The Influence of Organisational Culture, Subculture, Leadership Style and Job Satisfaction on Organisational Commitment

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This thesis submitted for the degree of Doctor of Philosophy Graduate School of Business University of Technology, Sydney

Ph. D (1997)

Ackno	wledgement7
Abstra	act9
Table	of Figures13
List of	Tables14
List of	Appendices17
Chapt	er 1: Introduction, Rationale and Hypotheses18
1.1	Introduction 18
1.2	Rationale for the Study
1.3	The Significance of this Study25
1.4	Definition of Terms
1.5	The Structure of this Thesis
Chapt	er 2: Literature Review Of Organisational Commitment
And It	s Antecedents36
2.1	Introduction
2.2	The Definition of Organisational Commitment
2.3	Differentiation between Organisational, Work and Career/Professional
	Commitment 44

2.4	Antecedents of Organisational Commitment	48
2.5	The Association between Organisational Commitment and Job	
	Satisfaction	57
2.6	Causal Models of Organisational Commitment	59
2.7	Organisational Commitment in Nursing	62
2.8	The Use of Ward Commitment in this Study	64
2.9	Review of Commonly Used Instruments to Measure Organisation	nal
	Commitment	66
		71
2.10	Summary	/ 1
Chapt	Summaryer 3: Organisational Culture, Subculture, Leadership Stocks	tyle
Chapt	er 3: Organisational Culture, Subculture, Leadership S	tyle 73
Chapte And Je	er 3: Organisational Culture, Subculture, Leadership Stock ob Satisfaction	tyle 73 73
Chapte And Je	er 3: Organisational Culture, Subculture, Leadership Soob Satisfaction	tyle 73 73
Chapte And Jo 3.1 3.2	er 3: Organisational Culture, Subculture, Leadership Soob Satisfaction Introduction Definitions of Organisational Culture	tyle 73 73 74
3.1 3.2 3.3	er 3: Organisational Culture, Subculture, Leadership Stock Satisfaction	tyle 73 74 78 89
3.1 3.2 3.3 3.4	er 3: Organisational Culture, Subculture, Leadership Stob Satisfaction Introduction Definitions of Organisational Culture Conceptual Frameworks of Organisational Culture Functional Aspects of Organisational Culture	tyle 73 74 78 89 94
3.1 3.2 3.3 3.4 3.5	er 3: Organisational Culture, Subculture, Leadership Stob Satisfaction Introduction Definitions of Organisational Culture Conceptual Frameworks of Organisational Culture Functional Aspects of Organisational Culture Organisational Culture and Subcultures	tyle 73 74 78 89 94
3.1 3.2 3.3 3.4 3.5 3.6	er 3: Organisational Culture, Subculture, Leadership Stob Satisfaction Introduction Definitions of Organisational Culture Conceptual Frameworks of Organisational Culture Functional Aspects of Organisational Culture Organisational Culture and Subcultures Organisational Climate and Organisational Culture	tyle 73 74 78 94 94 99

3.10	Leadership and Nursing 120		
3.11	The Concept of Job Satisfaction		
3.12	Job Satisfaction and Nursing		
3.13	The Relationship between Organisational Culture and Leadership		
	Style		
3.14	Relationship between Organisational Culture and Job Satisfaction, and		
	between Leadership Style and Job Satisfaction140		
3.15	Relationship between Job Satisfaction and Organisational		
	Commitment		
3.16	Differences between the Hospital Groups		
3.17	Summary147		
Chapt	Chapter 4: The Empirical Research: Overview, Aims and		
Hypot	heses 149		
4.1	Introduction		
4.2	Overview of the Questionnaire Based Study150		
4.3	Aims of the study		
4.4	Research Hypotheses		
4.5	Summary		

Chapt	er 5: Research Methodology and Validity Issues 163	
5.1	Introduction	
5.2	Research Design	
5.3	Instruments for Survey Questionnaire	
5.4	Piloting of the Questionnaire	
5.5	Sampling and Data Collection	
5.6	Analysis of Data	
5.7	Validity Issues	
5.8	Summary	
Chapt	er 6: Results of the Study187	
6.1	Introduction	
6.2	Results of Questionnaire Survey	
6.3	Comparison of Hospital Groups	
6.4	Evaluation of Hypotheses in this Study	
6.5	Summary	
. Chapter 7: Interviews and Observations: Data Collection and		
Result	żs225	
7.1	Introduction	
7.2	Collection of Qualitative Data	
7.3	Data Analysis	

7.4	Results of Qualitative Analysis	.230
7.5	Summary	.239
Chapt	er 8: Discussion and Conclusion	240
8.1	Introduction	.240
8.2	Discussion	.240
8.3	Limitations of the Study	.248
8.4	Key Contribution of the Thesis	.249
8.5	Possible Future Direction for Research	.251
8.6	Conclusion	.253
References 255		
Apper	ndices	290

Acknowledgement

More people than I can possibly hope to thank here have contributed to the completion of this thesis.

I wish to express my special appreciation to my supervisor Professor Serge Mukhi. Without his inspiration, support and encouragement, this work would never have come to fruition. My very special thanks go to Dr. John Crawford, my co-supervisor, who served as my adviser and mentor. I am extremely grateful for his support and enthusiasm. He was always available whenever I needed him.

My thanks also go to Professor George Strauss, of the Institute of Industrial Relations, University of California, Berkeley, who gave me his time to discuss issues in relation to my thesis during my visit to Berkeley.

My appreciation also extends to Denise Mapley and Ginger Mudd, who generously took time and effort to proof read the manuscript. Also, I am grateful to my colleagues who have given me the encouragement during these years.

Finally, I owe a great deal of thanks to my family and friends for their support and patience during periods of frustration and flagging motivation, and for sharing my happiness when things were progressing well.

October 1997

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Sydney, Australia

Abstract

Despite the large number of studies that have examined the antecedents of organisational commitment, the investigation of the influence of organisational culture and subculture on commitment is noticeably absent. The aim of this thesis is to examine the effects of both organisational culture and subculture on organisational commitment. Other measures which have been shown to be related to either organisational commitment or organisational culture are also included in the study. These are leadership style, job satisfaction and demographic variables such as age, education, years in position and years of experience.

Recently, multivariate studies have examined the causal relationships between a variety of different variables and organisational commitment, and a number of these have concluded that the effects of these variables on organisational commitment were mainly mediated by job satisfaction. The data gathered in the present study is examined to determine if it is consistent with job satisfaction fulfilling such a mediating role between commitment and the other variables in the study. Also, a multi-dimensional measure of job satisfaction is employed in

the present study and the effects of the different job satisfaction components on commitment are investigated.

The subjects used in this study were nurses working in different hospital settings. A questionnaire survey was used which was complemented by semi-structured interviews. A total of 398 questionnaires were distributed to nurses in seven hospitals, from which 251 completed questionnaires were returned (63.5% response rate). The sample was obtained from three general public hospitals, two private hospitals and two psychiatric hospitals. Correlational and regression analyses were used to investigate the relationships between nurses' commitment to their wards and the other variables measured in the study. A causal model of commitment was developed using a multiple regression analysis in which the role of job satisfaction in mediating the causal link between commitment and the other variables was explored.

It was found that organisational subculture had a greater impact on commitment than organisational culture. Innovative and supportive subcultures had a positive effect on commitment and a bureaucratic subculture had a negative effect on commitment. The leadership style variable, consideration, also exerted a relatively strong influence on commitment when compared with other variables included in the study. The results of this study also revealed that

the job satisfaction dimensions with the strongest associations with commitment were the control, professionalism and interaction dimensions, which represent intrinsic factors of job satisfaction or those related to higher-order needs in Maslow's (1943) hierarchy. Age showed a direct positive influence on commitment. However, the level of education, years in position and years of clinical experience failed to showed any impact on commitment.

Thus, the results of this study are not in agreement with causal models (such as that proposed by Williams and Hazer 1986), in which the influence of various antecedents on commitment are totally mediated via their influence on job satisfaction. The effect of the culture and leadership style variables on commitment was found to be significantly reduced, but not totally eliminated, after statistically controlling for the job satisfaction variables.

Finally, in relation to the different hospital groups, the results showed that private hospitals had the strongest bureaucratic ward culture when compared to general public and psychiatric hospitals. The most innovative ward culture was found in general public hospitals and the most supportive ward culture was found in psychiatric hospitals. These findings were contrary to expected outcomes.

Key words: organisational culture, subculture, leadership style, job satisfaction, organisational commitment

Table of Figures

Figure 1:	Overview structure of this study	35
Figure 2:	Williams and Hazer model (1986)	60
Figure 3:	Price and Mueller model (1981a)	60
Figure 4:	Mckinsey's 7-s framework	79
Figure 5:	Johnson's cultural web	81
Figure 6:	Three level approach to organisational culture and its interaction	
	(Schein 1985a)	84
Figure 7:	Schneider's layers of organisational culture	
	(Schneider 1990, p.157)	85
Figure 8:	Ballantine diagram	204
Figure 9:	Path analytic model of commitment2	212

List of Tables

Table 1:	Definitions of organisational commitment
Table 2:	Antecedents of commitment discussed by Mathieu and Zajac (1990)
	and studies which have examined these antecedents
Table 3:	Organisational commitment studies with antecedents not listed by
	Mathieu and Zajac (1990)51
Table 4:	Antecedents used in nursing commitment studies63
Table 5:	Underlying dimensions of organisational commitment (from: Barge
	and Schlueter 1988, p. 129)67
Table 6:	Organisational culture definitions
Table 7:	Hofstede's four types of organisational culture (Pheysey 1993,
	p.24)92
Table 8:	Different approaches to leadership (Schermerhorn et al. 1994,
	p. 497)111
Table 9:	Factors influencing nurses' job satisfaction
Table 10:	Reliability estimates of instruments used in previous studies 166
Table 11:	Correlations with commitment and reliability estimates of variables
	obtained in pilotting the questionnaire
Table 12:	Demographic summary

Table 13:	Cronbach alpha reliability estimates, means and standard deviations
	of variables used in the study (n = 251)
Table 14:	Correlations with commitment
Table 15:	Correlations between the same categories of hospital and ward
	cultures
Table 16:	Correlations between ward and hospital culture variables, and
	leadership style variables
Table 17:	Correlations between job satisfaction and leadership style
	variables
Table 18:	Correlations between job satisfaction and ward and hospital
	culture 199
Table 19:	Multiple regression of commitment on different sets of independent
	variables (columns 1-8)201
Table 20:	Multiple regression of job satisfaction variables (JSINT, JSPROF
	and JSCONTRL) on remaining independent variables207
Table 21:	Direct and indirect effects on commitment
Table 22:	Anovas (univariate) with hospital group as independent
	variables
Table 23	Means for various hospital groups
Table 24	Paired differences on variables between general, psychiatric and
	private hospital categories

Table 25:	Open-ended interview questions	227
Table 26:	Extracts of positive and negative statements in relation to the six	
	pre-set themes	231
Table 27:	Simple content analysis of interview data	233

List of Appendices

1.	Typology of elements of organisational culture	.29
2.	Typology of publications on organisational culture	.294
3.	Questionnaire survey	.295
4	Correlations of variables	304

Chapter 1

Introduction, Rationale and Hypotheses

1.1 Introduction

The aim of this thesis is to investigate the influence of organisational culture and subculture on nurses' commitment to their wards. Measures of leadership style, job satisfaction and a number of personal and demographic characteristics are also included in the study. This study focuses on the hospital sector. In this context, the variables measured are hospital culture, ward culture, leadership style of ward managers, nurses' job satisfaction and the demographic variables of age, years in the present position, educational level, and years of clinical experience.

The first part of this thesis (Chapters 1-3) deals with the rationale and the significance of this study. A review of the literature on organisational commitment, organisational culture, leadership style and job satisfaction is presented in Chapters 2 and 3. The second part of this thesis (Chapters 4-7) describes the empirical study. Chapter 8 provides the discussion and conclusion

of the thesis. The empirical study is concerned with the testing of the following hypotheses:

- 1. There is a relationship between nurses' commitment to their wards and measures of hospital culture, ward culture, leadership style and job satisfaction. More specifically, it is expected that a) the supportive and innovative hospital and ward culture dimensions will be positively correlated with commitment; b) the bureaucratic hospital and ward culture dimensions will be negatively correlated with commitment; and c) a consideration-leadership style will be more positively correlated with commitment than will structure-leadership style.
- Nurses' commitment to their wards is more strongly related to their perception of ward culture than to their perception of hospital culture.
- 3. Job satisfaction variables have the strongest relationships with ward commitment when compared with other antecedent variables.
- 4. The associations between nurses' commitment to their wards and the variables of hospital culture, ward culture and leadership style, are significantly reduced after statistically controlling for the job satisfaction measures.

- 5. The job satisfaction dimensions used in this study representing the psychosocial or higher order needs in Maslow's hierarchy are more highly correlated with nurses' commitment to their wards than are the dimensions representing safety or lower order needs.
- 6. Job satisfaction and commitment increase with age and decrease with education.
- 7. Years in position and years of clinical experience are positively associated with ward commitment.
- 8. There are significant differences in organisational culture among the different hospital groups (general public, private and psychiatric). General public hospitals are more bureaucratic than private and psychiatric hospitals, private hospitals are more innovative than general public and psychiatric hospitals, and psychiatric hospitals are more supportive than general public and private hospitals.

1.2 Rationale for the Study

In the past decade or so, the concept of organisational commitment has grown in popularity and has received a great deal of interest. A large number of studies (for example, Bateman and Strasser 1984, DeCotiis and Summers 1987, Iverson and Roy 1994, Michaels 1994, Mottaz 1988a, Williams and Hazer

1986) have investigated numerous possible antecedents of organisational influence of organisational commitment. However, the culture on organisational commitment has received little attention. For example, the major review and meta-analysis by Mathieu and Zajac (1990) on the antecedents, correlates and consequences of commitment did not include any reference to organisational culture. This is particularly interesting because prominent organisational culture writers such as Deal and Kennedy (1982) and Peters and Waterman (1982) have suggested that organisational culture could exert considerable influence in organisations, particularly in areas such as performance and commitment. Also, organisational culture has been discussed extensively in organisational writings (Alvesson and Berg 1992, Brown 1995, Hofstede, Kotter and Heskett 1992, Neuijen, Ohayr and Sanders 1990, Sackman 1991, Schneider 1990, Trice and Beyer 1993). This lack of attention given to its influence on organisational commitment in previous studies has highlighted a significant issue which requires further investigation.

Brewer (1993) proposed a model in which includes corporate culture as a form of managerial strategy for managing employees' commitment. The constructs of leadership style, organisational culture and job satisfaction used in the empirical study in this thesis can be seen as related to the managerial, corporate cultural and human resource strategies suggested in Brewer's (1993) model of

commitment. Thus, it could be expected that evidence for the link between these strategies and commitment provided in Brewer's (1993) model of commitment would be found in this empirical study.

It has been suggested that organisational subcultures may exist independently of organisational culture, that a small work group will have its own set of values, beliefs and attributes, and that different subcultures in organisations could affect individuals differently in the work place (Brown 1995, Martin 1992, Martin and Siehl 1983, Schneider 1990). Brewer (1993, p. 30) also suggested that if the organisational culture is not articulated strongly enough, the subculture may take precedence over the organisational culture for individual employees and thus gain their commitment. The influence of organisational subculture on commitment is an area which has not been studied in the organisational literature. Also, the relationships between organisational subculture and other variables such as leadership styles and job satisfaction are largely unresearched. Since the importance of subcultures has been emphasied in recent years (Brown 1995, Martin 1992, Sackman 1992, Trice and Beyer 1993), the inclusion of organisational subculture in this empirical emidy will further enhance any theoretical framework of organisational commitment.

Previous studies which have proposed causal models of organisational commitment and turnover (Iverson and Roy 1994, Michaels 1994, Price and Mueller 1981a, Taunton et al. 1989, Williams and Hazer 1986) have suggested that the effects of various antecedents on commitment are mediated through job satisfaction. In this thesis, a measure of job satisfaction was included in the empirical study to assess whether the data of this thesis are compatible with these previous results.

Although most older job satisfaction measures tend to be unidimensional (for example, Cook and Wall 1979, Hackman and Oldham 1975, Kendall and Hulin 1969, Quinn and Staines 1979), more recent job satisfaction instruments (for example, Glisson and Durick 1988, Mueller and McClosky 1990) have used a multi-dimensional approach. It has been suggested that various job satisfaction dimensions can influence individuals differently in the work place (Glisson and Durick 1988, Mueller and McClosky 1990). For example, intrinsic and extrinsic job satisfaction factors which relate to the higher- and lower-order needs in Maslow's (1943) model could be expected to exert different behavioural outcomes on individuals (Hunt and Osborn 1994, Schermerhorn 1995). The study reported in this thesis uses a multi-dimensional job satisfaction measure, namely, Mueller and McClosky's (1990) eight dimensional measure. This instrument is based on Maslow's hierarchy of needs, and allows the study to

examine whether the different dimensions of job satisfaction are related differently to commitment, and to the culture, subculture and leadership style variables measured in the study.

A number of demographic variables, frequently included in previous commitment studies, are also included in this empirical study. Variables such as age (Mathieu and Zajac 1990, Mottaz 1985, Williams and Hazer 1986), organisational tenure (Mathieu and Hamel 1989, Mathieu and Zajac 1990, Steers 1977), and position tenure (Gregersen and Black 1992, Mathieu and Zajac 1990, Mottaz 1988a) have been demonstrated to be positively associated with commitment in previous studies. However, level of education has been consistently shown to be inversely related to commitment (Mathieu and Zajac 1990, Michaels 1994, Morris and Sherman 1981).

This empirical study focuses on the nursing workforce within the hospital setting. Although the nursing literature has examined the issues of organisational culture, leadership style, job satisfaction and commitment in nursing, these studies have mainly focused on bivariate relationships, such as, that between organisational culture and nurses' job satisfaction (Browder 1993) and between job satisfaction and nurses' commitment (Guillemette 1992). Thus, investigation of the effects of antecedents such as organisational culture,

subculture, leadership style and job satisfaction on nurses' commitment in a multivariate study will further contribute to theory building and the formulation of nursing commitment models.

In conclusion, there has been little attention given to the effects of organisational culture and subcultures on organisational commitment in the past. Hence, it is the intention of this study to address this gap in the research literature. The relationship between these variables and several other antecedents such as leadership style, job satisfaction and certain demographic variables are also investigated in this empirical study.

1.3 The Significance of this Study

The results of this study will:

1. Provide a greater understanding of the influence of organisational culture on commitment. Although the issue of organisational culture has been examined extensively in organisational studies, the link between organisational culture and commitment has received little attention. Since this study focuses on the nursing profession in the hospital setting, the influence of various hospital cultures on nurses' commitment will be investigated. The above findings are important

particularly in theory building related to organisational culture and commitment, and also in determining effective change management strategies in organisations.

- 2. Provide further support in relation to the importance of subcultures in organisations. Although the issue of subcultures has received considerable attention in recent years, the influence of subcultures on commitment and other organisational variables has not been pursued in empirical research. Furthermore, the issue of subcultures in hospitals (that is, ward culture) and its influence on nurses' commitment has largely been ignored. The findings in this study will contribute to theory building in the areas of organisational subculture and commitment.
- 3. Determine whether the data gathered in this study are compatible with causal models in which the effects of various antecedent variables on commitment are mediated via their influences on job satisfaction.
- 4. Confirm that the job satisfaction dimensions related to Maslow's higher-order needs are more strongly related to commitment than those related to the lower-order needs.

1.4 Definition of Terms

The following definitions are adopted for the variables used in the thesis. More detailed discussion of these terms is found in the literature review in Chapters 2 and 3.

1.4.1 Organisational Commitment

Organisational commitment has been conceptualised in different ways by various researchers, with some adopting an attitudinal definition (Mowday, Steers and Porter 1979, Steers 1977), and others using a more behavioural approach (Halaby 1986, Staw and Ross 1977). However, it is the attitudinal definition which has been most commonly used, and which will be used in the present study. Consistent with this approach is the definition of commitment given by Blau and Boal (1987):

"A state in which an employee identifies with a particular organisation and its goals and wishes to maintain membership in the organisation" (Blau and Boal 1987, p. 250).

1.4.2 Organisational Culture

Although the definition of organisational culture depends on how the concept is interpreted, and from which discipline the assumptions are derived, one of the more widely accepted definitions is given by Schein (1985b):

"The pattern of basic assumptions that a given group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration, and have worked well enough to be considered valid, and therefore, to be taught to new members as the correct way to perceive, think and feel in relation to these problems" (Schein 1985b, p. 9).

The above definition is often linked with Schein's three levels of organisational culture: artefacts, values and beliefs, and basic assumptions, which are often used in organisational culture studies (Ott 1989, Sathe 1983, Schneider 1990, Trice and Beyer 1993). Organisational culture should be distinguished from the similar concept of organisational climate (Schneider 1990). Organisational culture is somewhat hidden or entrenched and organisational climate is what is at the surface. Organisational climate exists as the perception of people working in the organisation. The difference between the meaning of these two terms is discussed in section 3.6.

1.4.3 Organisational Subculture

Although organisations have distinct cultures, it is generally accepted that most organisations have multiple cultures (Louis 1985, Ott 1989, Robbins et al. 1994, Trice and Beyer 1993). Distinctive ideologies, cultural forms and substances, and practices of subcultures make them differ noticeably from the overall organisational cultures and from each other. Subcultures develop in large organisations to reflect group values, attitudes, beliefs, situations and experiences. They are typically defined by departmental designations and geographical separation. The subculture of the group or unit can include the core values of the dominant organisational culture (if it exists) plus additional values unique to members of the group/department. Martin (1992) viewed organisational culture under three different perspectives: integration, differentiation and fragmentation. She defined subcultures in organisations within the differentiation perspective. From the differentiation perspective, organisational culture is not seen to be in unity or harmony but is seen in terms of diversity and even inconsistency (Dunford 1992, p. 171, Meyerson and Martin 1987). Thus, the existence of subcultures can be regarded as a normal occurrence in organisations. Detailed discussion of subculture is presented in sections 3.5 and 3.7. The following is a definition of organisational subculture:

"Distinct clusters of understandings, behaviours and cultural forms that identify groups of people in the organisation. They differ noticeably from the common organisational culture in which they are embedded, either intensifying its understandings and practices or deviating from them" (Trice and Morand 1991, p. 1).

In this study, the subculture which is the focus of investigation is that of the hospital ward. Wallach's (1983) Organisational Culture Index (OCI) was used in this study to obtain measures of both organisational culture and subculture. This instrument has been used in similar studies (Koberg and Chusmir 1987, Scherer 1988) and is easily adapted to measure both the cultures and subcultures of organisations.

1.4.4 Leadership Style

Leadership style refers to the behaviour which leaders use to influence a group towards the achievement of goals. Leadership can be seen as:

"The process of influencing the activities of an organised group in its efforts toward goal setting and goal achievement" (Stogdill 1974, p. 4).

The source of this influence may be formal or informal. Different leadership styles such as "initiating structure" and "consideration" in the Ohio State Studies (Stogdill 1963, 1974; Vecchio 1995, p. 344); the "task orientation" and "relationship orientation" behaviour in the Fiedler's contingency model (1967); the "concern for people" and "concern for task" behaviour in the Hersey and Blanchard model (1977) and the "autocratic and participative" behaviour of the Vroom and Yetton model (1973), have all been studied extensively. Stogdill's (1963) Leadership Behaviour Description Questionnaire (LBDQ) was selected for this study because it provides the two dimensions which have been widely used and well validated by researchers in organisational studies (Mathieu and Zajac 1990, Mukhi 1982). Further discussion of leadership style is presented in section 3.9.

1.4.5 Job Satisfaction

The term job satisfaction refers to:

"An attitude that individuals have about their jobs. It results from their perception of their jobs and the degree to which there is a good fit between the individual and the organisation" (Ivancevich et al. 1997, p. 91).

Research into job satisfaction has received a great deal of attention in recent years and there is general agreement on the meaning of the term. Other definitions of the term are detailed in section 3.11.

1.4.6 Personal/demographic Characteristics

The variables of age, tenure, education and gender have been suggested in previous studies as having significant influence on organisational commitment (Bateman and Strasser 1984, Farrel and Rusbult 1981, Mathieu and Hamel 1989, Steers 1977) and were included in this study. However, other demographic variables such as length of time in current position and years of clinical experience were also included because of their importance in the nursing context (Battersby et al. 1990).

1.5 The Structure of this Thesis

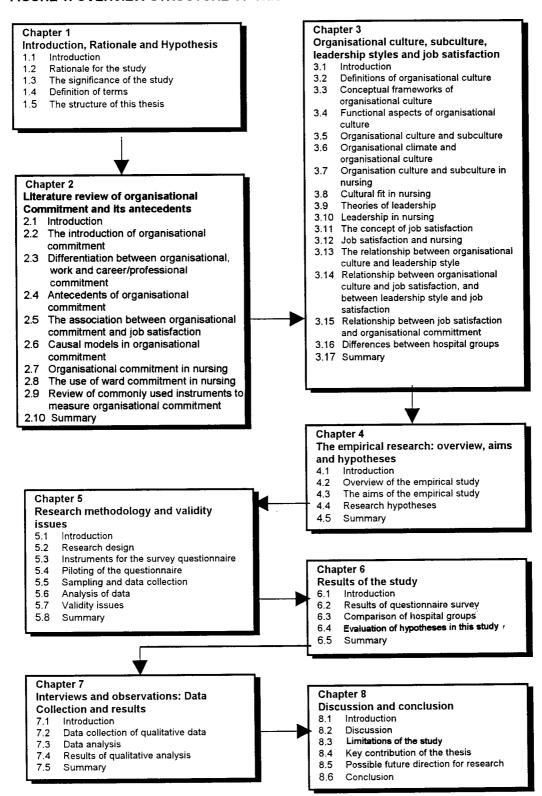
Figure 1 provides an overview of the structure for this thesis. In the first part of the thesis, Chapter 1 provides the introduction, the rationale for the study, the significance of the study and concludes with the definition of variables used in the empirical study. Chapter 2 provides a literature review of organisational commitment, and the differentiation between the three types of commitment (organisational, career and work). The chapter also lists the common

antecedents of organisational commitment used in previous studies. Common causal models of organisational commitment are discussed. Finally, organisational commitment in nursing and the frequently used instruments to measure organisational commitment are presented. Chapter 3 provides a literature review of organisational culture. Previous studies in relation to leadership style and job satisfaction are also examined. Finally, findings concerning the relationships between organisational culture, subculture, leadership style, job satisfaction and organisational commitment are reviewed.

The second part of this thesis describes the empirical research. Chapter 4 provides an overview of the empirical study, its aims and hypotheses. Chapter 5 describes the design of the study, the methodology, the sample used, the collection of quantitative data, the instruments used and the methods of analysis. Validity issues are also discussed in this chapter. Chapter 6 provides the results of this study. Quantitative analysis and results are detailed and the influences of the independent variables on organisational commitment are shown in a path diagram. The chapter also provides the results of hypotheses testing. Chapter 7 provides a description of the collection and analysis of qualitative data. Simple content analyses of interviews are used to complement the findings of the quantitative study. Chapter 8 concludes the thesis with a discussion of the findings and the contributions of the study to organisational

commitment theory and management practices. Discussion of the limitations of this study and its implications for further organisational commitment research and practice is also provided.

FIGURE 1: OVERVIEW STRUCTURE OF THIS STUDY



Chapter 2

Literature Review Of Organisational Commitment And Its Antecedents

2.1 Introduction

Many organisational researchers have contributed to the understanding of organisational commitment, and the influence on commitment of different antecedents have been examined in numerous past studies (Mathieu and Zajac 1990, Michaels 1994, Mottaz 1988b, Price and Mueller 1981a, Steers 1977, Williams and Hazer 1986). Different conceptual models of commitment, derived from different theoretical perspectives, have been used by various researchers (Allen and Meyer 1990a, Blau 1985, Hackett et al. 1994, Randall and Cote 1991, Reichers 1985). In order to understand the above issues, this chapter will:

- 1. Examine the various definitions of organisational commitment
- Differentiate between organisational, work and career (or professional or occupational) commitment

- 3. Discuss the antecedents commonly used in organisational commitment studies
- 4. Examine the association between organisational commitment and job satisfaction
- 5. Discuss the causal models of organisational commitment
- 6. Examine antecedents used in the study of nursing commitment
- 7. Discuss the instruments commonly used to measure organisational commitment.

2.2 The Definition of Organisational Commitment

The concept of organisational commitment has been studied and researched extensively since Becker (1960) and Etzioni (1961) first attempted to describe its dimensions. As interest in the area of organisational commitment developed, researchers from various disciplines formulated their own meanings of the term. An examination of the literature (Dunham et al. 1994, Hackett et al 1994, Hunt and Morgan 1994, Morrow 1983, Mottaz 1988b, Mowday et al. 1979, O'Reilly and Chatman 1986, Somers 1995) reveals a divergence of approaches to defining and measuring organisational commitment.

Morrow (1983) in his review noted that there are over twenty-five (25) commitment-related concepts or measures, such as psychological attachment, identification, willingness, social exchange, sunk cost, loyalty, intent to stay, work commitment, career commitment and utility of staying, which have been used to define organisational commitment. Morrow (1983, p. 486) further concluded that:

"The growth in commitment related concepts has not been accompanied by a careful segmentation of commitment's theoretical domain in terms of intent or the concepts' relationships among each other" (Morrow 1983, p. 486).

Despite the different meanings and concepts attached to organisational commitment, the various notions of organisational commitment can be grouped according to an "attitudinal-behavioural" dichotomy (Barge and Schlueter 1988). Table 1 shows some representative definitions of organisational commitment and classifies them in terms of the attitudinal-behavioural dichotomy.

TABLE 1: DEFINITIONS OF ORGANISATIONAL COMMITMENT

Author/s	Year Attitudinal Definitions		
Sheldon	1971	"attitude or an orientation toward the organisation which links or attaches the identity of the person to the organisation"	
Buchanan	1974	"affective attachment to the goals and values of an organisation, apart from its purely instrumental worth"	
Steers	1977	"the degree of an employee's identification and involvement in his or her employing organisation"	
Mowday, Steers and Porter	1979	"a state in which an individual identifies with a particular organisation and its goals and wishes to maintain membership in order to facilitate these goals"	
Rusbult and Farrell	1983	"the extent to which an employee perceived that he or she was connected to a job and involved feelings of psychological attachment, independent of affect"	
O'Reilly & Chatman	1986	"the internalisation of values and beliefs which are in congruence with the organisation"	
Mueller, Wallace & Price	1992	"the two dominant conceptualisations of an organisational commitment as loyalty and intent to stay"	

Author/s	Year	"unwillingness to leave the organisation for increments pay status or professional freedom or for greater collegion friendship"	
Hrebiniak & Alutto	1972		
Salancik	1977	"a state of being in which an individual becomes bound by his actions and through these actions to beliefs that sustain the activities and his own involvement"	
Staw and Ross	1977	"behaviours that exceed formal and/or normative expectation which represent sunk cost in the organisation where individuals forego alternative courses of action and choose to link themselves to the organisation"	
Mottaz	1988Ь	"the exchange of work rewards and work values between individuals and the organisation"	
Iverson and Roy	1994	"the process by which employees are able to link themselves to an organisation"	

The attitudinal approach sees commitment as referring to an individual's psychological bond to an organisation as "affective attachment and identification" (Buchanan 1974, Steers 1977). Another frequently employed definition of organisational commitment operationalises commitment in terms of three factors: a strong desire to remain a member of the organisation; a strong belief in, and acceptance of, the values and goals of the organisation; and a readiness to exert considerable effort on behalf of the organisation (Mowday, Steers and Porter 1979). Critics of this approach, such as Guest (1992), point out that the above definitions may be unhelpful in establishing the outcomes of affective commitment as it conflates process and outcome:

"It is difficult to relate variation in levels of commitment, defined and measured in this way, to dependent variables such as effort, performance and labour turnover, since these are contained in the definition" (Guest 1992, p. 115).

In contrast, the behavioural approach sees commitment as the binding of the individual to behavioural acts (Salancik 1977). This approach derives its theoretical bases from cognitive dissonance and consonance (Festinger 1957). Individuals become committed as a result of "side bets", "sunk cost" (for example, pension scheme) in the organisation which would be lost if he or she

were to leave. Thus, individuals are more likely to be bound to stay and they perceive their acts as voluntary (Salancik 1977).

While both forms of commitment assume calculative or instrumental motivations, attitudinal commitment largely suggests that commitment is internalised for valued organisational rewards (O'Reilly and Chatman 1986). Behavioural commitment mainly focuses on an exchange relationship and the calculation of the costs of leaving rather than the rewards for staying with the organisation (Legge 1995, p.181).

Mowday et al. (1982) and Mathieu and Zajac (1990) all suggested that on close examination of the "attitudinal-behavioural" dichotomy, attitudinal and behavioural commitment may not be entirely separable concepts, and that the measurement of each contains elements of the other. It can be argued that the individual may be drawn initially to the organisation because of an exchange relationship (that is, behavioural commitment), and may later develop an attitude consistent with maintaining membership (that is, attitudinal commitment). This suggests that these two processes may become closely related over time. However, Mathieu and Zajac (1990) argued that these two processes or forms of organisational commitment are sufficiently distinct to allow comparisons between their relationships with other variables of interest.

Although organisational commitment has been conceptualised in terms of the attitudinal-behavioural dichotomy, it is the measures based on the attitudinal approach which have most frequently been validated and used in previous studies (O'Reilly and Chatman 1986, Price and Mueller 1981b, Steers 1977).

Further to the attitudinal and behavioural approaches in commitment, Allen and Meyer (1990a) proposed a three component model of organisational commitment: affective, continuous and normative. Allen and Meyer (1990a) defined the three components as follows:

"The affective component of organisational commitment....refers to the employee's emotional attachment to, identification with, and involvement in, the organisation. The continuance component refers to commitment based on the costs that the employee associates with leaving the organisation. Finally, the normative component refers to the employee's feeling of obligation to remain with the organisation" (Allen and Meyer 1990a, p. 1).

Thus, Allen and Meyer's (1990a) affective component of organisational commitment can be seen as compatible with the attitudinal perspective of organisational commitment. The continuous and normative components can be

seen as representing two aspects of the behavioural perspective of organisational commitment.

Evidence supporting the distinct nature of these three components is presented in the results of Dunham et al. (1994) which showed that the antecedents of the three components are somewhat different. Also, McGee and Ford (1987) suggest that continuous commitment comprises two separate components, one concerned with sunk costs and the other with the lack of attractive alternatives. Despite a positive correlation being found between sunk costs and attitudinal commitment, a negative correlation emerged between lack of alternatives and attitudinal commitment.

In conclusion, Allen and Meyer's (1990a) three dimensions of organisational commitment have further extended our understanding of its meaning and measurement. The majority of studies which have used Allen and Meyer's (1990a) three dimensions of organisational commitment have concluded that it is the affective characteristics which have the greatest effect on outcome variables such as absenteeism and turnover (Dunham et al. 1994, McFarlane, Shore and Wayne 1993, Somers 1995). Thus, affective commitment remains the dominant measure used in majority of organisational commitment studies.

2.3 Differentiation between Organisational, Work and Career/Professional Commitment

A review of the literature suggests that there are a number of different forms of commitment which have been used as outcome measures. In addition to organisational commitment which has been discussed above, studies have also used measures of work and career commitment.

Work commitment refers neither to the organisation nor to the career but to work itself (Lodahl and Kejner 1965). People who are "committed to their work" hold a strong sense of duty toward their work, and place intrinsic value on work as a central life interest (Aryee et al. 1994, Bielby and Bielby 1984, Lincoln and Kalleberg 1990, Meyer and Allen 1991). Other related terms such as job involvement (Lodahl and Kejner 1965, Randall and Cote 1991), work involvement (Kanungo 1982, Lorence 1987), work motivation (Lawler and Hall 1970), work as central life interest (Dubin 1956) and Protestant work ethic (Brewer 1993, Randall and Cote 1991) are all mentioned as being closely related to the meaning of work commitment. Although work commitment is a distinct dimension, it has been found that it is positively correlated with organisational commitment and, to a lesser extent, with professional commitment (Meyer and Allen 1991).

The term career commitment is often used to refer to an identification with, and involvement in, one's occupation (Blau 1985). Other terms which refer to the same or closely related concepts are: career salience (Randall and Cote 1991), professional commitment (Morrow and Goetz 1988, Morrow and Wirth 1989, Wallace 1993), professionalism (Price and Mueller 1986) and occupational commitment (Meyer et al. 1993, Ritzer and Trice 1969). Although these three terms (career, professional and occupational commitment) have most commonly been used interchangeably, some studies have shown that they represent distinct dimensions (Randall and Cote 1991, Ritzer and Trice 1969, Tong 1993).

Professional commitment is derived from the Calvinistic theology emphasising the notion of a 'calling' or dedication to an occupation (Mueller et al. 1992). Professional commitment tends to describe more highly educated or skilled people who direct their loyalties to their professional group rather than to their work organisation (Brewer 1994). The following studies illustrate the distinct nature of each of the three types of commitment (organisational, work and career/professional) and show some of the relationships between them.

Wallace (1993) used meta-analysis to review data from fifteen studies on the relationship between professional and organisational commitment. A moderate positive association was found between professional and organisational commitment. Wallace's (1993) findings also suggested that professional employees tend to be more committed to their profession than to their employer or the organisation, and conflicting loyalties occur particularly when professionals are employed in non-professional or bureaucratic organisations. Wallace (1995) examined how the different structural arrangements of professional and non-professional organisations would influence lawyers' organisational and professional commitment. The study showed that organisational commitment was highly dependent on perceived opportunities for career advancement and the criteria used in the distribution of rewards. Lawyers working in non-professional organisations were reported to be significantly less committed to the legal profession than those working in professional organisations. Few of the organisations' structural characteristics were important in explaining professional commitment. The above results suggested that other additional factors could be responsible for professional commitment in lawyers. However, although these findings emphasise the distinct nature of professional and organisational commitment, studies by Gunz and Gunz (1994) on lawyers, and one by Aranya and Ferris (1994) on

accountants, revealed that professionals seem to be able to show a strong commitment to both their profession and organisation.

A study by Meyer et al. (1993) used confirmatory factor analyses on data collected from samples of nursing students and registered nurses (RNs). They found that the three component measures of organisational commitment, affective, continuance and normative, are distinguishable from each other. Their results also showed that occupational commitment and the three components of organisational commitment are also distinguishable from each other. They concluded that organisational and occupational commitments contributed independently to the prediction of outcome variables such as turnover intention, performance and organisational citizenship. Finally, Vandenburg and Scarpello (1994) suggested that occupational commitment was a causal antecedent to organisational commitment.

In summary, the above studies have shown that the various types of commitment (organisational, career and work) should be viewed as separate entities. The different types of commitment reflected different aspects of how individuals relate to the expectations and outcomes in their work place.

2.4 Antecedents of Organisational Commitment

A review of organisational commitment studies revealed that researchers have focused on different antecedents in their organisational commitment studies. For example, Hrebiniak and Alutto (1972) included antecedents such as gender, marital status, years of experience, role conflict, job dissatisfaction, work group attachment and norms in their organisational commitment study, while Steer (1977) included pay, leadership style, values and beliefs in his commitment study.

Steers (1977) examined 382 hospital employees and 119 scientists and engineers in relation to their level of organisational commitment. The results of regression analysis revealed that the following six antecedents were significantly associated with commitment: need for achievement, group attitudes toward the organisation, organisational dependability, task identity, education (inversely) and personal investment in the organisation.

Another study of organisational commitment by Brief and Aldag (1980), who used antecedents different from those in Steers (1977) study, concluded that pay, promotional opportunities, leadership style, supervision, values and beliefs, and job satisfaction, were predictors of a nurse's attachment to his or her employing organisation. Brief and Aldaag (1980) also emphasised that

satisfaction with work itself in nursing was more strongly related to organisational attachment than other affective variables. Since organisational attachment was highly associated with organisational commitment, Brief and Aldag's (1980) findings have provided a strong indication of a link between job satisfaction and organisational commitment in nursing

In addition to the above findings, Brief and Aaldag (1980) and Mathieu and Zajac (1990) suggested that the age and tenure of employees in the organisation are positively associated with attachment to the organisation, and that the nurses' level of education is negatively associated with organisational commitment. The explanation of the above findings put forward by Mowday et al. (1982) is that a higher level of formal education is under-utilised on the job and that because of this, the more highly qualified nurse's reaction to the type of work he or she is required to perform by the employer is largely negative. Brief and Aldag (1980) further concluded that family size and family responsibilities among female nurses were negatively related to attachment to the organisation.

Although Mathieu and Zajac (1990) identified twenty six common antecedents of organisational commitment in their meta-analysis, other organisational commitment studies have included antecedents which were not listed in the

meta-analysis. Table 2 lists the antecedents of commitment identified by Mathieu and Zajac (1990) together with other studies which have considered these antecedents. Table 3 provides a list of these antecedents included in past research but not considered in the Mathieu and Zajac (1990) review.

TABLE 2: ANTECEDENTS OF COMMITMENT DISCUSSED BY MATHIEU AND ZAJAC (1990) AND STUDIES WHICH HAVE EXAMINED THESE ANTECEDENTS

Antecedents	Relevant Studies		
Age	Brewer 1996, Brief and Aldag 1980, Mathieu and Zajac 1990, Michaels 1994, Morris and Sherman 1981, Mottaz 1985, Salancik 1977, Staw and Ross 1977, Williams and Hazer 1986		
Sex	Hrebiniak and Alutto 1972, Mathieu and Zajac 1990, Michaels 1994 Mottaz 1988b		
Education	Brewer 1996, Brief and Aldag 1980, DeCotiis and Summers 1987, Mathieu and Zajac 1990, Michaels 1994, Morris and Sherman 1981, Mottaz 1988b, Mowday et al. 1982, Steers 1977		
Marital status	Hrebiniak and Alutto 1972, Mathieu and Zajac 1990, Mottaz 1988b		
Position tenure	Brewer 1996, Brief and Aldag 1980, Gregersen and Black 1992 Mathieu and Zajac 1990, Mottaz 1988b		
Organisational tenure	Hrebiniak and Alutto 1972, Mathieu and Hamel 1989, Mathieu and Zajac 1990, Steers 1977		
Perceived personal competence	Mathieu and Zajac 1990, Michaels 1994		
Ability	Mathieu and Zajac 1990, Michaels 1994		
Salary	Brewer 1996, Brief and Aldag 1980, Mathieu and Zajac 1990, Michaels 1994, Mottaz 1988b		
Protestant work ethic	Brewer 1993, Brief and Aldag 1980, Mathieu and Zajac 1990		
Job level	Brewer 1996, Mathieu and Zajac 1990		
Role ambiguity	Gregersen and Black 1992, Mathieu and Zajac 1990, Michaels 1994, Morris and Sherman 1981		
Role conflict	Gregersen and Black 1992, Hrebeniak and Alutto 1972, Mathieu and Zajac 1990, Michaels 1994, Morris and Sherman 1981		
Role overload	Mathieu and Zajac 1990		
Skill variety	Mathieu and Zajac 1990, Morris and Sherman 1981, Steers 1977		

Antecedents	Relevant Studies		
Task variety	Mathieu and Hamel 1989, Mathieu and Zajac 1990, Morris and Sherman 1981, Steers 1997		
Job challenge	Brooks and Seers 1991, Mathieu and Hamel 1989, Mathieu and Zajac 1990, Michaels 1994, Morris and Sherman 1981, Steers 1997		
Job scope	Mathieu and Hamel 1989, Mathieu and Zajac 1990, Michaels 1994, Morris and Sherman 1981, Steers 1997		
Group cohesiveness	Mathieu and Zajac 1990		
Task interdependence	Mathieu and Zajac 1990		
Leader initiating structure	Mathieu and Zajac 1990, Morris and Sherman 1981		
Leader consideration	Iverson and Roy 1994, Mathieu and Zajac 1990, Morris and Sherman 1981, Williams and Hazer 1986		
Leader communication	Mathieu and Zajac 1990		
Participative leadership	Mathieu and Zajac 1990		
Organisational size	Mathieu and Zajac 1990, Stevens et al. 1978		
Organisational centralization	Bateman and Strasser 1984, Iverson and Roy 1994, Mathieu and Zajac 1990, Morris and Steers 1981		

TABLE 3: ORGANISATIONAL COMMITMENT STUDIES WITH ANTECEDENTS NOT LISTED BY MATHIEU AND ZAJAC (1990)

Antecedents	Studies	
Structure	Cheng 1990, Stevens et al. 1978	
Group attitude	Cook and Wall 1980, Steers 1977	
Organisational dependability	Cook and Wall 1980, Steers 1977	
Achievement of goals	Organ and Konovsky 1989	
Equity	Brewer & Lok 1995, Iverson and Roy 1994, Mowday et al. 1982	
Work group attachment	Hrebiniak and Alutto 1972, Mowday et al. 1982	
Group norm	Hrebiniak and Alutto 1972, Mowday et al. 1982	
Social norm	Cheng 1990	
Leadership	Cheng 1990	
Trust	Brewer 1993	

Antecedents	Studies		
Managerial strategy	Brewer 1993, Brewer and Lok 1995		
Communication satisfaction	Ticehurst and Ross-Smith 1992		
Work rewards	Mottaz 1988b		
Job control & autonomy	Iverson and Roy 1994, Mottaz 1988b, Pfeffer 1992, Thacker et al. 1990,		
Expectations	Iverson and Roy 1994		
Work involvement	Iverson and Roy 1994, Mottaz 1988b		
Responsibility	Iverson and Roy 1994		
Job satisfaction	Brief and Aldag 1980, Mathieu and Hamel 1989, Michaels 1994, Price and Mueller 1981b, Taunton et al. 1989, Williams and Hazer1986		
Need for achievement	Brief and Aldag 1980, Hollenbeck et al. 1989, Steers 1977		
Need for fulfilment	Mowday et al. 1982		
Work values	Kildron 1978, Koch and Steers 1978, Morris and Sherman 1981, Steer 1977		
Motivation	Kildron 1978, Morris and Sherman 1981, Steers 1977, William and Hamel 1986		
Expectations	Iverson and Roy 1994, Kildron 1978, Morris and Sherman 1981, Steers 1977		
Task significance	Mottaz 1988b		
Supervisory assistance	Michaels 1994, Mottaz 1988b		
Co-worker assistance	Brief and Aldag 1980, Michaels 1994, Mottaz 1988b		
Working conditions	Mottaz 1988b		
Promotion opportunities	Brief and Aldag 1980, Iverson and Roy 1994, Mottaz 1988b		
Fringe benefits	Mottaz 1988b		
Perceived job characteristics	Williams and Hazer 1986		
Pre-employment expectations	Williams and Hazer 1986		
Routinization	Williams and Hazer 1986		
Competence environment	Michaels 1994		
Work	Brief and Aldag 1980, Michaels 1994		
Time	Michaels 1994		
Power	Michaels 1994		

Antecedents Studies		
Family responsibilities	Brief and Aldag 1980, Iverson and Roy 1994	
Personality	Mathieu and Hamel 1989	
Organisation formalization	Mathieu and Hamel 1989	
Organisation decentralization	Brewer 1996, Mathieu and Hamel 1989	
Growth need	Mathieu and Hamel 1989	
Job characteristics	Mathieu and Hamel 1989	
Identification	Barge and Schlueter 1988, Buchanan 1974, O'Reilly and Chatman 1986	
Involvement	Barge and Schlueter 1988, Buchanan 1974	
Loyalty	Barge and Schlueter 1988, Buchanan 1974	
Participation	Brewer 1996, Brewer and Lok 1995, Iverson and Roy 1994	
Social rewards	Brewer 1996	
Adequate resources	Brewer 1996	
Training	Gregersen and Black 1992	
Organisation sponsor	Gregersen and Black 1992	
Organisational culture	Lahiry 1994	
Self efficacy	Brooks and Seers 1991	
Team cohesion	Brooks and Seers 1991, Iverson and Roy 1994	
Supervisor behaviour	Brooks and Seers 1991, Iverson and Roy 1994	
Climate	Brooks and Seers 1991	
Attitude towards organisation	McCaul et al. 1995	
Willingness	McCaul et al 1995	
Value acceptance	McCaul et al. 1995	
Job security	McCaul et al. 1995	
Environmental opportunities	Iverson and Roy 1994	
Personal investment	Steers 1977	
Task and identity	Steers 1977	

As shown in Tables 2 and 3, certain antecedents have attracted greater attention than others. For example, amongst the antecedents listed by Mathieu and Zajac (1990), the most commonly studied ones are age, education, position tenure, salary, role ambiguity, role conflict, task variety, job challenge, job scope, identification, job control and autonomy and organisation centralisation.

Antecedents which were not included in Mathieu and Zajac's (1990) review, but which have been frequently studied, include job satisfaction, equity, work values, motivation, expectation and promotion opportunities (see Table 3).

Organisational antecedents can be related to the organisation, the job or personal characteristics. Examples of antecedents related to the organisation include structure and size (Mathieu and Zajac 1990, Stevens et al. 1978), centralization (Bateman and Strasser 1984, Morris and Steers 1981), group attitudes, organisational dependability (Cook and Wall 1980, Mowday et al. 1979, Steers 1977), trust and managerial strategy (Brewer 1993), achievement of goals (Organ and Konovsky 1989), equity, group norms and work group attachment (Mowday et al. 1982), communication satisfaction (Ticehurst and Ross-Smith 1992) and work rewards (Mottaz 1988a).

Job ambiguity has often been found to be inversely related to job satisfaction (Miles et al. 1984, Rizzo et al. 1970), job involvement (Morris and Koch 1979) and commitment (Morris and Sherman 1981, Mottaz 1988b). Despite job scope or challenge being found to be positively associated with commitment (Stevens et al. 1978), an increase in job scope or challenge could often lead to an increase in job ambiguity (Buchanan 1974, Steers 1977).

Personal and demographic characteristics (Steers 1977) such as need for achievement (Brief 1980, Hollenbeck et al. 1989), need for fulfilment (Mowday et al. 1982) and personality factors such as motivation, work values and expectations (Kildron 1978, Koch and Steers 1978, Morris and Sherman 1981, Steers 1977), have been shown to be positively correlated with organisational commitment. Demographic variables such as age (Mathieu and Zajac 1990, Michaels 1994, Williams and Hazer 1986), organisational tenure (Mathieu and Hamel 1989, Mathieu and Zajac 1990) and position tenure (Gregersen and Black 1992, Mathieu and Zajac 1990) have been found to be positively associated with organisational commitment. Mathieu and Zajac (1990) concluded that age is considerably more strongly related to attitudinal than to behavioural commitment. They further suggested that older workers are more satisfied with their job, receiving better positions and having "cognitively justified" their remaining in the organisation. Mathieu and Zajac (1990) also

found that the number of years in a position is significantly positively related to attitudinal commitment, and length of service is significantly positively related to behavioural commitment. Similar results were reported by Gregersen and Black (1992).

Another demographic variable which has attracted a great deal of attention is level of education. Educational level has been reported to be negatively correlated with organisational commitment (DeCotiis and Summers 1987, Mathieu and Zajac 1990, Mottaz 1988b, Mowday et al. 1982). It has been argued that this inverse relationship is attributable to the fact that more highly educated individuals have higher expectations. They are therefore more likely to feel that they are not being rewarded adequately by their employers, and so the level of organisational commitment is diminished (DeCotiis and Summers 1987).

In relation to organisational culture as antecedent to commitment, a weak association between organisational culture and commitment was shown recently by Lahiry (1994). Lahiry (1994) applied Lafferty's (1989) Organisational Culture Inventory (OCI) to investigate the link between organisational culture and commitment. This instrument has 12 dimensions which were grouped into three categories: constructive culture,

passive/defensive culture and aggressive/defensive culture. The characteristics which dominated the constructive culture were achievement, self-actualisation, and affiliation. The passive/defensive culture was characterised by dependence and avoidance. The aggressive/defensive culture was characterised by power and competition. Lahiry (1994) used Allen and Meyer's (1990a) organisational commitment measures (affective, continuance and normative) in his study. The results did not show strong relationhips between the different cultures and commitment although there was a weak link between passive/defensive culture and continuous commitment. This result is contrary to the popular assumption that constructive cultures would give rise to higher levels of commitment.

In summary, there is no consensus among researchers as to the relative importance of the different antecedents on commitment. However, the listings in Tables 2 and 3 show that age, education and job satisfaction have received considerably greater attention than other antecedents.

2.5 The Association between Organisational Commitment and Job Satisfaction

In most previous studies, job satisfaction and motivation are regarded as antecedents to commitment (for example, Iverson and Roy 1994, Price and

Mueller 1981a, Williams and Hazer 1986). However, Mathieu and Zajac (1990) have described job satisfaction as a correlate of commitment, while others such as Bateman and Strasser (1984), Curry et al. (1986), and Vandenberg and Lance (1992) have concluded that it is a consequence of commitment.

The above controversy can be observed in the results of the following studies. Bateman and Strasser (1984) conducted a longitudinal study of 129 nursing employees which revealed that organisational commitment is an antecedent to job satisfaction rather than an outcome of it. Furthermore, other variables such as environmental alternatives, job tension, need for achievement, centralisation, motivation and leader reward/punishment behaviour were found to be causally related to satisfaction, but not to commitment. The results of Bateman and Strasser's (1984) study are controversial because they are contrary to the findings of most previous studies (Price and Mueller 1981b, Steers 1977) which concluded that job satisfaction is an antecedent to organisational commitment. The above issue was further examined by Curry et al. (1986). Their results did not confirm Bateman and Strasser's (1984) findings, and Curry et al. (1986) concluded that the relationship between commitment and job satisfaction is still inconclusive. However, Iverson and Roy (1994) concluded that the level of attitudinal commitment among workers was strongly determined by job

satisfaction. In fact, they found that attitudinal commitment had 70% of variance explained by the employee's job satisfaction (p. 32). Thus, while the majority of organisational commitment studies have supported the view that job satisfaction is an antecedent of commitment, this position has not been accepted by all researchers.

2.6 Causal Models of Organisational Commitment

Williams and Hazer (1986) used a causal modelling approach to examine the determinants of organisational commitment and turnover. Their results revealed that age, pre-employment expectations, perceived job characteristics, and consideration dimension of leadership style, all influence job satisfaction directly and that job satisfaction is the mediator between organisational commitment and other antecedents (Figure 2). Although the above results are supported by Mathieu and Hamel (1989), these findings are not fully compatible with those of Price and Mueller (1981a) (Figure 3). Price and Mueller (1981a) concluded that only some antecedents of commitment were mediated by job satisfaction, and that some antecedents (for example, professionalism and kinship responsibility) have a direct effect on organisational commitment.

FIGURE 2: WILLIAMS AND HAZER MODEL (1986)

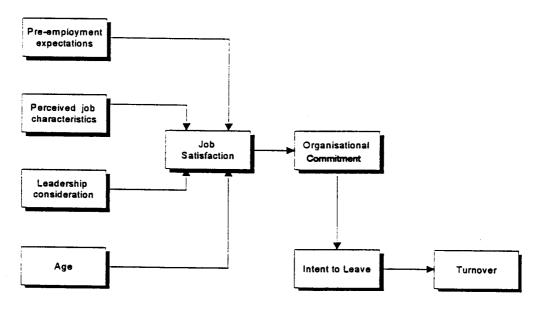
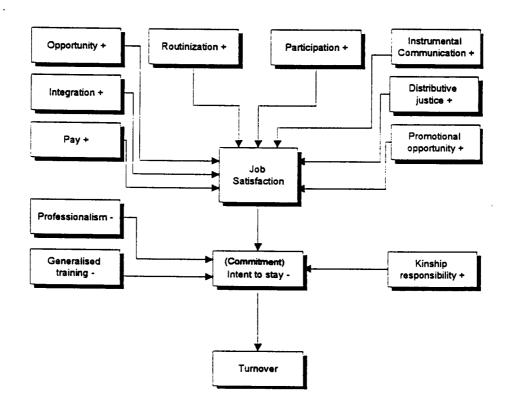


FIGURE 3: PRICE AND MUELLER MODEL (1981A)



The study by Mueller et al. (1992) showed that variables such as job satisfaction and work values and rewards have the greatest influence on organisational commitment. These results are compatible with the findings of previous studies (Brief and Aldag 1980, Mathieu and Hamel 1989, Price and Mueller 1981a, Williams and Hazer 1986), which showed the link between job satisfaction and organisational commitment.

Although antecedents such as organisational culture and subculture are noticeably absent in these commitment studies, some studies such as those of McCaul et al. (1995) and Mueller et al. (1992), have attempted to address these issues by using terms such as values and beliefs. They found that a positive relationship existed between commitment and certain values and beliefs of the organisation. This finding has highlighted the need for further investigation into the relationship between organisational culture and commitment.

Brewer (1993) examined employees commitment in relation to the level of consent to, and conflict with, managerial strategy. In Brewer's (1993) model of commitment, managerial strategy was seen to be driven by cultural and human resource strategies. Also, commitment was highly dependent on managerial

strategies and the level of employees' participation. In this model, although managerial strategy is not the same as leadership, the attributes and skills required in leadership could be seen as an essential part of managerial strategy.

2.7 Organisational Commitment in Nursing

Commitment in nursing has always been of great interest in the health care sector, largely because of the enormous costs involved in staff turnover. Thus, nursing turnover studies have received considerable attention (Battersby, Cavanagh 1989, Hemmings, Kermode, Parasuraman 1989, Price and Mueller 1981a, Sutherland and Cox 1990, Taunton et al. 1989). Despite the fact that nursing turnover is reported to be higher than that found in the retail, manufacturing or management fields, the reported predictors of turnover do seem to follow a similar pattern (Cavanagh 1989). A number of nursing studies have investigated the influence of antecedents on "intent to stay", which has generally been considered as equivalent to commitment. For example, Price and Mueller (1981b) provided an integrated model of nursing turnover which included job satisfaction and intent to stay as antecedents. In the Price and Mueller (1981b) model, they regarded intent to stay as equivalent to commitment (the results of this study were discussed previously). Table 4

TABLE 4: ANTECEDENTS USED IN NURSING COMMITMENT STUDIES

Antecedents	Studies		
Social integration	Taunton et al. (1989)		
Education	Brief and Aldag (1980), Taunton et al. (1989)		
Opportunity	Price and Mueller (1981a), Taunton et al. (1989)		
Rountinization	Price and Mueller (1981a). Taunton et al. (1989)		
Participation	Price and Mueller (1981a), Taunton et al. (1989)		
Communication	Price and Mueller (1981a), Taunton et al. (1989)		
Pay	Brief & Alutto (1980), Price & Mueller (1981a), Taunton et al. (1989)		
Distributive justice	Price and Mueller (1981a), Taunton et al. (1989)		
Promotional opportunities	Brief and Aldag (1980). Price and Mueller (1981a), Taunton et al. (1989)		
Professionalism	Price and Mueller (1981a), Taunton et al. (1989)		
Motivation to manage	Taunton et al. (1989)		
Power	Taunton et al. (1989)		
Intluence	Taunton et al. (1989)		
Leadership style	McNeese-Smith (1995), Taunton et al. (1989)		
Centralized training	Price and Mueller (1981a)		
Job satisfaction	Blegen (1993), McNeese-Smith (1995), Price and Mueller (1981a), Taunton et al. (1989)		
Kinship responsibility	Price and Mueller (1981a), Taunton et al. (1989)		
Organisational attachment	Brief and Aldag (1980)		
Supervision	Brief and Aldag (1980)		
Job scope	Krausz et al. (1995)		
Withdrawal intention	Krausz et al. (1995)		
Burnout	Krausz et al. (1995)		
Age	Brief and Aldag (1980). Krausz et al. (1995)		
Education	Krausz et al. (1995)		
Rank	Krausz et al. (1995)		
Position tenure	Brief and Aldag (1980)		
Trust	Brewer and Lok (1995)		
Identification	Brewer and Lok (1995)		

provides a list of common antecedents included in various nursing commitment. In addition to the antecedents mentioned in the Price & Mueller's (1981b) study, factors such as trust and identification (Brewer and Lok 1995) and leadership (McNeese-Smith 1995) were also reported to be significantly related to nursing commitment.

A common criticism of nursing commitment research (McCaul et al. 1995) is the failure to study different subgroups within an organisation's work force. That is, the subcultures of nurses' work environments may have different impact on their level of commitment. Furthermore, nurses working in different types of hospitals (for example public, private and psychiatric) may exhibit different levels of commitment. This is due to the different cultures which exist in these three types of hospital. Few studies have examined the commitment and turnover levels across these types of hospitals.

2.8 The Use of Ward Commitment in this Study

The study reported in this thesis measures nurses' commitment to their wards rather than to their hospitals. This approach is taken because ward commitment is likely to be more strongly related to nurses' job satisfaction, the nature of the

work performed by nurses in the ward and other variables of relevance to management such as turnover and absenteeism. Professional nurses often exhibit greater loyalty and commitment to their specialty areas of work, rather than to the hospital (Prestholdt et al. 1987). They tend to identify themselves with their area of nursing (for example, orthopaedic nursing, renal nursing), which is ward or unit based. They have special clinical interests, expertise, shared values and beliefs in their job or specialty area where, very often, they have worked in for some years and have acquired a significant level of responsibility. The concept of identification is closely related to that of organisational commitment (Steers 1977). If nurses leave the ward because of problems associated with organisational or job/role conflicts, they usually leave for a similar specialty area in another hospital (Mobley et al. 1979, Prestholdt et al. 1987). They feel they can make a contribution to the ward because their skills are best valued in those specialty areas. A recent longitudinal study by Krausz, Koslowsky, Shelon and Elyakim (1995) examined the intention of 146 nurses to withdraw from the ward, hospital or profession. Their findings supported a progressive model of withdrawal intention. This result suggested that a nurse first decides to leave the ward, then the hospital, and finally the profession. Thus, nurses' dissatisfaction with the ward would be the initial critical step for leaving. This finding further supports the decision, in the

present study, to examine nurses' commitment to their wards rather than to the hospitals.

With the current trend towards decentralisation and empowerment in hospital structures, the study of ward commitment is of increasing interest, because decision making concerning nurses' work load and job skills is occuring at the ward level. It is also more meaningful to measure the level of ward commitment rather than hospital commitment because the majority of variables used in this study are ward related. The results will be most applicable to manage change at this level.

2.9 Review of Commonly Used Instruments to Measure Organisational Commitment

Among researchers studying organisational commitment, there is considerable interest in the measurement of this construct (Allen and Meyer 1990a, Barge and Schlueter 1988, Morris and Sherman 1981). A review of the literature revealed that there are four popular instruments used by researchers. The various dimensions underlying organisational commitment measurements are summarised in Table 5 (Barge and Schlueter 1988, p. 129).

TABLE 5: UNDERLYING DIMENSIONS OF ORGANISATIONAL COMMITMENT (FROM: BARGE AND SCHLUETER 1988, P. 129)

Underlying Dimension	Mowday et al. OCQ (1979)	Cheney OIQ(1983)	Cook & Wall OCI (1980)	Hrebiniak OCM(1972)
Identification	X	X	X	Х
Exertion of effort	X		Х	
Loyalty				
• pay		Х	X	Х
• freedom				X
• creativity		,		Х
• friendliness				X
• work	Х			
• general	X	Х	Х	

Table 5 reveals that these four commitment questionnaires measured different underlying dimensions of organisation commitment. For instance, the instrument formulated by Mowday et al. (1979) emphasised the dimensions of identification, exertion of effort and, work and general within loyalty. In contrast to the tool suggested by Mowday et al. (1979), the instrument proposed by Hrebiniak (1972) focussed on the dimension of identification and pay, freedom, creativity and friendliness within loyalty. Further examination of items related to these questionnaires revealed that items within these dimensions, identification, effort, work and general within loyalty, were more related to attitudinal commitment than items related to pay, freedom, creativity

and friendliness within loyalty, which mainly described the behavioural aspects of commitment.

The Organisational Commitment Questionnaire (OCQ) of Mowday, Steers and Porter (1979) is based on the assumption that organisational commitment is primarily rooted in the attitudes of an individual, and to a lesser extent, in commitment-related behaviour. This questionnaire is consistent with the popular attitudinal approach used in organisational commitment studies. The questionnaire is characterised by three factors (Barge and Schlueter 1988, p. 118). The first is a strong belief in, and acceptance of, the organisation's goals and values which is represented as "identification" (Table 5). The second is a willingness to exert considerable effort on behalf of the organisation which is represented as "effort." The third is a strong desire to maintain membership in the organisation which is represented as the "work" and "general" components of loyalty (Barge and Schlueter 1988, p.118). Consistently high internal reliability coefficients (Cronbach alphas), ranging from 0.82 to 0.93 for the fifteen item questionnaire, have been obtained in a number of studies, Also, a study of the instrument's discriminant validity by Barge and Schlueter (1988) showed that the construct measured by the questionnaire is distinct from those measured by Lodahl and Kejner's (1965) Job Involvement Scale, Steers and

Braunstein's (1976) Career Satisfaction Measure and Smith, Kendall and Hulin's (1969) Job Satisfaction Index.

Cheney (1983) developed the Organisational Identification Questionnaire (OIQ). This questionnaire is based on the relationship between employee identification with the employing organisation and on-the-job decision making. The following items represent the areas of measurement in the questionnaire. First, "I often describe myself to others by saying, 'I work for.......' or 'I am from......'," represents "identification". Second, "I would probably continue working foreven if I didn't need the money" represents the "pay" component of loyalty. Third, "in general, the people employed by are working toward the same goals" represents the "general" component of loyalty (Barge and Schlueter, 1988 p.122). A close examination of items measuring these dimensions revealed that they are mainly related to attitudinal commitment. The reliability index (Cronbach alpha) for this twenty five item instrument is 0.95. The OIQ has a high degree of content validity (Cheney 1983). However, there were no discriminant or predictive validities reported in the Cheney (1983) study.

Cook and Wall's (1980) Organisational Commitment Index (OCI) measures the three components of organisational commitment (identification, effort and

loyalty) and the items used in the questionnaire mainly reflect the attitudinal aspect of commitment. For example, "I am quite proud to be able to tell people who I work for" measures "identification". The item, "I'm not willing to put myself out just to help the organisation" taps "effort". The item, "Even if the firm were not doing too well financially, I would be reluctant to change to another employer" measures the "pay" component in loyalty (Barge and Schlueter, 1988 p. 125). The reliability (Cronbach alpha) for this nine item instrument is 0.79. Discriminant validity was partially demonstrated by its moderate correlation with job satisfaction (0.52-0.62).

Hrebiniak and Alutto's (1972) twelve items Organisational Commitment Measure (OCM) focuses mainly on the likelihood of individuals leaving the organisation because of the lack of pay, freedom, creativity and friendliness in the work place (Barge and Schlueter 1988, p. 126). The internal reliability for this twelve item questionnaire was found to be 0.8. They considered its discriminant validity and predictive validity to be inconclusive.

Although all four instruments in Table 5 achieve acceptable levels of internal reliability, and they all emphasise identification as an important element in commitment, it is the Mowday et al. (1979) OCQ instrument whose convergent and predictive validities have been most firmly established in past studies.

Mowday's et al. (1979) (OCQ) instrument was chosen for the study reported in this thesis. The instrument was chosen on the grounds of its reported reliability and validity, and its wide acceptance in previous studies. Also, little normative data exists for these instruments except for the one by Mowday et al. (1979).

More recently, Allen and Meyer (1990a) developed an instrument to measure organisational commitment based on their three component model of organisational commitment: affective, continuous and normative commitment. It has been argued (Dunham et al. 1994, Somers 1995) that the instrument primarily assesses the affective dimension of commitment and provides results similar to those from the instrument by Mowday et al. (1979).

2.10 Summary

This chapter provided a review of the different definitions of organisational commitment, ranging from those with an attitudinal perspective to those with a behavioural one. The differences between organisational, work and career/professional/occupational commitment were considered. The chapter examined the antecedents used in various organisational commitment studies and highlighted some antecedents frequently mentioned in these studies. The different categories of organisational commitment antecedents put forward by

their authors were highlighted. The chapter further examined the various causal models of organisational commitment, and the relevance of organisational commitment in nursing was also discussed. Finally, this chapter provided an analysis of a number of instruments commonly used by researchers in organisation commitment, and the decision to select the instrument by Mowday et al. (1979) for this study was justified.

Chapter 3

Organisational Culture, Subculture, Leadership Style And Job Satisfaction

3.1. Introduction

The antecedents of organisational commitment investigated in this thesis includes measures of organisational culture, subculture, leadership style and job satisfaction.

The purpose of this chapter is to:

- 1. Discuss the schools of thought on the nature of organisational culture
- 2. Discuss the different definitions of organisational culture
- 3. Discuss the different conceptual frameworks of writers on organisational culture
- 4. Differentiate between organisational culture and subculture
- 5. Differentiate between organisational climate and culture
- 6. Discuss organisational culture and subculture in nursing

- 7. Discuss models of leadership style
- 8. Review the literature on leadership in a nursing context
- Discuss the concept of job satisfaction and its relationship with organisational commitment
- 10. Discuss past research on job satisfaction in nursing
- 11. Examine the relationships between organisational culture, subculture, leadership style, job satisfaction and commitment.

The chapter is divided into four main parts. The first part deals with issues related to organisational culture, subcultures, climate and cultural fit (sections 3.2 to 3.8). The second part discusses the different approaches to leadership style (section 3.9 and 3.10). The third part focuses on issues related to job satisfaction (section 3.11 and 3.12). The final part of the chapter discusses the relationships between organisational culture, job satisfaction and organisational commitment (section 3.13 to 3.15). Section 3.16 considers the differences between various types of hospitals.

3.2 Definitions of Organisational Culture

The concept of organisational culture has been discussed and researched for many years. According to Hofstede et al. (1990), the term "organisational

culture" first appeared in Silverzweig and Allen's (1976) paper. Since then, there have been numerous attempts by other researchers, academics and practitioners to define organisational culture. The concept was further promoted by writers such as Deal and Kennedy (1982) and Peters and Waterman (1982). Amongst anthropologists, sociologists, social psychologists, organisational psychologists and managers, organisational culture was defined from different perspectives, leading to different definitions.

Anthropology and organisational sociology, together with many other intellectual traditions, have had a considerable influence on the development of the broad field of organisational theory. The concept of organisational culture has its roots in these two disciplines. A review of the organisational culture literature suggests that the popular approach to examine this concept is to focus on organisational culture as social constructs. These social constructs can be seen as societal value systems, values, beliefs and assumptions of organisations, which can be integrated into the socialisation process of organisations.

Early researchers variously defined organisational culture as a set of expected behaviours that are generally supported within a group (Schwartz and Davies 1981, Silverzweig and Allen 1976, Van Maanen 1976 and 1977), values or

social ideals and beliefs manifested by symbolic devices such as myths (Boje et al. 1982), rituals (Deal and Kennedy 1982), stories (Hickman and Silva 1984), legends (Wilkins and Martin 1980) and specialised language (Andrews and Hirsch 1983). Researchers such as Schein (1983 and 1984) and Schneider (1990) saw culture as patterns of "assumptions", or "expectations" (Schwartz and Davies 1981). Deal and Kennedy (1982) encapsulated organisational culture as "the way we do things around here". Peters and Waterman (1982) described organisational culture as shared values conveyed by an organisation's stories, myths and legends. Their work highlighted the importance of organisational culture in successful organisations. The assumption that organisations can have distinct cultures, and that top management has a great deal of influence in shaping them, has generated enormous interest among social scientists and organisational researchers. The researchers' interpretation and use of the term organisational culture is strongly influenced by their disciplinary background. A selection of the best-known definitions of organisational culture is provided in Table 6.

TABLE 6: ORGANISATIONAL CULTURE DEFINITIONS

Author/s	Year	Definition	
Van Maanen and Schein	1977	"values, beliefs, and expectations that members come to share (p.37).	
Schwartz and Davies	1981	"a pattern of beliefs and expectations shared by the organisation's members. These beliefs and expectations produce norms that powerfully shape the behaviour of individuals and groups in the organisation" (p.33).	
Ouchi	1981	"set of symbols, ceremonies, and myths that communicate the underlying values and beliefs of the organisation to its employees" (p.4).	
Martin and Siehl	1983	"glue that holds together an organisation through shared patterns of meaning. Three component systems: context or core values, forms (process of communications - for instance, jargon), strategies to reinforce content (such as rewards, training programs)" (p.52).	
Sathe	1983	"a set of important understandings that members of a community share in common" (p.6).	
Wallach	1983	"the shared understanding of employees as to how things are done" (p.28).	
Wilkins and Ouchi	1983	"the taken-for-granted and shared meanings that people assign to their social surroundings" (p.25).	
McClure et al.	1983	"the total atmosphere of the work place" (p.20).	
Schein	1985b	"the pattern of basic assumptions that a given group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid. and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to these problems" (p.6).	
Morgan	1986	"by influencing the language, norms, folklore, ceremonies, and other social practices that communicate the key ideologies, values and beliefs guiding action" (p.135).	
O'Reilly	1989	"from a management perspective, culture in the form of shared expectations may be thought of as a social control system" (p.12)	
Denison	1990	"the underlying values, beliefs and principles that serve as a foundation for an organisation's management system as well as the set of management practices and behaviours that both exemplify and reinforce those basic principles" (p.2).	
Kotter and Heskett	1992	"an interdependent set of values and ways of behaving that are common in a community and that tend to perpetuate themselves, sometimes over long periods of time" (p.141).	
Pheysey	1993	"a way of seeing that is common to many people" (p.3).	

Author/s	Year	Definition
Brown	1995	"refers to the pattern of beliefs, values and learned ways of coping with experience that have developed during the course of an organisation's history, and which tend to be manifested in its material arrangements and in the behaviours of its members" (p.8).

From the above definitions, it is evident that the concept of organisational culture is a complex issue. While there is no consensus so far as to the definition of organisational culture, the majority of these definitions have shared some social constructs such as values, understandings, beliefs and expectations. The above conclusion is also supported by other researchers in this area (Brown 1995, Bloor and Dawson 1994, Schneider 1990, Trice and Beyer 1993).

3.3 Conceptual Frameworks of Organisational Culture

The debate on the nature of organisational culture can be seen from two perspectives. If one leans towards a positivistic structural or functional approach and conceptualises it as a variable which can be controlled, then one

sees it as something an organisation "has". On the other hand, if one applies a phenomenological world view, a process of enactment, a "root metaphor", or something emerging from social interaction, then one sees something an organisation "is" (Legge 1995, Ogbouna and Wilkinson 1990).

The organisation "has" perspective sees organisational culture as consisting of variables, subsystems or components. These components have been described in McKinsey's 7-S framework (Peters and Waterman 1982; see Figure 4).

Structure
Strategy
Shared values
Skills
Style

FIGURE 4: MCKINSEY'S 7-S FRAMEWORK

In this framework, components have certain functionality and management can control and integrate different components to form strong or weak cultures. As Meek (1988) stated:

"..... 'strong' cultures are somehow more likely to be associated with effectiveness than are 'weak' cultures, and strong cultures can be deliberately created" (p. 196).

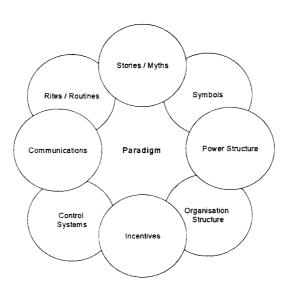
[and]

"Organisational cultures are created by leaders, and one of the most decisive functions of leadership may well be the creation, the management, and - if and when that may become necessary - the destruction of culture" (p. 198).

Proponents of the organisation "has" perspective assert that organisational members must come to know and share a common set of expectations. These must in turn be consistently valued and reinforced across divisions and management levels (O'Reilly 1989, p. 13). Such a proposition, however, ignores evidence that large complex organisations are likely to have subcultures with different norms of behaviour.

In contrast, culture may be conceptualised as something emerging from social interaction - something an organisation "is" (Gregory 1983, Smircich 1983). It is a label or metaphor for, not a component of, the total work organisation (Bate 1994, p.12). According to Smircich (1983), it can be seen as a system of shared cognitions, of knowledge and belief. It is both produced and reproduced through the negotiating and sharing of symbols and meanings. The key aspect of this view is that organisational culture is synonymous with organisations (organisations are cultures) which is generally represented by Johnson's "cultural web" (Hendry 1994; see Figure 5).

FIGURE 5: JOHNSON'S CULTURAL WEB



In the cultural web, all the various aspects of an organisation are interwoven to create a single picture of the organisation and all its facets, or in other words its culture. Supporters of the "metaphor" concept argue that the definition for culture is interchangeable with the definition of "organisation" (Bate 1994, p. 13).

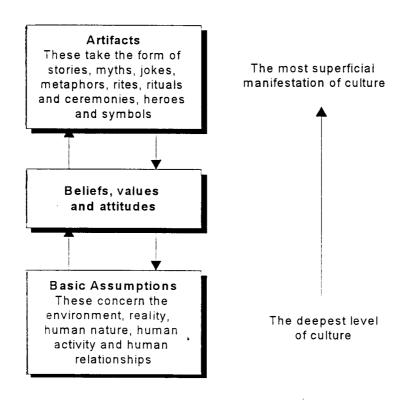
An influential and widely accepted account of organisational culture was given by Schein (1984, 1985b, 1991). He argued that organisational culture can be viewed through its various manifestations and can be seen at three different levels (see Figure 6). Level 1 represents the artefacts and creations of the organisation, such as its symbols and rituals. Level 2 represents the more visible, consciously held values, beliefs etc., that people give as reasons for behaving as they do. Level 3 represents the basic underlying assumptions, not necessarily conscious, within the organisation, which are the ideas and beliefs that are ingrained in the employees of the organisation. Schein (1984, 1985a) suggested that it is level 3, which represents the basic assumptions and beliefs, that forms the essence of the organisational culture. He also argued that level 3 exerts a greater influence on the individual's behaviour than do the observable elements of levels 1 and 2. His three level analysis of organisational culture has received wide acceptance among organisational researchers (Kilmann et al. 1985, Koberg and Chusmir 1987, Louis 1985).

A similar analysis of organisational culture was put forward by Trice and Beyer (1993) in which there are two components of organisational culture: substance and form. Substance consists of a shared system of beliefs, values and norms which corresponds to Schein's (1985a) levels 2 and 3. Form is the observable ways that members of a culture express cultural ideas, and is analogous to Schein's (1985a) level 1. Although Trice and Beyer (1993) and Schein (1985a) describe different components of organisational culture, the two approaches are similar in that their categories relate to the extent to which the elements are directly observable, or are more underlying and hidden.

Ott (1989) explored Schein's three level approach (Figure 6) and subsequently formulated a typology of elements of organisational culture according to Schein's (1984) analysis (Appendix 1). Ott (1989) adopted Schein's (1984) levels of organisational culture but formulated an additional level which he labelled as patterns of behaviour (1B in Appendix 1). Level 1B of organisational culture includes such elements of organisational culture as habits, patterns of behaviour, norms, rites and rituals. These elements are consistent with Schein's conceptualization of organisational culture. Ott's typology of elements (similar to Schein's three levels) was also used to classify previous studies of organisational culture (Appendix 2). Although there is no

unanimous agreement on the definition of organisational culture, Schein's (1984) approach has been generally accepted and followed in many organisational culture studies, such as those of Hoy and Miskel (1987) and Schneider (1990).

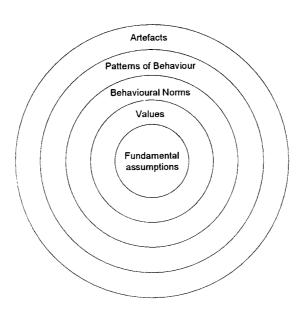
FIGURE 6: THREE LEVEL APPROACH TO ORGANISATIONAL CULTURE AND ITS INTERACTION (SCHEIN 1985A)



Schein's (1985a) concept of three levels of organisational culture was further extended in Schneider's (1990) five layers model. Schneider's (1990)

configuration (Figure 7) saw culture as layers of processes ranging from the superficial and readily observable element, to the deeper, unconscious elements, such as hidden assumptions. Schneider (1990, p.157) described the elements of organisational culture as being readily accessible at the perimeter and difficult to assess at the core of fundamental assumptions. A similar multi-dimensional model of culture was put forward by Kilman, Saxton, Serpa and Associates (1985).

FIGURE 7: SCHNEIDER'S LAYERS OF ORGANISATIONAL CULTURE (SCHNEIDER 1990, P.157)



Another researcher, Sackman (1991), suggested that organisational culture can be viewed from three broad perspectives: variable, cognitive or holistic. However, Sackman (1991) argued that the boundaries between these three perspectives are not clear cut and overlap exists. The variable perspective focuses on expressions of culture in organisations which may take the form of verbal and physical behaviours or practices, of artefacts, and of their underlying meanings. These expressions emphasise cultural manifestations that are tangible. Culture is defined as "the way we do things here" (Deal and Kennedy 1982, p. 12) and focus is placed on observable behaviour in the organisation. These behaviours include rites, rituals, ceremonies, speeches, jargon, stories, legends, myths or humour as well as collective verbal behaviours. Within this perspective, culture is seen as something that an organisation "has" (as discussed in section 3.3, Figure 4). Culture is treated as another organisational variable that may be controlled once it is known. Some researchers in the managerial literature refer to this perspective as "organisational symbolism" (Sackman 1991, Schein 1984). Sackman's (1991) variable perspective can be seen as an emphasis on Schein's (1984) level 1 category of organisational culture which deals with symbolism (i.e., artefacts and patterns of behaviour).

The cognitive perspective focuses on ideas, concepts, beliefs, values or norms. From this perspective, culture refers to what humans learn, what they have in their minds, rather than how they behave. Some researchers refer to a set of shared meanings or a set of important understandings shared by a community. Thus, researchers who focus on the intangible aspects of culture tend to treat organisations as being defined in terms of their cultures. This perpective can be seen as similar to the "is" approach of organisational culture. This view of culture is supported by Schein (1985a), who defined organisational culture as:

"The pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (p. 6).

The cognitive perspective can be seen as being primarily concerned with Schein's levels 2 and 3 categories of organisational culture (beliefs, values and assumptions).

The holistic perspective of culture integrates both the variable and cognitive approaches. Holistic culture in the management literature can be seen as a general constellation of beliefs, ceremonies, customs, value systems and behavioural norms that are unique to each organisation. This set of organisational beliefs, values and actions reflects the implicit and emergent patterns of behaviour and emotions characterising life in the organisation (Sackman 1991, p. 18).

However, a review of the different approaches (Sackman 1991, Schein 1984, Schneider 1990) to organisational culture has shown that while many researchers define culture from the holistic perspective, few in their actual research combine the "variable" and "cognitive" approaches. They tend to focus their research on either the visible manifestations (i.e., a "variable" approach) or else take more of a "cognitive" approach which is concerned with the beliefs, values and assumptions in the organisation.

With reference to the above analysis on approaches to organisational culture, it can be seen that the different perspectives to organisational culture can be incorporated into (at least one aspect of) the Schein's (1984) three levels approach. Indeed, Schein's (1984) definition and conceptual framework of organisational culture remains the dominant conceptual framework for

organisational culture and is widely used and accepted in organisational studies (Hatch 1993).

3.4 Functional Aspects of Organisational Culture

Apart from a consideration of the different approaches to, and perspectives on, organisational culture, it is also important to examine the functional aspects and outcomes of organisational culture. This is because management's interest is to integrate employees social and membership behaviours in the organisation in order to shape the desired culture outcome (Pheysey 1993, Trice and Beyer 1993).

The functional approach describes organisational culture as a social force which promotes membership behaviour. This social force controls patterns of organisational behaviour by shaping members' cognitions and perceptions of meanings and realities, providing affective energy for mobilisation, and identifying who belongs and who does not. The functional perspective provides an important understanding of the functions that organisational culture performs, and explains why organisational cultures continue to exist. Although it is the functional aspects of organisational culture which are of most interest to managers, Trice and Beyer (1993) have argued that a strong organisational

culture could be dysfunctional. The drawbacks would include unwillingness to change, coloring the interpretation of information, encouraging behaviour that few people do well, and encouraging ego involvement that heightens the emotionality of events (Trice and Beyer 1993). Despite the difficulties, it has been suggested that managers often like to see their organisation functioning according to their objectives and are more concerned with performance and outcomes (Brown 1995, Pheysey 1993).

Being concerned with the functional aspects of organisational culture, the managerial literature focuses on its relation to organisational performance and other outcomes. Researchers have also directed efforts to the study of outcomes of organisational culture (Louis 1985, Pheysey 1993), such as performance and subsequent organisational change.

In relation to performance and outcomes, organisational culture serves to govern member behaviour. Members are expected to adhere to the standards defined by the culture, so one of the outcomes of culture is control. Through this control, organisational culture fulfils its potential in promoting more desirable organisational outcomes. An example would be the Hawthorn studies. In the Hawthorn studies, the existing culture of the work unit exerted pressure on workers to stay within the accepted output limits (Louis 1985, Vecchio et

al. 1992). Peters and Waterman (1982), in their well-known study of outstanding business organisations, maintained that the excellent growth and earnings record of those companies over a twenty year period was due to their people oriented cultures. In these business organisations, members are treated with dignity and respect, as partners in an enterprise. Thus, in these two examples, it can be seen that the control function of organisational culture and its outcomes, such as organisational performance, are closely linked.

More recently, Pheysey (1993) discussed control as an outcome of organisational culture in the workplace. She suggested that organisational culture prescribes the way in which one does things in an organisation and concluded that organisational culture affects the controlling mechanisms of the organisation, the structure of the organisation, job design within the organisation, decision making strategies, group behaviour and leadership in the organisation. Table 7 shows the methods of control which Pheysey (1993) suggested are most likely to operate in each of Hofstede's (1980) four types of organisational culture. With reference to Table 7, it is apparent that in an organisation with a "role culture", hierarchical control is most likely to be found. An organisation with a "support culture" would rely more on collaboration.

TABLE 7: HOFSTEDE'S FOUR TYPES OF ORGANISATIONAL CULTURE (PHEYSEY 1993, P.24)

Contingencies	Method of Control		
	Control by regulation	Control by appreciation	
	Role Culture	Achievement Culture	
Internal contingencies	Hierarchical control via impersonal regulations	Self-control (personal accountability for delegated achievements)	
	Closure Separation	Problem solving Compromise	
	Power Culture	Support Culture	
Internal contingencies	Hierarchical control via direction and supervision	Collaborative control with mutual accountability	
External contingencies	Conquest Confrontation	Dynamic connectedness Transformation	

A similar approach using the three types of cultures (innovative, supportive and bureaucratic), and relating these to organisational outcomes, was used by Koberg and Chusmir (1987). They surveyed a sample of 165 managers from a variety of retail, service and industrial organisations. The results supported the proposition that different types of culture produce different outcomes such as different levels of performance and degrees of achievement of organisational goals. Their measurement of organisational culture was based on the earlier work of Wallach (1983), who defined the above three culture types and developed an index for their measurement. Wallach (1983) found that the

cultural "fit" between employees' values and the workplace culture is an important element which contributes to turnover. Further evidence of a relationship between organisational culture and turnover is provided in studies by Mobley, Stanley and Hollingsworth (1978), Pfeffer (1991), and Wagner, Pfeffer and O'Reilly (1984). Since it is generally accepted that organisational commitment and turnover are related (Price and Mueller 1981a, Williams and Hazer 1986), results of turnover studies such as these are relevant to the issue of the relationship between culture and organisational commitment.

The relationship between culture and various outcomes has also been demonstrated in the health care system, especially with nurses (del Bueno 1986). A bureaucratic culture is often associated with nursing and the health care system (Bourn and Ezzamel 1986). The dysfunctional consequences of such a culture, for example, an increase in absenteeism, lack of innovation, high turnover and job dissatisfaction, have long been established (del Bueno 1986, Kramer and Schmalenberg 1988).

In conclusion, despite the complexity of the concept of organisational culture and the lack of consensus on its definition, management research has good reasons to focus on how culture can affect organisational outcomes such as turnover, performance, job satisfaction and goal achievement. It is through a

good understanding of organisational culture that organisational culture could be manipulated and changed in order to optimise the organisation's performance and productivity.

3.5 Organisational Culture and Subcultures

Although the existence of an organisational culture in most organisations is generally accepted, a homogeneous culture in an organisation is rarely the case in practice. Most organisations of any size contain many identifiable subcultures, the beliefs, values and assumptions of which may compete with those of the dominant culture (Brown 1995). One basis for subcultural growth is the structure of the organisation itself. Organisations are internally differentiated into smaller groups which allow different cultures to evolve. Physical separation, different professional training and distinct functions provide the environment for subcultures to occur. For example, it is common experience that marketing departments are very different from finance departments. Individuals in different departments share different experiences, face different sorts of problems and provide different sorts of solutions to them. Thus, the development of subcultures in organisations should not be too surprising. Furthermore, certain professional groups or work groups can also exhibit different subcultures. For example, managers in an organisation could

have quite different subcultures from those of the union employees. The important point here is that within many (if not most) organisations, an array of overlapping and sometimes competing cultures can be detected (Sackman 1992).

Martin (1992) questioned the idea of a uniform organisational culture and argued that organisational culture can be viewed from three distinct perspectives. These are integration, differentiation and fragmentation.

The integration perspective assumes that there is a single, dominant organisational culture and that all cultural manifestations are interpreted as consistently reinforcing the same theme. It is a "normative glue" and "the way we do things around here" (Deal and Kennedy 1982). It is what people have in common in the organisation. It focuses on the core values that are presumed to pervade and characterise the organisation as a whole (Dunford 1992). In managerial studies of organisational culture, the "vision" of the organisation is often seen as an integrative force which leaders apply to bring about optimal performance (Deal and Kennedy 1982, Hickman and Silva 1984, Schein 1985a).

However, owing to the complex and dynamic nature of organisations, this integration perspective of organisational culture may not accurately reflect the nature of all organisations. In contrast to the integration perspective, the differentiation perspective suggests that organisational culture may be characterised not by unity and harmony, but by diversity and even inconsistency, and focuses on the notion of subcultures (Martin 1992, Martin and Siehl 1983, Young 1989). Subcultures can exist in certain parts of the organisation, such as departments, hospital wards, and within groups based on characteristics such as class, gender and occupation. That is, "shared meaning" exists only between individuals in that group. This "shared meaning" may or may not be compatible with the overall organisational culture. In complex organisations, subcultures are likely to occur because of the level of specialisation and differentiation of tasks and processes. Different departments or wards provide a suitable environment for cultural diversity (Krausz et al. 1995, Sackman 1991, Van Maanen and Barley 1985, Yoon et al. 1994). For instance, in a hospital, the subculture which exists in a renal ward can be significantly different from that in an oncology ward, or from the hospital culture as a whole. The differentiation perspective allows cultural diversity and accepts that conflict may exist between subcultures. However, it is commonly held that subcultures will need to have some shared meaning with the overall

culture in order for the organisation to continue and perform effectively (Trice and Beyer 1993).

The fragmentation perspective focuses on ambiguity as the essence of organisational culture. No stable organisation-wide or even subcultural consensus exists. When consensus forms among these fragmented groups, it is usually issue-specific (Frost, Moore, Louis, Lundberg and Martin 1991). Thus in the fragmentation perspective, there is no shared meaning among members of the organisation, or among members of a part of the organisation. Trice and Beyer (1993) further comment that the fragmentation perspective should not be regarded as involving a type of culture since the term "culture" should only be reserved for situations in which there is some core of consensus (i.e. core values).

It is more comfortable for managers to assume the integration perspective because it is consistent with their desire to see their values adhered to by others in the organisation. Thus, management often wants to see organisational culture from an integration perspective. However, in a complex organisation, this may not be accurate. In the study of organisational culture, it is important to realise that different organisational cultures can exist in groups within the organisation. In this study, the use of the differentiation perspective is

considered more appropriate for the hospital setting because there is significant evidence that subcultures exist in hospital settings, particularly at ward levels (Collette-Jones 1990, Krausz et al. 1995).

Martin and Siehl (1983) suggested that subcultures can be of three types. These are enhancing, orthogonal and counterculture. In the enhancing subculture, individuals follow the principal beliefs and values of the dominant culture more closely than in the rest of the organisation. For example, long serving employees have a deeper commitment to the firm's culture than do newer recruits. Individuals who belong to an orthogonal subculture subscribe to the core values and beliefs of the dominant organisational culture while simultaneously accepting other unconflicting values and beliefs. For example, staff in a marketing department might both endorse their organisation's dominant culture and also retain their own culture identity of innovation and creativity. In contrast, in the counterculture environment individuals may present a direct challenge to the dominant culture. For example, in a merger, individuals who possess the original culture may resist the new dominant culture.

From the above discussion, it is apparent that the issue of subculture in an organisation should not be overlooked and the influence of subculture on an

individual's behaviour in the organisation could be substantial. For instance, an individual's behaviour can be affected by the conflict generated between the organisational culture and subcultures (Gregory 1983, Martin and Siehl 1983) and a subculture may take precedence over the organisational culture and gain commitment or control over the individual employee (Brewer 1993).

3.6 Organisational Climate and Organisational Culture

A construct which has an apparent similarity to organisational culture is that of organisational climate. Unfortunately, organisational climate has sometimes been confused with, or used synonymously with, organisational culture. However, it has been argued (Katz and Kahn 1966, Schneider 1990) that there is a clear and important distinction between organisational culture and climate.

A review of the literature demonstrates that organisational climate has generally been defined differently from organisational culture (Denison 1996, Jackofsky and Slocum 1988, Schneider et al. 1994). Organisational climate refers to the psychological environment in which the behaviours of individuals occur. Organisational climate focuses on measuring the perceptions of individuals about the organisation (Jackofsky and Slocum 1988) while organisational

culture emphases the beliefs, values and norms shared by groups of people (Brown 1995, Schein 1985b, Trice and Beyer 1993). Although some researchers of organisational culture (Cooke and Rousseau 1988, Hofstede et al. 1990, O'Reilly et al. 1991) use methods and concepts similar to those used in research on organisational climate, critics suggest that such attempts are bound to miss the essence of what culture is all about (Pettigrew 1990, Trice and Beyer 1993). Organisational climate may be conceptualised as the organisational mood. However, it is affected by events and characteristics of the organisation and it, in turn, exerts a strong influence on the behaviour of the organisation's members and on organisational culture (Turnipseed 1988). Organisational climate research is typically at a more superficial level than organisational culture research (Ryder and Southey 1990).

As with research on organisational culture, there have been numerous organisational climate studies which show the influence of climate on various organisational outcomes (Mukhi 1982, Schneider 1990, Schneider et al. 1994). Previous studies (for example, Glick 1985, Schneider 1990) of organisational climate viewed climate as members' perceptions of "observable" practices and procedures that are closer to the "surface" of organisational life. Organisational climate refers to a situation and its link to thoughts, feelings and behaviours or

organisational members. Thus, it is temporal, subjective and often subject to direct manipulation by people with power and influence.

In contrast, organisational culture has often focused on the importance of a deep understanding of underlying assumptions including meaning and the insider's point of view of the organisation (Schein 1985a). Thus, it is rooted in history, collectively held, and sufficiently complex to resist attempts at direct manipulation. Also, organisational climate and culture have generated distinct theories, methods and epistemologies. Research on organisational climate has a long history in the field of industrial and organisational psychology and tends to focus on quantitative procedures of data collection. Research in organisational culture has its origin in the field of anthropology and tends to rely on qualitative data for its measurement (Denison 1996, Hofstede et al. 1990). This issue was explored further by Owens (1987) who suggested that organisational climate is related to and subsumed under organisational culture. Organisational climate is shaped by the organisational culture and simultaneously exerts shaping forces upon that culture. Although organisational culture is difficult to observe at times, it certainly influences the attitudes and feelings of participants and the way they perceive events (Owens 1987).

More recently, Alvesson and Berg (1992) stated that the difference between organisational culture and climate is as follows:

"The great difference between studying an organisation's culture and its climate is that, in the first case, the focus is on the mechanism behind the construction of the corporate collective's pictures of the world, while in the latter case, there is a concentration on the experiences which culture - and/or other organisational circumstances- produce in individuals" (Alvesson and Berg, p. 88).

This analysis is compatible with definitions by earlier writers such as Kanter (1983) and Owens (1987) for whom these two concepts are considered related but conceptually different. It can be seen that organisational culture and climate are different, and that climate can more accurately be understood as a manifestation of culture (Schneider 1990). Organisational culture is mainly hidden and entrenched while organisational climate is at the surface.

When climate and culture are measured through surveys, organisational members tend to respond in terms of their beliefs (Cooke and Rousseau 1988). Climate surveys tap individuals' descriptive beliefs about what has occurred or

does occur within the organisation. Culture surveys tap their causal and normative beliefs which specify how people attain desired outcomes and how they should behave to fit in the organisation. Thus, inventories designed to measure cultures focus on norms or values and are distinct from climate surveys.

In relation to the measurement of organisational climate and culture, the foci of these two concepts are different (as explained earlier). The dimensions in various instruments of organisational culture (for example, Wallach's 1983 bureaucratic, innovative and supportive cultures) and their interpretations differ significantly from those dimensions found in climate surveys (for example, Mukhi's 1982 and Newman's 1973 leadership, role conflict etc.). The rationale for their differences was discussed previously.

Despite the above argument that organisational culture and climate should be viewed as different constructs, Denison (1996) suggested that the elements measured in both organisational culture and climate studies are similar. Denison (1996) argued that both organisational culture and climate literatures actually address a common phenomenon which focuses on the creation and influence of social contexts in organisations. Denison (1996) further suggested that the perceived differences between organisational culture and climate were mainly

derived from their respective theoretical foundations and these two research traditions should be viewed as differences in interpretation rather than differences in the phenomenon.

Although Denison's (1996) view of organisational culture and climate has highlighted the potential problems in differentiating the measurement and interpretation of these two constructs, it is considered that the theoretical framework and the meaning associated with organisational culture and climate remain fundamentally different.

3.7 Organisational Culture and Subcultures in Nursing

Most of today's large organisations and their relevant environments are complex and dynamic. Hospitals are typical of this category. To deal with the various requirements imposed by their internal and external environments, they consist of multiple subsystems and work groups. They also consist of people who are potential carriers of multiple types of cultural knowledge and who are likely to belong to several cultural groups. It is quite unlikely that all members of an organisation hold similar cultural memberships across the whole organisation (Sackman 1991). More likely, it is the differentiation perspective of organisational culture that more appropriately applies in the work

environment of the hospital. Although there has been considerable study of organisational climate and subclimate (Litwin and Stringer 1968, Pritchard and Karasick 1973, Schneider 1990), little attention has been given to organisational culture and subcultures, particularly in the health care sector.

Subcultures develop in complex organisations to reflect group values, attitudes, beliefs, situations and experiences (Robbins, Water-Marsh, Cacioppe and Millett 1994). Subculture can be typically defined by department designations and geographical separation. The culture of a group or ward (i.e., a subculture of the hospital) can include the core values of the dominant organisational culture plus additional values unique to members of the department or even core values of group members which are quite different from those of the organisational culture. This is typically the situation in a complex hospital organisation whereby the various professional groups or specialty areas often exhibit different values, beliefs and assumptions (Collette-Jones 1990, Duxbury 1984, Krausz et al. 1995, Sackman 1991, Trice and Beyer 1993).

In a hospital environment, there are many units, departments and work groups. Nurses employed in different work groups or wards may have different values and beliefs when compared to the overall organisational (hospital) culture. For example, del Bueno (1986) commented that successful nursing managers may

need to discover the assumptions and values that lie beneath the artefacts at both hospital and ward levels. They also need to discriminate between what people say they value and what in fact is valued. For instance, what people value in the ward may be entirely different from the hospital's goals and direction, and unearthing the real culture may include discovering the sacred cows and taboos. Bueno (1986) concluded that organisational culture and subcultures may be different in the same organisation. The differences should be carefully managed to optimise organisational outcomes. Smith (1987) suggested that individuals need to be able to decide what is the underlying, unspoken culture of the workplace and to fit in accordingly. Another interesting study was done by Collette-Jones (1990) who proposed that a "Theory X" manager may attempt to impose a uniform culture in the overall organisation (hospital), but at the ward level, a "Theory Y" manager may manage his/her ward differently. Hence, the difference in management styles can create conflict. In this situation, leadership style has been suggested to influence organisational culture and not vice versa (Sergiovanni and Corbally 1984, Trice and Beyer 1993). The integrative perspective of organisational culture is not always applicable in this situation and managers need to orient themselves to manage the existence of different subcultures.

Another study which demonstrated the relevance of subcultures was presented by Coeling and Wilcox (1988). They reported that different subcultures within an organisation affect a variety of nursing administration decisions. The differences in subcultures were not investigated in order to make judgements on whether a culture is good or bad, but rather to identify different strategies and outcomes. The above findings were further illustrated in a study by Kramer and Schmalenberg (1988). These authors conducted a study on 16 hospitals, revealing problems of incompatibility between organisational subcultures and management. Management had to apply different strategies to provide a satisfactory outcome in these subcultures. More recently, Thomas et al. (1990) surveyed 225 nursing personnel and found that nursing personnel did not have strong norms and expectations for any of the twelve culture styles used in the study. Moreover, the level of agreement among the nurses regarding these norms and expectations was low, further indicating a weak culture. These results provided management with an understanding of the underlying forces behind the weak culture among nursing personnel and enabled them to identify possible cultural change strategies.

In conclusion, the above discussion suggested that organisational subcultures can have different effects on organisational outcomes. Nursing is the largest professional group in a hospital environment. Since the influence of hospital

and ward cultures on ward commitment in nursing has received little attention so far, this study examines these issues.

3.8 Cultural Fit in Hospitals

Health services and hospitals are generally large organisations which are mostly bureaucratically structured, fairly rigid, complex and resistant to change (Clinton and Scheiwe 1995, p. 219). The work of Weber (1948) has provided valuable insights into the workings of complex organisations such as hospitals. The characteristics of a bureaucracy suggested by Weber (1948) include hierarchy, continuity as in career structure of salaried professionals, impersonality as in rules and regulations, and expertise with officials being selected according to merit (Beetham 1987, p. 11). The positive elements of bureaucratic organisations include control, order, efficiency and stability. However, these positive elements are offset by negative elements such as reluctance to change, employee dissatisfaction, lack of innovation, "red tape" and paper work, and power-seeking behaviour. Bureaucracies emphasise authority and often managers within such organisations are reluctant to relinquish any of their power and authority.

With the above background in mind, it is therefore not surprising to find that hospitals fit into a well-established bureaucratic culture. Although the size and complexity of many hospitals and the increasing specialisation of medicine have made it difficult to structure the organisation in any way other than bureaucratically, there is a movement recently to reduce the levels of hierarchy in hospitals to provide greater efficiency (Byrt and Bowden 1989).

Professional people, such as nurses, who normally work in hospitals are naturally subjected to the bureaucratic nature of hospitals. Also, nurses working in different types of hospitals are subjected to the different value systems and clinical practices of these hospitals. The socialisation processes of nurses in the different types of hospitals would determine how well these nurses fit into these organisations, that is, the cultural fit of these nurses in their working environment (Brewer 1993, Trice and Beyer 1993). Of course, nurses working in a professional bureaucracy like a hospital, may accept the broad organisational culture in which they work in but may disagree with the managerial strategies applied in the organisation (Brewer 1994). This is an example of a mismatch or gap between the expectation of the employees and management strategies. Such a mismatch would have considerable influence on employees' commitment to the organisation. Thus, cultural fit and commitment can be seen as related.

3.9 Theories of Leadership

The issue of leadership style and behaviour, and their relevance to management development, has received considerable attention (Bass 1990, Conger and Kanungo 1988, Hogan et al. 1994, Yukl 1989). Bass (1990) identified over 7500 studies on leadership in the organisational psychology and management literature. The different approaches to leadership, leadership style and leadership theories (Hughes et al. 1993, Hogan et al. 1994, Kotter 1990) have generated much debate but there is little consensus among experts on what exactly leadership is and how it should be measured. However, most definitions and approaches to leadership involve the constructs of influence, communication and goals. Among the many available definitions of leadership, the following examples are presented:

"The process of influencing the activities of an organised group in its efforts toward goal setting and goal achievement" (Stogdill, 1974, p.4).

"The existence of people with power to mobilise others and to set constraints" (Kanter 1983, p. 249).

"Persuading other people to set aside for a period of time their individual concerns and to pursue a common goal that is important for the responsibilities and welfare of a group" (Hogan, Curphy and Hogan 1994, p. 493).

The main approaches to leadership are shown in Table 8, which is derived from Schermerhorn et al. (1994, p. 497).

TABLE 8: DIFFERENT APPROACHES TO LEADERSHIP (SCHERMERHORN ET AL. 1994, P. 497)

Approaches	Characteristics	
Trait and personalities	Assumes leaders are born and not made. Leadership consists of certain inherited characteristics or personality traits. Focuses attention on the person in the job and not on the job itself.	
Behavioural	Considers the kinds of behaviour of people in leadership positions and the influence on group performance. Draws attention to the range of possible managerial behaviours and importance of leadership style.	
Contingency or situational	Leadership style depends on the situation. Interactions exist between the variables involved in the leadership situation and patterns of behaviour and there is no single style of leadership appropriate to all situations.	
Transactional	Involves an exchange between leader's goals and subordinates' needs and desires. It can be seen as contingent reinforcement whereby work is exchanged for pay and other rewards.	
Transformational	Leader motivates and inspires subordinates to perform to their maximum capacity. Leaders provide vision and direction for followers to achieve the stated results.	
Self leadership	Leader promotes the self direction of subordinates to maximise their own potentials, and their ability to manage their own work.	

There have been many research studies into the common traits of leaders. Despite the interest in this approach and the possibility of an agreed list of more specific traits or qualities such as intelligence, integrity, height and the like (Bass 1990, Stogdill 1974), it is generally agreed that the trait approach has not produced an adequate theory of leadership (Hogan et al. 1994). Also, regarding the issue of whether leaders are born or made, it is suggested that these should not be seen as mutually exclusive alternatives (Hughes et al. 1993).

The behavioural approach draws attention to the kinds of behaviour exhibited by people in leadership situations. One of the most extensive research studies on behavioural categories of leadership was the Ohio State Leadership Studies undertaken by Ohio State University (Stogdill 1974). The focus was the effects of leadership style on group performance. Results indicated two major dimensions of leadership behaviour, "consideration" and "initiating structure".

The findings of these studies suggest that some balance is needed between "consideration" and "initiating structure" in order to satisfy both individual needs and organisational goals. Also, the majority of studies concluded that "initiating structure" is normally associated with efficiency and effectiveness in task performance, while "consideration" is normally considered to be correlated

with job satisfaction and lower turnover (Alexander et al. 1982, Drennan and Witterauer 1987, Mathieu and Zajac 1990, McClure et al. 1983, Sheridan and Vredenburgh 1979).

Another behavioural approach to leadership was proposed by Blake and Mouton (1978) which utilized the well known Managerial Grid. The Managerial Grid has two dimensions which measure the manager's level of concern for people and concern for production. These dimensions are similar to those of "consideration" and "initiating structure" from the Ohio State Leadership Studies.

More recent studies have focused on the interactions between the variables involved in a leadership situation and patterns of leadership behaviour, and provide another general approach to the study of leadership. These contingency or situational theories are based on the belief that there is no single style of leadership appropriate to all situations. Major contingency models of leadership include Fiedler's (1967) leadership effectiveness model, Vroom and Yetton's (1973) decision making model, House and Mitchell's (1974) path-goal theory, and Hersey and Blanchard's (1977) situational leadership theory.

Fiedler's (1967) leadership effectiveness model brings into consideration the organisational variables which affect leadership effectiveness, suggesting that the "best" style of leadership will be dependent upon the variable factors in the leadership situation which include position power, task structure and leadermember relations. These factors can be changed to make the situation more compatible with the characteristics of the leader.

Another contingency model of leadership is provided by the leader-participation approach proposed by Vroom and Yetton (1973). This model provides a sequential set of rules to determine the appropriate form and amount of participation in decision making, dependent on different types of situations. It emphasises the need of a leader to modify his/her leadership style to suit the situation. This is an important fundamental deviation from Fiedler's viewpoint which recommends changing a situation to suit the leader.

A different contingency model of leadership is House and Mitchell's (1974) path-goal theory. This model is based on the belief that the individual's motivation is dependent upon expectations that increased effort to achieve an improved level of performance will be successful, and expectations that improved performance will be instrumental in obtaining positive rewards and avoiding negative outcomes. House and Mitchell (1974) suggest that the four

main types of leadership behaviour (directive leadership, supportive leadership, participative leadership and achievement-oriented leadership) can be practised by the same person at different times in varying situations. By using one of the four types of leadership behaviour, the manager attempts to influence subordinates' perceptions and motivation, and smooth the path to their goals.

The Hersey and Blanchard (1977) model presents a form of situational leadership based on the circumstances at the time and the "readiness" level of the people the leader is attempting to influence. This model draws attention to the importance of developing the ability, confidence and commitment of subordinates. The manager should help subordinates to develop in "readiness" to the extent that they are able and willing to go. This development should take place by adjusting leadership behaviour through the four styles of telling, selling, participating and delegating functions in the model.

More recent developments in theories of leadership are in the areas of transactional leadership (Bass 1985, 1990, Chemers and Ayman 1993, Sashkin and Fulmer 1988), transformational leadership (Bass 1985, 1990, Burns 1978, Dunham and Klafehen 1990, Parry 1996), and self leadership/super leadership (Manz and Sims 1989, 1991).

In transactional leadership, leader-follower relationships are based on a series of exchanges or bargains between leaders and followers. Transactional leadership recognises subordinates' needs and desires and then clarifies how these needs and desires will be met in exchange for enactment of subordinates' work role. Such an exchange between leader and subordinates provides subordinates with the motivation and a sense of direction to reach agreed upon objectives (Howell and Avolio 1993, Yammarino, et al. 1993). Transactional leadership is compatible with the path-goal theory (House 1971, House and Mitchell 1974) and the leader-member exchange theory of leadership (Kuhnert and Lewis 1987). For instance, a lower order transaction in the exchange theory of leadership involves the exchange of tangibles such as pay increases for goal accomplishment. A higher order transaction involves the exchange of intangibles such as loyalty and trust (Kuhnert and Lewis 1987). Transactional leadership can also be characterised as contingent reinforcement, where work is exchanged for pay. Other less involved forms of transactional leadership are active and passive management by exception, where leaders monitor negative subordinate deviations and intervene only when subordinates fail to meet objectives (Bass 1985, 1990).

Transformational leadership goes beyond exchange inducements for desired performance (Deluga and Souza 1991). Transformational leadership motivates

subordinates to do more than originally expected. Leaders described as transformational concentrate their efforts on longer term goals and develop vision to inspire followers (Bass 1985). Bass suggested that there are three factors that comprise transformational leadership. The first factor is the leader's charisma. This factor refers to the leader's personal magnetic and mystical qualities that can generate great reverent power and influence. The second factor is intellectual stimulation. Subordinates are encouraged to think, analyse problems and generate solutions. The third factor is individual consideration. The leader derives power by serving as a mentor to assist an individual to further promote the organisation's mission (Bass 1985, 1990). A study by Yammarino, Spangler and Bass (1993) revealed that there is a positive relationship between performance and transformational leadership but not with transactional leadership.

Transactional and transformational leadership styles should not be seen to represent incompatible modes of behaviour. Indeed, many transformational leaders also engage in transactional behaviours (Avolio and Bass 1988, Bass 1985, 1990, Howell and Avolio 1993).

Finally, Manz and Sims (1991) proposed the concept of self leadership or superleadership. The concept of self leadership or superleadership states that the essence of the challenge is to encourage followers to rely less on their leader's directions and to initiate and formulate their own objectives which are compatible with the goals and objectives of the organisation (Manz and Sims 1991). They proposed seven steps to promote self leadership behaviour among workers:

- 1. Be self motivated and self directional
- 2. Use self leadership behaviour as a model
- 3. Encourage self set goals through empowerment
- 4. Create positive thought patterns
- 5. Develop self leadership through rewards and constructive reprimand
- 6. Promote self leadership through teamwork
- 7. Facilitate a self leadership culture

The concept of empowerment and self motivation has received much attention in recent years and the effects of these on organisational commitment have been found to be positive (Spence-Laschinger and Shamian 1994, Wilson and Spence-Laschinger 1994).

Although the development of leadership theories spans the past few decades, there is still no simple conclusion about the best approach to leadership or leadership style. The contingency or situational approaches suggest that there is no one best style but rather a variety of possibilities, depending on the situation. The transformational approach, which does not focus on the importance of the situation, suggests that leaders can provide a sense of purpose and direction to others. That is, transformational leaders pay attention to the concerns and developmental needs of individual followers; they excite, arouse, and inspire followers to achieve group goals, producing levels of employee effort and performance that go beyond what would occur with a transactional approach alone. However, the transformational approach tends to focus heavily on leadership as an activity of the most senior managers and ignores the leadership that can emanate from other participants in the organisation.

In recent years, attention has been directed to the issue of whether leadership attributes and vision can influence the success and failure of the firm (Collins and Porras 1996, Katzenbach 1996, Sarros and Woodman 1993). The results of these studies revealed that leadership vision and strategies, followed by clearly communicated goals and objectives, are most important to the success of the organisation. Since the relationship between managerial strategy and employee commitment have been established (Brewer 1993), and leadership can be seen as part of managerial strategy, then it is reasonable to assume that leadership can affect the level of employee commitment. Finally, although

leadership is often regarded as one of the main determinants of organisational performance and outcomes (Sarros and Woodman 1993), other external factors such as economic and political climates, and internal factors such as organisational structure and culture must also be taken into consideration.

3.10 Leadership and Nursing

Nursing leadership style plays an important role in determining the quality of care provided in our health care system (Harrison 1981, Meighan 1990, Rouhiainen 1983, Singleton 1988, Stevens 1978). To achieve effective nursing leadership, nurses must equip themselves with the skills necessary to influence others in order to achieve the goals of an organisation. Historically, nurses are not educated for leadership and are often unprepared for the challenge of such a position (Bergman et al. 1981, Irurita 1988, Kalisz and Ryan 1982, Meighan 1990, Zander 1983). With the growing demand for quality health care, cost containment, productivity and job satisfaction, the issue of nursing leadership and effectiveness has received priority attention by hospital management and the nursing profession.

Many studies in the past have linked nurses' leadership style with job satisfaction, turnover and performance outcome (Cilliers and Phil 1989,

Duxbury 1984, Irurita 1988). For instance, Duxbury (1984) used Stogdill's leadership behaviour questionnaire (LBDQ) to determine the relationship between leadership styles and job satisfaction. The study showed a positive correlation between nurses' job satisfaction and their leaders "consideration" behaviour but not with "initiating structure" behaviour. Another study by Cilliers and Phil (1989) revealed that an appropriate leadership style is necessary to encourage nurses to bridge the gap between their own needs and the organisation's objectives.

Concerning nursing leadership characteristics, Irurita (1988) found that the best combination of variables for predicting the leadership effectiveness of a head nurse was previous nursing management experience, continuing leadership education, length of time in the present position, previous leadership experience and level of nursing education. Finally, McDaniel and Wolf (1992) concluded that a successful transformational leader would build on the transactional qualities found in day-to-day management in nursing services and that the shared values and beliefs of the organisation would be closely related with leadership style. In conclusion, the above studies reveal the development of research on leadership style in nursing and highlight some of the essential attributes of leadership. They also show that there is a relationship between leadership style and job satisfaction.

3.11 The Concept of Job Satisfaction

The concept of job satisfaction is of great interest to social scientists and managers because they recognise the importance of a job in the total life experience of an individual. Mitchell and Larson (1987) examined over 3000 studies on job satisfaction over the past 60 years and concluded that there is no universal definition of job satisfaction. A commonly accepted job satisfaction definition is offered by Locke (1976):

"The pleasurable emotional state resulting from the perception of one's job as fulfilling or allowing the fulfilment of one's important job values" (p. 1342).

Hammer and Organ (1978) proposed five reasons for the sustained interest in job satisfaction over the last fifty years. First, Western society holds certain value judgements about satisfaction at work. Second, there is a relationship between job satisfaction and mental health. Third, there is an association between job satisfaction and physical health. Fourth, there is the relationship between higher levels of job satisfaction and lower levels of turnover, and to a lesser extent, between higher levels of job satisfaction and absenteeism. Finally,

job satisfaction is an important variable because satisfied employees represent a public relations asset for the organisation.

The concept of motivation is often linked with job satisfaction and theories of motivation have often formed the basis of models and measures of job satisfaction (Mullins 1996). Athough job satisfaction is not synonymous with motivation, it could, for example, be associated with a personal feeling of achievement. Motivation is a process which may lead to job satisfaction (Mullins 1996, p. 520). It has been suggested that the usual approach to the study of motivation is through an understanding of internal cognitive processes (Mullins 1996), that is, what people feel and how they think. These different cognitive processes or theories of motivation are usually divided into two contrasting approaches: content theories and process theories (Dunford 1992, Ivancevich and Matteson 1993, Vecchio et al. 1992).

Content theories focus on motivation, and are concerned with identifying people's needs and their relative strengths, and the goals they perceive in order to satisfy these needs. Major content theories include: Maslow's hierarchy of needs, McGregor's Theory X and Theory Y, Alderfer's (ERG) modified need hierarchy model, Herzberg's two factor theory, and McCelland's achievement theory (Robbins et al. 1994). Content theory approaches to motivation focus

mainly on the fundamental motives influencing behaviour. This focus has been criticised because it ignores the process aspect of motivation. That is, the content models fail to investigate the process and assume the connection between needs and behaviour to be unproblematic (Dunford 1992, p. 82).

Maslow's content theory states that a person attempts to satisfy the more basic needs (physiological) before diverting behaviour toward satisfying higher level needs. Higher level needs are those that are satisfied internally. They include social, esteem and self-actualisation needs. Studies have reported that managers higher in the organisation's chain of command place greater emphasis on self actualisation and autonomy than managers lower in the organisation (Mullins 1996). Maslow's hierarchy of needs theory has received wide recognition and the theory has provided a framework for viewing the different needs and expectations that people have, and the different motivators that might be applied to people at different levels.

Another content theory which has received a lot of attention is the two factors theory of Herzberg et al. (1959). It suggests that job content related factors or motivators such as achievement, responsibility, advancement, recognition, growth and the work itself are related to job satisfaction. On the other hand, job context related factors or hygiene factors, such as pay, working conditions,

supervision, relationships at work, security and status are related to job dissatisfaction. For instance, an acceptable level of pay may not lead to satisfaction but a less than acceptable amount may possibly lead to dissatisfaction.

Process theories place emphasis on the actual process of motivation. These theories are concerned with the relationships among the dynamic variables which make up motivation and with the way in which behaviour is initiated, directed and sustained. Major theories under this heading include expectancy-based models, equity theory, goal theory and attribution theory.

Vroom's (1964) expectancy theory, which is a process theory of motivation, suggests that both situational and personality variables are important to job satisfaction. Expectancy theory argues that the strength of a tendency to act in a certain way depends on the strength of an expectation that the act will be followed by a given outcome, and the attractiveness of that outcome to the employee (Robbins et al. 1994, p. 257). Although Vroom's (1964) theory acknowledges the complexity of work motivation, it is relatively difficult to understand and apply because people rarely sit down and list their expected outcomes for a contemplated behaviour. Thus, from a theoretical standpoint, the Vroom model seems to explain the complexity of motivation, but it does

not give managers much practical assistance in solving their motivational problems (Luthans 1981).

Lawler (1973) identified four theoretical perspectives from which to examine job satisfaction: fulfilment theory, discrepancy theory, equity theory and the two-factor theory. Researchers using the fulfilment approach measure people's satisfaction by simply asking how much of a given facet or outcome they are receiving. Lawler (1973) concluded that fulfilment theory fails to take into account individual differences in desires and aspirations.

Discrepancy theory maintains that satisfaction is determined by what people expect and what they actually receive. Three different discrepancy approaches are reported in the literature on job satisfaction: the first looks at what people want, the second at what people feel they should receive and the third at what people expect to receive. This theory does not address the question of how people decide what their outcomes shall be.

Equity theory determines satisfaction by the perceived ratio of what a person receives from his job relative to what a person puts into his job. Equity theory argues that people evaluate their input-outcome equity by comparing it with

their perception of what others receive at a similar level. This theory fails to recognise differences in the perception and desires of individuals.

After reviewing the above arguments regarding the links between content theories of motivation and job satisfaction, and process theories of motivation and job satisfaction, it can be seen that content theories have been more commonly used in relation to job satisfaction than process theories. In particular, Herzberg's two-factor theory is essentially a theory of job satisfaction and Herzberg has applied the content theory of motivation in his approach. Herzberg's belief is that job enrichment should give people the opportunity to use their talents and abilities, and to exercise more self control over their job. Inherent in the job should be a learning and growth experience. This provides a direct link between motivation and job satisfaction. The content theories of motivation also assume a direct relationship between job satisfaction and improved performance (Mullins 1996, p. 520). In contrast, the process theories of motivation emphasise the relationships among the variables. For instance, expectancy theories of motivation recognise the complexity of work motivation and consider in more detail the relationship between motivation, satisfaction and performance. Thus, the process theories provide a more indirect and weaker link to job satisfaction.

Another approach is the "person-environment fit" theory of job satisfaction (Bretz and Judge 1994, Kalleberg 1977, Katzell 1979, Locke 1969, Smith et al. 1969). This theory suggests that job satisfaction is a result of congruence between the worker's perception of the work situation (that is, perceived work characteristics which represent work rewards), and the worker's work values (that is, the importance that individuals attach to these perceived work characteristics). This model emphasises the interaction between the values of the worker and the working environment of the workforce, and represents a person-environment "fit". The importance of this person-environment fit model is further highlighted in a study by Bretz and Judge (1994) which concluded that the "fit" would lead to higher levels of satisfaction. The consequences of not fitting may result in job dissatisfaction, poor performance and turnover. As well as reporting a positive correlation between person-organisation fit and career success, Bretz and Judge (1994) concluded that the person-environment fit also results in a number of positive work-related outcomes. These include higher job involvement (Blau and Boal 1987), greater organisational commitment (Meglino et al. 1989), lower turnover (O'Reilly et al. 1991) and improved health and adaptation (Moos 1987). A major criticism of the above theory is that the organisation or environment often has too many activities and the fit between these activities and the needs of participants could be difficult

for managers to identify, particularly in the selection process (Caldwell and O'Reilly 1990).

Researchers have also turned their attention to determining the critical variables which can improve job satisfaction (Agho et al. 1993, Blegan 1993, Campbell et al. 1976, King et al. 1982, Mottaz 1985, Weaver 1977). A review of empirical studies by Savery (1989) showed there are seven working conditions or variables which lead to job satisfaction for a majority of people. These conditions are: interesting and challenging work, a feeling of achievement, relationship with immediate supervisor and other professionals, opportunities for friendship, advancement, security of employment, and recognition. Most of these conditions/variables have been identified as intrinsic motivators, and meeting these expectations is important to achieving high levels of job satisfaction for an individual, or at least preventing dissatisfaction. Mottaz (1985) showed that extrinsic organisational rewards can be an important determinant but only in lower level occupations. He further argued that there is a strong relationship between job satisfaction and intrinsic reward (such as achievement, recognition, advancement etc.) regardless of occupational levels. The value of intrinsic motivators to job satisfaction is well acknowledged among organisational researchers.

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Job satisfaction and commitment are related but distinguishable variables. The distinction between job satisfaction and organisational commitment was highlighted by Mowday et al. (1982). Mowday proposed that commitment is a more global construct, reflecting an overall affective attitude towards the organisation as a whole. In contrast to organisational commitment, job satisfaction is seen as one's attitudinal expression either toward one's job or towards a specific aspect of one's job. Another distinction between job satisfaction and organisational commitment is that, over time, organisational commitment is more stable than job satisfaction (Porter et al. 1974).

In conclusion, although there is no agreement as to which theory best explains a person's level of job satisfaction, it is generally agreed that job satisfaction can be seen as the feeling an employee has about the job in general. Despite the different approaches suggested by the content and process theories of motivation and their relationship to job satisfaction, a general agreement has emerged that intrinsic factors such as recognition, achievement and autonomy tend to have a greater effect on job satisfaction than extrinsic factors such as pay and conditions of work (Blau and Boal 1987, Savery 1989). This is particularly true for people at higher levels in the organisation than for people lower in the hierarchy.

3.12 Job Satisfaction and Nursing

The issue of job satisfaction is closely related to turnover and quality of care in nursing, and it is a major concern for administrators in the health care system. Indeed, the nursing literature is replete with articles on job satisfaction and its outcomes (Butler and Parson 1989, Larson and Brown 1984, Mueller and McClosky 1990, Nichols et al. 1981, Walker and Bronstein 1981). Research on job satisfaction in general, and in the health care field in particular, strongly suggests that turnover is, for the most part, an outcome of work dissatisfaction (Blegen and Mueller 1987, Currier et al. 1985, Diamond and Fox 1958, Johnston 1991, McClosky 1974, Price and Mueller 1981b, Mottaz 1988a, Saleh 1965, Seybolt 1986, Stamps and Piedmonte 1986, Wandelt et al. 1981). Table 9 illustrates some of the factors which have been shown to influence nurses' job satisfaction.

Newman (1973) reported that quality of care, intrinsic job factors and supervision are the best predictors of satisfaction. McClosky (1974) provided evidence that intrinsic rewards, such as achievement, are more strongly related to work satisfaction than are extrinsic factors such as pay. Everly and Falcione (1976) concluded that interpersonal relations followed by intrinsic rewards are the most important sources of satisfaction. Cronin-Stubbs (1978) reported that

TABLE 9: FACTORS INFLUENCING NURSES' JOB SATISFACTION

Author/s	Year	Factors
Newman	1973	quality of care, intrinsic job factors, adequate supervision
McClosky	1974	psychosocial factors:- achievement and recognition.
Everly and Falcione	1976	interpersonal relationship, intrinsic factors of satisfaction
Cronin-Stubbs	1978	achievement, recognition
Godfrey	1978	appreciation, communication, consensus with supervisors
Slavitt et al.	1978	autonomy
Seybolt and Walker	1980	autonomy
Wandelt et al.	1981	quality of patient care, salary
Munro	1983	challenge of work, work conditions
Larson et al.	1984	job expectation
Price and Mueller	1986	participation, communication, integration, pay, equity and promotion opportunities
Pilkington and Wood	1986	role conflict
Blegen and Mueller	1987	promotion opportunities, justice, kinship responsibilities, social integration
Savery	1989	interest and challenging work, feeling of achievement, relationship with immediate supervisor, working relationship with other health professionals, security of employment, responsibilities, recognition, working conditions, salary, opportunities for friendship and advancement
Battersby et al.	1990	job related factors such as pay, promotion, stress, kinship responsibilities, communication, staff shortage, peer relationship, education and training
Johnston	1991	professional status, autonomy, stress, interaction, pay, task requirements and organisational policies
Blegen	1993	commitment from supervisor, autonomy, recognition, routinization, communication with peers, fairness and locus of control

achievement and recognition are the best predictors of job satisfaction among newly graduated nurses. Godfrey (1978) reported that lack of appreciation, poor communication and conflict with superiors all contribute to dissatisfaction. Other studies demonstrated that autonomy is also a major source of job satisfaction (Seybolt and Walker 1980, Slavitt et al. 1978). Wandelt et al. (1981) argued that the quality of care given to patients and pay most influence satisfaction among nurses. Munro (1983) proposed that the importance and challenges of work, followed by work conditions, are the most important determinants of work satisfaction. Price and Mueller (1986) showed that factors such as participation, communication, integration, pay, equity and promotion opportunities have a direct positive effect on job satisfaction.

An Australian study conducted in 1986 by Pilkington and Wood examined the problems of job satisfaction, role conflict and role ambiguity between hospital nurses who were employed full time, permanent part time and casual. The results showed that permanent part time staff experienced greater job satisfaction than casuals and full time workers. The problem of role ambiguity was highest in the casual group. Permanent part time workers experienced less role conflict than full time and casual workers. High levels of role conflict, but not role ambiguity, were related to decreased job satisfaction. Blegen and Mueller (1987) concluded that factors such as promotional opportunity,

distributive justice, kinship responsibility, and social integration were significant in nurses' job satisfaction. A study by Savery (1989) concluded that interesting and challenging work, a feeling of achievement, relationship with immediate supervisor and other professionals, security of employment, recognition, salary, opportunities for friendship and advancement were considered as important for job satisfaction.

Another Australian study by Battersby et al. (1990) further revealed that pay, promotion, kinship, responsibilities, shortage of staff, communication, peer relationship, stress, education and training were important to the level of job satisfaction among nurses. In 1991, Johnston conducted a study of 385 registered nurses and showed that professional status, autonomy, interaction, pay, task requirements and organisational policies were most related to job satisfaction. More recently, Blegen (1993) conducted a meta-analysis of 48 studies related to nurses' job satisfaction and concluded that seven variables were most frequently associated with job satisfaction: communication with supervisor, autonomy, recognition, routinization, communication with peers, fairness, and locus of control.

A review of the above studies revealed that although they were conducted using different sample sizes and under various working conditions, the frequency of intrinsic factors mentioned as related to job satisfaction was considerably higher than that of extrinsic factors. Others studies such as those conducted by Johnston (1991), Mottaz (1985), Nelson and Fells (1989), Rowe and Manning (1987), Walsh and Bruni (1983), also concluded that intrinsic rewards such as autonomy, nature of supervision, acknowledgment and recognition are determinants of job satisfaction.

Regarding demographic variables and job satisfaction, Kramer (1974) showed that educational level is inversely related to nurses' job satisfaction. These findings were confirmed by Battersby et al. (1990) and Blegen (1993) who examined the factors which impact on nursing turnover and retention. The results suggested that a higher level of education may engender greater role expectations, including that of professionalism, which are not met in practice. Studies also demonstrated that age has a bearing on job satisfaction, with younger nurses being less satisfied than older nurses (Battersby et al. 1990, Blegen 1993, Stamps and Piedmonte 1986).

3.13 The Relationship between Organisational Culture and Leadership Style

A number of studies have suggested a strong link between organisational culture and leadership style (Schein 1985a, Sergiovanni and Corbally 1984, Smith and Peterson 1988). Some studies have argued that organisational culture is created by leaders and that leadership competence is evident in the creation and management of organisational culture (Buono and Bowditch 1989, Champy 1995, Hammer and Champy 1994, Hickman and Silva 1984, Martin and Siehl 1983, Peters and Waterman 1982, Schein 1985a). Other researchers have extended this proposition by suggesting that organisational culture is the result of entrepreneurial activities by organisational founders, institution builders and social architects (Sergiovanni 1990, Sergiovanni and Corbally 1984). Sergiovanni and Corbally (1984) also identified one of the main functions of leadership as expressing and reinforcing an organisational culture.

Sergiovanni and Corbally (1984) discussed leadership as an expression of culture, proposing that:

"Leadership as cultural expression seeks to build unity and order within an organisation by giving attention to purposes, historical

and philosophical tradition, and ideals and norms which define the way of life within the organisation and which provide the bases for socialising members and obtaining their compliance" (p. 106-107).

They also suggested that:

"An effective leader needs to practise his/her profession from a foundation of concepts and ideas strong enough to stand the test of time and powerful enough to account for a variety of situations" (p.160).

Although there has been some suggestion that organisational culture can have a considerable impact on leadership styles (Pheysey 1993), the argument for this link is relatively weak and is not supported by the majority of research in this area (Schein 1985a, Trice and Beyer 1993).

The link between leadership and organisational culture was suggested in a study by Hickman and Silva (1984). This study measured three components of organisational culture: commitment to a common purpose; competence to deliver superior performance, and consistency in perpetuating culture by attracting and keeping the right people. These three components of organisational culture were related to the following three elements of leadership

strategies: satisfying customer needs, gaining advantage over competitors and capitalising on company strengths. The study concluded that sustained excellent performance could be achieved when organisational culture and leadership strategies were working harmoniously together.

Peters and Waterman (1982) suggested that excellent organisations have a strong interaction between organisational culture and leadership. They introduced a multivariable model (McKinsey's 7-S model) which identified seven organisational variables (structure, strategy, people, management style, systems and procedures, guiding concepts and shared values) which can have significant effects on organisational change. These authors highlighted the functional relationship between leadership style and organisational culture, arguing that the leader has an important role in managing shared values which are the core of the seven variables. Although Peters and Waterman's (1982) ideas received considerable attention from organisations and researchers at the time, one of the major criticisms of their approach was that they had not addressed the influence of different cultures which can occur within an organisation. Also, a majority of the organisations which were reported to have strong cultures in Peters and Waterman's (1982) study experienced poor performance within the two years after the results were published (Gordon and Ditomaso 1993).

The association between leadership and organisational culture was argued by Schein (1985a), who maintained that in developing the strength of organisational culture, leadership strategy should take into account four components. First, organisational culture is a product of all employees. Second, organisational culture is the result of entrepreneurial activities by the company's founders, leaders and social architects. Third, organisational culture is also produced and changed by employees. Fourth, organisational culture provides a system of expectancies that sets norms and a standard of behaviour for employees, thereby providing a reason for such leadership behaviour.

The relationship between organisational culture and leadership style was further examined by Trice and Beyer (1993). They concluded that organisational cultures are created when leaders set social processes in motion to achieve their visions of what their organisations should be like and what they should try to accomplish. Trice and Beyer (1993) highlighted the importance of transformational leadership style and organisational culture and suggested that transformational leaders change their organisation's culture through innovation without the impetus of a crisis. To be successful, such leaders need to have more than innovative ideas. They also require sensitivity to the existing culture so that they can build upon what is there without totally disrupting it. Trice and Beyer (1993) concluded that the presence of multiple cultural leaders in

organisations is very likely. They further suggested that the popular trend towards charismatic leadership may not be appropriate, since attempts to encourage charisma are not likely to be effective, and charisma, by itself, is not likely to be successful. They argued that organisations need other types of leadership which can generate either cultural innovation or maintenance, and which will sustain a competitive advantage in the market.

In conclusion, it is apparent that there is an important relationship between leadership and organisational culture. The majority of studies in this area have reported that organisational cultures are created or affected by leaders. The success of an organisation is very much dependent on the approach the leader takes to transform the culture of the organisation.

3.14 Relationship between Organisational Culture and Job Satisfaction, and between Leadership Style and Job Satisfaction

A number of studies have suggested relationships between job satisfaction and organisational characteristics such as work group attachment and organisational centralisation (Deal and Kennedy 1982, Denison 1984, Hickman and Silva 1984, Martin and Siehl 1983, Peters and Waterman 1982, Schwartz

and Davies 1981, Schein 1985a, Sergiovanni and Corbally 1984). However, the relationship between organisational culture and job satisfaction is still unclear and there is a lack of empirical evidence to suggest that there is a strong link between these two variables.

A review of the literature provided evidence of a link between leadership style and job satisfaction. Filley et al. (1970) collected data from 456 employees using the Stogdill's Leader Behaviour Description Questionnaire (LBDQ), the Ohio State Job Description (JDQ) and a Job Expectation Questionnaire (JEQ). They concluded that job satisfaction was a function of leadership style. Duxbury (1984) examined the relationship between leadership style and job satisfaction and reported that in a sample of staff nurses, there was a positive correlation between job satisfaction and leader consideration behaviour.

3.15 Relationship between Job Satisfaction and Organisational Commitment

The relationship between job satisfaction and organisational commitment has received a great deal of attention. Numerous studies have demonstrated the distinction between these two constructs. Porter et al. (1974) studied the

relationships between organisational commitment, job satisfaction and turnover among psychiatric technicians and concluded that organisational commitment discriminated better between stayers and leavers than did the various components of job satisfaction. Mowday et al. (1979) further suggested that organisational commitment was different from job satisfaction in a number of ways. They argued that commitment, as a construct, is a more global concept which reflected the general affective response to the organisation as a whole. Job satisfaction, on the other hand, reflected one's response either to one's job or to certain aspects of one's job. Job satisfaction was also found to be a less stable measure over time, reflecting a more immediate reaction to specific and tangible aspects of the work environment such as pay and supervision (Porter et al. 1974, Smith et al. 1969). Mowday et al. (1979) concluded that commitment focused on attachment to the employing organisation, including its goals and values while satisfaction emphasised the specific task environment where an employee performed his or her duties.

A study by Steers (1977) showed that having expectations or needs met led to satisfaction which resulted in greater commitment among employees. This study also found that job satisfaction and commitment were equally predictive of voluntary turnover.

Williams and Hazer's (1986) found that job satisfaction was an immediate antecedent of organisational commitment and that the influence of other antecedents on commitment was totally mediated by their effects on job satisfaction. However, the above findings were not supported by Price and Mueller (1981a) who found that job satisfaction mediated only some of the effects of antecedents on commitment. There were some direct effects of antecedents on commitment as well. DeCotiis and Summers (1987) concluded that certain organisational elements of personal and situational characteristics, namely, structure, process and climate, as well as job satisfaction, were predictive of organisational commitment, but did not agree that job satisfaction acted as a mediator between commitment and these antecedents

A multivariate study by Glisson and Durick (1988) used variables representing job, individual and organisational characteristics as multiple predictors of job satisfaction and organisational commitment in human service organisations. This study revealed that two job characteristics, skill variety and role ambiguity, were the best predictors of satisfaction, while two organisational characteristics, leadership and the age of the organisation, were the best predictors of organisational commitment. One individual characteristic, education, was found to be a negative predictor of organisational commitment. They therefore suggested that organisational characteristics should also be

examined to enhance the benefit of services to the client in human service organisations. They concluded that the design and administration of human service organisations (i.e., organisational characteristics) were of considerable importance in generating greater commitment, morale and service quality.

As well as the above studies which highlighted the direct relationships between job satisfaction and commitment (for example, Glisson and Durick 1988, Williams and Hazer 1986), other studies have demonstrated effects which go beyond those of commitment. For example, Williams and Anderson (1991) examined the influence of job satisfaction and organisational commitment as predictors of organisational citizenship and role behaviour. They concluded that organisational commitment had a significantly higher impact on organisational citizenship behaviour than job satisfaction.

A number of studies which have included measures of job satisfaction and organisational commitment have been concerned with the prediction of turnover, and much of the empirical data on the relationship between job satisfaction and organisational commitment have come from such studies (for example, Bateman and Strasser 1984, Battersby et al. 1990, Curry et al. 1986, Price and Mueller 1981a, Shore and Martin 1989, William and Hazer 1986, Wright 1990). The general finding has been that organisational commitment is

more strongly related to turnover than is job satisfaction. (Findings involving staff turnover are not detailed here since turnover is not an issue of direct importance to the empirical study reported in this thesis).

Another important issue which is still unresolved is whether job satisfaction is an antecedent to commitment or vice versa. Some studies (Bateman and Strasser 1984, Curry et al. 1986, Vandenberg and Lance 1992) have suggested that commitment is an antecedent to job satisfaction. However, most researchers, based largely on the use of static correlations between commitment and satisfaction or the use of cross-sectional correlational designs, have supported the notion that job satisfaction is an antecedent of commitment (Price and Mueller 1981a, Rusbult and Farrell 1983, Vandenberg and Scarpello 1994, Williams and Hazer 1986). However, Mathieu and Zajac (1990) in their meta-analysis of variables related to commitment, classified job satisfaction as a correlate, rather than an antecedent or consequence, of commitment. Although job satisfaction has more commonly been regarded as causally antecedent to organisational commitment in past studies, Mathieu and Zajac (1990) used the term "correlate" to reflect their view that the evidence so far on the causal ordering of job satisfaction and commitment is inconclusive.

3.16 Differences between the Hospital Groups

There are three major categories of hospital in the Australian health care system: general public, private and psychiatric. The biggest group of hospitals is the general public (Macklin 1991). Although the main objective of all hospitals is to provide quality patient care, and while it is also acknowledged that hospitals are normally bureaucratic and hierarchical (Clinton and Scheiwe 1995, Etzioni 1961), there are significant differences between the three groups of hospitals. The main difference between the three categories of hospital is in their clinical practice. Clinical practice in a general public hospital is more focused on the physiological well-being of patients whereas in a psychiatric hospital, the emphasis is on the psychosocial well-being of the individual. In a private hospital, the above two clinical practices would be evident in conjunction with a strong focus on budget and profit. Thus, the socialisation of nurses working in these three categories of hospital could be different. Indeed, if they are being socialised differently, one would expect the organisational culture of these hospitals to be different. Although little attention has been given to the above question in the literature, one might expect that the socialisation of nursing staff within the psychosocial clinical practice (in psychiatric hospitals) could provide a more supportive environment than the strong traditional bureaucratic environment of the public general hospitals.

In conclusion, since the socialisation processes in these three groups of hospitals are somewhat different, it is expected that different organisational cultures are likely to emerge. In particular, it is expected that organisational culture in public general hospitals would be more bureaucratic than in private and psychiatric hospitals; that private hospitals would be more innovative than public general and psychiatric hospitals; and that psychiatric hospitals would be more supportive than general public and private hospitals.

3.17 Summary

This chapter was divided into three parts. The first part considered the concept of organisational culture. Although no universally accepted definition of organisational culture emerged, there is general consensus on the importance of shared perceptions, beliefs and values. There has also been a general acceptance of Schein's three levels approach to organisational culture. The importance of organisational subcultures, emphasised by Martin's (1992) differentiation perspective, was also discussed. Despite the diversity in meaning and approaches in the study of organisational culture, functional and outcome issues of organisational culture have received greater attention in recent years.

The second part of this chapter considered the definitions and approaches to the study of leadership. Various theories of leadership, from the trait theory approach to the transformational and super-leadership approaches were discussed. The third part of the chapter considered the concept of job satisfaction. Factors responsible for job satisfaction were examined. The relationships between organisational culture, leadership styles and job satisfaction and commitment were discussed. Finally, the expected cultural differences between the three hospital groups were outlined.

Chapter 4

The Empirical Research: Overview,

Aims and Hypotheses

4.1 Introduction

The empirical research reported in this thesis has two components. The first and major part of the research is a quantitative questionnaire-based study, which surveyed nurses working in the hospital environment. The second component comprises a small qualitative study in which the data was collected via a series of semi-structured interviews and observations. This qualitative study will be described in chapter 7. The data obtained from the interviews and observations are used to complement the findings in the questionnaire survey. In this chapter, the aims and hypotheses for the first study (questionnaire survey) are presented. The rationale for each of the hypothesis is also give. The following two chapters (chapter 5 and 6) are also related to the first study. Chapter 5 discusses the research methodology and validity issues and chapter 6 presents the results of the questionnaire survey.

4.2 Overview of the Questionnaire Based Study

A questionnaire-based empirical study was conducted in the hospital setting. The variables examined in this study were hospital culture, ward culture, ward leadership style, nursing job satisfaction and nurses' commitment to their wards. Thus, hospital culture was measured as organisational culture, and ward culture was measured as subculture.

This empirical study examined the effect of organisational culture and subculture on organisational commitment. The study was prompted by the lack of previous research on the effect of organisational culture and subculture on commitment. Although organisational culture and subculture have been suggested as significant variables in organisational studies (Hellriegel et al. 1995, Robbins et al. 1994, Trice and Beyer 1993) and as exerting considerable influence on organisational performance (Deal and Kennedy 1982, Peters and Waterman 1982), these two variables are noticeably absent in previous commitment studies. For example, Mathieu and Zajac's (1990) meta-analysis examined twenty six possible antecedents of organisational commitment, but organisational culture and subculture were not included in their study.

A number of other variables which have been shown to be related to organisational culture, or to commitment, were also included in the present

study. These were leadership style, job satisfaction and a number of demographic characteristics. Relationships have been shown to exist between organisational culture and leadership style (Sergiovanni and Corbally 1984, Smith and Peterson 1988), leadership and job satisfaction (Duxbury 1984, Iverson and Roy 1994), leadership and commitment (Blau 1985), job satisfaction and commitment (Batemen and Strasser 1984, Iverson and Roy 1994, Michaels 1994, Price and Mueller 1981a, Taunton et al. 1989, Vandenberg and Lance 1992), age and commitment (Williams and Hazer 1986) and between education and commitment (DeCotiis and Summers 1987, Mottaz 1988, Michaels 1994).

4.3 Aims of the study

The aim of the empirical study reported in this thesis was to investigate the effects of organisational culture, subculture, leadership styles and job satisfaction on organisational commitment. This empirical study involved nurses drawn from several large hospitals, and in this context, the study's aim was to examine the influence of the hospital and ward culture, the ward managers' leadership styles, and the components of nurses' job satisfaction on the nurses' commitment to their wards. The relationships between a number of demographic characteristics (such as the nurses' age, education level, years of

experience and duration in the ward), and their commitment to their wards, were also investigated.

This empirical study also explored the extent to which the data were consistent with the causal models proposed by Price and Mueller (1981a) and by Williams and Hazer (1986), in which the effects of various antecedents on commitment are mediated via their effects on job satisfaction.

4.4 Research Hypotheses

Based on the literature review (Chapters 2 and 3) and issues discussed in relation to antecedents and organisational commitment, the following hypotheses were formulated:

Hypothesis 1:

There is a relationship between nurses' commitment to their wards and measures of hospital culture, ward culture, leadership style and job satisfaction. More specifically, it is expected that a) a supportive and innovative hospital and ward culture will be positively correlated with commitment and b) the bureaucratic hospital and ward culture dimensions will be negatively correlated with commitment and c) a consideration-

leadership style will be more positively correlated with commitment than will structure-leadership style.

Although there is little empirical evidence to suggest that there is a strong relationship between organisational culture and commitment, characteristics of organisational culture such as corporate values and beliefs have been suggested to be related to commitment and performance of organisations (Harrison 1972, Peters and Waterman 1982, Trice and Beyer 1993). Previous studies have shown a relationship between commitment and leadership style (Blau 1985, Glisson and Durick 1988, Mathieu and Zajac 1990 and Schein 1985a) and between leadership style and organisational culture (Sergiovanni and Corbally 1984, Smith and Peterson 1988). Thus it is plausible that organisational culture and commitment are related, at least in part because of the common influence of leadership style on these variables.

Also, it has been suggested that bureaucratic practices often result in negative employee commitment while a supportive work environment could result in greater commitment and involvement among employees (Brewer 1993, Kratina 1990). Although the above studies were not directly related to organisational culture, the results present an indication of the possible relationship between organisational culture and employee commitment.

The relationship between leadership style and commitment has been examined by Blau (1985). A consideration-leadership style was found to have a greater influence than a structure-leadership style on commitment. Also, the Williams and Hazer (1986) model had only consideration-leadership style as one of the antecedents to commitment. Thus, it is expected that consideration-leadership style would exert a greater influence on commitment than structure-leadership style.

The expected relationship between job satisfaction and organisational commitment is based on the research carried out in numerous previous studies (for example, DeCotiis and Summers 1987, Glisson and Durick 1988, Iverson and Roy 1994, Mowday et al. 1979, Porter et al. 1974, Vandenberg and Lance 1992, Williams and Anderson 1991, Williams and Hazer 1986). Although the above studies mainly revealed a positive relationship between the uni-dimensional measure of job satisfaction and commitment, it is expected that a multi-dimensional measure of job satisfaction used in this thesis would produce similar results. The multi-dimensional measures of job satisfaction could provide us with further information on the contribution of different dimensions of job satisfaction on commitment.

Hypothesis 2:

Nurses' commitment to their wards is more strongly related to their perception of ward culture than to their perception of hospital culture.

It has been suggested (Prestholdt et al. 1987) that nurses tend to identify themselves more closely with their area of work rather than the hospital as a whole. That is, nurses often exhibit greater loyalty and commitment to their wards than to the hospital. This attachment can be seen as a form of identification described in the attitudinal approach of organisational commitment. As discussed in section 2.8 (p. 65), nurses' job satisfaction and the working environment in the ward tend to have greater effect on turnover than the hospital environment. It is therefore expected that nurses' commitment to their wards will be more strongly related to their perception of ward culture than to their perception of hospital culture.

Hypothesis 3:

Job satisfaction variables have the strongest relationships with ward commitment when compared with other antecedent variables.

Previous multivariate studies (for example Michaels 1994, Mottaz 1988b, Williams and Anderson 1991, Williams and Hazer 1986) have revealed that for

the large number of antecedents investigated, it was job satisfaction that had the greatest influence on commitment. Although the job satisfaction measures in the above studies were unidimensional, it is anticipated that the multi-dimensional measure of job satisfaction used in this study would continue to provide the strongest relationship with organisational commitment.

Hypothesis 4:

The associations between nurses' commitment to their wards and the variables of hospital culture, ward culture and leadership style, are significantly reduced after statistically controlling for job satisfaction measures.

This conclusion would follow if a significant part of the effects of the antecedent variables on commitment are mediated by their effects on the job satisfaction variables. This is the case in the model suggested by Price and Mueller (1981a). In the Price and Mueller (1981a) study, the majority of the variables (seven out of eleven) which had an influence on "intent to stay", exerted this influence via their effects on job satisfaction. In the causal model proposed by Williams and Hazer (1986), the effects of all the antecedents on commitment were assumed to be causally mediated via their effects on job satisfaction. Thus, although the antecedents included in the present research

(that is, organisational culture, subculture, leadership style and the selected demographic variables) are not the same as those in the Williams and Hazer (1986) or the Price and Mueller (1981a) studies, the general finding in past studies that the effects of most antecedents on commitment are mediated via job satisfaction forms the basis of this hypothesis for the present study.

Hypothesis 5:

The job satisfaction dimensions used in this study representing the psychosocial or higher order needs in Maslow's hierarchy are more highly correlated with nurses' commitment to their wards than are the dimensions representing safety or lower order needs.

In most previous studies of commitment (Blau 1985, Price and Mueller 1981a, Taunton et al. 1989), a unidimensional measure of job satisfaction has been used. In the present study, Mueller and McClosky's (1990) multidimensional measure covering eight job satisfaction dimensions is employed. As detailed later in section 5.3, Mueller and McClosky's (1990) job satisfaction measures were based on various dimensions of Maslow's hierarchy of needs. The dimensions representing psychological or higher order needs in Maslow's hierarchy such as the amount of control in the workplace, the level of professionalism, the ability to interact with colleagues and managers, the level

of praise from managers, and support from co-workers, are expected to be more highly correlated with nurses' commitment to their wards when compared with the dimensions representing safety or lower-order needs of Maslow's hierarchy, such as the amount of reward, flexibility of work schedule, and balance of work and home life, which are expected to have a lower level of correlation with nurses' commitment to their wards. This hypothesis is based on previous findings which reported that elements such as intrinsic factors (Herzberg, Mausmer and Synderman 1959) and needs for power and affiliation (McClelland 1961, Steers and Porter 1987) are items which have strong links with job satisfaction.

Hypothesis 6:

Job satisfaction and ward commitment increase with age and decrease with education.

A number of studies have suggested that age (Hrebiniak and Alutto 1972, Lawler 1973, Simpson 1985, Steers 1977) and education (Brief 1980, DeCotiis and Summers 1987, Mowday et al. 1982, Steers 1977) have a significant impact on organisational commitment. Weisman et al. (1981) found that age was a strong predictor of job satisfaction among nurses employed in two hospitals. Simpson (1985) found a positive correlation between years in the

position and job satisfaction. Since it is suggested that job satisfaction and organisational commitment are positively correlated (Glisson and Durick 1988, Morrow and McElroy 1987), a positive association between age and commitment could also be expected.

In relation to educational level and organisational commitment, it has been found that educational level was negatively correlated with organisational commitment (DeCotiis and Summers 1987, Mowday et al. 1982). DeCotiis and Summers (1987) suggest that this negative correlation arises because rewards do not adequately reflect the level of education, knowledge and skills. Indeed, a negative correlation between nurses' education and commitment was also found in an Australian study by Battersby et al. (1990). Thus, the overall evidence so far suggests that education and organisational commitment are negatively correlated.

Hypothesis 7:

Years in position and years of clinical experience are positively associated with ward commitment.

Previous studies have revealed that position tenure (Brief and Aldag 1980, Gregersen and Black 1992, Mottaz 1988a) and organisational tenure (Mathieu

and Hamel 1989, Mathieu and Zajac 1990) have positive effects on commitment. This can be explained as a result of the organization's socialisation process. The length of service in an organisation is positively related to the level of internalisation of organisational values which results in greater organisational commitment from the individual (Allen and Meyer 1990b, Hellriegel et al. 1995, O'Reilly, Chatman and Caldwell 1991).

Hypothesis 8:

There are significant differences in organisational culture among the different hospital groups (general public, private and psychiatric), in that general hospitals are more bureaucratic than private and psychiatric hospitals, private hospitals are more innovative than general public and psychiatric hospitals, and psychiatric hospitals are more supportive than general public and private hospitals.

Although hospitals tend to operate as a professional bureaucracy, it is anticipated that there is a significant difference in organisational culture between the three groups of hospitals (general public, private and psychiatric). These three groups of hospitals have their unique clinical focus, practice culture and profit versus non-profit orientations (Clinton and Scheiwe 1995). For example, therapeutic treatment in a psychiatric institution is somewhat different

from that in a general hospital or in a private hospital. Psychiatric hospitals have a greater emphasis on holistic care and the psychosocial well-being of the individual than do public and private hospitals (Clinton and Scheiwe 1995, Macklin 1991). Since the socialisation process and the supportive nature of clinical practices (mainly psychosocial therapies) provided in psychiatric hospitals are different from the physiological focus of general hospitals and the interests of shareholders in the private hospitals, the cultures of these hospital groups could be rather different. It is anticipated that psychiatric hospitals would provide a more supportive environment than public or private hospitals.

General public hospitals tend to be more involved in complex physical treatment and research than private hospitals. The general and private hospitals tend to be more task-orientated and focus mainly on the physical aspects of the individual. Traditionally, general public hospitals are more procedural and rules-oriented than psychiatric hospitals. Thus, it is anticipated that general public hospitals would provide a more bureaucratic environment than private or psychiatric hospitals.

Private hospitals mainly conduct elective surgery and are not owned by the government. A majority of private hospitals operate for profit. Their financial performance and budget procedures are rather different from those of public

and psychiatric hospitals. These hospitals need to operate at a profit in order to survive and to provide a reasonable return to their shareholders. Thus, it is anticipated that private hospitals need to be more innovative (particularly in revenue generation) than public or psychiatric hospitals in order to achieve their objectives. Nurses working in these three types of hospitals are subjected to different socialisation process and mind sets. Since socialisation is closely related to culture (Schein 1983, Trice and Beyer 1993), it is anticipated that the organisational cultures are different in the three categories of hospitals and nurses' commitment in the three hospital groups could be different as well.

4.5 Summary

This empirical study was designed to investigate the influence of hospital culture, ward culture, leadership style and job satisfaction, on nurses' commitment to their wards. The antecedents of organisational commitment, organisational culture and subculture, were selected in this empirical study because they had previously received little attention. Previous findings concerning the relationships between these and other antecedents and commitment were used to formulate the hypotheses for this study. The eight hypotheses formulated for this study were described, and their rationales were explained.

Chapter 5

Research Methodology and Validity Issues

5.1 Introduction

In this chapter, details of the research design and instrumentation for the questionnaire survey are provided. The methodology for data collection and analyses of the questionnaire is described. (The component of the empirical research involving the face-to-face interviews and observational data is described in Chapter 7). Finally, issues relating to validity are discussed.

The design and rationale for the questionnaire survey and the follow up interviews are outlined in section 5.2. A detailed description of the construction of the questionnaire is given in section 5.3. This is followed by a report of the piloting of the questionnaire in section 5.4. The sampling technique and the process of data collection for the questionnaire survey are discussed in section 5.5. Methods used in quantitative analyses for the questionnaire survey are detailed in sections 5.6. The problems associated with internal validity, external

validity, statistical conclusion validity and construct validity are discussed in section 5.7.

5.2 Research Design

A questionnaire survey complemented by interviews was used to assess the influences of hospital culture, ward culture, leadership style and job satisfaction on nurses' commitment to their wards. A number of nurses were chosen for the follow-up interviews. The data obtained from the interviews were used to complement the findings of the questionnaire survey. A detailed description of the collection of qualitative data (interviews, observations and procedure manuals) and the results of their analyses are provided in Chapter 7.

Survey research is defined as "the administration of questionnaires to a sample of respondents selected from some population" (Babbie 1989, p. 257). Survey research is especially appropriate for making descriptive studies of large populations and may be used for explanatory purposes as well. Hence, it is appropriate for this study. The questionnaire survey design was chosen for the following reasons:

- 1. It can survey large samples at a reasonable cost. In this study, nurses from seven hospitals were surveyed.
- 2. It is relatively easy to design and many questions can be asked. In this study, a Likert scale was used for 144 questions.
- 3. It is relatively objective, can be anonymous and is able to be analysed statistically.

However, there are also problems in the survey research method which this study acknowledges and attempts to minimise (Babbie 1989, p. 255). Details of these problems and validity issues are discussed in section 5.7.

5.3 Instruments for Survey Questionnaire

The survey questionnaire used in this study was a selection of established measuring instruments. The following were chosen for this study: Wallach's (1983) Organisational Culture Index (OCI), Stogdill's (1974) Leader Behaviour Description Questionnaire (LBDQ), Mueller and McClosky's (1990) Job Satisfaction Survey (JSS), and the Mowday et al. (1979) Job Commitment Survey (JCS). They were chosen because of their established reliabilities (see Table 10), relative ease in administration, user friendliness, and because they

had been used extensively by other researchers. Detailed discussion of the selection and description of these instruments follows.

TABLE 10: RELIABILITY ESTIMATES OF INSTRUMENTS USED IN PREVIOUS STUDIES

Instruments	Cronbach Alpha
Wallach's (1983) OCI (Organisational Culture Index)	(reliability estimates
• bureaucratic	0.71
• innovative	0.87
• supportive	0.77
Stogdill's (1974) LBDQ (Leadership Behaviour Descriptive Questionnaire)	
• consideration	0.82
initiating structure	0.78
Mueller and McClosky's (1990) JSS (Job Satisfaction Survey)	
extrinsic rewards	0.52
• scheduling	0.84
• balance	0.57
• co-workers	0.54
• interaction	0.72
 professionalism 	0.64
• praise	0.80
• control	0.80
• global	0.84
Mowday, Steers and Porter's (1979) OCS (Organisational Commitment Survey)	0.90

The questionnaire survey, together with a covering letter (see Appendix 3) was given to each participant. It contained the following six sections:

Section A: Demographic/personal data

Section B: Ward culture (organization subculture) (Wallach's OCI)

Section C: Leadership styles (Stogdill's LBDQ)

Section D: Job satisfaction (Mueller and McClosky's JSS)

Section E: Hospital culture (organisational culture) (Wallach's OCI)

Section F: Ward commitment (Mowday et al.'s OCS).

Although the same Organisational Culture Index (Wallach 1983) was used to measure both ward culture and hospital culture, the separation of its use (i.e., Section B and E) within the questionnaire was arranged to reduce the problem of cross-contamination in answering these questions by participants.

The component parts of the questionnaire are described below:

Demographic/Personal Data (Section A)

Demographic variables (age, years of clinical experience, years in the position and tertiary qualifications), suggested in previous studies as relevant, were included in the survey (Parasuraman 1989, Porter et al. 1974, Price and Mueller 1981a).

Organisational Culture Index (OCI)(Sections B and E) (Wallach 1983)

Wallach's (1983) Organisational Culture Index (OCI) describes organisational culture in terms of three dimensions: bureaucratic, innovative and supportive. Wallach (1983) defined the three dimensions as follows:

"Bureaucratic cultures are hierarchical and compartmentalised. There are clear lines of responsibility and authority. The work is organised and systematic; these cultures are usually based on control and power. The companies are stable, careful, and usually mature. A high score on bureaucracy means the organisation is power-oriented, cautious, established, solid, regulated, ordered, structured, procedural and hierarchical" (Wallach 1983, p. 32).

"Innovative cultures are exciting and dynamic. Entrepreneurial and ambitious people thrive in these environments. They are creative places to work, filled with challenge and risk. The stimulation is often constant..... Innovative environments, however, are not easy places in which to work. Burn-out and stress are routine occupational hazards..." (Wallach 1983, p. 33).

"Supportive cultures are warm, 'fuzzy' places to work. People are friendly, fair, and helpful to each other. They are open, harmonious environments almost like an extended family. They are trusting, safe, equitable, sociable, encouraging, relationshiporiented and collaborative" (Wallach 1983, p. 33).

This instrument was selected as appropriate for this study because it contains dimensions of organisational culture which have been shown in previous research, in the nursing context, to be significantly related to other variables of interest. Barhyte et al. (1987) found that the majority of nursing service departments were bureaucratic in nature. Scherer (1988) reported that a supportive culture and an atmosphere of caring and concern for employees led to lower turnover.

Wallach (1983) suggested that the Organisational Culture Index (OCI) would be suitable to assess the subculture of divisions or functional areas within a large organisation. Therefore, the OCI was adapted for the purposes of this study to measure both ward and hospital cultures by changing the response categories to read either "my ward" or "my hospital" rather than "my organisation". The differences between ward and hospital culture were assessed

by using the two versions of this instrument in sections B and section E, respectively, of the questionnaire.

The OCI consists of twenty-four adjectives/items. Eight adjectives/items are assigned to each of the three dimensions of organisational culture. Each adjective is rated as to its applicability to an organisation. The rating is accomplished on a four-point Likert scale ranging from "does not describe my organisation" (1) to "describes my organisation most of the time" (4). The score is the sum of responses for the items in each category of the index. Each category score indicates the extent to which the culture is perceived as bureaucratic, innovative or supportive, with the highest category score indicating the predominant culture type.

Koberg and Chusmir (1987) used the Wallach (1983) OCI to study the relationships of organisational culture to creativity, job satisfaction, propensity to leave, and individual needs of employees. Koberg and Chusmir (1987) concluded that the categories of culture identified in this instrument were related to the type of organisation. For instance, government organisations were more bureaucratic in nature than retail organisations which were more innovative.

Leader Behaviour Description Questionnaire (LBDQ) (Section C) (Stogdill 1963)

There are various leadership style instruments, such as Fleishman's (1957) Supervisory Behaviour Description Questionnaire, Taylor and Bowers's (1972) Survey of Organisations: Supervisory and Peer Leadership Questionnaire, and Sims and Szilagyi's (1975) Leader Reward Behaviour Questionnaire. However, Stogdill's (1963) Leadership Behaviour Description Questionnaire (LBDQ) was chosen because a large amount of information has accumulated about its psychometric properties and correlates which support the instrument's validity and reliability. Also, this instrument has been demonstrated to be the most reliable and it is popular and frequently used in leadership studies (Cook et al. 1981, Michaels 1994, Mukhi 1982). This instrument has forty items assigned to two categories of leadership style measurements: Consideration and Initiating Structure. These can be described as follows:

"Consideration describes the extent to which a leader is likely to have job relationships characterised by mutual trust, respect for subordinates' ideas and regards for their feelings" (Robbins et al. 1994. p. 472).

"Initiating Structure describes the extent to which a leader is likely to define and structure her or his role and those of subordinates in the search for goal attainment" (Robbins et al. 1994, p. 472).

Subjects responded on a rating scale, ranging from "not at all" (1) to "a great deal" (5). The score for each dimension is the sum of responses for the items in each subscale. The reliability coefficients for this instrument as measured by Stogdill (1963) are presented in Table 8. Previous studies (Cook et al. 1981, Halpin and Wiener 1973, Hamilton 1990, Mukhi 1982, Schriesheim and Kerr 1974) have found that the reliability coefficients vary from 0.76 to 0.87 for "Consideration" and 0.7 to 0.8 for "Initiating Structure", which are compatible with Stogdill's (1963) findings.

Job Satisfaction Survey (JSS)(Section D) (Mueller and McClosky 1990)

Job satisfaction measures traditionally used in organisational research were unidimensional (Quinn and Staines 1979, Taylor and Bowers 1972, Vroom 1960).

However, multi-dimensional job satisfaction measures (Cook et al. 1981,
Hackman and Oldham 1975, Warr et al. 1979) have become more popular.

Some studies have examined separately the intrinsic and extrinsic dimensions of
job satisfaction (Cook et al. 1981, Everly and Falcione 1976, Mathieu and

Zajac 1990, Newman 1973). Others have used different multiple job satisfaction dimensions to measure job satisfaction. Since this study focuses on nurses in the hospital sector, Mueller and McClosky's Job Satisfaction instrument was selected because it was specifically designed to be relevant to the nursing situation. The Mueller and McClosky Job Satisfaction instrument is multi-dimensional and measures eight aspects of job satisfaction. The items for this questionnaire were designed by McClosky (1974) to form three categories derived from Maslow's theory of hierarchy of needs (that is, low to high order needs). Although factor analysis by Mueller and McClosky (1990) did not show McClosky's (1974) original three categories (safety, social and psychological), their eight factor solution has provided a satisfactory alternative multi-dimensional measurement of job satisfaction. These eight factors or dimensions of job satisfaction (extrinsic rewards, scheduling, balance of family/work, co-workers, interaction opportunities, professional opportunities, praise and recognition, and control and responsibilities) can, however, be related to McClosky's original three categories. The job satisfaction dimensions of scheduling, extrinsic reward and balance of family/work were defined by items which were included in Mueller and McClosky's (1990) safety category. Items which were based on the job satisfaction dimensions of co-workers and interaction opportunities were in Mueller and McClosky's (1990) social category, and the dimensions of praise and recognition, professional

opportunites, and control and responsibilities were formed by items in Mueller and McClosky's (1990) psychological category.

McClosky's (1974) three categories, and the eight dimensions of Mueller and McClosky (1990), can also be related to the distinction between the intrinsic and extrinsic dimensions of job satisfaction (Cook et al. 1981, Newman 1973). Items defining McClosky's (1974) psychological and social categories, and the corresponding factors from Mueller and McClosky's (1990) eight dimensions, can be seen as similar to those which have been used to define the intrinsic component of job satisfaction, with the safety category items (or the lower order needs in Maslow's hierarchy) being similar to those used to define the extrinsic component of job satisfaction.

Mueller and McClosky's (1990) Job Satisfaction Survey (JSS) has thirty-one items assigned to eight dimensions. It uses a five point Likert scale ranging from "very dissatisfied" (1) to "very satisfied" (5). As stated by Mueller and McClosky (1990), scores for each of the eight dimensions are obtained by either summing or averaging the relevant items. The reliability coefficients for the eight dimensions of job satisfaction obtained by Mueller and McClosky (1990), as well as that for a measure of overall job satisfaction (found by summing all items) are presented in Table 10 (see p. 166).

Organisational Commitment Survey (OCS) (Section F) (Mowday, Steers and Porter 1979)

A review of the literature shows that there are a number of well-established organisational commitment questionnaires (Buchanan 1974, Cook and Wall 1980, Franklin 1975, Hrebiniak and Alutto 1972, Koch and Steers 1978). However, the Mowday et al. (1979) Organisational Commitment questionnaire remains the most popular and frequently used measure of organisational commitment. It examines organisational commitment from the attitudinal perspective rather than the behavioural perspective, which, as discussed in Chapter 2, is of greater relevance for the present study. The instrument also provides satisfactory convergent and discriminant validities (Cook et al. 1981, p. 125). It has fifteen items and each item has a seven point Likert rating scale ranging from "strongly disagree"(1) to "strongly agree" (7). The score is the sum of all items. An overall score of above sixty (60) is considered to indicate a positive attitude regarding organisational commitment. This instrument was found by Mowday et al. (1979) to have a reliability coefficient of 0.9.

5.4 Piloting of the Questionnaire

A small pilot study was carried out to assess the clarity of the instructions in the questionnaire and to detect any procedural problems in the distribution and

collection of questionnaires. The piloting of the questionnaire was conducted by the author in a ward of a general teaching hospital. The questionnaire was distributed to a total of 32 nurses. The average time to complete the questionnaire was 25 minutes. Nurses were also encouraged to add extra comments and opinions about their working environment and interactions in the questionnaire. A total of 24 returns were collected, two of which were incomplete and were discarded.

The size of the sample for the pilot study (a total of 22 responses) is not large enough to obtain accurate estimates of the reliabilities of the scales, or of correlations between them. However, in order to obtain initial rough estimates, Cronbach alpha reliabilities were calculated for each of the scales, as well as correlations between commitment and the other scales. These results are shown in Table 11.

The results indicated that the reliability estimates for the variables were generally satisfactory except for the job satisfaction (balance) and job satisfaction (co-worker) variables, which had relatively low alphas of 0.57 and 0.52, respectively. It was decided that these two variables would be retained for use in the main study because of the small sample size used in the pilot study (and hence a large sampling variability), and also to maintain the integrity

of the original questionnaire. However, the reliability of these two variables in the main study should be noted, and results involving these two variables treated accordingly. The correlations between organisational commitment and other variables were statistically significant except for the variables job satisfaction (balance) (r = 0.14), ward bureaucratic (r = -0.12), hospital bureaucratic (r = -0.02) and hospital supportive (r = 0.09).

TABLE 11: CORRELATIONS WITH COMMITMENT AND RELIABILITY ESTIMATES OF VARIABLES OBTAINED IN PILOTING THE QUESTIONNAIRE

Variables	Correlations	Alpha (reliability estimates)
Ward innovative	0.57**	0.70
Job satisfaction (praise)	0.56**	0.79
Leadership style (consideration)	0.51**	0.84
Ward supportive	0.50**	0.79
Job satisfaction (control)	0.48**	0.81
Job satisfaction (professional)	0.34**	0.72
Job satisfaction (all/Global)	0.31**	0.81
Job satisfaction (interaction)	0.33**	0.80
Job satisfaction (schedule)	0.28**	0.77
Job satisfaction (co-workers)	0.26*	0.52
Job satisfaction (rewards)	0.24*	0.74
Hospital innovative	0.23*	0.76
Leadership styles (structure)	0.19	0.80
Job satisfaction (balance)	0.14	0.57
Hospital supportive	0.09	0.81
Hospital bureaucratic	02	0.71
Ward bureaucratic	12	0.73
Commitment		0.81
n = 22, **p<.01, *p<.05		

No serious problems with the questionnaire or with the procedures were uncovered by the pilot study. However, there were five negative comments in the returns which reflected a concern that the questionnaire was too long and participants could lose concentration. Since all measures were regarded as necessary for this study, the length of the questionnaire was unavoidable and therefore, no changes were made. No interviews were conducted in the pilot study.

5.5 Sampling And Data Collection

A selection of hospitals from different categories (general, private and psychiatric) was used to reflect the broad range of hospital environments and the nursing staff practising in these hospitals. A total of fourteen public general hospitals, six private hospitals and three psychiatric hospitals in the three health areas of the Sydney metropolitan region were identified as potential targets for samples in this study. Hospitals with 200 beds or more were chosen for the sample, as this provided a greater access to nursing staff. It was calculated that approximately twenty six wards (with an average of 15 staff in each ward) were needed to provide an adequate sample size of around three hundred. Therefore, a random selection of hospitals was made from each group of hospitals

(general, private and psychiatric) to provide a good representation of each group of hospitals. Three public teaching hospitals, two private hospitals and two psychiatric hospitals were randomly selected from the above total population of fourteen public general hospitals, six private hospitals and three psychiatric hospitals located in the Sydney region. Approvals were obtained from the Ethics Committees of these hospitals to conduct the survey.

After the hospitals were selected, the use of appropriate wards for this study was discussed with senior nursing administrators in each hospital. Only wards which satisfied the following criteria were selected. Wards which had similar surveys performed within the past six months were not included in the selection. This was to prevent staff from being "over surveyed" and to reduce the risk of a low return rate. Also, wards were selected on the basis that the nurse unit manager had held that position for over twelve months and worked both morning and afternoon shifts. This was done so that the wards sampled were more likely to have a more stable ward culture and leadership style. Thirty general wards, sixteen private wards and fifteen psychiatric wards satisfied these criteria. As only twenty six wards were required, a random selection of wards occurred which resulted in eleven general hospital wards, seven private hospital wards, and eight psychiatric hospital wards being selected for the final

sample. All nursing staff in the selected wards were invited to participate in the questionnaire survey. In total, 398 nurses were invited to take part in the study

of which 201 nurses were from the general wards, 107 nurses were from the private wards and 90 were from the psychiatric wards. The purpose of the study was explained to the Nurse Unit Managers (NUMs) of the selected wards and special support and co-operation was requested by the researcher. The staff were informed that the responses were anonymous and confidentiality of data was promised to all participants.

The questionnaire was given to all participants with a covering letter and a blank return envelope. Participants were asked to return the completed questionnaire within seven days, in the envelope provided, to boxes located in their wards. A follow-up reminder was sent to all staff three days after the initial collection. A total of 258 returns was obtained from the 398 questionnaires distributed. Seven questionnaires were incomplete and were discarded. A total of 251 questionnaires were used for the final analysis which represents a response rate of 63%.

5.6 Analysis of Data

Survey questionnaires were collected and responses to items defining the variables (hospital culture, ward culture, leadership styles, job satisfaction, demographic variables and ward commitment) were entered into the SPSS for Windows (version 6.0) program for statistical analysis. Means and standard deviations were calculated for each variable. Although the instruments selected in this study were all well established, it was necessary to confirm their reliability once again for this study because of its usage in the Australian hospital context. Cronbach alpha estimates of reliability were calculated for all scales. Correlations between all variables were calculated and are shown in Appendix 4.

Multiple regression was used to investigate the relationship between the dependent variable (ward commitment) and independent variables (hospital culture, ward culture, leadership style, job satisfaction and demographic variables). In particular, multiple regression was used to determine the effects of hospital and ward cultures, and leadership style on ward commitment after controlling for job satisfaction. A path analytical framework was used to interpret the results of the multiple regression analyses.

5.7 Validity Issues

Four major threats to the validity of research findings are the lack of internal validity, external validity, construct validity and statistical conclusion validity (Cook and Campbell 1979). Many of the threats to validity arise from the research design and the design of the instruments used. In this study, attempts were made to reduce these threats. When this was not possible, the limitations such threats impose on the results and potential contribution of the finding are acknowledged.

Internal Validity

The major issue for internal validity is the possibility of alternative plausible explanations for relationships found in research results from the presence of a "third" variable that has not been measured. Survey research conducted in the field is particularly open to this threat. This is an integrative study covering organisational, job and personal variables in its analysis. It has been recognised that this study can examine only a limited number of variables that could influence ward commitment. This limitation is acknowledged. However, this threat was substantially reduced by the choice of the relevant variables which were suggested in relevant literature as being related to each other. Also, the survey was complemented by interview data. The results of interviews were

then compared with the survey findings to assess their compatibility. However, it must be acknowledged that regression coefficients might not reflect the magnitude of causal links between the independent and dependent variables as they may be altered by the inclusion of other variables not present in the study.

External Validity

External validity refers to the extent to which the results of the study can be generalised to other populations, environmental conditions or times. Sampling is not truly representative of the population when non-random selection of participants occurs. In this study, the selection of participants was not fully random, because of the constraints set by the participating institutions (see Section 5.5). However, the response rate of 63% is relatively high for this type of study (average of 50% response rate in nursing surveys). As the subjects in this study were nurses located in hospitals, the results of this study would not necessarily generalise to other professionals such as teachers in schools, lawyers in law firms, and this should be acknowledged as a possible limitation to the external validity of the study. Comparative findings from the different groups would be required to confirm the external validity of this empirical study.

Construct Validity

The construct validity of an instrument refers to the extent to which the instrument measures what it is intended to measure. The instruments used in this study were chosen from previously used and validated instruments. The established reliabilities and validities of these instruments were mainly obtained from studies in the United States. However, clinical nursing practice and the bureaucratic structure of hospitals are similar in the United States and Australian settings and so this is unlikely to effect the construct validity of the scales (Clinton and Scheiwe 1995, Macklin 1991).

Statistical Conclusion Validity

Statistical conclusion validity is concerned with "inferences about whether it is reasonable to presume covariation given a specific alpha level and the obtained variances" (Cook and Campbell 1979, p. 41). This could involve Type 1 error which is concluding that an effect exists when in fact it does not. Alternatively, Type 2 error can occur whereby the effect does exist but it is concluded that it does not. To minimise the likelihood of these errors occurring, established instruments with high reliability were used in this study (except possibly the two low reliabilities of job satisfaction-coworkers and job satisfaction-balance, which were noted). Also, an adequate sample size was used in the study. In this study, 251 returns (63% response rate) were used in the final analysis which

allows correlations of substantively significant magnitude to reach statistical significance (correlations greater than 0.11 and 0.17 are significant for alpha rates of 0.05 and 0.01 respectively in Appendix 4).

In conclusion, it is recognised that there are many threats to validity in this kind of field study using cross-sectional surveys. Strategies were used in the design, collection and analysis of the data to minimise these threats as outlined above.

5.8 Summary

This chapter described the methods used to investigate the interrelationships and influences of specific antecedent variables on nurses' commitment to their wards. A survey, complemented by interviews, was utilised in this study. The major challenges for the research design were: (1) to obtain permission to survey the appropriate groups of nurses, and (2) to execute the necessary steps to gather reliable and valid information about nurses' commitment and relevant specific antecedent variables. The rationale for using a combination of established instruments in the survey was detailed. Descriptions of the instruments used for the quantitative survey and the processes used were presented. Procedures for sampling and data collection were discussed for the main study. In total, 26 wards were surveyed (11 general, 7 private and 8

psychiatric) and 398 nurses were invited for this study. A response rate of 63% (n=251) was obtained in this survey. Methods of analysing quantitative data such as correlational analysis and multiple regression were outlined. Finally, strategies used to minimise threats to internal validity, external validity, construct validity and statistical conclusion validity, were discussed. Collection of qualitative data and the procedures used in the interpretation of interview data and other observations will be discussed in Chapter 7.

Chapter 6

Results of the Study

6.1 Introduction

In this chapter, the analysis of the results of the questionnaire survey is presented. A demographic summary of the sample used is provided in section 6.2. Means, standard deviations and reliability estimates of all variables are presented in section 6.2.1. Sections 6.2.2 and 6.2.3 provide the results of correlational and multiple regression analyses, respectively. Also, a path analytic model of commitment is presented in section 6.2.3 (Figure 9). Differences between hospital groups are analysed in section 6.3. Results of hypotheses testing are given in section 6.4. Finally, section 6.5 presents the summary of findings obtained in the survey.

6.2 Results of Questionnaire Survey

A total of 251 returns were used in the quantitative analysis (i.e., 63% of the total 398 surveyed sample). From these 251 returns, the following results were

obtained. Very few of the questionnaires contained items which were not completed, with the missing responses for each of the items representing less than 3% of the sample. For all the results reported below, substitution with mean values was used for missing data. A demographic summary of the sample obtained in this study is presented in Table 12.

TABLE 12: DEMOGRAPHIC SUMMARY

Variable	Result
Age	median range 31-35 years, modal range 26-30 years
Gender	84% female, 16% male
Clinical years in nursing	range < 1 to >8 years, mean 5.8 years
Years in present position	range 1 to 7 years, mean 4.6 years
Tertiary education	28.7% diplomas, 8.8% degrees, remainder certificates

6.2.1 Means, Standard Deviations and Reliability

Estimates of Variables in the Study

The eighteen variables in this study are shown in Table 13. Seventeen variables, other than commitment, were classified into four groups, namely, organisational culture (i.e., hospital culture), subculture (i.e., ward culture), leadership style (ward manager's) and job satisfaction. Each subject's score on a particular variable was calculated as the average of the subject's ratings on the set of items corresponding to that variable. The variable Global (JS) was

formed as the average of all the job satisfaction items. Cronbach alpha reliability estimates, means, standard deviations and rating scale midpoints are shown in Table 13.

The reliability estimates shown in Table 13 for the culture, leadership style and commitment variables are generally comparable in magnitude with the values found in previous studies. The reliability estimate for the "innovative ward culture" variable (WCINN in Table 13) is, however, somewhat lower in the present study (Alpha = 0.67) than Wallach's (1983) original estimate (Alpha = 0.87).

A comparison of the reliability estimates for the job satisfaction components obtained in this study and those obtained by Mueller and McClosky (1990) shows that the two sets of reliabilities are generally comparable in magnitude. The reliability estimate of the global scale in this study (Alpha = 0.83) is very close to the value obtained by Mueller and McClosky (1990) (Alpha = 0.84). The reliability estimate of 0.70 for the "extrinsic reward" variable in this study is somewhat higher than the value of 0.52 obtained by Mueller and McClosky (1990). However, the reliability estimate for the "balance job satisfaction" variable (JSBALNCE) remains relatively low (Apha = 0.51) when compared with the original estimate (Alpha = 0.57).

TABLE 13: CRONBACH ALPHA RELIABILITY ESTIMATES, MEANS AND STANDARD DEVIATIONS OF VARIABLES USED IN THE STUDY (N = 251)

Variables	Abbrev	Alpha (past studies)	Alpha (present study)	Mean	SD	Scale mid point
Organisational Culture (E Wallach's (1983) OCI	Iospital Culture)					
Hospital bureaucratic	HCBUR	0.71	0.72	2.24	0.45	1.5
Hospital innovative	HCINN	0.87	0.74	1.70	0.49	1.5
Hospital supportive	HCSUP	0.77	0.84	1.53	0.58	1.5
Subculture (Ward Culture	e)					
Ward bureaucratic	WCBUR	0.71	0.74	1.92	0.48	1.5
Ward innovative	WCINN	0.87	0.67	1.74	0.46	1.5
Ward supportive	WCSUP	0.77	0.83	1.95	0.56	1.5
Leadership Style Stogdill's (1974) LBDQ						
Structure	LSST	0.78	0.84	2.81	0.55	3.0
Consideration	LSCONSID	0.82	0.81	3.29	0.92	3.0
Job Satisfaction Mueller and McClosky's (1	990) JSS					
Praise	JSPRAISE	0.80	0.77	3.25	0.92	3.0
Control	JSCOBTRL	0.80	0.85	3.09	0.90	3.0
Interaction	JSINT	0.72	0.77	3.71	0.77	3.0
Professional	JSPROF	0.64	0.76	3.12	0.79	3.0
Co-worker	JSCOWKS	0.54	0.47	3.89	0.75	3.0
Scheduling	JSSCHED	0.84	0.82	3.59	0.82	3.0
Extrinsic reward	JSXREW	0.52	0.70	3.19	0.92	3.0
Balance	JSBALNCE	0.57	0.51	3.02	0.73	3.0
Gobal (JS)	JSALL	0.84	0.83	3.33	0.49	3.0
Ward Commitment Mowday, Steers and Porter	's (1979) OCS					
Ward commitment	COMMIT	0.90	0.85	4.98	0.98	4.0

Note: The "Global (JS)" variable was calculated by averaging all job satisfaction items for each subject. The "scale midpoints" refers to the value corresponding to centre of the rating scale used for items in the particular scale.

Although the Cronbach alphas in this study for JSBALNCE and JSCOWKS are relatively low (0.51 and 0.47 respectively), they are only slightly lower than those obtained for these variables in the Mueller and McClosky (1990) study, which were 0.57 and 0.54 respectively. For the sake of completeness and to maintain the integrity of the original instrument, these variables were included in subsequent analyses. However, the low reliability of the variables should be kept in mind when interpreting the results of further statistical analyses involving these variables.

With regard to the means of the variables used in this study, that of bureaucratic hospital culture (mean = 2.24) is much higher than the means for innovative and supportive hospital cultures (mean = 1.7 and 1.53 respectively). Although all the above means are above the scale midpoint of 1.5, the results reveal that nurses generally see that their hospitals are dominated by the bureaucratic culture.

Means for the supportive and bureaucratic ward culture variables are approximately equal (mean = 1.95 and 1.92 respectively). The means for these two variables are significantly higher than that of the innovative ward culture variable (mean = 1.74). The means of the three ward culture variables are all

above the scale midpoint of 1.5, indicating that nurses, on average, rated their wards as fairly supportive, bureaucratic and, to a lesser extent, innovative. Comparing the means of the hospital and ward culture variables, respondents saw their wards as being less bureaucratic, and slightly more supportive than their hospitals. They rated their wards and hospitals as being equally innovative.

The difference between the means of the leadership style variables initiating structure (2.81) and consideration (3.29), is statistically significant (p<0.01). This implies that respondents saw that their leaders used more of the consideration than the initiating structure leadership style. When the means of the variables within the job satisfaction group of measures are compared, it can be seen that the respondents had higher levels of satisfaction with co-workers (3.89), interaction with colleagues (3.71) and flexibility in scheduling (3.59) than with the other aspects of their job. Also, all the job satisfaction variables in this study achieved an average above the scale midpoint of 3. The mean for overall job satisfaction (Global JS) is 3.3 which is slightly above the scale midpoint. The mean of ward commitment in this study is 4.98 which is above the scale midpoint of 4. This shows that respondents are generally committed to their wards, though on average, not strongly so.

6.2.2 Correlations between Variables

Correlations among all variables are shown in Appendix 4. The correlations most relevant to the main aims and hypotheses of this thesis are those with commitment. Table 14 lists the variables (including demographic variables) in order of decreasing size of correlation with commitment. Job satisfaction (control) has the strongest correlation with commitment (0.51), followed by ward innovative (0.49), job satisfaction (praise) (0.47), ward supportive (0.47), leadership style (consideration) (0.45) and job satisfaction (global-JS) (0.47). Commitment has near zero correlations with hospital bureaucratic (0.05) and ward bureaucratic (-0.10), and these are not statistically significant. Among the demographic variables, age has the strongest correlation with commitment (0.23).

Regarding correlations with organisational culture (hospital culture) and subculture (ward culture) variables, ward innovative and ward supportive have stronger correlations with commitment (0.49 and 0.47, respectively) than do the hospital innovative and hospital supportive variables (0.24 and 0.22, respectively). The hospital and ward bureaucratic variables both have low non-significant correlations with commitment (0.05 and -0.10 respectively).

TABLE 14: CORRELATIONS WITH COMMITMENT

Variables	Correlations	
Job satisfaction (control)	0.51**	,#### <u>*</u>
Ward innovative	0.49**	
Job satisfaction (praise)	0.47**	
Ward supportive	0.47**	
Leadership style (consideration)	0.45**	
Job satisfaction (global)	0.47**	
Job satisfaction (interaction)	0.39**	
Job satisfaction (co-workers)	0.30**	
Job satisfaction (schedule)	0.29**	
Job satisfaction (professional)	0.26**	
Job satisfaction (rewards)	0.24**	
Hospital innovative	0.24**	
Hospital supportive	0.22**	
Leadership styles (structure)	0.20**	
Job satisfaction (balance)	0.13*	
Hospital bureaucratic	0.05	
Ward bureaucratic	10	
Demographic variables		
Age	0.23**	
Clinical years	0.10	
Tertiary education	0.09	
Years in position	0.02	
n = 251, **p<0.01, *p<0.05		

Although less directly related to the aims of this thesis, correlations amongst the culture, leadership and job satisfaction variables are also of interest and are presented below, in Tables 16-18. Table 15 lists the correlations between the corresponding hospital and ward culture variables.

TABLE 15: CORRELATIONS BETWEEN THE SAME CATEGORIES OF HOSPITAL AND WARD CULTURES

0.51**
0.51
0.37**
0.31**
_

It can be seen that these are relatively low (0.37 and 0.31 for the innovative and supportive measures), but somewhat higher with the correlation of 0.51 between the bureaucratic ward culture and bureaucratic hospital culture measures. However, it can be noted that the correlations between the corresponding ward and hospital culture variables are low when compared with the reliability estimates of these variables (see Table 13). This suggests that the measures obtained from the hospital culture and ward culture scales in the questionnaire do represent distinct constructs.

Correlations between the six culture variables and the two leadership variables are shown in Table 16.

TABLE 16: CORRELATIONS BETWEEN WARD AND HOSPITAL CULTURE VARIABLES AND LEADERSHIP STYLE VARIABLES

Variable	Leaders	hip Style
	Consideration	Structure
Ward culture (innovative)	0.41**	0.32**
Ward culture (supportive)	0.45**	0.13*
Ward culture (bureaucratic)	0.02	0.31**
Hospital culture (innovative)	0.14*	0.12*
Hospital culture (supportive)	0.17**	0.11*
Hospital culture (bureaucratic)	0.03	0.16*
n = 251, p<0.01**,p<0.05*		

Except for the correlations involving the ward and hospital bureaucratic culture variables, two trends can be observed. Firstly, ward culture variables (innovative and supportive) show stronger associations with the leadership style variables than do the corresponding hospital culture variables. Secondly, the "consideration" leadership style variable tends to be more highly correlated with the ward and hospital culture variables than is the "initiating structure" leadership variables. Thus, the higher correlations are between leadership style (consideration) and the two ward culture variables (innovative and supportive, 0.41 and 0.45 respectively). Correlations with the two bureaucratic culture variables do not follow this pattern, having near zero correlations with

leadership style "consideration" and small but significant correlations with leadership style "initiating structure".

Correlations (extracted from Appendix 4) between job satisfaction and leadership style are shown in Table 17. The job satisfaction variables have been grouped in this table following McClosky's (1974) interpretation of the questionnaire items based on safety, social and psychological categories, which reflect Maslow's hierarchy of needs (lower to higher order needs).

TABLE 17: CORRELATIONS BETWEEN JOB SATISFACTION AND LEADERSHIP STYLE VARIABLES

Job Satisfaction	Leaders	hip Style
	Consideration	Structure
Higher order needs (Psychological need	s)	
praise	0.58**	0.34**
control	0.50**	0.21**
professionalism	0.31**	0.20**
Social needs)		
nteraction	0.30**	0.16*
coworker	0.21**	0.21**
ower order needs (Safety needs)		
schedule	0.19**	0.10
reward	0.05	0.09
balance	0.00	02
global	0.40**	0.25**
o<0.01**, p<0.05*		

Inspection of correlations in Table 17 reveals two trends. Firstly, the psychological needs variables of job satisfaction (praise, control and professionalism) have the strongest association with the leadership style variables. This is followed by the social needs variables (interaction and coworker). Secondly, the consideration leadership style variable tends to be more highly correlated with the job satisfaction variables than is the initiating structure leadership style variable.

Table 18 shows the correlations (extracted from Appendix 4) between the job satisfaction variables and the ward and hospital culture variables. The results in this Table show the following trends. Firstly, the innovative and supportive culture variables show the strongest association with the psychological need variables of job satisfaction, followed by the social need variables and the safety need variables. Secondly, apart from the two bureaucratic culture variables, the remaining ward culture variables generally have higher correlations with the job satisfaction variables than do the hospital culture variables. Thirdly, although the results show a low association between the job satisfaction variables and the bureaucratic culture variables (both ward and hospital), the correlations with the hospital bureaucratic culture variables are consistently higher than those with the ward bureaucratic culture variable. (Note: the low reliability estimates of the "co-worker" and "balance" variables as shown in Table 13

should be acknowledged, as contributing to lower correlations with other variables. However, this is unlikely to influence the general trends described above).

TABLE 18: CORRELATIONS BETWEEN JOB SATISFACTION AND WARD AND HOSPITAL CULTURE

	Н	Hospital Culture			Ward Culture		
Job Satisfaction	Bur	Inn	Supp	Bur	Inn	Supp	
• praise	0.15*	0.25**	0.34**	0.00	0.36**	0.43**	
• control	0.07	0.28**	0.33**	04	0.35**	0.41**	
 professionalism 	80.0	0.25**	0.25**	02	0.23**	0.25**	
• interaction	0.17*	0.12*	0.10*	0.10	0.30**	0.38**	
co-worker	0.24**	0.11*	0.17*	0.04	0.21**	0.28**	
schedule	0.04	0.14**	0.19**	08	0.12*	0.14*	
reward	0.04	0.13*	0.25**	02	80.0	0.14*	
• balance	0.09	0.09	0.01	14*	0.07	0.04	
• global	0.15*	0.27**	0.27**	0.02	0.33**	0.35**	
p<0.01 **, p<0.05 *							
(Bur = bureaucratic; Inn = in	novative; Supp =	supportive)					

In summary, the highest three correlations between nurses' commitment and other independent variables are those with job satisfaction (control), ward innovative, and job satisfaction (praise). Also, the innovative and supportive ward culture variables are more strongly related to commitment than are the hospital culture variables. Overall, the psychological job satisfaction variables

of control and praise have the highest correlations with commitment. Finally, the correlation between commitment and consideration leadership style is considerably higher than that between commitment and initiating structure leadership style.

6.2.3 Multiple Regression Analyses

A series of multiple regression analyses were carried out to investigate the influence of the selected variables on commitment in this study. Table 19 shows the results of different regression analyses, obtained by selecting different sets of independent variables, with commitment as the dependent variable. The numbers displayed in Table 19 are the standardised regression coefficients (i.e., beta weights).

The first analysis in column 1 (Table 19) shows that when all independent variables are included in the analysis, eight variables have statistically significant independent influences on ward commitment. These variables are ward culture - innovative (beta = 0.25), job satisfaction - control (beta = 0.22), age (beta = 0.18), job satisfaction - interaction (beta = 0.14), job satisfaction - professional (beta = -0.15), consideration leadership style (beta = 0.13), ward culture - bureaucratic (beta = -0.14) and position years (beta = -0.11). The negative regression coefficients indicate that there are inverse relationships between

TABLE 19: MULTIPLE REGRESSION OF COMMITMENT ON DIFFERENT SETS OF INDEPENDENT VARIABLES (COLUMNS 1-8)

	dependent Iriables			Depen	dent Varia	ble = Con	nmitment		
		1	2	3	4	5	6	7	8
Job	Satisfaction								
•	Praise	0.03	0.04		0.04	_	0.20*	0.20**	_
•	Control	0.22**	0.20**		0.24**		0.33**	0.35**	0 .26**
•	Professionalism	-0.15*	-0.12*	_	-0.15*	_	-0.11*	-0.11*	-0.15*
•	Interaction	0.14*	0.13*	_	0.14*	_	0.18**	0.17**	0.18**
•	Coworkers	0.05	0.03		0.06		10.0	0.02	_
•	Schedule	0.06	0.08	***	_		0.07	_	
•	Balance	-0.04	-0.04		_		-0.05	_	
•	Reward	0.07	0.09	_		_	0.06		0.09*
Lea	dership Style	*****							
•	Consideration	0.13*	0.12*		0.14*	0.23**	_		0.19**
•	Initiating structure	0.03	0.02	- Marindry	0.04	0.06	_		_
los	spital Culture								
•	Bureaucratic	-0.02	-0.03	_	-0.01	0.02		_	
•	Innovative	0.06	0.07		0.05	0.04			
•	Supportive	-0.02	-0.02	_	0.05	0.05	_	_	
Wa	rd Culture								
•	Bureaucratic	-0.14*	-0.14*	_	-0.15*	-0.17*	_		-0.13*
•	Innovative	0.25**	0.24**		0.24**	0.27**	_	_	0.29**
•	Supportive	0.08	0.13*	_	0.08	0.16*		_	
Der	nographics						<u> </u>		
•	Age	0.18**	_	0.27**	0.20**	0.17**		_	0.22*
•	Clinical years	0.04	_	0.07	0.04	0.93			_
•	Position years	-0.11*		0.16*	-0.12*	-0.16*	_		-0.10*
•	Tertiary qualifications	0.03		0.06	0.04	0.04	_		_
₹ ²		0.49**	0.46**	0.07**	0.48**	0.41**	0.33**	0.32**	0.47**
	ltiple R 'p<0.01, *p<0.05	0.70**	0.68**	0.27**	0.69**	0.64**	0.58**	0.57**	0.69**

Table 19 continued

Note: Except for the bottom two rows, the numbers displayed are the standardised regression coefficients.

Column 1: All independent variables

Column 2: All independent variables minus demographics

Column 3: Only demographic variables

Column 4: All independent variables minus job satisfaction-safety needs variables Column 5: Only ward culture, hospital culture variables and selected demographics

Column 6: Job satisfaction variables only

Column 7: Job satisfaction - psychological and social needs variables only

Column 8: All independent variables, with variables having non-significant loadings

removed by the backward elimination procedure

these variables and commitment when all other variables in the equation are held constant.

The second analysis in column 2 indicates that when demographic variables are excluded, the same variables have significant betas as in column 1. In addition, "ward supportive" has a small but significant beta value of 0.13 (p<0.05) in the second analysis. A comparison of the R squares for columns 1 and 2 shows that when demographic variables are included in the equation, there is a small but statistically significant increase in R square of 0.03 (from 0.46 to 0.49, p<0.05).

This change in R square can be interpreted as a measure of the influence of the demographic variables on commitment after having controlled for the effects of the other variables. This value can be compared with an R square of 0.07

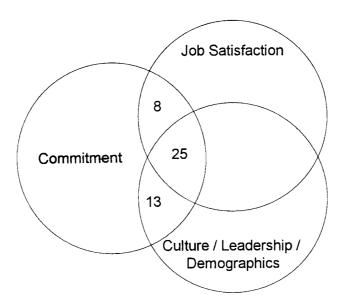
(p<0.01) obtained from the analysis in which only the demographic variables are in the equation (column 3). Thus, after controlling for the other variables, the small but significant effect of the demographic variables on commitment (R square = 0.07) is significantly reduced (to R square = 0.03), but is not totally removed. These results, therefore, do not support a model in which the effects of the demographic variables on commitment are mediated totally via their effects on the other antecedent variables. Thus the demographic variables have both direct and indirect effects on commitment, which, although statistically significant, are small in comparison with effects of the remaining variables (R square = 0.46, column 2).

When job satisfaction variables only are entered (column 6), the R square is 0.33. When the remaining independent variables are entered into the equation (column 1), a significant increase in R square of 0.13 to 0.46 can be observed. Hence, there is a significant relationship between commitment and these additional independent variables after controlling for the job satisfaction variables. Thus, the results are not compatible with a model (such as Williams and Hazer 1986), which holds that the effects of the independent variables on commitment are fully mediated via their effects on the job satisfaction variables. The results are, however, compatible with a model similar to that suggested by Price and Mueller (1981a, p. 38) in which the effects of the antecedents on

commitment are largely, but not totally, mediated via their influences on job satisfaction.

When all variables except the job satisfaction ones are entered (column 5), the R square is 0.41. From this regression analyses and those shown in columns 2 and 6, a Ballantine diagram was constructed using the procedure described by Cohen and Cohen (1983, p.140), and is shown in Figure 8. This gives a visual representation of the variance of commitment explained by the job satisfaction variables, and the set of all other independent variables.

FIGURE 8: BALLANTINE DIAGRAM



This diagram shows the relationship between commitment (dependent variable) and the two groups of independent variables, the job satisfaction variables and the remaining independent variables (leadership styles/cultures/demographics). It can be seen that 46% (i.e. 8 + 25 + 13) of the variance in commitment is explained by variation in both the job satisfaction and other variables. Of this, 25% of the variance of commitment is attributed to variance shared by both the job satisfaction and the other variables, 8% is explained by the independent effect of the job satisfaction variables and 13% by the independent effects of all culture, leadership styles and selected demographic variables.

Some turnover models, such as those of Price and Mueller (1981a) and Taunton et al. (1989), suggest that, apart from their direct effect of organisational variables on commitment (intent to stay), job satisfaction variables act as an intervening variable between organisational variables and commitment (intent to stay). That is, organisational variables also have an indirect effect on commitment via job satisfaction. A series of further regression analyses were therefore carried out to determine the possible indirect effects of variables on commitment, via the job satisfaction variables.

A calculation of these indirect effects requires, firstly, a regression of the job satisfaction variables and other antecedents on commitment (as shown in column 1 of Table 19), and secondly, regressions of the antecedents on each of the relevant job satisfaction variables (see Cohen and Cohen 1983, p. 67). Resulting from the method used to calculate indirect effects (see later in this section), regression analyses are needed only for those job satisfaction variables that have significant direct effects (betas) on commitment. Since it was the job satisfaction variables of interaction, professionalism, and control (in column 1), which had significant direct influences on commitment, multiple regression analyses on the above job satisfaction variables with the remaining independent variables were performed to determine the possible indirect effects of these independent variables (via the job satisfaction variables) on commitment. These results are shown in Table 20.

From these analyses, it can be seen that the job satisfaction-control variable is somewhat better predicted by the independent variables (R square = 0.38) than are the other two job satisfaction variables, interaction and professionalism, (R square = 0.22 and 0.21 respectively). The results in Table 20 also show that leadership style-consideration has a significant influence on all three job satisfaction variables: interaction, professionalism and control (as displayed in columns 1, 2 and 3 in Table 20). Also, hospital supportive culture and ward supportive culture have a significant influence on the majority of these job satisfaction variables. Column 3 shows that there are significant (p<0.01)

influences of hospital supportive culture, leadership style-consideration, and the demographic variable (position in years) on the job satisfaction-control variable. Also, as shown in column 1, supportive ward culture has a significant (p<0.01) influence on the job satisfaction-interaction variable.

TABLE 20: MULTIPLE REGRESSION OF JOB SATISFACTION VARIABLES (JSINT, JSPROF AND JSCONTRL) ON REMAINING INDEPENDENT VARIABLES

Independent Variables		Dependent Variable	
	1	2	3
	Job Satisfaction Interaction	Job Satisfaction Professionalism	Job Satisfaction Control
Leadership Style			
- Consideration	0.13*	0.19*	0.34**
- Initiating Structure	0.04	0.13*	0.05
Hospital Culture			
- Bureaucratic	0.13*	0.04	0.01
- Innovative	0.04	0.11	0.06
- Supportive	0.00	0.12*	0.22**
Ward Culture			
- Bureaucratic	0.02	-0.10	-0.11*
- Innovative	0.09	0.03	0.09
- Supportive	0.29**	0.05	0.13*
Demographics			
• Age	-0.09	0.15*	0.04
Clinical Years	0.20*	0.09	0.10
• Position Years	-0.08	-0.17*	-0.18**
Tertiary Qualifications	0.03	-0.06	-0.04
R^2	0.22**	0.21**	0.38**
Multiple R	0.46**	0.46**	0.62**
**p<0.01, p<0.05; Columns 1, 2 a	and 3 include all independe	nt variables except job satis	faction

Finally, the indirect effects of each of the antecedent variables on ward commitment via the three job satisfaction variables (interaction, professionalism and control) were calculated using the method described by Cohen and Cohen (1983, p. 67) and the results are shown in Table 21.

.

Here, the total effects (direct plus indirect) of these variables on commitment are also shown. Direct effects are the beta values as shown in column 1. For a particular independent variable, the indirect effect is the sum of the products of betas for all paths leading from the independent variable to commitment. For example, with the independent variable of hospital bureaucratic culture, the indirect effect via job satisfaction - interaction would be the product of betas 0.14 and 0.13 ($0.13 \times 0.14 = 0.18$ or 0.02). A path analytic diagram was drawn to represent the results displayed in Table 20 and 21, and is shown in Figure 9. (Note: Tertiary qualifications is not included in Figure 9 as there is no statistically significant direct or indirect effects on commitment for this variable).

The results show that the strongest indirect effects on commitment are from the variables of supportive ward culture (beta = 0.07), supportive hospital culture (beta = 0.07) and leadership style - consideration (beta = 0.06). The significant

TABLE 21: DIRECT AND INDIRECT EFFECTS ON COMMITMENT

	Direct Effect (a)	Indirect Effects (b) Via Job Satisfaction Variables			Total Indirect	Total Indirect + Direct Effect
Independent		VIA	VIA	VIA		
Variables		Job Satisfaction - Interaction	Job Satisfaction -Professionalism	Job Satisfaction -Control		
	1	2	3	4	5	6
Job Satisfaction						
• Interaction	0.14					0.14
• Professionalism	-0.15					-0.15
• Control	0.22					0.22
Hospital Culture						
Bureaucratic	-0.02.	0.02	0.00	0.00	0.02	0.00
• Innovative	0.06	0.00	0.02	0.01	0.03	0.09
• Supportive	-0.01	0.00	0.02	0.05	0.07	0.02
Ward Culture						
Bureaucratic	-0.14	0.00	-0.02	-0.02	-0.04	-0.16
• Innovative	0.25	0.00	0.00	0.00	0.00	0.25
• Supportive	0.08	0.04	0.00	0.03	0.07	0.15
Leadership Style						
• Initiating structure	0.03	0.00	0.02	0.01	0.03	0.03
• Consideration	0.15	0.02	-0.03	0.07	0.06	0.21
Demographics						
• Age	0.19	0.00	0.02	0.00	0.02	0.21
• Clinical years	0.04	0.03	0.00	0.00	0.03	0.07
• Position years	-0.11	-0.01	-0.02	-0.04	-0.07	-0.18
• Tertiary qual.	0.03	0.00	0.00	0.00	0.00	0.03

⁽a):Direct effects are the beta values as in column 1 of Table 20

⁽b):Indirect effects are the sum of the product of betas for all paths leading from the independent variable to commitment (dependent variable)

direct effects on commitment are by the variables innovative ward culture (beta = 0.25), age (beta = 0.18), job satisfaction-interaction (beta = 0.14), job satisfaction - professionalism (beta = -0.15), job satisfaction - control (beta = 0.22), leadership style - consideration (beta = 0.13) and bureaucratic ward culture (beta = -0.14).

Ward innovative culture has the strongest total effect on commitment (beta = 0.25). The level of control in job satisfaction has the second highest total effect on commitment (beta = 0.22). Leadership style - consideration has the third highest direct influence on commitment (beta = 0.21). Although the results support the predicted relationships between leadership style and commitment (Bateman and Strasser 1984, DeCotiis and Summers 1987) and between job satisfaction and commitment (Mowday et al. 1982, Vandenberg and Lance 1992), an important finding is that ward innovative culture has the strongest influence on commitment when compared to other variables in this study.

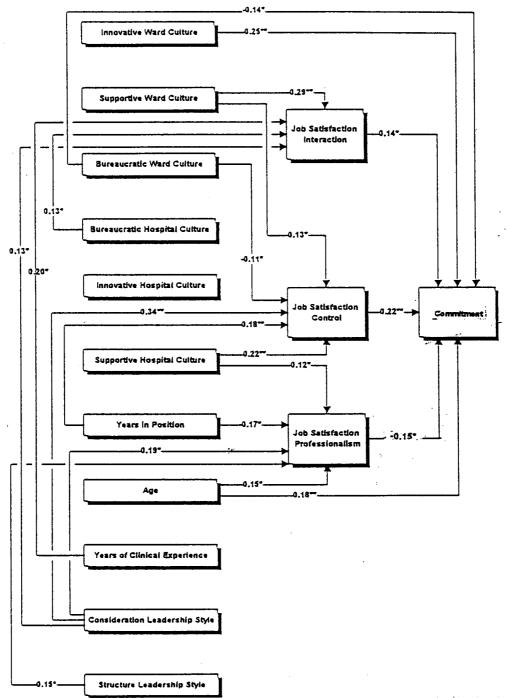
Also, the total (direct plus indirect) effects of the ward culture variables on commitment are generally higher than those of the hospital culture variables. This is an important finding since there has been little attention in the literature given to the relative influences of hospital culture (organisational culture) and ward culture (subculture) on commitment.

Age is equal third with leadership style - consideration in total effect on commitment (0.21). This finding is consistent with previous research (Battersby et al. 1990, Williams and Hazer 1986) which concluded that age is a significant factor in commitment and turnover studies.

The variable bureaucratic ward culture had a negative total effect on nurses' commitment. This result provides support for previous suggestions that factors such as hierarchical decision making, autocratic working environment, and the lack of employee empowerment would produce negative employee commitment in the work place (Brewer 1994, Brewer and Lok 1995, Mueller et al. 1992). The results of this thesis also reveal that the number of years in the position is inversely related to commitment. This could be expected if there was a lack of continuing challenges in the job. The negative effect of satisfaction with professionalism on commitment was rather surprising. This finding was contrary to the popular assumption that professionals are constantly involved in their learning and are committed to their work. Thus, this interesting finding would require further investigation.

FIGURE 9: PATH ANALYTIC MODEL OF COMMITMENT

Numbers shown are the standardised regression coefficients. Only those significantly different from zero (alpha = 0.05) are shown. (* p<0.05, ** p<0.01)



Note: "Tertiary qualifications" is not included in Figure 9 as there is no statistically significant direct or indirect effects on commitment for this variable.

6.3 Comparison of Hospital Groups

MANOVA (Multivariate Analysis of Variance) was first used to test if there was a significant difference between the three groups of hospitals. An overall test of the null hypothesis of no differences in means for all variables (Hotelling's test) showed significant differences between these three categories of hospitals (p<0.001, F=3.56, df=34, 462). A series of univariate ANOVAs (Table 22) was used to investigate differences between the three categories of hospital for each of the twelve (12) variables. (Note: age and tertiary education were not included in the above analyses because they were represented as ordinal variables).

TABLE 22: ANOVAS (UNIVARIATE) WITH HOSPITAL GROUP AS INDEPENDENT VARIABLES

Variable	F	
Years in the position	5.50**	
Clinical years experience	4.57*	
Ward culture (bureaucratic)	5.10**	
Ward culture (innovative)	4.02	
Ward culture (supportive)	0.30	
Leadership (structure)	0.93	
Leadership (consideration)	2.36*	
Hosp. culture (bureaucratic)	1.93	
Hosp. culture (innovative)	1.10	
Hosp. culture (supportive)	8.45**	
Job satisfaction (global)	2.26	
Commitment	2.01	
**p<0.01, *p<0.05		

The results in Table 22 show that there were significant differences between hospital groups for the following variables: years in the position (F=5.50, p<.01), clinical years of experience (F=4.57, p<0.05), bureaucratic ward culture (F=5.10, p<0.01), innovative ward culture (F=4.02, p<0.05), consideration leadership style (F=2.36, p<0.05) and supportive hospital culture (F=8.45, p<0.01). It can be noted that there were no statistically significant hospital group effects for overall job satisfaction or commitment. Paired comparison between hospital groups was also conducted for those variables for which the ANOVAs showed significant differences between the hospital groups (see Tables 23 and 24). The results showed that the number of years in position in private hospitals was significantly higher than in general hospitals, and the number of years in psychiatric hospitals was significantly higher than in general hospitals. Clinical years of experience was significantly higher in psychiatric hospitals than in general hospitals. Ward culture-bureaucratic was significantly higher in private hospitals than in general hospitals and psychiatric hospitals. This finding is contrary to previous assumptions which suggested that general hospitals tend to be more bureaucratic than others because of the clinical focus and bureaucratic socialisation processes in general hospital. (discussed in Chapter 4, Hypothesis 8). Hospital culture-supportive is significantly higher in private hospitals than psychiatric or general hospitals. The finding is also

contrary to the assumption that psychiatric hospitals should be more supportive because of the holistic approach to their clinical practice.

TABLE 23: MEANS FOR VARIOUS HOSPITAL GROUPS

	Scale midpoint	General	Psych	Private
Years in the position		4.04 ab	5.13 a	5.25 b
Clinical years experience		5.27 a	6.31 a	6.13
Ward culture (bureaucratic)	1.5	1.90 a	1.83 b	2.10 ab
Ward culture (innovative)	1.5	1.81	1.69	1.62
Ward culture (supportive)	1.5	1.92	1.99	1.97
Leadership (structure)	3.0	2.77	2.88	2.84
Leadership (consideration)	3.0	3.32	3.40	3.05
Hosp. culture (bureaucratic)	1.5	2.27	2.16	2.30
Hosp. culture (innovative)	1.5	1.67	1.77	1.66
Hosp. culture (supportive)	1.5	1.41 a	1.54 b	1.80 ab
Job satisfaction (Global)	3.0	3.34	3.39	3.21
Commitment	4.0	5.10	4.90	4.82

a, b and c = differences between means with same superscript are statistically significant (p<0.05).

TABLE 24: PAIRED DIFFERENCES FOR VARIABLES BETWEEN GENERAL, PSYCHIATRIC AND PRIVATE HOSPITAL CATEGORIES

Variables	Psychiatric vs General		Private vs General		Psychiatric vs Private	
	t	Sig.	t	Sig.	t	Sig.
Years in position	2.63	0.01*	2.82	0.01*	-0.42	0.68
Clinical years experience	2.75	0.01*	1.92	0.06*	0.50	0.61
Ward culture (bureaucratic)	-0.84	0.40	3.10	0.00**	-3.49	0.00**
Leadership consideration	0.50	0.62	-1.39	0.17	1.67	0.10
Hospital culture (supportive)	1.54	0.12	4.31	0.00**	-2.66	0.01*

Only significant variables from Table 23 are shown here.

6.4 Evaluation of Hypotheses in this Study

The results of the questionnaire survey provided the following conclusions relating to the hypotheses stated earlier in this thesis.

Hypothesis 1:

There is a relationship between nurses' commitment to their wards and measures of hospital culture, ward culture, leadership style and job satisfaction. More specifically, it is expected that a) a supportive and innovative hospital and ward culture will be positively correlated with commitment and b) the bureaucratic hospital and ward culture will be negatively correlated with commitment and c) a consideration-leadership style will be more positively correlated with commitment than will structure-leadership style.

The correlations shown in Table 14 (in section 6.2.2) suggest that, except for the hospital bureaucratic and ward bureaucratic culture variables, there are, in general, positive and significant correlations between commitment and measures of hospital culture, ward culture, leadership style and job satisfaction. Correlations between all variables and commitment in this study ranged from 0.51 to -0.10. Job satisfaction dimensions such as control, praise and

interactive (which are considered as intrinsic factors or higher order needs) had significantly higher correlations with commitment (0.51, 0.47 and 0.39 respectively) than most of the other variables. The correlation of leadership style - consideration and commitment was reasonably high (0.45) when compared to others in this study. However, the correlation between leadership style - structure and commitment was low (0.20). Hospital culture dimensions generally had low correlations with commitment (0.24, 0.22 and 0.05 respectively). However, the ward culture dimensions innovation and supportive had higher correlations with commitment (0.49 and 0.47 respectively). Hence, results from this study generally support Hypothesis 1.

Hypothesis 2:

Nurses' commitment to their wards is more strongly related to their perception of ward culture than to their perception of hospital culture.

Results in Table 14 revealed that innovative and supportive ward cultures had significantly higher correlations with commitment (0.49 and 0.47 respectively) than innovative and supportive hospital cultures (0.24 and 0.22 respectively). Multiple regression analysis on commitment also showed that ward innovative culture had the highest direct influence on commitment. Thus, hypothesis 2 is supported by these results.

Hypothesis 3:

Job satisfaction variables have the strongest relationships with ward commitment when compared with other antecedent variables.

Although correlations between ward commitment and the job satisfaction variables were generally higher than those with the other variables (Table 14 in section 6.2.2), only two job satisfaction components (control and praise) appeared in the top four correlations with commitment. These were satisfaction with control over one's work environment, and praise from management (r = 0.51 and 0.47 respectively). However, there was negligible difference between these correlations and those with the two ward culture variables (the level of innovation and the degree of supportiveness in the ward, r = 0.49 and 0.47 respectively). Thus, hypothesis 3 is not fully supported.

Hypothesis 4:

The association between nurses' commitment to their wards and the variables of hospital culture, ward culture and leadership style, are significantly reduced after statistically controlling for the job satisfaction measures.

The proportion of variance explained by the culture and leadership variables was found to be significantly reduced from 41% to 16%, after controlling for job satisfaction variables. This is shown in Table 19, where an R square of 0.33 for the job satisfaction variables only (column 6) was increased by 0.16 to an R square of 0.49 (column 1) with inclusion of the remaining variables in the equation. Column 5 shows that the R square for all variables, except the job satisfaction ones, is 0.41. Thus, the finding supports Hypothesis 4.

Hypothesis 5:

The job satisfaction dimensions used in this study representing the psychosocial or higher order needs in Maslow's hierarchy, are more highly correlated with nurses' commitment to their wards than are the dimensions representing safety or lower order needs.

The results (Table 14 in section 6.2.2) show that satisfaction with the level of control over working environment had the highest correlation with the level of commitment to the ward. This was followed by other job satisfaction dimensions such as praise received from colleagues and leaders, the level of interaction with colleagues, the flexibility of shift scheduling, the level of acceptance by co-workers, the amount of professional activities provided in the ward, and finally, the amount of pay being received. Thus, job satisfaction

dimensions of control, praise, interaction, shift flexibility and acceptance by coworkers, which represent Maslow's higher-order needs, had higher correlations with commitment than other job satisfaction dimensions which represent the lower needs of Maslow hierarchy. Thus, the findings support Hypothesis 5.

Hypothesis 6:

Job satisfaction and commitment increase with age and decrease with education.

The results shown in Table 14 (section 6.2.2), show that correlations between commitment and age, and between job satisfaction (global) and age, were positively and statistically significant. Minimal correlations were also found between job satisfaction (global) and education (r = 0.03), and between commitment and education (r = 0.09, Appendix 4). The results of the multiple regression analyses showed that age was the only demographic variable which had a statistically significant direct positive influence on ward commitment (column 1 in Table 19 and Figure 9 in section 6.2.4).

Education (tertiary qualifications) failed to show any direct influence on commitment in this study. Although DeCotiis and Summers (1987) found that education was inversely related to job satisfaction and commitment, their

results are not supported by this study. In conclusion, the hypothesised positive relation between age and commitment was found in this study. However, the expected negative association between nurses' educational levels and commitment was not observed. Thus, only one part of Hypothesis 6 can be accepted.

Hypothesis 7:

Years in position and years of clinical experience are positively associated with ward commitment.

The results in Table 14 (section 6.2.2) do not show a significant correlation between commitment and years in position, or between commitment and years of clinical experience. Also, the regression analyses shown in Table 19 (section 6.2.4) did not reveal any influence of years of clinical experience on commitment. However, Table 19 shows that years in position had a small but significant independent negative effect on commitment when the effects of other variables were statistically controlled. Hence, hypothesis 7 is rejected.

Hypothesis 8:

There are significant differences in organisational culture between the different hospital groups (general public, private and psychiatric), in that general hospitals are more bureaucratic than private and psychiatric hospitals, private hospitals are more innovative than general public and psychiatric hospitals, and the psychiatric hospitals are more supportive than general public and private hospitals.

The results of quantitative analyses (Tables 22, 23 and 24) show that there were significant differences between the different hospital groups which occured mainly in areas such as bureaucratic ward culture and supportive hospital culture. The findings revealed that bureaucratic ward culture was significantly greater in private hospitals than in general or psychiatric hospitals, and hospital supportive culture was significantly higher in private hospitals than in psychiatric and general hospitals. Innovative ward culture was highest in general hospitals. These results are contrary to those expected. The results do not indicate that private hospitals have a more innovative hospital culture than general or psychiatric hospitals, or that general hospitals have a higher bureaucratic culture than private or psychiatric hospitals. Thus, hypothesis 8 is rejected.

TABLE 27: SIMPLE CONTENT ANALYSIS ON INTERVIEW DATA

Group/Theme	Frequency Of Key Words
(Positive and negative key words and statements are presented)	
Ward Commitment	
Positive key words: stay, happy, committed, loyal, recommend, great place.	24
Examples of statements:	
• I like to stay in this ward.	
• I'm happy and committed to the ward, but not the hospital.	
• I'm <u>loyal</u> to this ward.	
• It is a great place to work in.	
I am <u>committed</u> here.	
Negative key words: leaving, unhappy	2
Examples of statements:	
• I am thinking of <u>leaving</u> this ward.	
• I am <u>unhappy</u> working here.	
Ward Culture	
Positive key words: fair, great atmosphere, supportive, innovative, excellent.	15
Examples of statements:	
• This is an excellent ward to work in.	
• It is very fair and staff are good here.	
 This ward has a great atmosphere. 	
• The staff are very <u>supportive</u> .	
 This ward is both supportive and innovative. 	
Negative key words: bureaucratic, inflexible	3
Examples of statements:	
The ward is bureaucratic and inflexible.	

contrary to what was expected. Finally, section 6.4 provided the results of hypothesis testing for this study.

Chapter 7

Interviews and Observations:

Data Collection and Results

7.1 Introduction

In addition to the questionnaire-based survey described in the last three chapters, a small qualitative study, based on a series of interviews and observations, was carried out. This was done to complement the findings of the quantitative questionnaire-based study and to confirm the validity of these findings. A qualitative approach emphasises the understanding and meaning of human experience, exploring the nature of people's transactions with themselves, others and their surroundings. In the present study, respondents were interviewed to obtain their perception and experience of the organisation under a number of pre-determined themes.

7.2 Collection of Qualitative Data

Following the collection of questionnaires from the wards (as described in Chapter 5, section 5.6), follow-up interviews were conducted with nurses in the wards. Due to the heavy workload in hospital wards, randomly selected nurses were not always available for an interview. Interviews could be conducted only when the nurses were free in the wards. However, it was ensured that at least one nurse from each hospital was available for an interview to collect information about perceptions of the work environment. In total, eleven nurses who had participated in the questionnaire survey were selected for the follow-up interviews: six nurses from general hospitals, three nurses from private hospitals and two nurses from psychiatric hospitals.

The interviews were conducted using a semi-structured format whereby the interviewer (the author) specifically directed open-ended questions to the interviewee in relation to the six pre-determined themes of hospital culture, ward culture, leadership styles, job satisfaction, commitment and the interrelationships between these variables. These questions are listed in Table 25.

A total of eleven interviews were conducted. The average time per interview was twenty two minutes (ranging from 18 to 30 minutes). Participants were encouraged to discuss any other issues that were relevant to the specific questions asked. Interviews were taped (with consent from participants) and later transcribed.

TABLE 25: OPEN-ENDED INTERVIEW QUESTIONS

(These questions were used as a guide to collect information for the six pre-determined themes)

Ward commitment

- 1. What is the working environment like in this ward?
- 2. Are you loyal and committed to this ward?
- 3. Would you recommend this ward to others?
- 4. Are you proud to be a member of this ward?
- 5. What are the important elements that make you stay in this ward?
- 6. Have you got any plans to leave? Why? When? What to do?

Ward culture

- 7. What are the things that this ward expects of you?
- 8. What are the assumed rules and values in this ward?
- 9. Do you feel that this ward has a bureaucratic, innovative or supportive environment? Why?
- 10. Are there any specific practices in this ward?

Hospital culture

- 11. What are the things that this hospital expects of you?
- 12. What are the assumed rules and values in this hospital?
- 13. Do you feel that this hospital has a bureaucratic, innovative or supportive environment? Why?
- 14. Are there any specific practices in this hospital?

Leadership

- 15. How do you see your boss in this ward?
- 16. How do you see the director of nursing or nursing administration in this hospital?
- 17. Can you make decisions freely in this ward?
- 18. Do you get sufficient recognition in this ward?
- 19. Do you feel that you are being treated fairly in this ward?
- 20. Do you feel that your leader is more concerned about work practices than people?
- 21. Do you find that your boss is supportive and easy to get on with?

Job satisfaction

- 22. Do you get sufficient autonomy in your work?
- 23. Do you have sufficient responsibility?
- 24. Are your co-workers supportive?
- 25. Do you have sufficient professional or personal development opportunities in this ward?
- 26. Do you find sufficient flexibility about your shift schedule in this ward?
- 27. Are you satisfied with your pay?
- 28. Do you get sufficient feedback?

Relationship between variables

- 29. Is there a link between your ward environment, leadership and job satisfaction with your present position? Why?
- 30. Which of the following variables do you think are mostly responsible for your level of commitment: ward culture, hospital culture, leadership or job satisfaction?

Other qualitative data, such as five procedure manuals and five annual reports, three copies of strategic plans and five minutes of meetings, were selected randomly, sighted and summarised. Eight wards were also observed for an average of two hours each. The above activities were carried out by the

researcher (the author) at different times without prior knowledge of the ward staff. These qualitative data were collected in order to obtain a greater understanding of systems of operation, communication pattern and symbolism of the different working environments. These factors were seen as important organisational culture variables (Trice and Beyer 1993). A summary of the analysis of annual reports, procedure manuals, minutes of meetings, internal memos and general observations of staff interactions is presented in section 7.4. The qualitative data overlapped with the quantitative data and was designed to provide scope for confirmation of the questionnaire findings.

7.3 Data Analysis

Qualitative data (interview and observational data) can be analysed by the process of content analysis (Miles and Huberman 1984, Portney and Watkins 1993). Qualitative data can be categorised in a systematic way to uncover patterns or themes and to extract meaning from the mass of information that is available. Also, categories may be developed in accordance with an existing theory to reflect a conceptual framework, or in situations where theories have not yet evolved, they may emerge from the data by demonstrating how particular observations or responses go together. The analysis of qualitative data can be assisted by the use of computer packages such as the "Non-

numerical Unstructured Data Indexing, Searching and Theorising" (NUDIST) software package for further analysis (Richards et al. 1992). This package is suitable for handling large amounts of qualitative data and to perform complex content analysis. Since the qualitative data in this study was not sufficiently complex or large, detailed analysis using NUDIST was not justified and the information was analysed manually.

Content analysis was performed on the transcribed data and key words were grouped into different themes. The transcribing was done by an experienced research assistant and was later verified by the author.

7.4 Results of Qualitative Analysis

Table 26 shows extracts of positive and negative statements of data from the interviews. Simple content analysis (shown in Table 27) was also performed on the interview data from the present study to identify the frequency of key words and common themes.

The results of the interview data revealed that the staff were overwhelmingly positive about their ward culture, the ward managers' leadership style, their satisfaction with their jobs and commitment to their wards. This contrasted

with the survey results where the means of these three variables were only slightly above the scale midpoints.

TABLE 26: EXTRACTS OF POSITIVE AND NEGATIVE STATEMENTS IN RELATION TO THE SIX PRESET THEMES

Variables	Illustrative Statements
Positive statements:	
Ward commitment	"Yes, I would recommend this ward to anyone."
	"I'll stay in this ward."
	"I'm very loyal and want to stay in this ward."
Ward culture	"We all work together here."
	"The staff are friendly and supportive. We can initiate actions and make decisions."
	"It's a very friendly unit."
Leadership styles	"She is fair and you can trust her."
	"She is very supportive of her staff."
	"She is very concerned about her staff."
Job satisfaction	"I really get job satisfaction here."
	"Yes, I do get feedback as to whether I have done good or bad."
	"I'm very satisfied here and that is why I'm staying."
Hospital culture	No positive statement was recorded.
RELATIONSHIPS BETWEEN VARIABLES	
Ward culture and commitment	"I feel the bureaucracy in this hospital does not make me feel committed to the ward."
	"It is friendliness and the supportive nature in this ward that make me stay."
Leadership style and commitment	"The NUM in this ward is very supportive. She is fair and cares about her staff, that is why I'm still here."
	"Our NUM is great. She is tough but fair and I like to work with someone like that."

Job satisfaction, leadership style and commitment	"Both the NUM's leadership style and level of job satisfaction are important for my stay in this ward".
	"Without the supportive leadership style and the pleasant environment in this ward, I would not be here."
	"I feel job satisfaction is the most important factor for my stay. I suppose the NUM's leadership style could be part of the equation."
Negative statements:	
Ward culture	"I find the ward to be autocratic and there is no innovation in this ward."
Leadership style	"Yes, there is definitely favouritism."
	"There is a lack of support from the NUM."
Job satisfaction	"There is too much responsibility."
	"There is an overall lack of team work."
Hospital culture	"The hospital has a hierarchical environment and is traditional."
	"There is a lot of bureaucracy in this hospital. I just do my work in the ward and have nothing to do with the hospital."
Hospital culture and commitment	"If it is not for the ward, I would have left the hospital".
	"The bureaucracy in this hospital is overwhelming."

Apart from the these extracts which illustrate overall findings from the quantitative analysis, a simple content analysis of interview statements was performed. Key words from each theme were grouped and statements with similar meaning were also collated. These results are presented in Table 27.

TABLE 27: SIMPLE CONTENT ANALYSIS ON INTERVIEW DATA

Group/Theme	Frequency Of Key Words
(Positive and negative key words and statements are presented)	
Ward Commitment	
Positive key words: stay, happy, committed, loyal, recommend, great place. Examples of statements:	24
 I like to stay in this ward. I'm happy and committed to the ward, but not the hospital. I'm loyal to this ward. It is a great place to work in. I am committed here. 	
Negative key words: leaving, unhappy Examples of statements:	2
 I am thinking of <u>leaving</u> this ward. I am <u>unhappy</u> working here. 	
Ward Culture	
Positive key words: fair, great atmosphere, supportive, innovative, excellent. Examples of statements:	15
 This is an excellent ward to work in. It is very fair and staff are good here. This ward has a great atmosphere. The staff are very supportive. This ward is both supportive and innovative. 	
Negative key words: bureaucratic, inflexible Examples of statements:	3
The ward is bureaucratic and inflexible.	

Group/Theme	Frequency Of Key Words
Hospital Culture	
Positive key words: vision, direction	3
Examples of statements:	
I feel the hospital has a vision to provide quality care.	
 At last, there is some positive direction from nursing administration in this hospital. 	
Negative key words: traditional, hierarchical, patronising, little consultation	7
Examples of statements:	
• The hospital is very traditional and hierarchical.	
It is very <u>patronising.</u>	
Nursing administration decides what to do and there is little consultation with us. Leadership Styles	
Leadership Styles Positive key words: fair, firm, approachable, great leader, organised, supportive, decisions, people's person	22
With us. Leadership Styles Positive key words: fair, firm, approachable, great leader, organised, supportive, decisions, people's person Examples of statements: • She is firm, fair and gets things done, however, she is also approachable and	22
With us. Leadership Styles Positive key words: fair, firm, approachable, great leader, organised, supportive, decisions, people's person Examples of statements:	22
With us. Leadership Styles Positive key words: fair, firm, approachable, great leader, organised, supportive, decisions, people's person Examples of statements: • She is firm, fair and gets things done, however, she is also approachable and cares about her staff.	22
With us. Leadership Styles Positive key words: fair, firm, approachable, great leader, organised, supportive, decisions, people's person Examples of statements: She is firm, fair and gets things done, however, she is also approachable and cares about her staff. She is a great leader.	22
Vith us. Leadership Styles Positive key words: fair, firm, approachable, great leader, organised, supportive, decisions, people's person Examples of statements: She is firm, fair and gets things done, however, she is also approachable and cares about her staff. She is a great leader. She is a people's person.	22
With us. Leadership Styles Positive key words: fair, firm, approachable, great leader, organised, supportive, decisions, people's person Examples of statements: She is firm, fair and gets things done, however, she is also approachable and cares about her staff. She is a great leader. She is a people's person. She is organised and everyone has respect for her.	22
With us. Leadership Styles Positive key words: fair, firm, approachable, great leader, organised, supportive, decisions, people's person Examples of statements: She is firm, fair and gets things done, however, she is also approachable and cares about her staff. She is a great leader. She is a people's person. She is organised and everyone has respect for her. She is supportive and approachable.	22
Positive key words: fair, firm, approachable, great leader, organised, supportive, decisions, people's person Examples of statements: • She is firm, fair and gets things done, however, she is also approachable and cares about her staff. • She is a great leader. • She is a people's person. • She is organised and everyone has respect for her. • She is supportive and approachable. • She provides us with opportunities to make decisions.	
With us. Leadership Styles Positive key words: fair, firm, approachable, great leader, organised, supportive, decisions, people's person Examples of statements: • She is firm, fair and gets things done, however, she is also approachable and cares about her staff. • She is a great leader. • She is a people's person. • She is organised and everyone has respect for her. • She is supportive and approachable. • She provides us with opportunities to make decisions. Negative key words: favouritism, lack of support	

Group/Theme	Frequency Of Key Words
Job Satisfaction	
Positive key words: satisfied, autonomy, feedback, flexible, education, control, decisions, support	20
Examples of statements:	
• I am very <u>satisfied</u> working here.	
• There is plenty of inservice education to support staff.	
• I get sufficient <u>autonomy</u> in my job.	
 There is adequate <u>feedback</u> from my NUM. 	
• We have a <u>flexible schedule</u> of shifts here.	
• We can make <u>decisions</u> and have certain <u>control</u> over our work.	
Negative key words: poor, lack of	4
Examples of statements:	
• The pay is still poor compared to our responsibilities.	
• There is a <u>lack</u> of team work here.	
Ward Culture And Commitment Positive key words: Innovative, supportive, ward environment	6
Examples of statements:	
- Innovative and example trend environment would anticle on house and	
 Innovative and supportive ward environment would certainly enhance my level of commitment in this ward. I feel this ward has got both of these elements. 	
level of commitment in this ward. I feel this ward has got both of these	
level of commitment in this ward. I feel this ward has got both of these elements.	9
level of commitment in this ward. I feel this ward has got both of these elements. Leadership Styles And Commitment	9
level of commitment in this ward. I feel this ward has got both of these elements. Leadership Styles And Commitment Positive key words: great, supportive, stay, fair, effective	9

Group/Theme Frequency Of Key Words

Job Satisfaction, Leadership Style And Commitment

Positive key words: stay, recognition, people skills, decision

8

Examples of statements:

- It is both the leadership style of the NUM and my job satisfaction here that
 make me stay in this ward all this long.
- It is the NUM's people skills and the recognition, shared decision making that make the ward.

The interview data suggested that job satisfaction was the variable most strongly related to commitment. The frequency with which job satisfaction was mentioned as an important factor which influenced commitment was significantly higher than the frequency of mention of ward culture, hospital culture and leadership style. Elements closely related to the psychosocial or intrinsic factors of motivation, such as achievement and recognition, were mentioned in the interviews as most relevant to job satisfaction.

A summary of observations of staff interactions, analyses of annual reports, procedure manuals, minutes of meetings and artefacts of hospitals/wards was also developed. Data from eight observations of staff interactions, notes on five procedure manuals, notes on three strategic plans and minutes of five meetings

were summarised by the researcher. The results revealed that the formal structure in all annual reports reflected the traditional bureaucratic nature of the hospitals. There was a great emphasis on achievements by senior members of the medical staff and a lack of acknowledgment of the contribution that other hospital staff had made. For instance, all the awards, prizes and research grants were published to reflect the achievement of the medical staff. There was little mention about the improvement of catering or domestic services in the hospitals.

Similarly, the procedure manuals in all hospitals reflected the formal structure of control and documentation. Steps were listed for staff to follow. There was little room for deviation. There was no indication in these procedure manuals that staff were encouraged to use their initiative. Indeed, this approach may be necessary when an organisation is accountable for patients' lives. For instance, in one procedure manual, there were twelve steps to transport a patient from A to B. In one nursing procedure manual, there were five steps to admit a patient. The nature of these procedure manuals reflected the issue of standards, control and bureaucracy in hospitals.

A review of internal memos/minutes of meetings further suggested the bureaucratic nature of these organisations. For instance, written memos were

used for minor matters and records of communication were seen as necessary in most instances. However, observations in informal situations revealed that staff communicated in a friendly, collegial manner and there was a feeling of friendliness and mutual support.

In summary, analysis of the interviews showed that registered nurses were generally satisfied and committed to their wards. This was reflected in the number of positive statements which was much higher than that of negative statements. They felt that if the ward environment or culture was congruent with their expectations and that the leader was fair, equitable, supportive and was able to empower, then greater levels of job satisfaction and commitment could be achieved. Furthermore, the influence of ward culture and leadership style could be seen to have positive effects on job satisfaction and ward commitment. Psychosocial or intrinsic job satisfaction factors such as support, recognition, decision making and friendliness were often mentioned as important factors in job satisfaction. The impact of hospital culture on ward commitment was not an important factor. The number of positive statements about ward culture, leadership style, job satisfaction and ward commitment were overwhelmingly greater than the negative statements. Although the questionnaire survey results revealed only a slightly positive attitude of staff towards the above variables (that is, the means of all variables were only

slightly above their scale midpoints, see Table 13), the positive results from the interview data were generally consistent with the quantitative results in this study.

7.5 Summary

Qualitative data collection was used to complement the results of the questionnaire survey. Simple content analysis was used to analyse the interview data. The results of the qualitative analyses generally supported the findings of the questionnaire survey, particularly in the area of how ward culture and a fair, equitable and supportive leadership style could influence the level of job satisfaction and commitment.

Chapter 8

Discussion and Conclusion

8.1 Introduction

In this chapter, a summary and general discussion in relation to the results of the studies are provided in section 8.2. Section 8.3 considers the possible limitations of this research. Key contributions of the thesis to theory building and management practices are discussed in section 8.4. Section 8.5 suggests areas which may be useful to explore in future research. Section 8.6 provides the conclusion for this chapter.

8.2 Discussion

The main aim of this thesis was to investigate the relationship between organisational culture and commitment and between subculture and commitment. The setting used in this study was the hospital environment and the sample consisted of nurses working in these hospitals. This research was prompted by the lack of attention given in the literature to the influence of

organisational culture and subculture on commitment. A number of other measures, shown in past studies to be related to either organisational culture or commitment, were also included in this study. These were leadership style, job satisfaction and certain demographic variables such as age, years in current position, years of experience and level of education.

The main results of the empirical research in this study were derived from the questionnaire survey. However, interview and observational data were also gathered to complement the findings of the questionnaire survey.

One main findings of this thesis was that organisational subculture had a greater influence on commitment than organisational culture. This was a relatively important finding, and is a substantial contribution to the theory development of organisational commitment. Previous literature has suggested that organisational culture and subculture could have differential effects on individuals in the work place (Brown 1995, Krausz et al. 1995, Martin 1992, Trice and Beyer 1993). However, these ideas have not lead to empirical studies on the effects of organisational culture and subculture on commitment.

Another important finding from the results of this thesis was that innovative and supportive subcultures had positive effects on commitment, while a

bureaucratic subculture had a negative effect on commitment. This finding is compatible with previous results which suggested that a bureaucratic environment often resulted in a lower level of employee commitment (Brewer 1994, Kratina 1990, Wallach 1983) and performance (Krausz et al. 1995, Trice and Beyer 1993). A similar, but weaker pattern of associations with commitment was also observed with the organisational culture variables in the present study.

A number of writers have suggested models of commitment in which the causal effects of a range of antecedent variables on commitment were mediated either totally or partially via their effects on job satisfaction. In the model described by Williams and Hazer (1986), the influences of the antecedent variables were assumed to be totally mediated via the effects of job satisfaction, while in the model described by Price and Mueller (1981b), these influences were only partially mediated via job satisfaction, with some of the antecedents having significant direct effects on commitment. The results obtained from the study reported in this thesis did not support a model in which all effects were mediated via job satisfaction, but were consistent with a model in which a significant proportion of the effects of antecedents on commitment operate via their effects on job satisfaction.

One important difference between this study and others examining the relationship between job satisfaction and commitment was the multidimensional measure of job satisfaction used in this thesis. This multidimensional job satisfaction measurement was based on McClosky's (1974) work which proposed that items used in the job satisfaction questionnaire could be grouped into higher-and lower-order needs as defined in Maslow's (1943) theory of motivation. The results of this thesis revealed that higher order needs or intrinsic factors (such as the level of control, the amount of interaction and the level of professionalism) exerted the greatest influence on commitment. This supported the propositions suggested by Herzberg's theory of motivation and Maslow's hierarchy of needs (Robbins et al. 1994, Schermerhorn et al. 1994), that intrinsic factors or higher-order needs were more important to job satisfaction than extrinsic factors or lower-order needs. These results were also consistent with the meta-analysis of the antecedents of organisational commitment by Mathieu and Zajac (1990). They concluded that the correlations between job satisfaction and organisational commitment were uniformly positive, and that the intrinsic job satisfaction components yielded higher correlations than the extrinsic job satisfaction components. Since intrinsic job satisfaction variables such as recognition, achievement and responsibilities in Mathieu and Zajac's (1990) study could be seen as similar to job satisfaction variables in the McClosky (1974) higher-order needs category,

the results of this study were in agreement with the conclusion of Mathieu and Zajac (1990).

The results of multiple regression analyses (Tables 19 to 21) were used to construct the path analytical diagram shown in Figure 9 (in section 6.2.4). These results were more consistent with the Price and Mueller (1981a) turnover models than with the findings of Williams and Hazer (1986). This was because of the existence of direct as well as indirect influences on commitment in this study, which were not found by Williams and Hazer (1986).

Previous studies (Bateman and Strasser 1984, DeCotiis and Summers 1987, Mathiew and Zajac 1990) have investigated the relationship between leadership style and organisational commitment. The results of this thesis confirmed that the leadership style-consideration variable had a stronger influence on commitment than the leadership style-structure variable. Also, the strong positive relationship between job satisfaction and organisational commitment found in this thesis was reported in previous studies (for example, Bateman and Strasser 1984, DeCotiis and Summers 1987, Glisson and Durick 1988, Iverson and Roy 1994, Mowday et al. 1979, Vandenberg and Lance 1992, Williams and Anderson 1991, Williams and Hazer 1986).

Mathieu and Zajac (1990) and Staw and Ross (1977) suggested that job satisfaction and commitment increased with age and decreased with education. The results of the present study revealed a significant positive correlation between age and commitment, and between job satisfaction dimensions and commitment, which support the findings of these previous studies. However, multiple regression analyses (Table 20) did not show any significant inverse association between education and job satisfaction, or between education and commitment (Table 19).

The results of this thesis showing that the older the participant, the greater the degree of commitment, reflects the notion of "sunk costs" (Staw and Ross 1977) which was perceived as an investment in the organisation. These results are compatible with previous findings (Mathieu and Zajac 1990, Meyer and Allen 1984, Staw and Ross 1977, Williams and Hazer 1986). However, these studies did not show an association between age and job satisfaction, as was found in the present study.

Although the results did not show a negative correlation between the level of education and commitment which was suggested in some previous literature (DeCotiis and Summers 1987), the findings in this study revealed that there was a very low correlation between these two variables. Furthermore, years in

position and years of clinical experience failed to show any significant effects on commitment.

A comparison of the three types of hospitals used in this study (general public. psychiatric and private) provided the following results. The highest average bureaucratic ward culture rating was seen in private hospitals (mean = 2.10) while the lowest was in the psychiatric hospitals (mean = 1.83) (Table 23). These results were contrary to the expectation that public general hospitals would have a stronger bureaucratic culture than private and psychiatric hospitals. This was expected because general public hospitals often have a physiological clinical focus (which is different from private and psychiatric hospitals) and a hierarchical tradition (Clinton and Scheiwe 1995, Macklin 1991). Furthermore, private hospitals were observed to have a stronger supportive hospital culture when compared to public and psychiatric hospitals. This result was also unexpected because the clinical practice in private hospitals is more focused on physiological treatment and profit for shareholders. This is quite different from the clinical practice of psychiatric hospitals which is more psychologically oriented and would be expected to be more supportive in nature.

In relation to consideration-leadership style among the three hospital groups, the results showed that there were considerable differences. Psychiatric hospitals had the highest mean score (mean = 3.4) and private hospitals the lowest (mean = 3.05). These results were compatible with the general assumption that the level of consideration-leadership style and supportive environment are positively linked. The above findings were further supported by the correlation results in this study, which showed (Appendix 4) that a supportive subculture had the highest correlation with consideration-leadership style (r = 0.45) followed by an innovative subculture (r = 0.41). Bureaucratic culture and subculture had the lowest correlation with consideration-leadership style (r = 0.02 and 0.03 respectively).

The survey results of this thesis revealed that the mean values of all of the variables (Table 13 in section 6.2.1) were slightly above the scale midpoint. This meant that the respondents were generally positive about their innovative and supportive ward and hospital cultures. However, the interview findings (section 7.4) revealed overwhelmingly positive comments on respondents' commitment and other aspects of their work environment such as ward culture, leadership style of their managers and job satisfaction, compared with the less positive results in the survey. The differences between the survey and interview results could be attributed to the following reasons:

- There was a sampling bias where a high percentage of participants who
 were more highly committed to their job were selected for the
 interviews.
- 2. The respondents in interviews were reluctant to provide negative comments about their work.
- 3. The less positive responses obtained in the questionnaire rating scales could be attributed to the frequently observed "central tendency" rater bias (Saal and Knight 1988, p. 121). Raters are generally unwilling to give very high or very low ratings in surveys.

Nevertheless, both survey results and interviews indicated a relatively positive attitude towards the working environment.

8.3 Limitations of the Study

This study has certain limitations. The results of this study could reflect relationships only among variables used in this study. Variables which other researchers might consider to be important as antecedents of commitment were not included in this study. The original intention of this study was to examine

the effects of culture and subculture on commitment and only a limited selection of variables shown in past research to be related to these were able to be included in the study.

Another limitation of this study is that the results of this study may not be transferable to other professional groups. This is because other professional groups may not operate under similar environmental or organisational settings as nurses in hospitals. Furthermore, due to differences in national cultures, the results of this study may not be applicable to countries which have different organisational settings. (For example, Hofstede's 1990, cultural dimensions of collectivism and power distance are different in Asian countries as compared to Australia. This issue is further discussed in section 8.5).

8.4 Key Contributions of the Thesis

The results of this thesis provide a number of key contributions. First, it provides evidence for the importance of subcultures in organisations. Organisational subculture had a greater effect on organisational commitment than organisational culture. In particular, the results of the thesis showed that innovative and supportive subcultures have a significant and positive effect on nurses' ward commitment.

These results are of great importance to management. Management can direct its resources and focus its energy towards subcultures particularly in areas such as training and development, innovation and risk management, job and reward design, team design and participative decision making, creation of networks to promote greater trust and commitment to shape the environment and to produce both innovative and supportive subcultures in the work place. This approach is contrary to the traditional intervention strategy (influenced by the work of Deal and Kennedy 1982 and Peters and Waterman 1982) which focuses on the organisational culture without considering the effects of subcultures in organisation. Thus, an important finding in this thesis was that organisational culture had a smaller influence on commitment than subculture.

The second contribution, resulting from the use of multi-dimensional, rather than un-idimensional measures of job satisfaction, was the identification of the intrinsic job satisfaction variables (control, interaction and professionalism) as the ones with the strongest association with commitment.

The third contribution relates to the evaluation of previously proposed causal models of commitment. The findings of this thesis are consistent with Price and

Mueller's (1981a) causal model of commitment. That is, not all of the effects of antecedents of commitment were mediated via job satisfaction.

The fourth contribution was that the findings revealed that bureaucratic ward culture was significantly stronger in private hospitals than in general or psychiatric hospitals and that general public hospitals had stronger innovative ward culture than psychiatric or private hospitals. These result are contrary to the previous assumptions. The above findings provide us with a better understanding about nurses' working environment and call into question common assumptions made about different types of hospitals.

8.5 Possible Future Direction for Research

This study examined the level of influence of organisational culture and subculture on organisational commitment. In the process of this study, several promising avenues for future research were identified.

The use of organisational culture and subculture as antecedents of commitment revealed significantly different influences on commitment. This is an important finding, both for theory and research. However, the generalisability of these findings is unclear, particularly to countries which have a different cultural

orientation. For instance, with Hofstede's (1990) power distance dimension, the negative association between bureaucratic culture and commitment reported in this thesis may not occur in an Asian country where power distance is high and employees may have a more favourable view on operating in a strong bureaucratic environment. Thus, further research needs to be undertaken in different settings, both in Australia and overseas (particularly in Asian countries where power distance is high), to determine the extent to which these dimensions and causal effects are generalisable.

The design of the present study did not enable it to determine the causal ordering of job satisfaction and commitment. Further research using more appropriate designs (for example, longitudinal design) could be carried out to resolve this important issue.

Future research could also extend the present causal model of commitment into a model of performance. Since the link between job satisfaction and performance has been suggested (Cranny, Smith and Stone 1992), a causal model of performance and turnover could be developed to examine the effects of antecedents used in the present study.

8.6 Conclusion

This thesis sought to provide a greater understanding of the relationships between organisational culture, subculture and commitment. Measures of leadership style, job satisfaction and selected demographic variables were also included in this study. Multivariate analyses were used to determine the effects of the selected variables on commitment. Qualitative results, based on interviews and observations, were used to complement the findings of the survey.

In conclusion, the findings of this study also supported suggestions in the literature review that organisational culture and subculture could exert different influences on individuals in the work place (Coeling and Wilcox 1988, Collette-Jones 1990, Krausz et al. 1995, Kramer and Schmalenberg 1988, Trice and Beyer 1993). In particular, the results of this study revealed that the influence of subculture on commitment in the work place was considerably greater than the influence of organisational culture. This is a significant contribution to the theory development of commitment. The results of this empirical study also supported the proposition that higher-order needs, or intrinsic job satisfaction factors had a greater influence on commitment than did lower-order needs or extrinsic job satisfaction factors. Also, the findings from this empirical study are compatible with Brewer's commitment model (1993). That is, a positive

managerial strategy (represented by a consideration-leadership style in this thesis) and a supportive corporate culture (represented by innovative and supportive ward cultures in this thesis) would lead to greater employee commitment. Finally, the results of this study have provided useful information for both management and the nursing profession in formulating their priorities in change management and also a theoretical framework for future commitment studies.

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Appendices

APPENDIX 1 TYPOLOGY OF ELEMENTS OF ORGANISATIONAL CULTURE

		Level of Culture						
Elements of Organizational Culture	Artifacts	Patterns of Behaviour IB	Beliefs & Values	Assumptions	Not Clear			
			2					
anecdotes, organisation	x							
art	x							
assumptions that people live by				x				
assumptions, patterns of basic			ĺ	x				
assumptions, shared				x				
attitudes		x	x	^				
behavioural regularities		x	^		İ			
being		, and the second	. x	x				
beliefs			x	^				
beliefs, patterns of shared			x.					
celebration	x		^.					
ceremonies	1							
climate, organizational	×							
cognitive processes, patterns of					x			
commitment to excellence				X				
communications, patterns of			x					
consensus, level of	X							
			×					
core			X	x	x			
customs .		X						
doing things, way of		X			ĺ			
enactment (per Weick, 1977)				x				
ethic, organizational			x					
ethos			x		•			
expectations, shared		x						
feelings			x					
glue that holds an organization								
together								
habits		x						
heroes	x	•						
historical vestiges	x							
identity			x	x .				
ideologies			x		Ì			
interaction, patterns of		x						
jargon	x							
justifications for behaviour			x					
knowledge			x					
language	x							
links between language,								
metaphor, and ritual	x .	x						
management practices		x						
manner		x						

material objects meaning, patterns of meanings meanings, intersubjective mind-set myths norms philosophy physical arrangements practical syllogisms purpose rites ritualized practices rituals roots rules, informal system of scripts, organisational (cognitive social psychology) scripts, organisational (transactional analysis) sentiments source of norms, rules, attitudes, customs, and roles specialness, quality of perceived spirit stories, organisational style sumbols thinking, way of traditions translation of myths into action and relationship	x x	
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rules, informal system of scripts, organisational (cognitive social psychology) scripts, organisational (transactional analysis) sentiments		
rules, informal system of scripts, organisational (cognitive social psychology) x scripts, organisational (transactional analysis) sentiments		x
scripts, organisational (cognitive social psychology) scripts, organisational (transactional analysis) sentiments source of norms, rules, attitudes, customs, and roles specialness, quality of perceived spirit stories, organisational style sumbols thinking, way of traditions translation of myths into action		
(cognitive social psychology) scripts, organisational (transactional analysis) sentiments source of norms, rules, attitudes, customs, and roles specialness, quality of perceived spirit stories, organisational style sumbols thinking, way of traditions translation of myths into action		ļ
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attitudes, customs, and roles specialness, quality of perceived spirit stories, organisational style sumbols thinking, way of traditions translation of myths into action		
specialness, quality of perceived spirit stories, organisational x style x sumbols thinking, way of traditions x x translation of myths into action		
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spirit stories, organisational x style x sumbols x thinking, way of x traditions x x translation of myths into action		
stories, organisational x x x x x x x x x x x x x x x x x x x		
sumbols x thinking, way of x traditions x x x translation of myths into action	Ì	
thinking, way of x traditions x x x translation of myths into action		
traditions x x translation of myths into action		
translation of myths into action		
action		
and relationship x	1	
· · · · · · · · · · · · · · · · · · ·		
understandings, tacit x		
values x		
values, basic or core x		
values, patterns of shared x vision x		
	x	
way x worldviews x	x x	X X
		1 ^
	*	

Ref: Ott, J.S., 1989, Organisational culture perspectives, Brooks/Cole, Pacific Grove, p.65-66

iers

Not Fit Cleanly into Levels, and Why

Etzioni (1975) (Addresses all levels)
Gold (1982) (A feeling of specialness)
Lippitt, Langseth and Mossop (1985) (Organizational climate)
Miles and Schmuck (1971) (Organizational climate)
Tagiuri and Litwin (1968) (Organizational climate)

* The author was not writing specifically about organisational culture

Ref: Ott, J.S., 1989, Organisational culture perspectives, Brooks/Cole, Pacific Grove, p.65-66

APPENDIX 2 TYPOLOGY OF PUBLICATIONS ON ORGANISATIONAL CULTURE

Author and Work	
Level 1A: Artifacts	Level 2:
Bates (1984) Clark (1970 Cohen (1969)(*) Edelman (1971, 1977)(*) Evered (1983) Gephart (1978) Hayakawa (1953) (*) Hirsch (1980) Martin (1982b) Meissner (1976) Pettigrew (1979) Pfeffer (1981b) Pondy (1978) Steele and Jenks (1977)	Beliefs and Values Allaire and Firsirotu (1985) Barnard (1938, 1968) Blake and Mouton (1969) Buchanan (1975) Clark (1970) Davis (1984) Deal and Kennedy (1982) Duncan and Weiss (1979) Hall (1977) Harrison (1972) Jaques (1984) Morley (1984)
Wilkins (1983) Level 1B: Patterns of Behaviour Allaire and Firsirotu (1985) Blake & Mouton (1969) Clark (1970) Davis (1984) Deal and Kennedy (1982) Gephart (1978) Goffman (1959, 1967) (*)	Morley (1984) Ouchi (1981) Pascale and Athos (1981) Peters and Waterman (1982) Selznick (1957) Sergiovanni and Corbally (1984a Smircich (1983) Sproull (1981) Tichy and Ulrich (1984) Weick (1977, 1979) Wharton & Worthley (1983)
Hall (1977) Jaques (1952) Martin and Siehl (1983) Pettigrew (1979) Ritti and Funkhouser (1982) Tichy and Ulrich (1984) Van Maanen (1976, 1979)	Basic Assumptions Buchanan (1975) Duncan and Weiss (1979) Jongeward (1973) Sathe (1985) Schein (1991, 1984, 1985) Weick (1977, 1979)

APPENDIX 3 QUESTIONNAIRE SURVEY

QUESTIONNAIRE OF YOUR WORK ENVIRONMENT AND COMMITMENT



University of Technology, Sydney

Dear Participant,

Your participation in this study is greatly appreciated. This questionnaire is part of my Ph.D research project. It is mainly concerned with your work environment, leadership styles, the level of your work satisfaction and commitment.

You are not required to identify yourself in any way, and therefore your answers will be confidential. Your response will be combined with others from a number of organisations and then analysed. Results of this study will be sent to all units and organisations which have participated in this study.

Your participation will provide information which will contribute towards better understanding of job environment culture, management change strategies, and making the organisation/unit a better place for people to work and to learn.

The questionnaire will take 15-20 minutes to complete and can be returned to a sealed envelope in the specified box in your unit.

If you have any further questions, please do not hesitate to contact me: Peter Lok, Chief Researcher. Tel: 02-517 0222, Fax: 02- 517 0208

Yours faithfully,

Peter Lok

Thank you for your time and careful consideration

SURVEY IN RELATION TO YOUR WORK ENVIRONMENT AND COMMITMENT

DEMOGRAPHIC DATA (Please tick the appropriate box)
1. Position RN [], NUM [], CNS [], CNC []
2. Years in above position 1[], 2[], 3[], 4[], 5[], 6[], 7 [], above 7 []
3. Years in clinical experience 1[], 2[], 3[], 4[], 5[], 6[], 7 [], above 7 []
4. Gender: Female [], Male []
5. Age: 21-25 [], 26-30 [], 31-35 [], 36-40 [], 41-45 [], 46-50 [], above 50 []
6. Type of nursing unit:
Medical [], Surgical [], ICU [], Psychiatric [] Others [], please specify:
7. Number of beds in your ward []
8. Number of months in your ward []
9. Clinical certificates:

10. Tertiary qualifications, institution and year of completion

11. Tertiary qualifications currently undertaking

SECTION A - YOUR UNIT ENVIRONMENT

Instructions: Please circle a score from the scale below which most closely corresponds with how you see your own unit.

		Does not describe my unit	Describes my unit a little	Describes my unit a fair amount	Describes my unit most of the time
1.	Risk taking	0	1	2	3
2.	Collaborative	0	1	2	3
3	Hierarchical	0	1	2	3
4.	Procedural	0	1	2	3
5.	Relationships-oriented	0	1	2	3
6.	Results-oriented	0	1	2	3
7.	Creative	0	1	2	3
8.	Encouraging	0	1	2	3
9.	Sociable	0	1	2	3
10.	Structured	0	1	2	3
11.	Pressurised	0	1	2	3
12.	Ordered	0	1	2	3
13.	Stimulating	0	1	2	3
14.	Regulated	0	1	2	3
15.	Personal freedom	0	1	2	3
16.	Equitable	0	1	2	3
17.	Safe	0	1	2	3
18.	Challenging	0	1	2	3
19.	Enterprising	0	1	2	3
20.	Established, solid	0	1	2	3
21.	Cautious	0	ı	2	3
22.	Trusting	0	l	2	3
23.	Driving	0	l	2	3
24.	Power-oriented	0	1	2	3

^{*} Risk taking = Does the unit operate at a minimal safety standard in order to minimise costs?

			γ	Т	T		
		Not at all	Compar atively	To some degree	Fairly much	A great deal	
19.	He/she would not let others do the way they think best	1	2	3	4	5	
20.	He/she backs up the people under him/her in their actions	i	2	3	4	5	
21.	He/she asks group under him/her to get more out of their group	1	2	3	4	5	
22.	He/she puts suggestions made by people under him/her into operation	1	2	3	4	5	
23.	He/she "needles" people under him/her for greater effort	1	2	3	4	5	
24.	He/she assigns people under him/her to particular tasks	1	2	3	4	5	
25.	He/she emphasises the quality of work	1	2	3	4	5	
26.	He/she treats everyone under him/her as his/her equal	1	2	3	4	5	
27.	He/she is quick to accept new ideas	1	2	3	4	5	
28.	He/she treats people under him/her without considering their feelings	1	2	3	4	5	
29.	He/she is willing to make changes	1	2	3	4	5	
30.	He/she stresses the importance of high morale among those under him/her	1	2	3	4	5	
31.	He/she insists that people follow standard ways of doing things in every detail	1	2	3	4	5	
32.	He/she insists that he/she be informed on decisions made by people under him/her	1	. 2	3	4	5	
33.	He/she encourages those under him/her to work in excess of normal hours	1	2	3	4	5	
34.	He/she accepts suggestions for change	1	2	3	4	5	
35.	He/she gets the approval of the people under him/her on important matters before going ahead	1	2	3	4	5	
36.	He/she does not wait for people under him/her to push new ideas (He/she initiates)	I	2	3	4	5	
37.	He/she tries out his/her new ideas	t	2	3	4	5	
38.	He/she sees that people are rewarded for a job well done	ı	2	3	4	5	

		Not at all	Compar. atively	To some degree	Fairly much	A great deal
39.	He/she is friendly and can be easily approached	1	2	3	4	5
40.	He/she criticises a specific act rather than a particular individual	1	2	3	4	5

SECTION C

YOUR JOB CHARACTERISTICS

Please circle the appropriate responses.

How satisfied are you with the following aspects of your current job?

Please ignore the item/items if they are not applicable.

		Very Dissatis fied	Moderat ely Dissatis fied	Neutral	Moderate ly Satisfied	Very Satisfied
1.	Salary	1	2	3	4	5
2.	Holidays	1	2	3	4	5.
3.	Other allowances (e.g. shift, study leave)	1	2	3	4	5
4.	Hours that you work	1 .	2	3	4	5
5.	Flexibility in scheduling your hours	t	2	3	4	5
6.	Opportunity to work straight days	1	2	3	4	5
7.	Opportunity for part/time work	1	2	3	4	5
8.	Weekends off per month	1	2	3	4	5
9.	Flexibility in scheduling your weekends off	1	2	3	4	5
10.	Compensation for working weekends	1	2	3	4	5
11.	Maternity leave time	ı	2	3	4	5
12.	Child care facilities	ı	2	3	4	5
l3.	Your immediate supervisor	Į	2	3	4	5
14.	your peers	ı	2	3	4	5
ι5.	The other professionals you work with	l l	2	3	4	<u>-</u> -
16.	The delivery product/services method used on your unit (eg. team, functional)	1	2	3	4	5
17.	Opportunities for social contact with your colleagues at work	L	2	3	4	5

SECTION B - LEADERSHIP STYLE

Instructions:

Please circle your immediate boss's leadership style.

		Not at all	Compar atively	To some degree	Fairly much	A great deal
1.	He/she encourages slow working people to greater efforts	1	2	3	4	5
2.	He/she talks about how much should be done	1	2	3	4	5
3.	He/she consults the people under him before acting	1	2	3	4	5
4.	He/she emphasises meeting of deadlines	1	2	3	4	5
5.	He/she gives in when people disagree with him	I	2	3	4	5
6.	He/she decides in details what shall be done and how it shall be done	I	2	3	4	5
7.	He/she rules with an iron hand	1	2	3	4	5
8.	He/she makes those under him/her feel at ease when talking with him/her	1	2	3	4	5
9.	He/she explains his/her actions to others	l	2	3	4 -	5
10.	He/she criticises poor work	1	2	3	4	5 .
11.	He/she sees to it that people are to Working up to their limits.	ı	2	3	4	5
12.	He/she offers new approaches to problems	1	2	3	4	5
13.	He/she expresses appreciation when one of us does a good job	1	2	3	. 4	5
14.	He/she stresses being ahead of competing work groups or other units	I	2	3	4	5
15.	He/she tries to keep the people under him in good standing with those in higher authority	l .	2	3	4	5
16.	He/she asks for sacrifices from individuals for the good of the unit	1	2	3	4	5
ι7.	He/she is easy to understand		2	3	4	5
18.	He/she consults with the persons' concern before he/she changes the duties of people	l.	2	3	4	5

		Very Dissatis fied	Moderat ely Dissatis fied	Neutral	Moderate ly Satisfied	Very Satisfied
18.	Opportunities for social contact with your colleagues after work	1	2	3	4	5
19.	Opportunities to interact professionally with other disciplines	1	2	3	4	5
20.	Opportunities for continuing education (inservice/external programs)	1	2	3	4	5
21.	Opportunities to belong to unit/department and institutional committees	1	2	3	4	5
22.	Control over what goes on in your work setting	1	2	3	4	5
23.	Opportunities for career advancement	1	2	3	4	5
24.	Recognition for your work from supervisors	1	2	3	4	5
25.	Recognition of your work from peers	1	2	3	4	5
26.	Amount of encouragement and positive feedback	1	2	3	4	5
27.	Opportunities to participate in research	1	2	3	4	5
28.	Opportunities to write and publish	1	2	3	4	5
29.	Your amount of responsibility	1	2	3	4	5
30.	Your control over work conditions	1	2	3	4	5
31.	Your participation in organisational decision making	1	2	3	4	5

SECTION D. YOUR ORGANISATON ENVIRONMENT

Instructions: The organisations environment may or may not be the same as your unit as in section A.

Please <u>circle</u> a score from the scale below which most closely corresponds with how you see <u>your organisation in general</u>

		Does not describe my unit	Describes my unit a little	Describes my unit a fair amount	Describes my unit most of the time
1.	Risk taking	0	1	2	3
2.	Collaborative	0	1	2	3
3.	Hierarchical	0	1	2	3
4.	Procedural	0	1	2	3
5.	Relationships-oriented	0	1	2	3
6.	Results-oriented	0	1	2	3
7.	Creative	0	1	2	3
8.	Encouraging	0	1	2	3
9.	Sociable	0	1	2	3
10.	Structured	0	1	2	3
11.	Pressurised	0	1	2	3
12.	Ordered	0	1	2	3
13.	Stimulating	0	1	2	3
14.	Regulated	0	1	2	3
15.	Personal freedom	0	1	2	3
16.	Equitable	0	1	2	3
17.	Safe	0	I	2	3
18.	Challenging	0	1	2	3
19,	Enterprising	0	l.	2	3
20.	Established, solid	0	1	2	3
21.	Cautious	0	į.	2	3
22.	Trusting	0	l	2	3
23.	Driving	0	ı	2	3
24.	Power-oriented	0	L	2	3

SECTIO	NE YOUR FEELINGS ABOUT THE U	MEDIXO	ow.or	RIGINA		en en e	(Pa jira)	-
	ndicate the degree of your agreement with e					opriate (espouse.	
		Strongly Disagree	Moderately Disagree	Slightly Disagree	neither Agree nor Disagree	Slightly Agree	Moderately Agree	Strongly Agree
1.	I am willing to put in a great deal of effort beyond that normally expected in order to help this Unit be successful	L	2	3	4	5	6	7
2.	I talk up this unit to my friends as a great place to work for	L	2	3	4	5	6	7
3.	I feel very loyal to this unit	į.	2	רז	4.	5	6	7
4.	I would not accept any type of job assignment in order to keep working for this unit	l	2	3	4 .	5	6	7
5.	I find that my values and the unit's values are very similar	l.	2	3	4	5	6	7
6.	I am proud to tell others that I am part of this unit	Ĺ	2	3	4	5	6	7
7.	I could just as well be working for a different unit as long as the type of work was similar	i	2	3	4	S	.6	7
8.	This unit really inspires the very best in me in the way of job performance	L	2	3	4	ว์	6	7
9.	It would take a great change in my present circumstances to cause me to leave this unit	I	2	3	4	5	6	7
10.	I am extremely glad to choose this unit to work for, over others I was considering at the time I joined	I	2	3	4	5	6	7
li.	There is much to be gained by sticking with this unit indefinitely	I.	2	3	4	5	6	7
12.	Often, [find it easy to agree with this unit's policies on important matters relating to its employees	į	2	3	4	5	ó	7
ເ3.	[really care about the fate of this unit	Į	2	3	4	5	6	7
14.	For me this is the best of all possible units for which to work	Į.	2	3	4	5	6	7
เร.	Deciding to work for this unit was not a mistake on my part		2	3	4	5	6	7

Other coininents:	
	

APPENDIX 4 CORRELATIONS OF VARIABLES

	COMMIT	JSBALANCE	JSCOBTRL	JSCOWKS	JSINT	JSPRAISE	JSPROF	JSSCHED	JSXREW	LLSCONSID	LSSTR	OCBUR	OCINN	OCSUPP	WCBUR	WCINN	WCSUPP
COMMIT	1.00																
JSBALANCE	.13*	1.90															ļ
	51***	.24***	1.00												_		
JSCOBTRL.	 	 	.38***	1.00													
JSCOWKS	.30***	.20**															
JSINT	٠٠٠ور	.20**	.44***	.49***	1.00	 	<u> </u>										
JSPRAISE	.47***	.20**	.67***	.48***	.44***	1.00					<u> </u>	ļ	<u> </u>		 		
JSPROF	.26***	.20**	.55***	.28***	.39***	.49***	1.00								 	 	
JSSCHED .	.29***	.49***	.43***	.20**	.22***	.33***	.27***	1.00					 	ļ		ļ	ļ
JSXREW	.24***	.25***	.30***	.22***	.20**	.29***	.30***	.40***	1.00					ļ	ļ		
LSCONSID	.45***	00	.50	.21**	.30***	.58***	.31***	.19**	.05	1.00			ļ		<u> </u>	<u> </u>	
LSSTR	.20**	02	.21**	.21**	.16*	.34***	.20**	.10	.09	.37***	1.00			ļ <u>.</u>	 	ļ ——-	ļ
OCBUR	.05	.09	.07	.24***	.17*	.15*	.08	.04	.04	.03	.16*	1.00					ļ
OCINN	.24***	.09	.28***	.11*	.12*	.25***	.25***	.14*	.13*	.14*	.12*	.38***	1.00		ļ	ļ	ļ
	.22**	.01	.33***	.17*	.10*	.34***	.25***	.19**	.25***	.17***	.11*	.19**	.50***	1.00		ļ	<u> </u>
OCSUPP	 		 	.04	.10	.00	02	08	02	.02	.32***	.51***	.20**	.15*	1.00		<u> </u>
WCBUR	10	14*	04	 		.36***	.23***	.12*	.08	.41***	.32***	.25***	.37***	.17**	.11*	1.00	1
WCINN	.49***	.07	.35***	21**	.30***	 	 	 	 	 	.13*	.11*	.24***	.31***	.02	.49***	1.00
WCSUPP	.47***	.04	.41***	.28***	.38***	.43***	.25***	.14*	.14*	.45***	 		╁───	 	 	6.33***	8.35***
JS(ALL)	0.44***	0.53***	0.66***	0.36***	0.48***	0.66***	0.61***	0.59***	0.52***	0.40***	25***	0.15*	0.27***	0.27***	-0.02	6.33	0.33

*** p<0.001, ** p<0.01, * p<0.05

JSBALANCE = job satisfaction balance, JSCONTRL = job satisfaction control, JSCOWKS = job satisfaction coworkers, JSINT = job satisfaction interaction, JSPRAISE = job satisfaction praise, JSPROF = job satisfaction professionalism, JSSCHED = job satisfaction schedule, JSREW = job satisfaction reward, LSCOND = leadership consideration, LSSTR = leadership structure, OCBUR = hospital bureaucratic culture, OCINN = hospital innovative culture, OCSUPP = hospital supportive culture, WCBUR = ward bureaucratic culture, WC INN = ward innovative culture, WCSUPP = ward supportive culture, JS(ALL) = global job satisfaction