong. The purpose of the research is to describe patient and staff perceptions of the ward atmosphere in three psychiatric inpatient units in Jordan. The study also wishes to differentiate the perception of the ward atmosphere between nurses; patients and patients’ relatives.

INVESTIGATORS

Prof Patrick Crookes (Team Leader) Dr Janette Curtis Ahmad Al-Sagarat

School of Nursing School of Nursing School of Nursing
02-4221 3339 02-4221 3123 001196232242065
pcrookes@uow.du.au jcurtis@uow.edu.au aa967@uow.edu.au

METHOD AND DEMANDS ON PARTICIPANTS

If you choose to participate, you will be asked to complete a written survey, the Real (R) and the Ideal (I) forms of Moos Ward atmosphere Scale. By using both Forms I and R, we can identify areas in which patients and staff want to change their ward atmosphere. In describing your actual and ideal work environment, you will provide information that can guide attempts to change the treatment orientation and facilitate more effective programme organization. Information about an individual staff view of the actual and preferred work setting can help to counsel the staff about how to adapt to the work environment and obtain more benefit from it.
RISKS, INCONVENIENCES AND DISCOMFORTS

Apart from the 60 minutes of your time for completing both questionnaires, we can foresee no risks for you. Your involvement in the study is voluntary and you may withdraw your participation from the study and withdraw any data that you have provided to that point. Refusal to participate in the study will not affect your employment status.

FUNDING AND POSSIBLE BENEFITS OF THE RESEARCH

This study is funded by a research grant from the Faculty of Nursing at Mu’tah University/ Jordan. The results of the study will contribute to the body of literature describing the perception of Jordanian mental health patients and staff of their ward atmosphere. In addition, the results of this study may have practical implications for changing the environments of the facilities under study.

Findings from the study will be published in Nursing Journals and may be in conferences paper. Confidentiality is assured, and the hospitals and you will not be identified in any part of the research.

ETHICS REVIEW AND COMPLAINTS

This study has been reviewed by the Human Research Ethics Committee (Social Science, Humanities and Behavioural Science) of the University of Wollongong. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the UoW Ethics Officer on (02) 4221 4457.

Thank you for your interest in this study.

Ahmad Al-Sagarat
Appendix 6. Information Sheet for Patients

TITLE: Patient, Staff and patients relatives Perceptions of Ward atmosphere in Four Psychiatric hospitals in Jordan.

PURPOSE OF THE RESEARCH

This is an invitation to participate in a study conducted by researchers at the University of Wollongong/ Australia. The purpose of the research is to describe patient and staff perceptions of the ward atmosphere in four psychiatric hospitals in Jordan. The study also wishes to differentiate the perception of the ward atmosphere between nurses; patients and patients’ relatives.

INVESTIGATORS

Prof Patrick Crookes (Team Leader) Dr Janette Curtis and Ahmad Al-Sagarat

School of Nursing       School of Nursing                          School of Nursing
02-4221 3147            02-4221 3339           001196232242065
pcrookes@uow.du.au      jcurtis@uow.edu.au      aa967@uow.edu.au

METHOD AND DEMANDS ON PARTICIPANTS

If you choose to participate, you will be asked to complete a written survey, the Real (R) and the Ideal (I) forms of Moos Ward atmosphere Scale. By using both Forms I and R, we can identify areas in which patients and staff want to change their ward atmosphere. In describing your actual and ideal treatment environment, you will provide information that can guide attempts to change the treatment orientation and facilitate more effective programme organization.
RISKS, INCONVENIENCES AND DISCOMFORTS

Apart from the 60 minutes of your time for completing both questionnaires, we can foresee no risks for you. However, if you feel distressed from the questions of the questionnaire, the researcher will refer you to the specialized counselor who will be available in this hospital. Your involvement in the study is voluntary and you may withdraw your participation from the study and withdraw any data that you have provided to that point. Refusal to participate in the study will not affect your treatment programme.

FUNDING AND POSSIBLE BENEFITS OF THE RESEARCH

This study is funded by a research grant from the Faculty of Nursing at Mu’tah University/ Jordan. The results of the study will contribute to the body of literature describing the perception of Jordanian mental health patients and staff of their ward atmosphere. In addition, the results of this study may have practical implications for changing the environments of the facilities under study.

Findings from the study will be published in Nursing Journals and may be in conferences paper. Confidentiality is assured, and the hospitals and you will not be identified in any part of the research.

ETHICS REVIEW AND COMPLAINTS

This study has been reviewed by the Human Research Ethics Committee (Social Science, Humanities and Behavioural Science) of the University of Wollongong. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the UoW Ethics Officer on (02) 4221 4457.

Thank you for your interest in this study.

Ahmad Al-Sagarat
Appendix 7. Information Sheet for Patients’ Relatives

TITLE: Patient, Staff and patients’ relatives Perceptions of Ward atmosphere in Four Psychiatric hospitals in Jordan.

PURPOSE OF THE RESEARCH

This is an invitation for your relative to participate in a study conducted by researchers at the University of Wollongong. The purpose of the research is to describe patient and staff perceptions of the ward atmosphere in four psychiatric hospitals in Jordan. The study also wishes to differentiate the perception of the ward atmosphere between nurses; patients and patients’ relatives.

INVESTIGATORS

Prof Patrick Crookes (Team Leader) Dr Janette Curtis and Ahmad Al-Sagarat

School of Nursing    School of Nursing    School of Nursing
02-4221 3147    02-4221 3339    001196232242065

pcrookes@uow.du.au    jcurtis@uow.edu.au    aa967@uow.edu.au
METHOD AND DEMANDS ON PARTICIPANTS

If you choose to be included, you will be asked to complete a written survey, the Real (R) and the Ideal (I) forms of Moos Ward atmosphere Scale. By using both Forms I and R, we can identify areas in which patients and staff want to change their programme. In describing the actual and ideal treatment environment you will provide information that can guide attempts to change the treatment orientation and facilitate more effective programme organization.

RISKS, INCONVENIENCES AND DISCOMFORTS

Apart from the 60 minutes of your time for completing both questionnaires, we can foresee no risks for you. However, if you feel distressed from the questions of the questionnaire, the researcher will refer you to the specialized counselor who will be available in this hospital. Your involvement in the study is voluntary and you may withdraw your participation from the study and withdraw any data that you have provided to that point. Refusal to participate in the study will not affect your relationship with the nursing administration of psychiatric unit.

FUNDING AND POSSIBLE BENEFITS OF THE RESEARCH

This study is funded by a research grant from the Faculty of Nursing at Mu’tah University/ Jordan. The results of the study will contribute to the body of literature describing the perception of Jordanian mental health patients and staff of their ward atmosphere. In addition, the results of this study may have practical implications for changing the environments of the facilities under study.

Findings from the study will be published in Nursing Journals and may be in conferences paper. Confidentiality is assured, and the hospitals and you will not be identified in any part of the research.
ETHICS REVIEW AND COMPLAINTS

This study has been reviewed by the Human Research Ethics Committee (Social Science, Humanities and Behavioural Science) of the University of Wollongong. If you have any concerns or complaints regarding the way this research has been conducted, you can contact the UoW Ethics Officer on (02) 4221 4457.

Thank you for your interest in this study.
Appendix 8. Information Sheet for Nursing Staff in Arabic

ورقة توضيحية للممرضين النفسيين الأردنيين المشاركين

العنوان: إدراك المرضى وأقاربهم والممرضين لجو القسم في أربع مستشفيات للصحة النفسية لمرضى مدخليين في الأردن.

الهدف من البحث: هذه دعوة لكم للمشاركة في هذا البحث الذي يقوم به باحثون في جامعة ولنجونج في استراليا.

الهدف من البحث هو وصف إدراك المرضى وأقاربهم والممرضين لجو القسم في أربع مستشفيات صحة نفسية لمرضى مدخليين في الأردن. وتأمل من هذه الدراسة أن نفرق بين إدراك الممرضين والمريضي لجو القسم.

الباحثون: آد باتريك كروك
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طالب: أحمد السقا
كلية التمريض/ جامعة لونجونج/ استراليا

0061404360133

بريد الالكتروني:

Sagara4@hotmail.com

الطريقة والمطلوب من المشاركين:

إذا اختبرت المشاركة في البحث فالمطلوب أن تتم القسم (ر) والقسم (أ) من مقياس أحوال أجنحة القيم. حيث إننا سنستطيع التعرف على المواطن التي يرغب المرضى وأقاربهم والكادر تغييرها في البرنامج. نتب妊娠نا بوصف الليبية العلاجية الواقعية وتلك المثالية (من وجهة نظرك) فإن هذه المعلومات سقوتنا لإحداث تغيرات في طريقة التعريف بأساليب العلاج وتسهل في تنظيم البرنامج العلاجي بشكل أكثر فعالية.

المخاطر والازعاج وعدم الراحة: لا مخاطر تتذكر من خلال إجابتك على الاستبيانين ولمدة نصف ساعة. إن مشاركتك في البحث اختيارية حيث يمكنك سحب مشاركتك أو أي معلومة زودتنا إياها حتى اللحظة. إن رفض المشاركة في البحث لن يؤثر على برامجك العلاجي في هذا القسم.
ال_BITS_ والمواقع المحتملة من البحث: هذه الدراسة ممثلة بمنحه بحثية مقدمة من كلية التمريض بجامعة معينة في الأردن.

إن نتائج الدراسة ستُضيف إلى الأدبيات واصفة إدراك مرضى الصحة النفسية والكادر العام معهم في الأردن لجو القسم. بالإضافة إلى أن نتائج هذه الدراسة قد تؤدي إلى تأثيرات عملية لتغيير الأحواض داخل المراكز تحت الدراسة. سيتم نشر النتائج في مجالات التمريض وقد يتم تقديمها في مؤتمرات. إن السرية في المعلومات مؤكد. ولن يتم الكشف عن هو بكأ أو هوية المستشفي في أي قسم من أقسام البحث.

المراجعة الأخلاقية والشكاوي:

لقد قامت لجنة متخصصة بأخلاقيات البحث تسمى لجنة أخلاقيات البحث الإنساني في جامعة ولونجونج بمراجعة البحث والموافقة على إجراءات. إذا كان لديك أي شكوى أو استفسار بخصوص طريقة تطبيق البحث في استطاعتك الاتصال بهذه اللجنة على هاتف رقم 742214445 /14445 /742214445 /0742214454/ ولونجونج /استراليا.

شكرا على الاهتمام بهذه الدراسة.

الباحث: أحمد السقراط
Appendix 9. Information Sheet for Patients in Arabic

_attempts to inform patients on the participating nurses.

The title of the research is to study the effect of four participating hospitals in Jordan on the nurses and their patients in the context of health facilities.

The objective of the research is to study the effect of the nurses and their patients in the context of health facilities in Jordan. We aim to study the effect of the nurses and their patients in the context of health facilities in Jordan.

The researchers:

Dr. Patrick Crooks
0061242213339
Faculty of Nursing/University of Wollongong
Electronic mail: Pcrookes@uow.edu.au

Dr. Janet Curtis
0061242213123
Faculty of Nursing/University of Wollongong
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The student:

Ahmed Al-Saarrat
Faculty of Nursing/University of Wollongong/Australia
0061404360133

بريد الإلكتروني:

Sagara4@hotmail.com

الطريقة والمطلوب من المشاركين:

إذا اختبرت المشاركة في البحث فالمطلوب أن تتم القسم (ر) والقسم (أ) من مقياس أجواء أجنحة القسم. حيث إتنا ستستطيع التعرف على المواطن التي يرغب المرضي والكادر تغييرهم في البرنامج. بتزويدينا بوصف للبيئة العلاجية الواقعية وتلك المثالیة (من وجهة نظرك) فإن هذه المعلومات ستقدمنا لإحداث تغييرات في طريقة التعريف بأساليب العلاج وتسهل في تنظيم البرنامج العلاجي بشكل أكثر فعالية.

المخاطر والإزعاج وعدم الراحة: لا مخاطر تذكر من خلال إجابتك على الاستبيانين ولعدة نصف ساعة. إن مشاركتك في البحث اختيارية حيث يمكنك سحب مشاركتك أو أي معلومة زودتنا إياها حتى اللحظة. إن رفض المشاركة في البحث لن يؤثر على برنامجك العلاجي في هذا القسم.

التمويل والقواعد المحتملة من البحث: هذه الدراسة ممولة بمنحته بحثية مقدمة من كلية التمريض بجامعة ميدة في الأردن.

إن نتائج الدراسة ستضفي إلى الأدبيات واصفة إدراج مرضى الصحة النفسية والكادر العام معهم في الأردن لجو القسم. بالإضافة إلى أن نتائج هذه الدراسة قد تؤدي إلى تأثيرات عملية لتغيير الأجزاء داخل المراكز تحت الدراسة. سيتم نشر النتائج في مجلات التمريض وسوف يتم تقديمها في مؤتمرات. إن السرية في المعلومات مكولة. ولن يتم الكشف عن هوئتك أو هوية المستثلي في أي قسم من أسالك البحث.

المراجعة الأخلاقية والشكر:
لقد قامت لجنة متخصصة بأخلاقيات البحث تسمى لجنة أخلاقيات البحث الإنساني في جامعة لونجونج بمراجعة البحث والموافقة على اجراه. إذا كان لديك أي شكوى أو استفسار يخص طريقة تطبيق البحث فباستطاعتك الاتصال بهذه اللجنة على هاتف رقم 242214457/00614 ولونجونج/استراليا.

شكرا على الاهتمام بهذه الدراسة

الباحث: أحمد السفرات
Appendix 10. Information Sheet for Patients’ Relatives in Arabic

ورقة توضيحية لأقارب المرضى التنسيبيين الأردنيين المشاركون

العنوان: إدراك المرضى وأقاربهم والممرضين لجو القسم في أربع مستشفيات للصحة النفسية لمرضى مدخليين في الأردن

الهدف من البحث: هذه دعوة لكم للمشاركة في هذا البحث الذي يقوم به باحثون في جامعة ولونجونج في استراليا.

الهدف من البحث هو وصف إدراك المرضى والعاملين لجو القسم في أربع مستشفيات صحة نفسية لمرضى مدخليين في الأردن. وتأمل من هذه الدراسة أن تفرق بين إدراك المرضى والمرضى لجو القسم.

الباحثون: أ.د. باتريك كروك
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الطالب: أحمد السفرات
0061404360133
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 إن كنت مشاركاً في البحث، فلمطلوب أن تتم القسم (R) والقسم (A) من مقياس ألوية أجنحة القسم. بحيث إنا نستطيع التعرف على المواطن التي يرغب المرضى والكادر تغييرهم في البرنامج. بتوظيفنا بوصف للبيئة العلاجية الواقعية وتلك المثالية (من وجهة نظرك) فإن هذه المعلومات ستقومنا لإحداث تغييرات في طريقة التعريف بأساليب العلاج وتسهل في تنظيم البرنامج العلاجي بشكل أكثر فعالية.

المخاطر والإزعاج وعدم الراحة: لا مخاطر تذكر من خلال إجابتك على الاستجوابات ولمدة نصف ساعة. إن مشاركتك في البحث اختيارية حيث يمكنك سحب مشاركتك أو أي معلومات زودتنا إياها حتى اللحظة. إن رفض المشاركة في البحث لن يؤثر على برنامجك العلاجي في هذا القسم.

التمويل والقواعد المحتملة من البحث: هذه الدراسة ممولة بنجمة بنحية مقدمة من كلية التمريض بجامعة موتة في الأردن.

إن نتائج الدراسة ستضيف إلى الأدبيات واصفة إدراك مرضى الصحة النفسية والكادر العام معهم في الأردن لجو القسم. بالإضافة إلى أن نتائج هذه الدراسة قد تؤدي إلى تأثيرات عملية لتغيير الأحوال داخل المراكز تحت الدراسة. سيتم نشر النتائج في مجلات التمريض وقد يتم تقديمها في مؤتمرات. إن السرية في المعلومات مكيدة. ولن يتم الكشف عن هوبيك أو هوية المستشار في أي قسم من أقسام البحث.

المراجعة الأخلاقية والشكوى:
لقد قامت لجنة متخصصة بأخلاقات البحث تسمى لجنة أخلاقيات البحث الإنساني في جامعة ولونجونج بمراجعة البحث والموافقة على اجراوه. إذا كان لديك أي شكوى أو استفسار يخص طريقة تطبيق البحث فياستطاعتك الاتصال بهذه اللجنة على هاتف رقم75442214/44457 ولونجونج/استراليا.

شكرًا على الاهتمام بهذه الدراسة

الباحث: أحمد السفرات
Appendix 11. Consent Form for Nursing Staff

Patient and Staff Perceptions of Ward atmosphere in Four Psychiatric hospitals in Jordan this research is conducted by Ahmad Al-Sagarat

I have been given information about Patient and Staff Perceptions of Ward atmosphere in four psychiatric hospitals in Jordan and discussed the research project with Ahmad Al-Sagarat, the PhD student in University of Wollongong/ Australia. This is part of a doctoral degree supervised by Professor Patrick Crookes and Associate Professor Janette Curtis from the School of Nursing, Midwifery & Indigenous Health at the University of Wollongong.

I consent to participate in the survey. I understand that my contribution will be confidential and that there will be no personal identification in the data that I agree to allow to be used in the study. I understand that there are no potential risks or burdens associated with this study.

I understand that I will not be able to be identified by my response. I have had an opportunity to ask Ahmad Al-Sagarat any questions I may have about the research and my participation. I understand that my participation in this research is voluntary and I am free to refuse to participate and I'm free to withdraw from the research without penalty of any kind. However, due to the anonymous nature of the survey, once data has been collected, surveys can not be able to be retrieved.

If I have any enquires about the research, I can contact Ahmad Al-Sagarat on these numbers 032242065 and 065157659/Jordan and/or Prof Patrick on this number 0061242213147 and Associate Professor Janette Curtis, on this number 006142213339 in Australia. If I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer, Human Research Ethics Committee, University of Wollongong on 006124221 4457.

By signing below I am indicating my consent to participate in the research. I understand that the data collected from my participation will be unidentified and used primarily for
a PhD thesis, and will also be used in summary form for academic journal publication, and I consent for it to be used in that manner.

Signed
Appendix 12. Consent Form for Patients

Patient; Staff and patients’ relatives Perceptions of Ward atmosphere in Four Psychiatric hospitals in Jordan.

This research is to be conducted by Ahmad Al-Sagarat

I have been given information about a project examining ‘Patient and Staff Perceptions of Ward atmosphere in four Psychiatric hospitals in Jordan’ and discussed the research project with Ahmad Al-Sagarat, the PhD student in University of Wollongong. This is part of a doctoral degree supervised by Professor Patrick Crookes and Associate Professor Janette Curtis from the School of Nursing, Midwifery & Indigenous Health at the University of Wollongong.

I consent to participate in the survey. I understand that my contribution will be confidential and that there will be no personal identification in the data that I agree to allow to be used in the study. I understand that there are no potential risks or burdens to me, associated with this study.

I understand that I will not be able to be identified by my responses. I have had an opportunity to ask Ahmad Al-Sagarat any questions I may have about the research and my participation. I understand that my participation in this research is voluntary and I am free to refuse to participate and I’m free to withdraw from the research without penalty of any kind. However, due to the anonymous nature of the survey, once data has been collected, surveys can not be retrieved.

If I have any enquires about the research I can contact Ahmad Al-Sagarat on these numbers 032242065 and 065157659/Jordan and/or Prof Patrick on 0061242213174 and Associate Professor Janette Curtis, on 006142213339 in Australia. If I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer, Human Research Ethics Committee, University of Wollongong on 006124221 4457 OR, I can approach the ward staff in my hospital and ask that they make contact on my behalf.
By signing below I am indicating my consent to participate in the research. I understand that the data collected from my participation will be unidentified and used primarily for a PhD thesis, and will also be used in summary form for academic journal publication, and I consent for it to be used in that manner.

Signed
Appendix 13. Consent Form for Patients’ Relatives

Patient and staff perceptions of ward atmosphere in four psychiatric hospitals in Jordan.

This research is conducted by Ahmad Al-Sagarat

I have been given information about Patient and Staff Perceptions of Ward atmosphere in four psychiatric hospitals in Jordan and discussed the research project with Ahmad Al-Sagarat, the PhD student in University of Wollongong. This is part of a doctoral degree supervised by Professor Patrick Crookes and Associate Professor Janette Curtis from the School of Nursing, Midwifery and Indigenous Health at the University of Wollongong.

I consent to participate in the survey. I understand that my contribution will be confidential and that there will be no personal identification in the data that I agree to allow to be used in the study. I understand that there are no potential risks or burdens associated with this study.

I understand that I will not be able to be identified by my response. I have had an opportunity to ask Ahmad Al-Sagarat any questions I may have about the research and my participation. I understand that my participation in this research is voluntary and I am free to refuse to participate and I’m free to withdraw from the research without penalty of any kind. However, due to the anonymous nature of the survey, once data has been collected, surveys can not be retrieved.

If I have any enquires about the research I can contact Ahmad Al-Sagarat on these numbers 032242065 and 06 5157659 /Jordan and/or Prof Patrick on this number 0061242213147and Associate Professor Janette Curtis, on this number 006142213339 in Australia. If I have any concerns or complaints regarding the way the research is or has been conducted, I can contact the Ethics Officer, Human Research Ethics Committee, University of Wollongong on 006124221 4457.
With your permission, we would like to ask your relatives that are presented in this unit as a patient to complete the questionnaire too. Please read this statement and circle yes if you would like to give the researcher permission to approach your relatives to participate in this study, and no if you would not like to give the researcher permission to approach your relatives to participate in this study.

I give permission for the researcher to approach my relatives to participate in this study. Yes / No.

By signing below I am indicating my consent to participate in the research. I understand that the data collected from my participation will be deidentified and used primarily for a PhD thesis, and will also be used in summary form for academic journal publication, and I consent for it to be used in that manner.

Signed
Appendix 14. Consent Form for Nurses in Arabic

بحث حول إدراك المرضى وآقراهم والممرضين لجو القسم في أربع مستشفيات للصحة النفسية لمرضى مدخلين في الأردن.

يفري هذا البحث الباحث: أحمد السقرات

لقد تم تزويدى بمعلومات عن موضوع البحث حول إدراك المرضى والممرضين لجو القسم في أربع مستشفيات

للصحة النفسية لمريضي مدخلين في الأردن ومناقشة موضوع البحث مع الباحث أحمد السقرات طالب الدكتوراة في

جامعة ولوجنوجن - استراليا. وهذا يعتبر إحدى متطلبات درجة الدكتوراة والتي يتم الأشراف عليها من قبل الأستاذ

الدكتور باتريك كروكس والأستاذ المشارك جانيت كيرنز من كلية التمريض والقبالة والصحة المحلية في جامعة

ولوجنوجن.

وافق على المشاركة في هذا البحث وأدركت أن مساهمتي هذه سوف تحاول بالسرية الثامة وسوف لا يتم كشف أي

معلومات شخصية تدل على هويتي وأوافق على السماح لاستخدامها في هذه الدراسة. وأدركت أنه لا يوجد أي

مخاطر أو أعباء ترتبط بالإشتراف بهذه الدراسة.

وأدركت أيضا أن مشاركتي التامة والكاملة في هذه الدراسة سوف تخلو من أي معلومات شخصية تدل على هويتي

وإجابتي على أسئلة الاستبيان سوف يتم تنفيذها باستخدام شفرة معينة قبل تحليتها. ولقد أعطت الفرضة الملائمة

لسؤال الباحث أحمد السقرات أي سوال لدى حول موضوع البحث والمشاركة فيه.

أدركت تماما أن مشاركتي في هذا البحث هي طوعية واختيارية تماما وأنا أملك كل الحرية لرفض المشاركة فيها

وذلك الانسحاب من هذا البحث بدون أن تسمى أي نوع من العقوبة والجزاء. ومع ذلك وبسبب طبيعة الاستبيان

التي لا تكشف اسم المشاركات فإن المعلومات التي يتم جمعها بواسطة الاستبيان لا يمكن استرجاعها حال تعينه هذا

الاستبيان.
وإذا كان عندي أي سؤال أو استفسار عن البحث فأنا أستطيع الاتصال بالباحث أحمد السرطان على هاتف رقم 032242065/ الأردن أو بالمشارف الأستاذ الدكتور باتريك كروكس على هاتف رقم 061242213339/ أستراليا.

وكل ذلك بالدكتورة جاينيت كيرنز على هاتف رقم 061242213174/ أستراليا. وكذلك إذا كان عندي أي استفسار أو شكوى بخصوص طريقة إجراء البحث فآستطيع الاتصال بلجنة أخلاقيات البحث في جامعة ونوجينج على هاتف رقم 061242214457.

بالتوقيع أذناء أؤكد موافقتي بالاشتراك في هذا البحث.

وأدرك أن المعلومات التي يتم جمعها من خلال مشاركتي هذه سوف تكون غير معرفة لهويتي وسوف تستخدم تحديداً لغاية الحصول على درجة الدكتوراه وكذلك يمكن استخدامها لنشر العديد من المقالات في المجالات العالمية المحكمة وأوافق على استخدامها بهذا الخصوص.

التوقيع
Appendix 15. Consent Form for Patients in Arabic

بحث حول إدراك المرضى وأقاربه ومرضى اللجوء القدس في أربعة مستشفيات للصحة النفسية لمريضي مدخلين في الأردن.

يجري هذا البحث الباحث: أحمد السقات

لقد تم تزويدي بمعلومات عن موضوع البحث حول إدراك المرضى والمرضى لجو القدم في أربعة مستشفيات للصحة النفسية لمريضي مدخلين في الأردن ومناقشة موضوع البحث مع الباحث أحمد السقات طالب الدكتوراة في جامعة ولونوجن – أستراليا. وهذا يعتبر إحدى متطلبات درجة الدكتوراة والتي يتم الأشراف عليها من قبل الأستاذ الدكتور باتريك كوك وكأس الأستاذ المشارك جانيت كيردتز من كلية التمريض والقبيلة والصحة المحلية في جامعة ولونوجن.

أوافق على المشاركة في هذا البحث وأدرك أن مساهمتي هذه سوف تتحاول بالسرية التامة وسوف لا يتم كشف أي معلومات شخصية تعلق علي وافق على السماح لاستخدامها في هذا الدراسة. وأدرك أنه لا يوجد أي مخاطر أو أعباء ترتبط بالاشتراك بهذه الدراسة.

وأدرك أيضا أن مشاركتي التامة والكاملة في هذه الدراسة سوف تخلو من أي معلومات شخصية تتعلق علي وافق على السماح لاستخدامها في هذا الدراسة. وأدرك أنه لا يوجد أي مخاطر أو أعباء ترتبط بالاشتراك بهذه الدراسة.

وأدرك تماما أن مشاركتي في هذا البحث هي طوعية واختيارية تماما وأنا املك كل الحرية لرفض المشاركة فيها. وكذلك الانسحاب من هذا البحث بدون أن تمسى أي نوع من العقوبة والعجز. ومع ذلك وسأطرح استبيان الرضا والتي لا تكشف اسم المشارك فإنه المعلومات التي يتم جمعها بواسطة الاستبيان لا يمكن استرجاعها حال تعنيه هذا الاستبيان.
وإذا كان عندي أي سؤال أو استفسار عن البحث فأنني أستطيع الاتصال بالباحث أحمد السمرات على هاتف رقم 032242213339.

وذلك بالدكتورة جانيت كيرنز على هاتف رقم 0061242213174. أستراليا. وكذلك إذا كان عندي أي استفسار أو شكوى بخصوص طريقة إجراء البحث فأتطلع الاتصال بلجنة أخلاقيات البحث في جامعة ولونجنج على هاتف رقم 0061242214457.

بالتوفيق أدعمك موافقتي بالاشتراك في هذا البحث.

وأدرك أن المعلومات التي يتم جمعها من خلال مشاركتي هذه سوف تكون غير معرفة لهويتي وسوف تستخدم تحديداً لغاية الحصول على درجة الدكتوراة وكذلك يمكن استخدامه لنشر العديد من المقالات في المجلات العالمية المحكمة وأوافق على استخدامها بهذا الخصوص.
Appendix 16. Consent Form for Patients’ Relatives in Arabic

بحث حول إدراك المرضى وأقاربهم والممرضين نحو القسم في أربع مستشفيات للصحة النفسية لمرضى مدخلين في الأردن.

يجري هذا البحث الباحث: أحمد السقراط

لقد تم تزويد البيانات عن موضوع البحث حول إدراك المرضى والممرضين نحو القسم في أربع مستشفيات للصحة النفسية لمرضى مدخلين في الأردن ومناقشة موضوع البحث مع الباحث أحمد السقراط طالب الدكتوراة في جامعة ولونجونج – إسرائيل. وهذا يعتبر إحدى متطلبات درجة الدكتوراة والتي يتم الأشراف عليها من قبل الأساتذة الدكتور باتريك كرك وكوك والأساتذة المشاركون جان كيرترز من كلية التمريض والقبالة والصحة المحلية في جامعة ولونجونج.

وافق على المشاركة في هذا البحث وأدرك أن مساهمتي هذا سوف تتم بالسرية التامة وسوف لا يتم كشف أي معلومات شخصية تدل على هويتي وأوافق على السماح باستخدامها في هذه الدراسة. وأدرك أنه لا يوجد أي مخاطر أو أعباء ترتبط بالاشتراك بهذه الدراسة.

أدركت أيضا أن مشاركتي التامة والكاملة في هذه الدراسة سوف تخلق من أي معلومات شخصية تدل على هويتي وإجباري على أسلأة الاستبيان سوف يتم تنفيذها باستخدام شفرة معينة قبل تحليلها. ولقد أعطيت الفرصة الملائمة لسؤال الباحث أحمد السقراط أي سؤال لدي حول موضوع البحث والمشاركة فيه.

أدركت تماما أن مشاركتي في هذا البحث هي طوعية و اختيارية تمامًا وأنني املك كل الحرية لرفض المشاركة فيها وكذلك الانسحاب من هذا البحث بدون أن يمسني أي نوع من العقوبة والجزاء. ومع ذلك وبسبب طبيعة الاستبيان التي لا تكشف اسم المشارك أو المعلومات التي يتم جمعها بواسطة الاستبيان لا يمكن استرجاعها حال تعينه هذا الاستبيان.
وإذا كان عندي أي سؤال أو استفسار عن البحث فأنا أستطيع الاتصال بالباحث أحمد السقرات على هاتف رقم 032242133339/0061242213174. 

وكل ذلك بالدكتورة جانيت كيرنز على هاتف رقم 0061242214457/0061242213174. الاستatham. وكذلك إذا كان عندي أي استفسار أو شكوى بخصوص طريقة إجراء البحث فاستطيع الاتصال بلجنة أخلاقيات البحث في جامعة ولونجونج على هاتف رقم 0061242214457.

بعد اخذ موافقتكم، نود أن نسأل قريبك أو قريبتك الذين يتنافون في هذه الوحدة كمرضي تقيين لتعبة الاستبيانين أيضاً. لو سمحت إقرأ العبارة التالية وضع دائرة حول كلمة امر إذا أردت إن تعطي الباحث الموافقة على اختيار قريبك أو قريبتك للمشاركة في هذا الدراسة أو وضع دائرة حول كلمة لا إذا أردت أن لا تعطي الباحث الموافقة على اختيار قريبك أو قريبتك للمشاركة في هذا الدراسة.

العبارة هي: أعطي الباحث الموافقة على اختيار قريبي أو قريبتي للمشاركة في هذه الدراسة نعم / لا.

بالتوقيع أدناه أؤكد موافقتى بالاشتراك في هذا البحث.

وأدرك أن المعلومات التي يتم جمعها من خلال مشاركتي هذه سوف تكون غير معرفة لهويتي وسوف تستخدم تحديداً لغاية الحصول على درجة الدكتوراه وكذلك يمكن استخدامها لنشر العديد من المقالات في المجلات العالمية المحكمة وأوافق على استخدامها بهذا الخصوص.
Appendix 17. Ward Atmosphere Scale (Real Form)

There are 100 statements here. They are statements about treatment programmes. Please decide which statements are true of your programme and which are false. Please be sure to answer every statement and fill in the other information requested.

Please decide which statements are true and which are not.

True- Circle the T if you think the statement is true or mostly true of your programme.

False- Circle the F if you think the statement is false or mostly false of your programme.

Please be sure to answer every question.

Real Form

1. Patients put a lot of energy into what they do around here T F

2. Doctors have very little time to encourage patients T F

3. Patients tend to hide their feelings from one another T F

4. The staff act on patients’ suggestions T F

5. New treatment approaches are often tried in this programme T F

6. Patients hardly ever discuss their sex life T F
7. Patients often gripe T  F

8. Patients activities are carefully planned  T  F

9. The patients know when doctors will be on the unit  T  F

10. The staff very rarely punish patients by restricting them  T  F

11. This is a lively programme  T  F

12. The staff know what the patients want  T  F

13. Patients say anything they want to the doctors  T  F

14. Very few patients have any responsibility here  T  F

15. There is little emphasis on teaching patients solutions to practical problems  T  F

16. Patients tell each other about their personal problems  T  F

17. Patients often criticize or joke about the staff  T  F

18. This is a very well organized programme  T  F

19. Doctors do not explain what treatment is about to patients  T  F

20. Patients may interrupt when a doctor is talking  T  F

21. The patients are proud of this programme  T  F

22. Staff are interested in following up patients when they discharge  T  F

23. It is hard to tell how patients are feeling here  T  F

24. Patients are expected to take leadership here  T  F

25. Patients are strongly encouraged to plan for the future  T  F
26. Personal problems are openly talked about  T  F
27. Patients in this programme rarely argue  T  F
28. The staff make sure that the unit is always neat  T  F
29. A nurse or doctor will always explain why patient’s medicine is changed  T  F
30. Patients who break the rules are punished for it  T  F
31. There is very little group spirit in this programme  T  F
32. Nurse has very little time to encourage patients  T  F
33. Patients are careful about what they say when staff are around  T  F
34. Patients here are encouraged to be independent  T  F
35. There is little emphasis on what patients will be doing after discharge  T  F
36. Patients are expected to share their personal problems with each other  T  F
37. Staff sometimes argue openly with each other  T  F
38. The unit sometimes gets very messy  T  F
39. The patients clearly understand the programme rules  T  F
40. Patients who argue with other patients will get into trouble with the staff  T  F
41. Very few patients ever volunteer around here  T  F
42. Doctors spend more time with some patients than with others  T  F
43. Patients freely set up their own activities here  T  F
44. Patients can leave the unit when ever they want  T  F
45. There is little emphasis on making plans for discharge   T  F
46. Patients talk very little about their past   T  F
47. Patients sometimes play practical jokes on each other   T  F
48. Most patients follow a regular schedule each day   T  F
49. Patients never know when staff will ask to see them   T  F
50. Staff do not order the patients around   T  F
51. Patients are quite busy all of the time   T  F
52. The healthier patients here help take care of the less healthy ones   T  F
53. When patients disagree with each other, they keep it to themselves   T  F
54. Patients can wear whatever they want   T  F
55. This programme emphasis training for new kinds of jobs   T  F
56. The staff rarely ask patients personal questions   T  F
57. It’s hard to get people to argue here   T  F
58. Many patients look messy   T  F
59. In this programme, everyone knows who is in charge   T  F
60. Once a schedule is arranged for a patient, the patient must follow it   T  F
61. The programme has very few social activities   T  F
62. Patients rarely help each other   T  F
63. It’s okay to act crazy around here   T  F
64. There is no patient government in this programme   T   F
65. Most patients are more concerned with the past than with the future   T   F
66. Staff are mainly interested in learning about patients’ feelings   T   F
67. Staff here never start arguments   T   F
68. Things are sometimes very disorganized around here   T   F
69. Patients who break the rules know what will happen to them   T   F
70. Patients can call nursing staff by their first name   T   F
71. Very few things around here ever get people excited   T   F
72. The staff help new patients get acquainted here   T   F
73. Patients tend to hide their feelings from the staff   T   F
74. Patients can leave the unit without saying where they are going   T   F
75. Patients are encouraged to learn new ways of doing things   T   F
76. The patients rarely talk with each other about their personal problems   T   F
77. In this programme, staff think it is a healthy thing to argue   T   F
78. The staff set an example for neatness and orderliness   T   F
79. People are always changing their minds here   T   F
80. Patients will be transferred from this unit if they do not obey the rules   T   F
81. Discussions here are very interesting   T   F
82. Staff sometimes do not show up for their appointments with patients   T   F
83. Patients are strongly encouraged to show their feelings  T  F

84. Staff rarely give in to patients’ pressure  T  F

85. Staff care more about how patients feel than about their practical problems  T  F

86. Staff strongly encouraged patients to talk about their past  T  F

87. Patients here rarely become angry  T  F

88. Patients are rarely kept waiting when they have appointments with staff  T  F

89. Patients never know when they will be transferred from this programme  T  F

90. It is not safe for patients to discuss their personal problems around here  T  F

91. Patients often do things together on weekends  T  F

92. Staff go out of their way to help patients  T  F

93. The programme always stays just about the same  T  F

94. The staff discourages criticism  T  F

95. Patients must make specific plans before leaving the programme  T  F

96. It is hard to get a group together for card games or other activities  T  F

97. A lot of patients just seem to be passing time here  T  F

98. The day room is often messy  T  F

99. Staff tell patients when they are getting better  T  F

100. It is a good idea to let the doctors know that they are in charge  T  F
Appendix 18. Ward Atmosphere Scale (Ideal Form)

Instructions for Participants

There are 100 statements here. They ask you what you think an Ideal ward would be like. You are to decide which of these statements would be true of an Ideal ward and which would be false.

Please decide which statements are true of an Ideal ward and which are not.

True- Circle the T if you think the statement is true or mostly true of an Ideal ward

False- Circle the F if you think the statement is false or mostly false of an Ideal ward

Please be sure to answer every question

Ideal Form

1. Patients put a lot of energy into what they do   T   F

2. Doctors will have very little time to encourage patients   T   F

3. Patients will tend to hide their feelings from one another   T   F

4. The staff will act on patients’ suggestions   T   F

5. New treatment approaches will often be tried in this programme   T   F
6. Patients will hardly ever discuss their sex life  T   F

7. Patients will often gripe  T   F

8. Patients activities will be carefully planned  T   F

9. The patients will know when doctors will be on the unit  T   F

10. The staff will very rarely punish patients by restricting them  T   F

11. It will be a lively programme  T   F

12. The staff will know what the patients want  T   F

13. Patients will say anything they want to the doctors  T   F

14. Very few patients will have any responsibility in the programme  T   F

15. There will be very little emphasis on teaching patients solutions to practical problems  T   F

16. Patients will tell each other about their personal problems  T   F

17. Patients will often criticize or joke about the staff  T   F

18. It will be a very well organized programme  T   F

19. Doctors will not explain what treatment is about to patients  T   F

20. Patients will be able to interrupt when a doctor is talking  T   F

21. The patients will be proud of this programme  T   F

22. Staff will be interested in following up patients when they discharge  T   F
23. It will be hard to tell how patients are feeling here  T   F

24. Patients will be expected to take leadership here  T   F

25. Patients will be strongly encouraged to plan for the future  T   F

26. Personal problems will be openly talked about  T   F

27. Patients in this programme will rarely argue  T   F

28. The staff will make sure that the unit is always neat  T   F

29. A nurse or doctor will always explain why patient’s medicine is changed  T   F

30. Patients who break the rules will be punished for it  T   F

31. There will be very little group spirit in this programme  T   F

32. Nurses will have very little time to encourage patients  T   F

33. Patients will be careful about what they say when staff are around  T   F

34. Patients will be encouraged to be independent  T   F

35. There will be little emphasis on what patients will be doing after discharge  T   F

36. Patients will be expected to share their personal problems with each other  T   F

37. Staff will sometimes argue openly with each other  T   F

38. The unit will sometimes get very messy  T   F

39. The patients will clearly understand the programme rules  T   F

40. Patients who argue with other patients will get into trouble with the staff  T   F

41. Very few patients will ever volunteer  T   F
42. Doctors will spend more time with some patients than with others  T  F
43. Patients will freely set up their own activities  T  F
44. Patients will be allowed to leave the unit when ever they want  T  F
45. There will be very little emphasis on making plans for discharge  T  F
46. Patients will talk very little about their past  T  F
47. Patients will sometimes play practical jokes on each other  T  F
48. Most patients will follow a regular schedule each day  T  F
49. Patients will never know when staff will ask to see them  T  F
50. Staff will not order the patients around  T  F
51. Patients will be quite busy all of the time  T  F
52. The healthier patients will help take care of the less healthy ones  T  F
53. When patients disagree with each other, they will keep it to themselves  T  F
54. Patients will be allowed to wear whatever they want  T  F
55. This programme will emphasis training for new kinds of jobs  T  F
56. The staff will rarely ask patients personal questions  T  F
57. It will be hard to get people to argue here  T  F
58. Many patients will look messy  T  F
59. Everyone will know who is the in charge of the programme  T  F
60. Once a schedule is arranged for a patient, the patient will have to follow it.  T  F
61. The programme will have very few social activities  T  F
62. Patients will rarely help each other  T  F
63. It will be okay to act crazy around here  T  F
64. There will be no patient government in this programme  T  F
65. Most patients will be more concerned with the past than with the future  T  F
66. Staff will be mainly interested in learning about patients’ feelings  T  F
67. Staff will never start arguments  T  F
68. Things will sometimes very disorganized  T  F
69. Patients who break the rules will know what will happen to them  T  F
70. Patients will call nursing staff by their first name  T  F
71. Very few things will ever get people excited  T  F
72. The staff will help new patients get acquainted  T  F
73. Patients will tend to hide their feelings from the staff  T  F
74. Patients will be able to leave the unit without saying where they are going  T  F
75. Patients will be encouraged to learn new ways of doing things  T  F
76. The patients will rarely talk with each other about their personal problems  T  F
77. Staff will think it is a healthy thing to argue  T  F
78. The staff will set an example for neatness and orderliness  T  F
79. People will always be changing their minds  T  F
80. Patients will be transferred from this unit if they do not obey the rules  T  F
81. Discussions will be very interesting  T  F
82. Staff sometimes will not show up for their appointments with patients  T  F
83. Patients will be strongly encouraged to show their feelings  T  F
84. Staff will rarely give in to patients’ pressure  T  F
85. Staff will care more about how patients feel than about their practical problems  T  F
86. Staff will strongly encourage patients to talk about their past  T  F
87. Patients will rarely become angry  T  F
88. Patients will rarely be kept waiting when they have appointments with staff  T  F
89. Patients will never know when they will be transferred from this programme  T  F
90. It will be not safe for patients to discuss their personal problems around here  T  F
91. Patients will often do things together on weekends  T  F
92. Staff will go out of their way to help patients  T  F
93. The programme will always stay just about the same  T  F
94. The staff will discourage criticism  T  F
95. Patients will have to make specific plans before leaving the programme  T  F
96. It will be hard to get a group together for card games or other activities  T  F
97. A lot of patients will just seem to be passing time here  T  F
98. The day room will often be messy  T  F
99. Staff will tell patients when they are getting better  T  F

100. It is a good idea to let the doctors know that they are in charge  T  F
Appendix 19. Ward Atmosphere Scale (Real Form of Arabic Version)

نماذج (ر)

إليك في هذا النموذج (100) جملة تتعلق جميعها برامج المعالجة

نأمل أن تحدد أي الجمل تمثل حقيقة صحيحة لبرنامجك وأيها تمثل معلومة خاطئة. ونأمل التأكد أنك اجنبت على كل
جملة منها وأنك أكملت المعلومات المطلوبة الأخرى.

أرجو أن تقرر أي الجمل صحيحة في برنامجك وأيها غير ذلك

ضع دائرة حول كلمة صح إذا كنت تعتقد أن الجملة صحيحة أو معظمها صحيح في برنامجك.

ضع دائرة حول كلمة خطأ إذا كنت تعتقد أن الجملة خطأ أو معظمها خاطئة في برنامجك.

نرجو أن تتأكد أنك اجنبت على كل جملة من الجمل
النموذج (ر)

<table>
<thead>
<tr>
<th>رقم</th>
<th>وصف</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ببذل المرضى طاقة كبرى فيما يعملونه هذا. صح</td>
</tr>
<tr>
<td>2</td>
<td>لا يملك الأطباء سوى القليل من الوقت لتشجيع المرضى. صح</td>
</tr>
<tr>
<td>3</td>
<td>يميل المرضى عادة لإخفاء مشاعرهم عن بعضهم البعض. صح</td>
</tr>
<tr>
<td>4</td>
<td>تتصرف هيئة التمريض بناء على اقتراحات المرضى. صح</td>
</tr>
<tr>
<td>5</td>
<td>الأساليب الجديدة للمعالجة كثيراً ما يتم تجربتها في هذا البرنامج. صح</td>
</tr>
<tr>
<td>6</td>
<td>لا يناقش المرضى عادة حياتهم الجنسية إلا بخصوصية صح</td>
</tr>
<tr>
<td>7</td>
<td>كثيراً ما يتعترض المرضى ويترددون. صح</td>
</tr>
<tr>
<td>8</td>
<td>نشاط المريض يخطط لها بعناية وحذر. صح</td>
</tr>
<tr>
<td>9</td>
<td>يكون المريض على علم بمواقع تواجد الأطباء في الوحدة صح</td>
</tr>
<tr>
<td>10</td>
<td>نادرًا ما تعاقب هيئة التمريض المرضى بحقهم صح</td>
</tr>
<tr>
<td>11</td>
<td>هذا برنامج منهج صح</td>
</tr>
<tr>
<td>12</td>
<td>هيئة التمريض إذا رى المرضى  م subdivision. تعلم صح</td>
</tr>
<tr>
<td>13</td>
<td>يقول المريض أي شيء يريده للأطباء. صح</td>
</tr>
<tr>
<td>14</td>
<td>القلة القليلة من المرضى يتحملون أي مسؤولية هنا صح</td>
</tr>
<tr>
<td>15</td>
<td>لا يوجد إلا تركز قليل جداً حول تعليم المريض الجملة الممكلة للمستقبل العملية صح</td>
</tr>
<tr>
<td>16</td>
<td>يقول المريض لبعضهم عن مشكلاتهم الشخصية صح</td>
</tr>
<tr>
<td>17</td>
<td>غالبًا ما يقوم المريض بانتقاد هيئة التمريض أو الاستهزاء بهم صح</td>
</tr>
<tr>
<td>18</td>
<td>هذا برنامج منظم بشكل جيد جداً صح</td>
</tr>
<tr>
<td>19</td>
<td>لا يشرح الأطباء عادة سبب ونتيجة العلاج للمريض. صح</td>
</tr>
<tr>
<td>20</td>
<td>يقوم المريض بمقاولة الأطباء عندما يكلمون. صح</td>
</tr>
<tr>
<td>21</td>
<td>المريض فخورون بهذا البرنامج صح</td>
</tr>
<tr>
<td>22</td>
<td>هيئة التمريض مهتمة بمتابعة المرضى عندما ينتهي من البرنامج صح</td>
</tr>
<tr>
<td>23</td>
<td>من الصعب تبيان شعور المرضى هنا صح</td>
</tr>
<tr>
<td>24</td>
<td>يوقع من المريض اخذ زمام القيادة هنا صح</td>
</tr>
<tr>
<td>25</td>
<td>يجري تشجيع المريض بقوة للتخطيط للمستقبل صح</td>
</tr>
<tr>
<td>26</td>
<td>يجري الحديث بشأن المشكلات الشخصية بصورة صح</td>
</tr>
<tr>
<td>27</td>
<td>نادرًا ما يجادل أو يتراوح في هذا البرنامج صح</td>
</tr>
<tr>
<td>28</td>
<td>تأكد هيئة التمريض دائمًا أن الوحدة دائمًا مرتبة صح</td>
</tr>
<tr>
<td>29</td>
<td>إذا جرى تغيير علاج المريض فإن الطبيب أو الممرض يشرحان السبب دائمًا. صح</td>
</tr>
<tr>
<td>رقم</td>
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<td>30.</td>
<td>المرضى المخالفين لأنظمة عاقبائهن</td>
</tr>
<tr>
<td>31.</td>
<td>لا يوجد سوى النزور البسيط من روح الجماعة في هذا البرنامج</td>
</tr>
<tr>
<td>32.</td>
<td>ليس لدى هيئة التمريض سوي وقت قليل جداً لتشجيع المرضى</td>
</tr>
<tr>
<td>33.</td>
<td>يكون المريض عادة حذرًا فيما يقولون وجود إعاء هيئة التمريض</td>
</tr>
<tr>
<td>34.</td>
<td>يجري تشجيع المرضى هنا على الاستقلالية</td>
</tr>
<tr>
<td>35.</td>
<td>لا يوجد إلا النزور البسيط من التأكيد مما يجب أن يفعله المريض بعد مغادرتهم</td>
</tr>
<tr>
<td>36.</td>
<td>يتوقع من المريض أن يشارك بعضهم البعض في مشكلاتهم الشخصية</td>
</tr>
<tr>
<td>37.</td>
<td>احياناً يتجارب اعضاء هيئة التمريض مع بعضهم بكل صراحة</td>
</tr>
<tr>
<td>38.</td>
<td>احياناً تصبح الوحدة مشوشة وتعتمد الفوضى</td>
</tr>
<tr>
<td>39.</td>
<td>يفهم المريض قواعد البرنامج بكل وضوح</td>
</tr>
<tr>
<td>40.</td>
<td>المرضى الذين يجادلون مرضى آخرين يفعلون في مشكلات مع هيئة التمريض</td>
</tr>
<tr>
<td>41.</td>
<td>اللغة القليلة جداً من المرضى يتدفقون هنا</td>
</tr>
<tr>
<td>42.</td>
<td>يقضى الأطباء وقتاً أكثر مع بعض المريض أكثر من مرضى آخرين</td>
</tr>
<tr>
<td>43.</td>
<td>يمكن المريض هنا من اعداد نشاطاتهم هنا بكل حرية</td>
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<tr>
<td>44.</td>
<td>يمكن المريض هنا من مغادرة الوحدة عندما يريدون</td>
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<tr>
<td>45.</td>
<td>لا يوجد إلا تأكيد سيطع جداً حول خطط الخروج من هذا البرنامج</td>
</tr>
<tr>
<td>46.</td>
<td>لا يحدث المريض عن ماضيه إلا قليلا</td>
</tr>
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<td>47.</td>
<td>احياناً يطلق المرضى نكاماً علی بعضهم البعض</td>
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<tr>
<td>48.</td>
<td>معظم المرضى يشعرون جداً منتظماً يوميا</td>
</tr>
<tr>
<td>49.</td>
<td>لا يعرف المريض ما تطلب هيئة التمريض رؤيتهم</td>
</tr>
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<td>50.</td>
<td>لا تطلب هيئة التمريض من المرضى تواجدهم قريبين</td>
</tr>
<tr>
<td>51.</td>
<td>المرضى مشغولون جداً طوال الوقت</td>
</tr>
<tr>
<td>52.</td>
<td>المريض الأفضل صحة هنا يساعدون بالاعتناء بالمريض الأضعف صحة</td>
</tr>
<tr>
<td>53.</td>
<td>عندما يختلف المريض مع بعضهم البعض يكون خلافاتهم بينهم</td>
</tr>
<tr>
<td>54.</td>
<td>يستطيع المريض لبس ما يشاءون</td>
</tr>
<tr>
<td>55.</td>
<td>يؤكد هذا البرنامج على التدريب بالأنواع الجديدة من العمل</td>
</tr>
<tr>
<td>56.</td>
<td>نادراً ما تسأل هيئة التمريض المريض أسئلة شخصية</td>
</tr>
<tr>
<td>57.</td>
<td>من الصعب أن تجعل الناس يجادلون هنا</td>
</tr>
<tr>
<td>58.</td>
<td>كثير من المرضى يبدون مشوشين وفوضويين</td>
</tr>
<tr>
<td>59.</td>
<td>في هذا البرنامج يعرف كل شخص من هو المسؤول</td>
</tr>
</tbody>
</table>
60- حالفًا يتم ترتيب برنامج معين للمريض يجب على المريض اتباعه
61- يشمل البرنامج نشاطات اجتماعية قليلة جدا
62- نادراً ما يساعد المرضى بعضهم البعض
63- ليس غريباً هنا أن يصرف بعضون
64- لا يوجد حكمة مرضي في هذا البرنامج
65- معظم المرضى مهتمون بالموضوع أكثر من المستقبل
66- الاهتمام الرئيسي لـ هيئة التمريض يتوقف على معرفة شعور المريض
67- أعضاء هيئة التمريض هنا لا يبدون الجد على الإطلاق
68- أحياناً تكون الأشياء هنا غير مفهومة
69- يعلم المرضى المحافظون للقانون والأنظمة ما سيحدث لهم
70- يستطيع المرضى أن يددوا هيئة التمريض بأسمائهم الأولى
71- قبل من الأشياء هنا نسب غضب الناس
72- تساعد هيئة التمريض المرضى الجدد على الإطلاع هنا
73- يميل المرضى لإخفاء مشاعرهم عن أعضاء هيئة التمريض
74- يستطيع المرضى أن يتركوا الوحدة دون أن يقوموا إلى أي مكان هم ذاهبون
75- يجري تشجيع المرضى على تعلم طرق جديدة لعمل الأشياء
76- نادراً ما يتحدث المرضى مع بعضهم البعض حول مشكلاتهم الشخصية
77- في هذا البرنامج تعتقد هيئة التمريض أن الجدل والحوارات ظاهرة صحيحة
78- تضرب هيئة التمريض مثلاً رائعاً في الترتيب والتنظيم
79- الناس يعبرون تفكيرهم هنا باستمرار
80- يتم نقل المرضى من هذه الوحدة إذا لم يُقدموا بالأنظمة
81- المناقصات هنا شيء مشابه وليبر الاهتمام
82- أحياناً تفشل هيئة التمريض في التعامل بالانواء مع المرضى
83- يجري تشجيع المرضى بقوة للتذيع عن مشاعرهم
84- نادراً ما تخضع هيئة التمريض لضغوط المرضى
85- نهتم هيئة التمريض بكيف يشعر المرضى أكثر من مشكلاتهم الواقعية
86- تشجيع هيئة التمريض المرضى بقوة ليحذروا عن مشاهمهم
87- نادراً ما يكون المرضى غضبائين
88- نادراً ما يبقى المرضى ينظرون عندما يكون لهم مواضع مع هيئة التمريض
89- لا يعرف المرضى متي سينتقلون من هذا البرنامج
| ص | 90 - ليس مأمونا للمرضى مناقشة مشاكلهم الشخصية حول هذا المكان
| ص | 91 - كثيرا ما يشتركون المرضى بعمل الأشياء في عطل نهاية الأسبوع
| ص | 92 - تقوم هيئة التمريض بتجاوز صلاحياتها لمساعدة المرضى
| ص | 93 - يبقى البرنامج هو نفسه باستمرار دائم
| ص | 94 - تحيط هيئة التمريض عوامل التقدم
| ص | 95 - يجب على المرضى عمل خطط معينة قبل ترك البرنامج
| ص | 96 - من الصعب تجميع مجموعة ما في مكان واحد على لعبة الشدة أو أي نشاطات أخرى
| ص | 97 - يبدو ان العديد من المرضى هنا يقضون الوقت فقط
| ص | 98 - غرفة عناية اليوم الواحد عادة ما تكون فوضى ومتوهجة
| ص | 99 - تقوم هيئة التمريض بإعلام المرضى عندما يبدو عليهم التحسن
| ص | 100 - من المستحسن جعل الأطباء يعلمن أنهم مسؤولون
Appendix 20. Ward Atmosphere Scale (Ideal Form of Arabic Version)

مقياس أحوال أجواء المستشفى

النموذج (أ)

إليك في هذا النموذج (100) جملة تتعلق جميعها ببرامج المعالجة.

جميع هذه الجمل تسألك كيف تتوقع أن يكون البرنامج المثالي للمعالج.

أرجو أن تقرر أي الجمل التالية صحيحة عن البرنامج المثالي وأيها غير ذلك.

ونأمل التأكد انك اجبت على كل جملة منها وأنت أكملت المعلومات المطلوبة الأخرى.

أرجو أن تقرر أي الجمل صحيحة في برنامحك وأيها غير ذلك.

ضع دائرة حول كلمة صح إذا كنت تعتقد أن الجملة صحيحة أو معظمها صحيح في برنامحك.

ضع دائرة حول كلمة خطأ إذا كنت تعتقد أن الجملة خطأ أو معظمها خاطئة في برنامحك.

نرجو أن تتأكد انك اجبت على كل جملة من الجمل.

النموذج (أ)

<table>
<thead>
<tr>
<th>الخطأ</th>
<th>صحة</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>بديل المرضى طاقة كبيرة فيما يعملون هنا.</td>
</tr>
<tr>
<td>2.</td>
<td>سوف يكون لدى الأطباء القليل من الوقت لتشجيع المرضى.</td>
</tr>
<tr>
<td>3.</td>
<td>سوف يميل المرضى لإخفاء مشاعرهم عن بعضهم البعض.</td>
</tr>
<tr>
<td>4.</td>
<td>سوف تتميز هيئة التمريض بناء على اقتراحات المرضى.</td>
</tr>
<tr>
<td>5.</td>
<td>الأساليب الجديدة للمعالجة سوف يتم تجربتها في هذا البرنامج.</td>
</tr>
</tbody>
</table>
6. سوف يجد المريض صعوبة لمناقشة حياتهم الجنسية.
7. سوف يمنع المريض ويتم إخباره كثيرة.
8. نشاط المريض سوف يحظى بما يَسعى وحده.
9. سوف يعلم المريض بوجود الأطباء في الوحدة.
10. سوف يكون من النادر مالاً هيئة التمريض للمرضى بحجزهم وتقديمهم.
11. سوف يكون برنامج منعش.
12. سوف تعلم هيئة التمريض ماذا يريد المريض.
13. سوف يقول المريض أي شيء يريدون للأطباء.
14. اللغة القليلة من المريض سوف يتحملها أي مسؤولية هذا.
15. سوف لا يوجد إلا التركيز قليل جداً حول تعليم المريض الحفل الممكن لمسائل العملية.
16. سوف يخبر المريض بعضهم البعض عن مشكلاتهم الشخصية.
17. غالبًا سيقوم المريض بانتقاد هيئة التمريض أو الاستهتزاء بهم.
18. سوف يكون برنامج منظم بشكل جيد جداً.
19. سوف لا يشرح الأطباء عادة سبب ونتيجة العلاج للمريض.
20. سوف يكون المريض قادرًا على مقاطعة الأطباء عندما يكمالون.
21. سوف يكون المريض فخورًا بهذا البرنامج.
22. سوف تكون هيئة التمريض مهتمة بمتابعة المرضى عندما ينتهي من البرنامج.
23. سوف يكون من الصعب تبيان شعر المريض هنا.
24. سوف يتوقع من المريض أخذ زمام القيادة هنا.
25. سوف يتم تشجيع المريض يقوم لتحديد المستقبل.
26. سوف يتم الحديث بشأن المشكلات الشخصية بصورة.
27. سوف يكون من النادر تجاهل المريض في هذا البرنامج.
28. سوف تكون هيئة التمريض دائمًا أن الوحدة دائمًا مرتبة.
29- إذا جرى تغيير علاج المريض فإن الطبيب أو الممرض سوف يشرحان السبب دائمًا.
30. المرضى المخالفين للاستقلالية بالاقاح.
31. سوف لا يوجد سوى النذر البسيط من روح الجماعة في هذا البرنامج.
32. سوف يكون لدى هيئة التمريض وقت قليل جداً لتشجيع المريض.
33- سوف يكون المريض حذرًا فيما يقولون بوجود اعضاً هيئة التمريض.
64. سوف لا يكون حكمة مرضي في هذا البرنامج ص
65. معظم المرضى سوف يكون مهتمون بالماني أكثر من المستقبل ص
66- الاهتمام الرئيسي لبيئة المريض يتركز على معرفة شعور المريض ص
67- أعضاء هيئة التمريض هنا سوف لا يبدون الجدل على الإطلاق ص
68- أحياناً ستكون الأشياء هنا غير مرتبة ص
69- سيعلم المرضى المخالفين للقانون وأنظمتهم ما سيحدث لهم ص
70- سيستطيع المريض أن ينادوا هيئة التمريض لباسمانهم الأولي ص
71- قليل من الأشياء هنا سوف تسبب عضب الناس ص
72- سوف تساعدها هيئة التمريض المريض الجدد على الإطلاع هذا ص
73- سوف يميل المريض لإخفاء مشاعرهم عن أعضاء هيئة التمريض ص
74- سيستطيع المريض أن يتركوا الوحدة دون أن يقولون إلى أي مكان هم ذاهبون ص
75- سوف يتم تشجيع المريض على تعلم طرق جديدة لعمل الأشياء ص
76- سوف يكون نادراً أن يحدث المريض مع بعضهم البعض حول مشاكلتهم الشخصية ص
77- في هذا البرنامج سوف تعتقد هيئة التمريض أن الجبال والحيوانات نزاره صحة ص
78- سوف تضرب هيئة التمريض مثلاً رائعاً في الترتيب والنظام ص
79- الناس هنا سوف يغيرون تفكيرهم باستمرار ص
80- سوف يتم نقل المريض من هذه الوحدة إذا لم يتقيدوا بالأنظمة ص
81- سكون المناقشات هنا ممتعة ومثيرة ص
82- أحياناً سوف تقضي هيئة التمريض في التقيد بالقواعد مع المريض ص
83- سوف يتم تشجيع المريض بقوة للتعبير عن مشاعرهم ص
84- سوف يكون نادراً أن تخضع هيئة التمريض لضغوط المريض ص
85- سوف تتم هيئة التمريض بكيف يشعر المريض أكثر من مشاكلهم الواقعة ص
86- سوف تشجع هيئة التمريض المريض بقوة ليتحدثوا عن مشاكلهم ص
87- سوف يكون نادراً أن يصبح المريض غضبائنا ص
88- سوف يكون نادراً أن يبقي المريض بيتهونون عندما يكون لهم مواعيد مع هيئة التمريض ص
89- سوف لا يعرف المريض متى سيستقلون من هذا البرنامج ص
90- سوف يكون غير ممدوحاً للمريض مناقشة مشاكلهم الشخصية حول هذا المكان ص
91- سوف يكون كثيراً ما يبتكر المريض يعمل الأشياء في عطل نهاية الأسبوع ص
<table>
<thead>
<tr>
<th>رقم</th>
<th>جملة</th>
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<tbody>
<tr>
<td>92</td>
<td>ستقوم هيئة التمريض بتجاوز صلاحياتها لمساعدة المريض</td>
</tr>
<tr>
<td>93</td>
<td>سيبقى البرنامج نفسه باستمرار دائم</td>
</tr>
<tr>
<td>94</td>
<td>سوف تحتس هيئة التمريض تجاه عمليات النقد</td>
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<td>95</td>
<td>سوف يكون من الواجب على المريض عمل خطط معينة قبل ترك البرنامج</td>
</tr>
<tr>
<td>96</td>
<td>سوف يكون من الصعب تجميع مجموعة ما في مكان واحد على لعبة الشدة أو أي نشاطات أخرى</td>
</tr>
<tr>
<td>97</td>
<td>يبدو أن العديد من المرضى هنا يقضون الوقت فقط</td>
</tr>
<tr>
<td>98</td>
<td>غرفة عناية اليوم الواحد سوف تكون غالباً فوضى ومشرقة</td>
</tr>
<tr>
<td>99</td>
<td>ستقوم هيئة التمريض بإعلام المريض عندما يبدو عليهم التحسن</td>
</tr>
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<td>100</td>
<td>سوف يكون من المستحسن جعل الأطباء يعلمون أنهم مسؤولون</td>
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</table>
Appendix 21. Nurses’, patients’ and relatives’ scores of both Real and Ideal ward atmosphere scales.

<table>
<thead>
<tr>
<th>Ward atmosphere Scale’s subscales</th>
<th>Nurses N= 136</th>
<th>Patients N= 104</th>
<th>Patients’ relatives N= 27</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean and std. deviation for Real WAS</td>
<td>Mean and std. deviation for Ideal WAS</td>
<td>Mean and std. deviation for Real WAS</td>
</tr>
<tr>
<td>Involvement</td>
<td>3.93 2.31 6.52 2.27</td>
<td>5.08 2.23 6.07 2.04</td>
<td>5.55 1.65 6.74 1.06</td>
</tr>
<tr>
<td>Support</td>
<td>5.03 1.89 6.83 2.09</td>
<td>5.57 2.07 6.03 2.15</td>
<td>7.44 1.63 7.04 1.62</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>4.73 2.01 6.36 2.00</td>
<td>4.66 2.03 5.37 1.98</td>
<td>5.41 1.82 7.04 2.08</td>
</tr>
<tr>
<td>Autonomy</td>
<td>3.91 1.62 4.74 2.05</td>
<td>4.90 1.52 4.12 1.65</td>
<td>4.74 1.26 3.92 .988</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>4.64 2.24 6.28 1.63</td>
<td>5.33 1.88 5.43 1.96</td>
<td>5.74 2.08 7.21 1.81</td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>5.19 2.16 6.53 1.86</td>
<td>5.04 1.78 5.73 2.00</td>
<td>5.52 2.05 6.89 1.63</td>
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<tr>
<td>Anger and Aggression</td>
<td>6.16 1.58 5.82 1.80</td>
<td>5.50 1.67 5.04 1.58</td>
<td>5.96 1.83 6.86 1.63</td>
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<td>Order and Organization</td>
<td>5.13 2.38 7.68 2.58</td>
<td>6.35 2.25 7.21 2.30</td>
<td>6.74 2.17 6.29 1.79</td>
</tr>
<tr>
<td>Programme Clarity</td>
<td>5.38 2.02 7.09 1.86</td>
<td>5.52 2.25 6.30 1.76</td>
<td>6.63 1.82 7.22 1.50</td>
</tr>
<tr>
<td>Staff Control</td>
<td>5.18 1.64 5.26 1.66</td>
<td>5.96 1.72 5.77 1.60</td>
<td>5.48 1.71 5.33 2.28</td>
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</table>
Appendix 22. Nurses’, patients’ and relatives’ standard scores of Real WAS subscales in the current study.

<table>
<thead>
<tr>
<th>Ward atmosphere Scale’s subscales</th>
<th>Nurses</th>
<th>Patients</th>
<th>Relatives</th>
</tr>
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<tbody>
<tr>
<td>Involvement</td>
<td>39</td>
<td>52</td>
<td>54</td>
</tr>
<tr>
<td>Support</td>
<td>40</td>
<td>47</td>
<td>50</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>47</td>
<td>43</td>
<td>51</td>
</tr>
<tr>
<td>Autonomy</td>
<td>47</td>
<td>46</td>
<td>53</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>43</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>51</td>
<td>50</td>
<td>52</td>
</tr>
<tr>
<td>Anger and Aggression</td>
<td>50</td>
<td>51</td>
<td>53</td>
</tr>
<tr>
<td>Order and Organization</td>
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<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Programme Clarity</td>
<td>42</td>
<td>50</td>
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</tr>
<tr>
<td>Staff Control</td>
<td>54</td>
<td>62</td>
<td>62</td>
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