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**A STUDY OF ORGANIZATIONAL
AND PROFESSIONAL COMMITMENT
AMONG NURSES IN SINGAPORE**

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**Presented As Partial Requirement For
The Degree Of Doctor Of Philosophy**

**Business School
The City University
London
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DECLARATION

I hereby grant authority of discretion to the City University Librarian to allow the thesis to be copied in part and in single copies for study purposes without further reference to the author.

ABSTRACT

Issues on commitment have captured the great interest of organizations and research scholars. The health-service organizations in Singapore are anxious to develop appropriate organizational strategies to enhance their nursing personnel's levels of commitment to the organization and profession, and hope that this may, in one way or other, help to ease the turnover among the nurses currently taking place in the organizations.

The current study has, therefore, been carried out to investigate the commitment levels of nurses in the health-service organizations in the Asian Context of Singapore with an attempt to (a) establish the differences between the nurses' level of organizational commitment and professional commitment; (b) determine the effects of the nurses' personal variables on their organizational commitment; and (c) ascertain the relationships between the nurses's overall job satisfaction and their organizational commitment and professional commitment.

A total of 2,424 usable questionnaires were collected from nurses in six government hospitals and four private hospitals.

The results of the data analysis have indicated that (a) the nurses, irrespective of their organizational affiliation to the public or private sector, tended to show a higher level of commitment to the profession than to the organization; (b) the nurses in the private hospitals did not tend to show more commitment to the organization than their counterparts in the government hospitals; (c) the personal variables of age, tenure and salary level of the nurses in both the government and private hospitals seemed to have created an impact on their organizational commitment, and that of these variables, salary level seemed to have the greatest impact on the organizational commitment, and have an intervening effect on the relationships between age and tenure and the organizational commitment; and (d) the overall job satisfaction of the nurses in the government hospitals seemed to have been related more to their professional commitment than to their organizational commitment, but the overall job satisfaction of the nurses in the private hospitals did not appear to have significant relationships either with their organizational commitment or professional commitment. The possible contributing factors to these findings were analysed; the implications for the health-service and other organizations concerned, and the implications for future studies were discussed.

CHAPTER ONE

INTRODUCTION

As the current study will be focused on the commitment levels of nurses in the Republic of Singapore, this Chapter will provide some information on the general background of Singapore. First, a brief description of the historical background, the parliamentary system and the political climate of the Republic will be presented. This will be followed by an account of the labour force and the economic development in Singapore. The problems of labour shortage and labour turnover faced by employers, especially the health-service organizations will also be included, and a brief description of the nursing service and the role of the Singapore Civil Service Institute will follow. Finally, an account of the purpose and outline of the current study will be presented.

Historical Background

The Republic of Singapore is a young country located in the centre of Southeast Asia and mid-way between the Indian and Pacific Oceans. The population was about 2.65 million in June 1988. Of this figure, 76 per cent were Chinese, 15.1 per cent were Malays, 6.5 per cent were Indians and the rest were other races, including Caucasians, Eurasians, etc.. The beginnings of Singapore have remained a matter of speculation. However, modern Singapore is unique in that it was founded in 1819 by Sir Stamford Raffles, an agent of the East India Company. He signed a

treaty with the local chieftain, the Temenggong of Johore providing for the foundation of a British trading post. Singapore was thus occupied by the British. In 1826 Singapore was joined with Penang and Malacca to form the Straits Settlements under the general supervision of Penang. In 1830, the Straits Settlements were placed under the government in Bengal. In 1867, the Straits Settlements became a crown colony directly under the control of the Colonial Office.

Singapore remained as a British Colony (except for the period from 1942 to 1945 during which the island was occupied by the Japanese troops) till 1959. In 1959 Singapore became a self-governing state. In 1963 Singapore joined the Federation of Malaya, Sabah and Sarawak to form Malaysia. In 1965 Singapore was separated from Malaysia and became a fully independent and sovereign country.

Parliamentary System

Singapore is a republic with a parliamentary system of government. The Constitution of Singapore provides for a President who is the Head of State elected by Parliament once in four years. The Member of Parliament who commands the confidence of the majority in Parliament is appointed as Prime Minister by the President. Power is vested in the Prime Minister and his Cabinet Ministers who are responsible collectively to Parliament. The Ministers are appointed by the President from Members of Parliament on the advice of the Prime Minister. There are 13 Ministries altogether. Each is under the charge of a Minister. Parliament is unicameral and consists of 81 members who are elected by the people once in five

years in single-member constituencies and group representation constituencies.

Political Stability

The government of Singapore realizes that political stability and an honest administrative machinery are prerequisites to the economic development and prosperity of the country. The attention of the government has been focused on the development of political stability. The Republic has been able to maintain remarkable political stability and a highly efficient and honest administration since its independence. The success in these efforts by the government has generated a strong confidence and good investment climate for investors from many overseas countries, resulting in a strong influx of foreign investments to the Republic. The foreign investments have thus enhanced the country's economic growth and enabled the young country to progress steadily in the last 25 years.

Labour Force

The latest figure from "Singapore 1989", a government publication, shows that the total labour force in Singapore was about 1.28 million persons in 1988. Employers in the manufacturing, commercial, community, social and personal services sectors engaged about 73 per cent of the total employed persons. Production workers, transport equipment operators and labourers formed the largest group of employed persons (36 per cent of the total employed persons). Professional, technical, administrative, managerial and executive workers were the next largest group (18.5

per cent).

Job seekers in Singapore are provided with counselling by the Ministry of Labour on job expectations, and employers are advised by the Ministry of Labour on market conditions. The Employment Act governs the terms and conditions of employment, and stipulates the rights and obligations of employers and employees. The industrial relations climate in Singapore has been peaceful and steady since its independence in 1965. The country has enjoyed the good reputation of being strike-free since then.

Flexible Wage System

To be able to respond to the economic performance of the country and the market conditions of the world speedily and effectively, Singapore has adopted a flexible wage system in both the public and private sectors. The flexible wage system allows employers greater flexibility in meeting the market demands and ensuring that high wages awarded to employees in good years will not be perpetuated in any subsequent lean years. Using the system as a guide, the National Wages Council, a tripartite body consisting of representatives from the government, employers and workers, advises the government on general wage guidelines and wage adjustments for the year according to the economic performance of the country. The recommendation by the Council, when accepted by the government, serves as a basis for negotiations between employers and employees or their unions for wage adjustments.

Economic Development

Singapore's economy has developed rapidly and steadily since its independence; the country has enjoyed one of the fastest economic growth rates in the world. The average economic growth rate for the 1970s was 9.4 per cent, and the growth rate for 1988 was 11 per cent. The per capita GNP increased from, for example, \$9,600* in 1980 to \$12,600* in 1984. As a proportion of Japan's 1980 per capita GNP of \$19,100*, Singapore's per capita GNP rose from 49 per cent in 1980 to 66 per cent in 1984. Workers have benefited substantially from this rapid economic growth. Except for the periods between 1985 and 1986, Singapore has enjoyed full employment since the early 1980s. No worker has had difficulty at all in getting a job he prefers.

Economic Restructuring

The late 1970s saw a steady rise of protectionism, particularly in the advanced countries. The rise of protectionism has posed a serious threat to the economies of developing countries such as Singapore. To safeguard Singapore's economy, the government had to restructure the Republic's economy in the early 1980s by phasing out gradually labour intensive industries; and by developing high value added, skill intensive and low weight products for the world market; and by providing highly sophisticated services and banking and financial facilities for the region. The

* Figures are quoted in Singapore dollars

economic restructuring has been very successful, and Singapore has been able to sustain its economic growth, in spite of the highly competitive market and protectionism.

Labour Shortage and Turnover

The rapid economic growth and full employment have brought about several side effects to the labour market in Singapore. Labour shortage and high employee turnover or job hopping are some of these problems. Because of labour shortage and job hopping, employers are unable to plan their human resource development in a more meaningful way. Many of the employers have had to resort heavily to foreign labour imported from neighbouring countries to sustain their organizations' growth. The restructuring of the economy and the heavy emphasis on higher value added industries and sophisticated services have also intensified the demand for skilled and professional workers. This has deteriorated the tight labour market; and has directly or indirectly encouraged employers to "snatch" workers, particularly professional workers, from one another by offering workers higher wages and better conditions of service.

The government has also imposed heavy levies on companies which employ foreign workers in order to encourage the companies to automate or mechanize their work process, and phase out foreign labour. Being caught between these ends, employers have constantly tried to search for other alternatives to overcome the labour problems. One of the alternatives is, perhaps, to modify workers' work attitude or

behaviour so that they will be more loyal or committed to their organizations. Because of this, the issues of organizational commitment or organizational loyalty have become one of the major focuses of management both in the public and private sectors. Various programmes and efforts have been used by organizations to promote workers' loyalty to or their identification with their organizations. The introduction of company based welfare schemes, and the increase of other employee welfarism programmes are some of the examples of employers' efforts to promote workers' commitment and loyalty to organizations.

On the other hand, the government has also tried to encourage workers and management to form workers' house unions to replace the existing industry-based unions. It is believed that a house union will be more concerned with the success and progress of the organization. The assumption is that the members' rice bowl is inextricably tied to the success of the organization; and the recognition of this relationship will, therefore, enhance the linkages between employees and their organizations.

Demand for Nurses

Efforts to upgrade medical science and technology in Singapore, and eventually develop the country into an excellent medical centre in this region have been undertaken by the government as part of the economic restructuring programmes to develop and sustain the economy of the country. To make the efforts more meaningful, various incentives have been offered by the government to the private

sector in order to encourage private organizations to take an active part in making Singapore, for example, a highly reputable medical centre providing excellent medical services. As a result of the encouragement of the government, many private hospitals and medical centres have been established since the early 1980s. The rapid rise of private health-service organizations has resulted in a high demand for trained and qualified nurses, and has created an acute shortage of nurses in the labour market. In addition, the health-service organizations in the foreign countries such as Australia, Canada, Brunei and Saudi Arabia have also competed for qualified nurses in Singapore with local health-service organizations. This has further deteriorated the labour shortage problem.

The full employment situation achieved by Singapore in these few years has provided job seekers with ample opportunities to get a job they prefer. The nursing profession has become one of the least preferred jobs in the mind of young job seekers because of shift duties and longer hours of work. Health-service organizations, therefore, have been faced with extreme difficulties in recruiting people to join the nursing profession. This has worsened the manpower shortage faced by the organizations. The high demand for trained nurses has also encouraged in-service nurses to leave their present organizations and join other organizations or simply retire earlier from their jobs with the relative assurance that they will be able to re-enter the labour market any time they wish. This has added an extra burden to health-service organizations, and hampered their development plans.

The private-health service organizations do not have their own nursing schools

to train nurses. The only source of supply of trained nurses is the government health-service organizations. In order to keep the organizations functioning effectively, the private sector has no other alternative but to recruit trained nurses directly from the government health-service organizations or from other private health-service organizations. To be able to compete successfully in the tight labour market for nurses, the private health-service organizations have relied heavily on higher wages and better conditions of service and incentives to lure qualified nurses especially from the government health-service organizations. As a result, the public sector has suffered a great loss of trained nurses to the private sector, and has faced a serious shortage of nursing personnel. The shortage of fresh supply from the labour market has made the problem even worse. In 1988, the government had no other alternative but to announce a pay rise for the nursing service in the public sector; hopefully by doing so, the public sector would be able to improve the situation.

Commitment and Identification

However, the government has also realised that increase in pay or other financial incentives may be just a short term solution to the problem. Perhaps, as a long term strategy, the public sector health-service organizations may have to pay more attention to the attitudinal and behavioural aspects of nurses so as to inculcate in them a sense of loyalty to or identification with their organizations. As a result, the curriculums used in the government School of Nursing, and the human resource development programmes adopted by the various government health-service organizations have been revamped. Emphasis has been placed on promoting

employees' commitment to or identification with their organizations and profession. Hopefully by doing so, nurses will be more loyal to their organizations and be more willing to stay with their organizations or profession.

In addition, a comprehensive publicity programme has also been launched by the government to enhance the image of the nursing profession in order to attract job seekers to the nursing service. On the other hand, the private health-service organizations have also followed the public sector's example by directing their efforts to promoting the commitment of their nursing staff so that they will not be lured to join other organizations.

Figure I

Organizational Hierarchy in Government Nursing Service

Chief Nursing Officer	(Salary Scale: \$5000*)
Senior Principal Nursing Officer	(Salary Scale: \$3700 - 4150*)
Principal Nursing Officer	(Salary Scale: \$2800 - 3675*)
Higher Nursing Officer	(Salary Scale: \$2000 - 3125*)
Nursing Officer	(Salary Scale: \$1300 - 2330*)
Staff Nurse	(Salary Scale: \$810 - 1745*)
Assistant Nurse/Staff Midwife	(Salary Scale: \$610 - 1200*)
Student Nurse	(Salary Scale: \$570 - 780*)
Pupil Assistant Nurse	(Salary Scale \$490 - 615*)

* Figures are quoted in Singapore dollars

Organizational Hierarchy and Salary

Figure 1 shows the general organizational hierarchy or promotional aspects of the nursing service currently (i.e. 1988) implemented in the public sector. A similar organizational structure of the nursing personnel has also been followed in the private health-service organizations, although the titles of the posts are different. For example, the post of Chief Nursing Officer in the government health-service organizations is named as Nursing Director in the private sector; and the post of Principal Nursing Officer in the public sector is named as Assistant Nursing Director in the private sector. The salary scales quoted in Figure 1 are the basic wages currently implemented in the public sector. In addition to the basic wages, nurses are given monthly allowances, an annual bonus, and an extra annual bonus (ranging from one month to three months of the basic salary, depending on the economic performance of the country for the year). Similar wage guidelines have also been followed by the private sector. However, because of the labour shortage, many private sector organizations have offered much higher wages and better terms and conditions of service as inducements to attract nurses to join their organizations.

Entry Qualification

Candidates can enter the service either as Pupil Assistant Nurses or Student Nurses depending on their educational qualifications. The basic entry qualifications for the nursing service in Singapore, as stipulated by the Ministry of Health (the central health authority), are:-

(a) **Pupil Assistant Nurse**

- (1) Obtained Singapore-Cambridge GCE "N" Level Passes in three subjects;
- (2) Passed Secondary Three Education;
- (3) Completed Secondary Four Education;
- and
- (4) Obtained three "O" Level Passes.

(b) **Student Nurse**

- (1) Obtained three GCE "O" Level Passes which include English and either Science or Mathematics;
- and
- (2) Obtained Four GCE "O" Level Passes.

Special aptitudes and fitness required for entry into the nursing service are:-

- (a) physically and mentally fit;
- (b) having a caring attitude;
- (c) be willing to study hard, work hard and make adjustments in personal life;
- and
- (d) liking to meet new people and make new friends.

Training and Advancement

The training agency for nurses in the public sector is the School of Nursing. All Pupil Assistant Nurses are required to undergo a two-year basic training programme, and all student nurses are required to undergo a three-year basic training programme at the School of Nursing. As the private health-service organizations do not have their own training schools, the School of Nursing has also provided basic training for private nurses.

According to the policy and practice adopted by the public and private health-service organizations, Pupil Assistant Nurses, on successful completion of the basic training, will be eligible for enrollment on the Roll for Assistant Nurses with the Singapore Nursing Board; and are eligible for appointment as Assistant Nurses. After five years of completed service, Assistant Nurses are eligible for consideration for promotion to Senior Assistant Nurses. Confirmed Assistant Nurses are also eligible for applying for Student Nurse Training in order to advance to the grade of Staff Nurse.

On the other hand, on successful completion of the basic training, Student Nurses are eligible for registration as State Registered Nurses with the Singapore Nursing Board. They are also eligible for applying for appointment as Staff Nurse. After completing five years of service, Staff Nurses are eligible for consideration for promotion to Nursing Officer if they possess a recognised post-basic nursing qualification. Nursing Officers are also eligible for consideration for promotion to

Higher Nursing Officer, Principal Nursing Officer, Senior Principal Nursing Officer and Chief Nursing Officer. However, promotion from Nursing Officer to the various higher grades is generally more stringent. It depends on educational qualifications, length of service, experience and work performance.

Confirmed nurses in the public nursing service are also eligible for advanced training in specialised clinical fields or in the fields of nursing education and administration or other post basic courses to enable them to move up the organizational hierarchy and to take up more responsible jobs.

Role of Civil Service Institute

The researcher of the current study is a Training Manager of the Civil Service Institute in Singapore. The Institute is the central training organization in Singapore responsible for the training and development of officers in the Singapore Civil Service. The Institute's mission is to support the goals and programmes of the Singapore Civil Service through:-

- (a) selective training, especially in management and supervision, clerical and technical skills, language and related areas;
- and
- (b) the promotion of productivity, especially through the Work Improvement Teams (Quality Control Circles) programmes.

The Institute's key objective is to improve the quality of civil servants in Singapore by:

- (a) training and developing them locally;
- (b) providing training and development consultancy services for their departments;
- (c) promoting and sustaining a system of training and work improvement through Work Improvement Teams;
- and
- (d) testing and evaluating their gains in skill and knowledge

However, it is felt that many of the existing training programmes that the Institute has developed appear to be inadequate and unable to cope with the real needs of the various departments especially departments which provide professional services. Many of the existing training programmes have been developed generally through the intuition or personal judgement of the course developers. Very little empirical research has been carried out by the Institute to identify the real training and development needs of civil servants in the Service, particularly those in the professional fields. As a result, there appears to be no concrete evidence to indicate whether the programmes have been effectively implemented and have successfully met the needs of the civil servants and their organizations. Therefore, it is hoped that more empirical research will be carried out by the Institute to increase the effectiveness of the training programmes and to upgrade the image of the organization.

The researcher of the current study is responsible for planning, designing, developing and implementing training programmes for civil servants in Singapore, especially for those who are in the professional services. In addition, the researcher has provided consultancy services on the planning and development of human resources in government organizations. It is, therefore, hoped that the current study will generate some valuable information to help the Institute review and restructure some of its present training and development programmes, particularly in the areas of organizational behaviour, and, at the same time, to enable the Institute to provide better quality consultancy in the area of human resource development. This will, in turn, upgrade the image of the Institute as a central agency of training and consultancy.

Purpose of Study

The current study intends to:-

- a) examine the commitment level of nurses in both the public and private health-service organizations in Singapore;
- b) establish the differences between the levels of organizational commitment and professional commitment of the nurses;
- c) determine the effects of some of the personal factors of the nurses on their commitment to their organization;

and

- d) ascertain the relationships between the nurses' overall job satisfaction and their commitment to the organization and the profession.

No research of this nature in the nursing service has ever been carried out in Singapore. It is, therefore, hoped that the current study will throw some light on the types of training and development programmes and organizational strategies that the Civil Service Institute should try to provide for government health-service organizations to enhance the nurses' loyalty and commitment to both their organizations and profession. It is also hoped that the findings will provide the private health-service organizations with some useful suggestions for improving their human resource development programmes, or designing appropriate organizational strategies to strengthen their nursing personnel's commitment and loyalty.

Outline of Study

In Chapter Two a review of the literature pertaining to commitment will be presented. The review will include the general issues, definitions, concepts and theories of commitment, and the studies carried out by scholars and researchers in these areas.

The methodology chosen for the current study will be discussed in Chapter

Three. The chapter will cover the samples and questionnaires selected for the study, the method of administering the questionnaires and the types of analysis techniques to be used in examining the data.

In Chapter Four the compiled data will be presented in tabular forms and analysis will be carried out to interpret the data gathered through the survey questionnaires. Statistical tools will be utilized to analyse the data.

Chapter Five will focus on the findings and conclusions of the study. A detailed discussion on the findings and their implications will be presented. The limitations (if any) of the study will also be analysed in this chapter.

CHAPTER TWO

REVIEW OF LITERATURE

The chapter will begin with a brief mention of the interest shown by management and researchers in the study of commitment. Next, a discussion on the concepts and theories of commitment will be presented, and a brief account of some of the instruments used by researchers to measure commitment will also be reported. This will be followed by a detailed discussion on the antecedents of commitment. The differences between commitment and job satisfaction will be briefly discussed then, and a report on the scales or instruments used by researchers to measure job satisfaction will also be given. This will be followed by a brief discussion on the consequences or outcomes of commitment, though outcomes will not be a focus in the study. A critical evaluation of the various problems and issues related to commitment and job satisfaction, and a conceptual model of commitment to be used as a guide for the current study will then be given. Finally, the hypotheses formulated as a result of the review of the literature will be presented.

Introduction

In 1956 Whyte published a stimulating book on the dangers of an individual's over-commitment to his organization. Whyte (1956) called his book "The Organization Man". In the book, Whyte warned his readers against the various serious consequences of an employee's over-commitment to his organization. He described

the "organization man" as someone who not only worked for the organization but also belonged to the organization. He believed in the group as the source of creativity and in belongingness as the ultimate need of the individual. Whyte felt sorry for the "organization man" and urged:-

"each individual to avoid total involvement in any organization; to seek to whatever extent lies within his power to limit each group to the minimum control necessary for performance of essential functions; to struggle against the effort to absorb; to lend his energies to many organizations and give himself completely to none" (p51)

Interest in Commitment Study

Since then, the topic of commitment has become an area of central interest to organization scholars and researchers and has been explored extensively, as evidenced by the proliferation of concepts designed to operationalize the construct; and, as Lee (1971) commented:-

"the analysis of men's loyalty or commitment to a certain person, a group of people, or an organization is a major topic of concern in the systematic study of organizations." (p213)

Similarly, Scholl (1981) also pointed out that:

"it is difficult to find any comprehensive work on organizations that does not in some way refer to the construct of organizational or employee commitment."

(p589)

Organizations prefer loyal, devoted and productive employees, and, therefore, have constantly attempted to find ways and means to increase employees' motivation, enhance their work attendance and performance, and encourage their stay with the organizations; or to identify factors that are related to employee commitment so that appropriate organizational strategies can be designed to increase employees' commitment levels. Researchers too, are anxious to establish variables that may affect employees' work attitude and behaviour or their linkages with their organizations. As Mowday, Porter and Steers (1982) pointed out:-

"concern about these linkages exists in all types of organizations that employ people....." (p1)

One factor that has been identified by researchers as an important precursor of employees' work outcomes or their linkages with their organizations is commitment.

Scholl (1981), for example, pointed out that:-

"commitment has become a variable of interest because of the belief that increased commitment leads, in some way, to increased organizational effectiveness, and is therefore something worth developing in employees."
(p589)

The enthusiasm of researchers in this area can be witnessed in the great volume of research articles, dissertations and books produced. The major interest of researchers has been focused on the theoretical efforts to implicate the construct of commitment; and on the empirical efforts to determine the antecedents and outcomes of commitment, and the processes through which commitment develops. Through the various studies, commitment has been identified by many researchers as an important variable in understanding the work attitude and behaviour of employees in organizations.

Concepts and Theories

But, what is commitment? What does it mean? This is a very difficult question to answer. When one reviews the literature on commitment, one will discover that there is a vast difference of views by researchers about the meaning or concept of commitment as the topic has been studied from so many different theoretical perspectives.

Researchers generally have tended to formulate their own assumptions or

interpret the construct in accordance with their own perspectives and research objectives. For example, Buchanan (1974), after reviewing the commitment literature, felt that there was little consensus on what the construct meant, and an acceptable definition of commitment was, therefore, still lacking.

Salancik (1977) contended that:-

"in them you will find, in short, a lot of nonsense mixed with a lot of common sense. But from them your understanding of commitment may not be enhanced"
(p1)

Mowday, Steers and Porter (1979) commented that:-

"studies of commitment have been made more difficult by a general lack of agreement concerning how best to conceptualize and measure the concept." (p225)

Mowday et al (1982) felt that:-

"as the area grew and developed, researchers from various disciplines ascribed their own meanings to the topic, thereby increasing the difficulty involved in understanding the construct." (p20)

Morrow (1983) noted that there might be more than 25 commitment-related concepts and measures and that:-

"a review of work commitment concepts used in organizational research indicates that many researchers have elected to formulate their own definition and measure of work commitment rather than rely on an existing approach to commitment." (p486)

Reichers (1986) commented that:-

"the empirical literature concerning organizational commitment is potentially confusing, because it is characterized by a diversity of definitions and operationalizations of organizational commitment." (p508)

Pierce and Dunham (1987), after reviewing the commitment literature, commented that:-

"to date, the process by which organizational commitment develops and operates is only partially understood." (p164)

However, they added that:-

"still a number of theoretical models have emerged to help explicate this process." (p164)

Approaches to Commitment Study

Although the views vary considerably, certain trends have appeared to be quite evident. If one studies the trends carefully, one may broadly classify the different concepts of commitment into two main categories or approaches as suggested by Stevens, Beyer and Trice (1978); namely: the exchange approach and the psychological approach.

(a) **Exchange approach** The exchange approach tends to view commitment from an economic standpoint. As explained by, for instance, Morris and Sherman (1981), the approach considered commitment as an outcome of inducement/contribution transactions between an individual and his organization, with an explicit emphasis on the instrumentalities of membership as the primary determinant of the member's accrual of advantage or disadvantage in the ongoing process of exchange. Therefore, the greater the favourability of the exchange from the member's perspective, the greater will be his commitment to the organization. Becker (1960), Grusky (1966), Sheldon (1971), Alutto, Hrebiniak and Alonso (1973), and Farrell and Rusbult (1981), for example, are the researchers who used this approach in their studies of commitment.

Becker, for example, described commitment as a disposition to engage in a consistent line of activity (maintaining membership in the organization) as a result of the accumulation of side bets that would be lost if the activity was discontinued. He contended that commitment:-

"contains an implicit explanation of one mechanism producing consistent human behaviour. Commitments come into being when a person, by making a side bet, links extraneous interests with a consistent line of activity. Side bets are often a consequence of the person's participation in social organizations." (p32)

Becker felt that when we proposed commitment as an explanation of consistency in behaviour, we must have independent observations of the major components in such a proposition. These components were : (1) prior actions of the person staking some originally extraneous interest on his following a consistent line of activity; (2) a recognition by him of the involvement of this originally extraneous interest in his present activity; and (3) the resulting consistent line of activity. Becker argued that an individual invested in his organization or occupation by placing side bets or staking something in which he valued, or something originally unrelated to his present line of activity. Therefore, the more the investments or side bets were at stake, the greater would be his commitment to his organization or occupation.

Grusky (1966) defined organizational commitment as:-

"the nature of the relationship of the member to the system as a whole." (p489)

He felt that two general factors which influenced the strength of a person's attachment to an organization were the rewards he had received from the organization and the experiences he had had to undergo to receive them. So, as Grusky argued, people became members of formal organizations because they could attain objectives that they desired through their membership. If the person discovered that he could not obtain the rewards he originally desired, he either left the organization and joined another, or if this was not feasible, he accepted those rewards which he could obtain and became less committed to the organization. On the other hand, as Grusky felt:-

"obtaining the rewards sought, operates to further his felt obligation to the organization, and his commitment is strengthened." (p489)

Ritzer and Trice (1969, 1970) contended that commitment was basically a psychological phenomenon. However, they added that the side-bets or structural factors discussed by Becker also played a role in increasing organizational commitment. To them, commitment to an occupation:-

"is primarily a psychological phenomenon based on the subjective meaningfulness of the occupation." (p531)

They argued that the strength of an individual's commitment to his organization or occupation depended upon the rewards perceived by the individual.

Sheldon (1971) held that commitment was:-

"an attitude or orientation toward the organization which links or attaches the identity of the person to the organization." (p143)

She felt that investments would produce commitment to the organization, regardless of other features of the relationship of the person to the organization. To her, investments meant:-

"participation in an organization to an extent that possible participation in another organization is decreased. Investments may develop with or without the person being aware of their development." (p144)

Similarly, Hrebiniak and Alutto (1972) also felt that commitment was:-

"an exchange and accrual phenomenon, dependent on the employee's perception of the ratio of inducements to contributions and the accumulation of side bets or investments in the employing system." (p555)

Alutto, Hrebiniak and Alonso (1973) held that commitment, as defined by Becker, was primarily a matter of accrued investments and that:-

"as investments or side bets increase over time the attractiveness of other organizations or occupations tends to decline". (p448)

The researchers argued that:-

"individual-occupational, and individual-organizational transactions and the accrual of side-bets or investments are crucial to an understanding of the commitment phenomenon" (p453)

In other words, when side bets (e.g. pension schemes, status, time or other accrued investments) are made to an organization or an occupation, the individual will tend to perceive these associated benefits as positive elements in an exchange, and will be more likely to stay with the organization or occupation in order not to lose these benefits. When investments increase over time, the individual's propensity to remain with his organization or occupation will also increase. Many of these investments are, to cite what Shoemaker, Snizek and Bryant (1977), have said, "structurally arranged" either by the society in which the individual lives or the organization in which the individual works. The individual may have little control over the investments or cost features of these factors. Thus the greater the favourability of the exchange from the

individual's perspective, the greater will be his commitment, either to his organization or occupation.

Salancik (1977) defined commitment as:-

"the binding of the individual to behavioural acts." (p4)

In other words, his view of commitment was, as he said, grounded in behaviour and the implications of behaviour in one situation for behaviour in another. Salancik contended that the degree of commitment derived from the extent to which a person's "behaviours are binding". To him, action was a necessary ingredient of commitment. Therefore:-

"a person who is committed to a goal will try harder to achieve it than if he is not." (p27)

He held that four characteristics of behavioural acts made them binding, and hence determine the extent of commitment. These four characteristics of behavioural acts were explicitness; revocability; volition and publicity.

The "behaviour" as Mowday et al (1979) commented later, represented "sunk costs" in the organization where individuals would have to forgo alternative courses of action. Scholl (1981) also commented later, that the behavioural school used the concept of "investment" to explain membership, and in doing so:-

"implicitly defines commitment as a type of force directing individual behaviour." (p590)

As commitment to the organization involves the individual's willingness to remain with a particular system given an alternative job that provides better outcomes for the individual, Kidron (1978) referred to this kind of commitment as "calculative commitment." On the other hand, because of the consistent lines of activity that the individual engages or the consistent behaviour of the individual in his organization, Stevens et al (1978) labelled the concept as "continuance commitment." The researchers felt that continuance commitment was generally developed on the basis of an "economic rationale". They argued that:-

"with its economic rationale, this approach gives us a general model for commitment that can be attached to various objects and that allows for a variety of possible influences - both positive and negative." (p381)

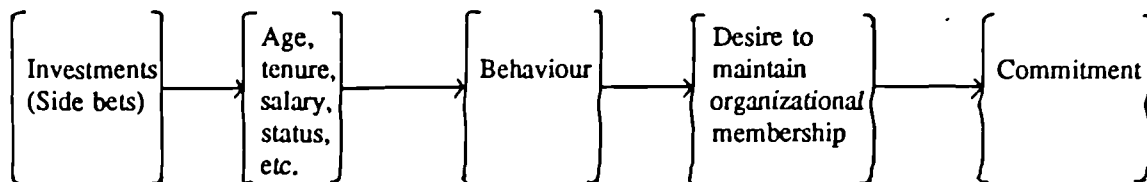
The investment concept of commitment was further expounded by Farrell and Rusbult (1981) who argued that job commitment was a function of:-

"the rewards and costs (satisfaction) derived from the job, the quality of the individual's job alternatives, and the magnitude of the individual's investment in the job" (p81)

In brief, the exchange approach argues that commitment is a function of the rewards and costs associated with organizational membership; these typically increase as tenure in the organization increases. Therefore, the greater the number of investments is, the greater the degree of commitment will be; and an individual will find it costly to leave the organization, if he has to give up the rewards he has accrued. The approach may be summed up in the following diagram:-

Figure 2

Exchange Approach



(b) **Psychological approach** The psychological approach described commitment as a more active and positive orientation toward the organization. The approach views commitment as affective or attitudinal. Researchers such as Kanter (1968), Buchanan (1974), and Porter, Steers, Mowday and Boulian (1974) seemed to favour this approach.

Kanter (1968), to a certain extent, also viewed commitment as affective. For example, she defined commitment as:-

"the willingness of social actors to give their energy and loyalty to social systems, the attachment of personality systems to social relations which are seen as self-

expressive (p499)

On the other hand, Kanter also argued that commitment involved three distinct areas. These three areas were continuance, group cohesion and social control; each was supported by a dissociative and an associative process, and operationalized in terms of specific mechanisms - organisational practices and arrangements which distinguished successful from unsuccessful "commitment-requiring organizations."

She explained that continuance commitment involved primarily securing an actor's positive cognitive orientations, inducing the actors to cognize participation in the organization as profitable. She felt that if an individual, after considering the profit and cost, found that the cost of leaving the social system would be greater than the cost of remaining, the "profit" would compel the individual to continue participating in the system. She contended that there were positive and negative components in the cognitive-continuance commitment. For example, personal sacrifice was a negative component and investment was a positive component. Like Becker (1960) and other side-bet theorists, Kanter felt that through, for instance, investments individuals became integrated with the social system, since their time and resources had become part of its economy. The individual, as Kanter contended, had:-

"in effect purchased a share in the proceeds of the organization and now have a stake in its continued good operation." (p506)

She argued that when individuals invested their resources in one system rather than in other potential paths, they tied their rewards and the future usefulness of their resources to the success of the system, and cut themselves off from other ways of allocating their resources. Obviously, this argument was in line with Becker's concept of commitment when he described about the unanticipated involvement of other sources of rewards or other aspects of a person once a line of action was chosen. Kanter was of the view that:-

"Becker is talking primarily of continuance - the conditions under which an individual will continue a line of action once undertaken; he attributes this to the making of 'side-bets', the unanticipated investment of other, often intangible, resources once a person is a member of a system." (p506)

However, when she referred to cohesion commitment, she interpreted it as the commitment of an actor to group solidarity or to a set of social relationships. It involved primarily the actor's positive "cathectic" orientations, affective ties to the community, and gratifications that stemmed from involvement with all the members of the group. According to Kanter, two general processes were involved - the renunciation by the individual of other ties; and the communion by the individual with the group as a whole.

· Control commitment was interpreted by Kanter as an actor's upholding the

norms and obeying the authority of the group. It involved primarily the individual's positive evaluative orientations. For example, the demands made by the system on the individual were evaluated as right, moral, just, so that the obedience by the individual to these demands was regarded as a normative necessity. For example, the so-called "organisation man" syndrome, as Mowday et al (1982) pointed out later, in which the lives of employees were largely determined by their organizations is a good example of control commitment.

Kanter felt that the above three types of commitment were highly interrelated, and organizations often used all the three types simultaneously to develop their members' commitment. In many ways, these three aspects of commitment acted to reinforce each other to influence an individual's ties with his organization.

Buchanan (1974) viewed commitment as:-

"a partisan, affective attachment to the goals and values of an organization, to one's role in relation to goals and values, and to the organization for its own sake, apart from its purely instrumental worth." (p533)

He suggested that commitment should consist of identification with the goals and values of the organization; involvement in work activities; and organizational loyalty. Affective attachment or psychological bond to the organization, and internalization of the organization's goals and values were thus highlighted by Buchanan.

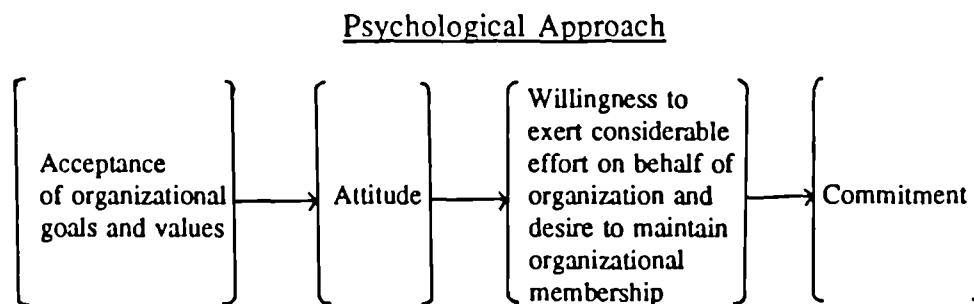
The psychological views of commitment and the acceptance of organizational goals and values were expressed also by Porter et al (1974). The researchers contended that commitment could be defined:-

"in terms of the strength of an individual's identification with and involvement in a particular organization. Such commitment can generally be characterized by at least three factors: (a) a strong belief in and acceptance of the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a definite desire to maintain organizational membership." (p604)

Similar views were also given by Porter, Crampon and Smith (1976). Again, the individual's involvement with his organization, his belief in and acceptance of the organization's goals and values, his willingness to show strong effort for the organization, and his strong desire to maintain organizational membership were highlighted. Thus to Porter et al (1974) an individual's commitment did not just represent his mere passive loyalty to his organization; it involved an active relationship such that the individual was willing to put forth extra effort in order to contribute to his organization's well being. In other words, an individual who was highly committed to his organization intended to stay with it and to work hard towards its goal.

To conclude, the psychological approach describes commitment as a positive and high-intensity orientation toward the organization. The researchers see commitment as an individual's involvement with his organization, his internalization of the organization's values, his willingness to put forth a strong effort to help his organization to achieve its goals, and his strong desire to maintain his membership in the organization. Thus the stronger the attachment he has, the greater his reluctance to leave the organization. As commitment to the organization involves the individual's incorporation of the organizational values and goals into his own identity, Kidron (1978) referred to the commitment as "moral commitment." The approach may be summed up in the following diagram:-

Figure 3



Based on the above arguments, Aranya, Pollock and Amernic (1981) defined professional commitment as:-

- (a) "the belief in, and acceptance of, the goals and values of the profession; (b) a willingness to exert considerable effort on behalf of the profession; and (c) a definite desire to maintain membership in the profession." (p272)

Because of the affective attachment as highlighted by the researchers, Meyer and Allen (1984) referred to this approach as "affective commitment" as opposed to "continuance commitment". McGee and Ford (1987) supported this conceptual distinction between continuance commitment and affective commitment.

Behavioural-attitudinal approach Mowday et al (1979), and Mowday et al (1982) tended to view the concepts in rather different perspectives. After reviewing the literature on commitment, the researchers commented that though approaches to the definitions of organizational commitment might vary considerably, certain trends were evident. In particular, as Mowday et al (1979) argued, many of these definitions focused on "commitment-related behaviours." For example, when one talked about someone becoming "bound by his actions" or "behaviours that exceeded normal and/or normative expectations," one was:-

"in effect focusing on overt manifestations of commitment. Such behaviours represent sunk costs in the organization where individuals forgo alternative courses of action....." (p225)

This behavioural approach to commitment was, as Mowday et al pointed out, discussed in detail by, for example, Salancik (1977).

A second trend that emerged from the available theories was, according to Mowday et al (1979), to define commitment "in terms of an attitude"; that was

attitudinal commitment. For example, when Sheldon (1971) talked about "the identity of a person (is linked) to the organization" or when Hall, Schneider and Nygren (1970) mentioned about "the goals of the organization and those of the individual becoming increasingly integrated or congruent", they were in effect talking about attitudinal commitment. Attitudinal commitment thus, as Mowday et al (1979) contended:-

"represents a state in which individual identifies with a particular organization and its goals and decides to maintain membership in order to facilitate these goals."
(p225)

Mowday et al (1982) maintained that there was a cyclical relationship between attitudinal commitment and behavioural commitment whereby commitment attitudes led to committing behaviour which, in turn, reinforced commitment attitudes.

Identification

In the review of the literature, one will find that the term "identification" has been used by many researchers in their studies of commitment. The issue pertaining to organizational identification or the process by which an individual identifies with his organization or profession has also captured the tremendous interest of many organizational researchers. McGregor (1967), for example, was of the view that identification processes in organizations could produce a host of beneficial outcomes

including, for example, goal commitment, goal achievement, quality of performance and job satisfaction. Hall et al (1970) also pointed out the positive relationship between organizational identification and individual commitment to organizational goals.

Commitment Measurement

The richness and diversity of concepts and theories about commitment found in the literature, as noted earlier, have resulted in a vast diversity of views as to how commitment should be measured. As researchers have generally tended to construct or develop their own scales of measurement or instruments in accordance with their own assumptions about commitment or the purposes they intend to achieve, one can easily find a large number of different commitment scales in the literature. This has made the study of commitment even more complicated. Mowday et al (1979), for example, noted that:-

"studies of commitment have been made more difficult by a general lack of agreement concerning how best to conceptualize and measure the concept." (p225)

Hrebiniak and Alutto (1972) also contended that:-

"the lack of extensive examination of the organizational commitment of professionals might be due to the

difficulty of making that concept operational and of deriving indexes amenable to empirical testing and validation." (p558)

The number of items to be measured in the scales generally differs. It ranges from two items to over 30 items. However, most of the scales, as noticed by Mowday et al (1979) generally consist of two items to four or five items, depending on the objectives which the researchers intend to achieve and the basic underlying assumptions they have in mind.

Grusky (1966), as mentioned earlier, argued that the two general factors which influenced the strength of a person's attachment to an organization were the rewards he had received from the organization and the experiences he had had to undergo to receive them. He felt that upward career mobility in an organization might be considered a general reinforcer in that it provided rewards of many kinds for the upward-mobile person. Based on this argument Grusky constructed a four-item scale in his study to examine the relationship between organizational commitment and the rewards in a large business organization. These four items were seniority, identification with the company, attitude toward the company's administrators, and general satisfaction with the company. The major measure of reward used in the study was the degree of upward career mobility experienced by the managers in the organization. An interrater reliability was reported as 0.90 by Grusky.

Brown (1969) argued that a useful index of organizational identification in

organizational research must include four aspects of involvement. These four aspects of involvement were attraction to the organization, consistency of individual and organizational goals, loyalty, and the reference of self to organizational membership. Accordingly, a four-item index representing the four aspects of involvement was designed by Brown to measure organizational identification. A test-retest reliability of the index from one of the studies by Brown was reported as 0.61. An example of the items is:-

- (a) If you could begin working over again, but in the same occupation as you are in now, how likely would you be to choose TVA as a place to work?

Respondents were asked to answer the question on a five-point scale, ranging from "definitely would choose another place" to "definitely would choose TVA".

Becker's (1960) theory of commitment was typically operationalized by the scales developed by Ritzer and Trice (1969), and Hrebiniak and Alutto (1972). Ritzer and Trice (1969), for example, developed a five-item instrument to test the utility of Becker's side-bet theory of commitment to organization and occupation. The five items were pay, freedom, status, responsibility and opportunity. In brief, respondents were asked to indicate whether they would change their organization or occupation; or would definitely not change their organization or occupation; or were undecided if they were offered the following:-

- (a) (1) no (2) a slight or (3) a large increase in pay; and
- (b) (1) no more (2) a little or (3) much more freedom, status, responsibility and opportunity to get ahead.

As commitment was viewed by the side-bet theory in terms of the perceived utility of continued participation in the organization (i.e. calculative involvement), the measure of commitment in this scale was, therefore, reflected in the respondents' willingness or unwillingness to change their organization or occupation for moderate advantages. The rest-retest reliability indices, as reported by Ritzer and Trice, ranged from 0.83 to 1.0.

Sheldon (1971) hypothesized that investments would produce commitment to the organization regardless of other features of the relationship of the person to the organization, and his social involvement would also produce commitment to the organization. Two separate scales were thus developed by her to test the organizational and professional commitment of a group of Ph.D scientists. The following were examples of the questions used to measure organizational commitment:-

- (a) In the near future I would most like:
 - (1) To make a major contribution to one of the laboratory's projects.

- (2) To publish a paper in the leading journal of my profession even though the topic might be of minor interest to the laboratory.

(b) As far as you know what are your career plans?

- (1) I plan to stay here permanently, if possible.

- (2) I plan to stay for the time being but to move somewhere else eventually.

Respondents were asked to indicate their feeling about the organization on a seven-point rating scale to measure organizational commitment. A coefficient of reproducibility of 0.89, a minimum marginal reproducibility of 0.61, and a coefficient of scalability of 0.72 were reported by Sheldon.

The following were examples of the questions used to measure professional commitment:-

- (a)
 - (1) How important is it to you to have a chance to contribute to scientific knowledge?
 - (2) How important is it to you to have freedom to carry out your own research ideas?
 - (3) How important is it to you to have a chance to do basic research?

The choice of "very important" was considered endorsement for all items; the choices of "some importance", "minor importance", and "no importance" were considered non-endorsement. A coefficient of reproducibility of 0.91, a minimum marginal reproducibility of 0.62 and a coefficient of scalability of 0.76 were reported by Sheldon for this scale.

Based on the argument of the side-bet or investment theory, Hrebiniak and Alutto (1972) constructed a four-item scale to measure the organizational commitment and professional commitment of a group of school teachers and nurses. The scale was basically modelled upon that designed by Ritzer and Trice (1969). However, the "responsibility" variable in the scale developed by Ritzer and Trice was deleted because, as explained by Alutto, Hrebiniak and Alonso (1973):-

"of its possible ambivalence as a positive or negative
inducement condition." (p449)

The variable of "opportunity to get ahead" was also replaced by the inducement of increased "friendliness" of co-workers.

The instrument developed by Hrebiniak and Alutto has been widely used by researchers to measure organizational commitment as well as professional commitment. The reliability of the scale was reported by Hrebiniak and Alutto as 0.79. Shoemaker, Snizek and Bryant (1977) used the "slight scale" of the instrument to test the side-bet theory on a group of park and forest rangers. Kidron (1978) used

the instrument to study the "calculative commitment" of a group of clerical workers, nurses, secretaries and personnel staff. The internal reliabilities of the scale were cited as from 0.75 to 0.89 by Kidron. Ferris and Aranya (1983) used the scale to measure both organizational and professional commitment. Meyer and Allen (1984) adopted the scale in their study on the commitment of a group of introductory psychology students. Parasuraman and Nachman (1987) also used the scale to study the organizational and professional commitment of a group of musicians. The scale is used by the researcher in the current study, more details will, therefore, be given in the next chapter.

Buchanan (1974) contended that methodologically, commitment consisted of three components. These were: (a) identification - adoption as one's own the goals and values of the organization; (b) involvement - psychological immersion or absorption in the activities of one's work role; and (c) loyalty - a feeling of affection for and attachment to the organization. A special scale to measure the above three components was developed by him. The scale consisted of 23 items to assess variables such as experiences, role, clarity, peer group cohesion, expectations, realization, loyalty, conflicts, self-image, reinforcement, organizational commitment norms, work commitment norms, organizational dependability and so on. A seven-point dimension (ranging from strongly disagree to strongly agree; and scoring from 1 to 7 respectively) was used. An alpha coefficient of 0.86 was reported by the researcher.

Franklin (1975), proposed a three-dimensional concept to measure

organizational commitment. These three dimensions were: an individual's willingness to uphold the norms and values of his organization; his willingness to support the goals of his organization; and his willingness to remain with his organization. These were reflected in his eleven-item and five-item scales of measurement respectively; each scale consisted of a five-point response continuum ranging from 0 to 4 such that high commitment was reflected in high scores and low commitment was reflected in low scores. Ten items, for example, were reverse-scored. The alpha coefficients were reported as 0.83 and 0.62 by the researcher.

Porter et al (1974) developed an instrument known as the Organizational Commitment Questionnaire (OCQ) to measure organizational commitment. The OCQ was based on the researchers' definition of organizational commitment which conceptualized the construct as having three primary components: (1) a strong belief in and acceptance of the organization's goals and values; (2) a willingness to exert considerable effort on behalf of the organization; and (3) a strong desire to maintain membership in the organization. The instrument consisted of 15 items reflecting a combination of attitudes, behavioural intentions and the moral involvement of an individual in his organization.

Respondents were asked to indicate the extent to which they would agree or disagree with each item on a seven-point scale. Like the instrument developed by Hrebiniak and Alutto (1972), the OCQ has also been widely used by researchers. For example, Dubin, Champoux and Porter (1975), Stone and Porter (1975), Angle and Perry (1981), Morris and Sherman (1981), Welsch and LaVan (1981), Aranya et al

(1981), Bateman and Strasser (1984), and Piece and Dunham (1987) utilized the scale to measure organizational commitment in their studies. Aranya et al (1981), and Ferris and Aranya (1983) also used the scale to measure professional commitment by replacing the word organization with profession in the questionnaire. Similarly, Aranya, Kushnir and Valency (1986) used the OCQ as the basis for constructing a professional commitment scale, and they contended that:-

"this approach is valid since both profession and organization are objects of commitment, and the concept of commitment is independent of any particular factor."
(p439)

The psychometric properties of the OCQ were considered good by researchers. Porter et al (1974) reported that the alpha coefficients were from 0.82 to 0.93. Porter et al (1976) reported alpha coefficients as from 0.80 to 0.90, and Angle and Perry (1981) cited the alpha coefficient as 0.90. An alpha coefficient of 0.87 was reported by Aranya et al (1981) for the professional commitment scale.

In a study of the organizational commitment and organizational effectiveness, Angle and Perry (1981) adopted the OCQ scale developed by Porter et al (1974) to measure organizational commitment. In addition, the researchers created two subscales to measure value commitment and commitment to stay. The value commitment scale included, as explained by the researchers, items connoting identification with the organization. The alpha coefficient for the value commitment

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subscale was reported as 0.89; and that for the commitment to stay subscale was reported as 0.72 by the researchers.

Based on the work by Buchanan (1974) and Porter et al (1974), Cook and Wall (1980) viewed organizational commitment as consisting of three interrelated components. These three components were: (a) identification (pride in the organization and internalization of the organization's goals and values); (b) involvement (willingness to invest personal effort as a member of the organization, for the sake of the organization); and (c) loyalty (affection for, and attachment to the organization, a wish to remain a member of the organization). A nine-item commitment scale was constructed, with three items tapping each of the three components. Respondents were asked to indicate their responses on a seven-point scale ranging from "strongly disagree" to "strongly agree." Responses were scored from 1 to 7 respectively and totalled across the items to indicate the degree of commitment; a high score indicated high commitment. The alpha coefficients cited by the researchers from two studies were 0.74 and 0.71, 0.87 and 0.71, and 0.82 and 0.60 for identification, involvement and loyalty, respectively.

Antecedents of Commitment

Many studies of commitment have focused on identifying antecedents of commitment. However, factors that affect commitment appear to be abundant, as Steers (1977) pointed out, there are diverse sources affecting commitment in organizations. Researchers are, therefore, anxious to know what the factors are, how

they affect employee commitment in organizations. The interest in this area can be seen in the rich collection of empirical studies in the literature. However, many of the studies are, as noted by Mowday et al (1982), correlational in nature.

Research in 1950s Among those who were interested in predicting determinants of commitment in the early period of the organizational research literature were Becker and Carper (1956). In a study of the graduate students of the physiology, philosophy and mechanical engineering programmes of a university, Becker and Carper found that identification with a profession was related to three types of experiences that the graduates had acquired: namely (a) their investments, particularly time spent in the graduate programmes; (b) their involvements with their peers and teachers, which reinforced the value of the profession; and (c) their development of technical interests and skills, and acquisition of ideologies. As the profession became more highly valued, one began, as the researchers felt, to internalize the ideology of the occupation, and thus acquired the motivation essential for pursuing it further.

Two types of latent organizational roles or identities were proposed by Gouldner (1957-1958) in his study of the organizational loyalty and professional commitment of the faculty members of a college. Gouldner contended that:-

"such identities influence organizational behaviour
because those who hold them may have reference
groups and value commitments that conflict with those

prescribed by the organization." (p281)

These two types of latent organizational roles were referred to by Gouldner as "cosmopolitan" and "local". He identified three variables specifying a person's position on this cosmopolitan-local continuum. These variables were commitment to professional skills and values, organizational loyalty, and reference group orientation. Gouldner felt that these variables were so highly associated that they formed a single dimension. Gouldner described, therefore, cosmopolitans as those who were low on loyalty to the employing organization, high on commitment to specialized role skills, and likely to use an outer reference group orientation; whereas locals were those who were high on loyalty to the employing organization, low on commitment to specialized role skills, and likely to use an inner reference group orientation.

The results of the study indicated that there were differences between cosmopolitans and locals in terms of the degrees of group influence, participation in group activities, propensity to accept or reject organizational rules, and informal relations with others in the organization. For example, it was found that locals especially those who were low on group influence tended to rely on rules and regulations in solving their organizational problems. In contrast, cosmopolitans did not seem to rely on rules and regulations, irrespective of whether they had high or low influence. A tendency for influence was noted to have increased steadily as one moved from cosmos to locals until extreme locals who manifested a sharp decline in influence. Extreme locals also tended to participate more in group activities than extreme cosmos. Locals were also noted to be more likely to be homophilous than

cosmopolitans; and have higher sociability with other locals than with cosmos. In general, locals appeared to have a higher rate of sociability than did cosmos regardless of whether their choices were homophilous or heterophilous. Cosmos, on the other hand, manifested little or no tendency to prefer homophilous to heterophilous sociability. Gouldner felt that locals were more likely to be administrators and cosmopolitans were more likely to be researchers or teachers.

The researcher contended that from the modern organization's point of view:-

"the distinction between cosmopolitans and locals seems particularly promising because it focuses attention on the tensions between the modern organization's needs for loyalty and expertise," (p466)

and that

"the cosmopolitan-local distinction appears to be potentially fruitful for the study of organizational dynamics and especially of intraorganizational tensions and conflicts..... It may be that the study of the relations between cosmopolitans and locals in modern organizations can provide clues for the analysis of conflict within educational, governmental, hospital and other bureaucracies." (p467)

The notion of locals and cosmopolitans was also examined by Bennis,

Kertowitz, Affinito and Malone (1957 - 1958) in their study of loyalties of nurses in a hospital.

In contrast to the findings by Gouldner (1957-1958) the results indicated that cosmopolitans did not refer to an external group. Cosmopolitans, in fact, did maintain high in-group loyalty, and were motivated toward organizational commitment. Locals, on the other hand, were interested in external groups (i.e. nursing associations), showed lower loyalty than cosmopolitans to the work group, and were less interested in developing professional skills.

An explanation for these unanticipated findings, as given by Bennis et al, was that the hospital environment was substantially different from that of other organizations in which the local-cosmopolitan model was derived. The basic distinction, as the researchers argued, between the nursing profession and other organizational settings:-

"lies in the nature of the profession and how it is viewed by its membership. For the majority of nurses the profession is an idealized image, something vaguely equivalent to a personal identity. It represents a symbol, internalized by the individual nurse, which stands more for a way of life than a codified body of knowledge..... Thus we are not here dealing with one group striving for achievement and recognition within

the broader professional field and one group vying for local power." (p496)

The researchers pointed out that for nurses there were four major areas of success. By and large, the nurse who would rise in terms of recognized titles of success and in terms of financial reward must rise through administrative or educational positions. Therefore, for the nurse to be promoted beyond a certain stage, she must change her role from that for which she was trained to that of the administrator or educator. The other path of success was a static one devoid of the usual institutional symbols but deriving recognition and praise from colleagues or immediate work groups for performing necessary functions skilfully. This helped to explain why the nurse who was committed to her professional skills also expressed a high loyalty to her work group since only the group could give her praise and recognition for her good performance. Therefore, to reward individuals who increased the domain of skills in which they were trained and for which they received gratification was, as the researchers suggested, to create a hierarchy of:-

"functional skills by setting up a lattice of reward systems parallel to the administrative hierarchy." (p498)

The researchers contended in their conclusion that there were at least three properties of reference groups wherein the original local-cosmopolitan dimension might not hold. The three properties were: (a) where the main body of the membership perceived the profession chiefly as embodying ultimate values rather than

criteria for skills, research, and the development of a body of knowledge; (b) where the organization goals were fuzzy and inoperable rather than clearly delineated; and (c) where the organization was not substantially indispensable for individual success.

Thus the researchers pointed out that:-

"unless nursing, as well as other professional groups, can develop an organizational hierarchy which will create reward systems for pursuing those functions for which one is trained, we will see a dysfunctional cycle of gaining job specialization, low commitment to the local structure, and high mobility and turnover." (p500)

Research in 1960s Becker (1960) felt that commitment could be explained in terms of "consistent behaviour" or the "consistent lines of activity" in which people engaged. He pointed out that a person remaining in the same occupation might engage in many kinds of activities in the course of his career. The diverse activities had in common the fact that they were seen by the actor as activities which, whatever their external diversity, served him in pursuit of the same goal. Finally, the notion of consistent lines of activity seemed to imply a rejection by the actor of feasible alternatives. He saw several alternative courses open to him, each having something to commend it, but chose one which best served his purposes. He argued that commitment could be achieved by making a side bet and that:

"the committed person has acted in such a way as to

involve other interests of his, originally extraneous to the action he is engaged in, directly in that action."

(p35)

He said that a person sometimes might find that he had made side bets constraining his present activity because the existence of generalized cultural expectations provided penalties for those who violated the expectations. One such expectation operated in the area of work. For example, people felt that a person should not change his job too often and that if he did, he was erratic and untrustworthy.

A person might also find that side bets had been made for him by the operation of impersonal bureaucratic arrangements, such as the rules governing the pension fund, or the bureaucratic rules governing requests for transfer. Becker added that side bets constraining behaviour might also come into existence through the process of individual adjustment to social positions.

However, he also argued that:-

"commitments are not necessarily made consciously and deliberately". (p38)

"Some commitments", as he said, did result from conscious decisions, but others arose creseively. The person became aware that he was committed only when some events changed the situation, and he realized that he might lose the side bets that he had

made if he changed his line of activity. He contended that a consistent line of activity might often be based on more than one kind of side bet; several kinds of things might be staked on a particular line of activity. For example:-

"the man who hesitates to take a new job may be deterred by a complex of side bets : the financial loss connected with a pension fund he would lose if he moved; the loss of seniority, the loss of ease in doing his work because of his success in adjusting to the particular conditions of his present job" (p38)

Therefore, if a person refused to change his job, even though the new job offered him a higher salary and better working conditions, we should suspect that his decision was the result of commitment that other sets of rewards than income and working conditions had become attached to his present job so it would be too painful for him to change. Becker concluded that:-

"side bets are often a consequence of the person's participation in social organizations. To understand commitments fully, an analysis of the system of values within which side bets are made is necessary." (p32)

However, he added that it was important to recognize that many sets of valuable things had value only within subcultural groups in a society and that many side bets

producing commitment were made within systems of value of limited "provenience".

Blau and Scott (1963) reported that the results of their research on the professional commitment and organizational loyalty of a group of social workers of a public welfare agency had indicated that professionals were more apt to be willing to leave or expect to leave the organization than bureaucrats. The findings seemed to be consistent with the contention by Gouldner (1957-1958), for example, that professional orientation was inversely related to organizational loyalty or that professionals tended to be cosmopolitans and not locals. On the other hand, they appeared to be contradictory to those obtained by Bennis et al (1957 - 1958).

The crucial factor accounting for these differences in the findings was, as explained by Blau and Scott, not so much the visibility of performance as the nature of the limits of professional opportunity, as argued by Bennis et al. If there was little opportunity for advancement within the profession, regardless of the organization by which a professional was employed, commitment to professional skills would come into conflict with aspirations for advancement. Such limits would apply, for instance, to nurses whose major opportunities for advancement involved forsaking nursing practice and going into, for example, administration or teaching. Thus the more committed a nurse was to her professional skills, the less attractive she would find the formal reward of a promotion that removed her from the work for which she was trained, and the more she would have to rely on the informal rewards of being highly esteemed for her skills as a nurse by colleagues working in close association with her. Hence commitment to nursing skills, as Blau and Scott felt, provided an attachment

to the local colleague group.

On the other hand, if there was ample opportunity for advancement in a profession but this opportunity was much more restricted in some organizations than in others of the same type, commitment to the profession would come into conflict with loyalty to the organization and encourage a cosmopolitan orientation. Limits of this type, as Blau and Scott pointed out, would seem to apply to the faculties of small colleges, such as the one studied by, for instance, Gouldner (1957 - 1958). These faculty members knew that research opportunities and other professional advantages were superior in large universities, and thus those who were most interested in cultivating their professional skills were usually the ones who were most eager to leave the college. The same considerations, therefore, applied to the public welfare agency. Since the opportunity for doing professional casework was not as good there as in private agencies, professional commitment would tend to motivate workers to hop for positions in private agencies, thus making them less loyal to their present organization. Blau and Scott, therefore, suggested that:-

"a commitment to professional skills will be associated with low organizational loyalty only if professional opportunities are more limited in the organization under consideration than in others with which it competes for manpower." (p71)

The notion of dual orientation (local-cosmopolitan orientation) was advanced

also by Glaser (1963) in his study of the commitment of a group of research scientists in a government medical research organization. Glaser contended in the study that:-

"the congruence of goals reduces in considerable measure, if not completely, the strains between organizational and professional requirements that tend to generate distinct local and cosmopolitan types." (p250)

The results indicated that the scientists were both hard-working investigators and hard-working organizational men; in other words, they were both cosmopolitan and local oriented. Both research and nonresearch activities seemed to be important and compatible to these highly motivated scientists. It was noted that they were oriented to the achievement of the institutional goal and honorary rewards, and hence toward their professional colleagues and toward the success as members of their profession. They were also oriented to their responsibilities within the organization that provided them with the facilities for advancing scientific knowledge, and thus gaining recognition and organizational rewards or a promising career.

The dual orientation arose, as Glaser contended, in a context of similarity of the institutional goal of science with the goal of the organization. In other words:-

"this congruence of organizational and institutional goals generates a local-cosmopolitan scientist when the scientist is highly motivated to advance basic

knowledge. Devotion to both profession and organization is, in this case, not incompatible, as it tends to be for scientists in industry," (p257)

and

"because of this congruence of goals, a local orientation helps to maintain the opportunity to pursue research and to have a career at a highly prestiged locale, both thoroughly consistent with the cosmopolitan orientation." (p258)

These arguments appeared to be consistent with those advanced by Blau and Scott (1963), which indicated that opportunities for a professional career in an organization coupled with restricted opportunities in competing organizations generated local orientations among professionals.

Goldberg, Baker and Rubenstein (1965) also argued against the notion of a single bipolar continuum with those at one end labelled as cosmopolitans and those at the other end as locals. In their study of the role orientations of the personnel in a research and development laboratory company, Goldberg et al found, for example, a high loading of two items concerning localism (i.e. "advancement in the organisation" and "pleasing organizational supervisors") on the factor that included all the professional-scientific (cosmopolitan) items. In other words, respondents in the company did not choose between organizational and professional rewards, as suggested in the local-cosmopolitan literature; instead, they varied in the extent to

which they sought after personal gratifications in general, whether these came from the organization or the profession. However, Goldberg et al explained that:-

"the possibility that the organization we studied was a deviant case and that the view of laboratories as tending to be divided into two polarized camps is the correct one for most organizations." (p710)

Abrahamson (1965-66) discovered, in his study of the cosmopolitanism, dependence-identification, and geographical mobility of the professional staff in a university, that cosmopolitanism and geographical mobility were not part of the same dimension; the relationship depended on underlying psychological dependence-identification needs.

In other words, the strength of the relationship between mobility and cosmopolitanism varied with the degree of the dependence-identification (e.g. family). For example, it was found that cosmopolitanism was most strongly related to mobility for the scientists who had low dependence-identification. It appeared, therefore, that orientation (whether cosmopolitan or local) was most likely to be manifested in overt behaviour when high dependence-identification provided the underlying psychological support for a local orientation; or when low dependence-identification supported a cosmopolitan orientation. In other words, as Abrahamson explained:-

"attitudes are most apt to be translated into overt

behaviour when they are supported by underlying personality needs." (p98)

A study was carried out by Grusky (1966) on a group of managers in a large public utility holding company to examine the relationship between career mobility and organisational commitment of the managers. In the study Grusky contended that the strength of an individual's commitment to his organization was dependent upon the rewards he had received from the system and the obstacles he had to overcome in order to obtain the rewards from the system. The measure of rewards used in the study was the degree of upward career mobility in the organisation experienced by the managers. Variables such as formal education and sex were used to measure the obstacles to the upward mobility. The results of the study did not adequately support the contention that there was a close relationship between the rewards that an individual received from his organisation and the strength of his commitment to his organisation.

However, the study indicated clearly that there was a correlation between the obstacles that the individual had to overcome in order to obtain the rewards and the degree of the individual's commitment to his organisation. In other words, the greater the obstacles the person had to overcome, the greater his commitment would be. It was also found in the study that, in general, the strength of an individual's organizational commitment was related positively with his seniority in the organisation.

Lewis (1967) carried out a study to examine the effects of the institutional prestige and professional prestige on the loyalty of the faculty members of a university. The sample included professors, associate professors, assistant professors, lecturers and instructors. Rank was used as the main criterion to measure institutional prestige; however, age and length of service at the university were also taken into consideration. Professional prestige was measured by the number of professional publications in the preceding three years, the highest degree earned and the time spent on research.

It was found that those with high institutional prestige and those with low professional prestige were more loyal to the organization than their counterparts; those who were over 45 years of age were more loyal than those who were under 45 years of age; and those who had seven or more years of service in the university were more loyal than those who had less than seven years of service. It was also noted that those who had a combination of high institutional prestige and low professional prestige were the most loyal while those who had low institutional prestige and high professional prestige were the least loyal.

However, the attitudes toward economic conditions (e.g. health and life insurance benefits, retirement policies, salary increases etc.) or colleagues did not differentiate the loyal from the disloyal, but the feelings about integration in the university life (e.g. participation in policies affecting students, participation in policies affecting promotions, maintenance of social life among staff and communication between faculty and administration), the scholarly reputation of the university and the

hope of finding conditions more favourable for research elsewhere did differentiate the loyal from the disloyal. For example, opportunities for research and concern for the school's scholarly reputation were the factors that were considered important by about two-thirds of those who would leave the organization at the same or a lower salary, but by less than one-third of those who would not leave.

The findings, as Lewis pointed out, would:-

"lead to the conclusion that rather than being concerned with economic factors, faculty are disloyal, and hence inclined to be mobile, because of feelings of alienation in their present situation and because of the possibility of becoming a part of a more scholarly environment with more chances for scholarly production." (p641)

The findings were, to a certain extent, consistent with the cosmopolitan-local notion advanced by, for example, Gouldner (1957-1958).

Kanter (1968), in her study of the commitment in utopian communities, pointed out that investment enhanced commitment. She felt that for a person to realise his gains, to reap his rewards, he must continue to support the system. It was found in her study that a higher proportion of successful than of unsuccessful utopian groups tended to employ investment strategies to secure their members' commitment. It was also noted that a larger proportion of successful groups than of unsuccessful groups

tended to make use of the structural and social arrangements as renunciation and communion strategies to enhance their members' cohesion commitment, or as mortification and surrender strategies to secure control commitment.

To test the validity of the side-bet theory advanced by Becker (1960), Ritzer and Trice (1969) conducted a study on the organizational commitment and professional commitment of a group of personnel managers.

The results showed that there were no significant correlations between organizational commitment and personal variables such as age, education, marital status, number of children, which were generally expected to have significant relationships with organizational commitment under the side-bet theory. Similarly, no significant relationship was found between professional commitment and variables such as educational level and occupational level. Ritzer and Trice, therefore, concluded that the side-bet theory should be rejected. They contended that organizational commitment was basically a psychological phenomenon and was not a structural phenomenon as suggested by, for example, Becker. Thus the researchers offered an alternative concept of commitment which emphasized social-psychological factors affecting identification.

They argued that occupational commitment was based on the subjective meaningfulness of an occupation, and that organizational commitment seemed to arise only when the occupation had no really meaningful base to which one might commit himself. The less subjectively meaningful the occupation, the more difficult it was for

anyone to commit himself to it, and the more likely one was to commit himself to his organization. They argued that:-

"the basic tenet behind both of these hypotheses is that, in order to make his work life meaningful, one must commit himself to either his occupation or his organization." (p478)

They felt that workers who were oriented to their profession were less likely to exhibit a high degree of loyalty to a particular organization than those who were not so oriented. In addition, individuals in society's more meaningful occupations were much more likely to be committed to those occupations. Thus where an occupation (e.g. personnel administration) was part bureaucratic and part professional, a dual commitment (to both the occupation and organization) was expected. Therefore, personnel managers were committed, in part, to both occupation and organization, and that:-

"in order to make his work life really meaningful the personnel manager must supplement his commitment to the occupation with some degree of commitment to the organization." (p478)

It was, therefore, possible, as the researchers suggested, that members might be tied to organizations through their commitment to an occupation, since the organization

provided the opportunity to pursue the occupation.

In a study of the organisational identification and involvement of a group of skilled and professional employees in the Tennessee Valley Authority, Brown (1969) found that job characteristics such as opportunities for achievement and participating in decision making were associated with employees' identification with the organization. However, the study was not able to establish any relationship between tenure of the employees and organizational identification. Brown noted in the study that employees tended to identify with the organization in three situations: (1) when they saw the organization as providing opportunities for personal achievement; (2) when they had power within the organization; and (3) when there were no competing sources of identification.

Thornton (1969-1970) was of the view that professionals were able to harmoniously relate their organizational and professional activities if their situation within the organization reaffirmed certain principles of professionalism. He argued that:-

"the degree of professionalism in the organizational involvement of professionals might therefore be an important determinant of the compatibility of the two commitments." (p417)

To explore this possibility, a study on the organizational involvement and

commitment to organization and profession was carried out by the researcher. The sample of the study involved a group of junior college teachers. Three dimensions of involvement were used to examine the compatibility between organizational commitment and professional commitment. These three dimensions were criteria of performance, authority over subordinates and kind of supervision.

The results indicated that the more professional the three dimensions of involvement were, the more compatible the organizational commitment and professional commitment would tend to be. The findings, therefore, cast doubt on the notion about the incompatibility of professional commitment and organizational commitment held by researchers such as Gouldner (1957-1958). As mentioned earlier, Gouldner was of the view that a professional employee was inclined to choose between his profession and organization, as the values of these two variables (i.e. profession and organization) tended to conflict with each other. Consequently, the professional would tend to become either a local and accept the organization or a cosmopolitan, and maintain his professional allegiance. However, the results of Thornton's study indicated that professional and organizational commitment, in fact, could be compatible under certain conditions. Generally, as Thornton contended:-

"the extent to which the organizational professional experiences and perceives an organizational situation as reaffirming and exemplifying certain principles of professionalism determines the compatibility of the two commitments." (p424)

Research in 1970s An interesting study on the various aspects of motivation, job involvement and identification with organization was conducted by Patchen (1970) among the employees of the work units (i.e. the engineering divisions and steam plants) of the Tennessee Valley Authority (TVA). Identification was considered by the researcher to have included the phenomena of: (a) an employee's perception of shared characteristics with other members; (b) his feelings of solidarity with or being part of the organization; and (c) his support of the organization (e.g. his support of organizational goals and policies).

The results of this study indicated that jobs of moderate difficulty (as compared with jobs of lesser challenge) and control over work methods were important determinants of work motivation which led to greater job interest and fewer absences; and that when opportunities for achievement were high, the association between chance to use abilities and job motivation became stronger. Chance to use abilities also noted to show a substantial association with overall level of identification.

Participation in decision making was noted to have a positive impact on organizational identification. In other words, work groups which were given opportunities to participate with the management in decision making tended to show higher overall identification with the organization. It appeared, therefore, as the researcher felt, that high participation was likely to increase the likelihood that employees could perceive common interests and goals with management, and that:-

"involving employees in decisions concerning such

things as work methods and equipment, even where management retains the final say....., can be a powerful tool for reducing the psychological cleavage between management and other employees." (p244)

It was revealed that work groups whose members felt a higher degree of solidarity with their co-workers were more likely to perceive common goals with the management and tend to attend the organization's social events which were considered as some of the indicators of the employees' organizational identification.

Interestingly, those who identified strongly with their occupations were noted to be less likely than others to indicate that they would choose the organization (TVA) to work again, if given a chance. They were also less likely to perceive common interests with the management. However, it was also noted that those with strong commitment to their occupations were also more interested than others in their work (which was the organization's work); and told people about the organization's projects. This, as the researcher concluded:-

"may be that employees such as professionals, who are strongly committed to their occupations, may come to feel a strong sense of solidarity with a particular organization when they see the goals and work of that organization as being congruent with their own organizational goals." (p247)

Interestingly, length of service was not found to have an association with overall identification or with workers' perception of common goals with the TVA management.

The results of a study by Hall et al (1970) on the personal factors and organizational identification of the professionals in the U.S. Forest Service revealed that an increase in the length of service in the organization was related to an increase of identification with the organization and the importance of identification. However, organizational position (when tenure was held constant) did not have much effect on identification. It was discovered that foresters' commitment to the general good of public service was the main basis for the continuing identification.

Satisfaction of higher-order needs, esteem, autonomy and self-fulfilment were noted to have significant and consistent relationships with identification with the Forest Service; and self-identity (i.e. supportiveness and involvement) was also found to be strongly correlated with the degree and importance of identification. In other words, foresters who identified highly with the organization and valued the identification tended to be socially oriented (i.e. supportive, involved and affiliative). However, both the self-identity and satisfaction of needs did not change greatly over time. It seemed, therefore, to be reasonable to assume that the foresters, as the researchers felt, entered the Forest Service with self-identity and needs that were congruent with the Forest Service goals and were ready to respond to the organizational conditions resulting in organizational identification.

In another study of organizational identification by Hall and Schneider (1972), which was focused on a sample of priests from a Roman Catholic Church and a sample of professionals from three R and D laboratories, the researchers discovered that tenure was significantly related to organizational identification for the priest sample but it was not related to organizational identification for the R and D sample; and as the Forest Service sample, when tenure was held constant, the impact of organizational position on identification became weak and insignificant.

Job challenge was found to be related to organizational identification for both the priest sample and R and D sample, and work satisfaction appeared to be an intervening variable in the relationship between job challenge and organizational identification.

In contrast to the Forest Service study, self-image was not found to be significantly correlated with identification for both the priest and R and D samples. However, job challenge, on the other hand, was found to be more strongly associated with need satisfaction than identification for the R and D personnel whereas the opposite had been true for the Forest Service sample. For the R and D personnel, job involvement was correlated with satisfaction at about the same level as identification, while job involvement had been a far weaker correlate of satisfaction than identification among the foresters. Satisfaction derived from the job relative to the organization appeared to be greater for the R and D professionals than they were for the foresters.

In conclusion, job challenge was found to be the most consistently strong correlate of organizational identification in the study, regardless of career pattern or type of organization. This was consistent, as discussed earlier, with the data and findings presented, for example, by Brown (1969) and Patchen (1970). As job challenge and organizational identification were mediated by work satisfaction, challenging and satisfying work, as the researchers argued:-

"seems to be a key factor in the development of a person's commitment to his employing organization."

(p347)

In her study of the commitment of a group of Ph.D. scientists of a private laboratory, Sheldon (1971) argued that commitment to utilitarian organizations (those in which the sources of control and motivation were material rather than psychological or symbolic) might be difficult for professionals who were likely to have a prior commitment to their profession, which was more enduring than their commitment to the organization. However, as Sheldon felt, investments and social involvement would tend to enhance commitment to the organization, regardless of other features of the relationship of the person to the organization. Investments, as Sheldon said, referred to participation in an organization to an extent that possible participation in another organization was decreased.

The results of her study showed that investments were associated with commitment to the organization for respondents who had long years of service in the

organization, regardless of their positions in the organization. This, as Sheldon felt, appeared to be consistent with the suggestion by Becker (1960), for example, that a lack of alternatives as in the case of older workers would itself lead to commitment.

Social involvements, on the other hand, were also found to be related with commitment to the organization, though the degree of relationship was not as strong as that of the relationship between investments and the organizational commitment especially in the case of older professionals and those who had low commitment to the profession.

Interestingly, it was also found in the study that professional commitment seemed to have increased with the work experience of the professionals at the expense of organizational commitment. This is particularly true for those who had a medium degree of length of service. In other words, the increase in organizational commitment appeared to have been counter-balanced by the increase in professional commitment. As a result, the professionals who had high professional commitment tended to be less committed to the organization. Sheldon, therefore, felt that:-

"the profession thus increasingly provides a reference group that competes for loyalty with the organization."

(p149)

However, on the other hand, investments seemed to have helped to increase the organizational commitment of those with low commitment to the profession and

of older men. For example, for those with low commitment to the profession, investments appeared to be sufficient to produce commitment to the organization. Those who had medium length of service were noted to have developed a higher level of professional competence which, in turn, produced commitment to the profession. However, social involvements seemed to help this group of scientists to produce commitment to the organization. Therefore, social relationships, as Sheldon argued, were particularly important for producing commitment to the organization for a group of men with an attribute very important to the organization-professional competence. Sheldon thus concluded that:-

"social involvements increased the commitment of the professionally competent men to the organization, thus reinforcing the effect of investments and mitigating the negative effects of professional commitment," (p143)

and that

"social involvements therefore ensure that the organization retains some of its personnel with professional competence." (p149)

In a study on the organizational identification of a group of scientists in a scientific research organisation, Lee (1971) argued that the tendency of the conflict between professional commitment and organizational commitment might be reduced if the scientist departed from his professional commitment and chose the

organizational path as his personal goal, or if the organization redefined the employee role of the scientist to be compatible with his professional goals.

The results revealed that scientists who had high organizational identification were those who were more mature in terms of age and organizational life, and had a higher educational level (e.g. Ph.D.). On the other hand, young scientists with relatively lower educational training, short organizational life, and less enthusiasm about the community as a place to settle down seemed to show low organizational identification. These young scientists tended to have a less definite commitment to the profession, organization and community.

It was also found that scientists who demonstrated high organizational identification tended to have higher job inputs (e.g. education, skill, experience, seniority, age, and responsibility). Scientists who had high organizational identification also received higher salaries, enjoyed higher job status in the organization and demonstrated more favourable attitudes toward the job, organization, and profession than those who had low organizational identification. It was found also that scientists who had high organizational identification, were better motivated and, as a result, their propensity to leave the organization was also lower than those who had low organizational identification.

To conclude, it appeared that the organizational identification of the scientist was the function of the scientist's general satisfaction with the job, organization, and profession. Those with high organizational identification were generally more

productive, better motivated and rewarded, more satisfied, and had less propensity to leave the organization than those with low organizational identification.

Two types of role-orientations (i.e. professional orientation and bureaucratic orientation) of a group of nonsupervisory scientists and engineers from an aerospace company were studied by Miller and Wager (1971). The scientists were selected from the Aero-Space Group and the Basic Science Research Laboratory.

The results revealed that the type of role orientation shown by the professionals was largely the result of differences in the length and type of educational training the professionals had received; and the effect of the organizational factor (i.e. work unit) was to further reinforce rather than to change or otherwise manipulate these orientations. For example, it was found that those who were professionally oriented or committed were generally the scientists who possessed Ph.D. degrees and who worked in the Basic Science Research Laboratory. On the other hand, those who were bureaucratically oriented were generally the engineers who possessed M.A. or M.S. degrees and who worked in the larger work unit of the Aero-Space Group. It was shown that these professionals had, in fact, been socialized in their schools to have their role orientations before joining the company. The organizational context (i.e. work unit) in which they performed their work served to reinforce their commitment to professional values or organizational values. As a result, those working in the laboratory were more professionally oriented than those working in the larger unit who were more bureaucratically oriented. The researchers, therefore, suggested that:-

"one method for solving conflicts between professional goals and organizational objectives is to separate organizationally the different types of research performed." (p161)

In conclusion, the findings did not support the argument that industrial scientists and engineers faced a basic dilemma regarding organizational goals versus professional goals.

The conceptualization of the cosmopolitan-local distinction was tested by Friedlander (1971) in his study of the behavioural orientations of the research scientists in the R & D laboratories.

Contrary to the findings by, for instance, Gouldner (1957-1958), the results of the study showed that scientists who remained with the organizations were higher in research orientation, professional orientation and local orientation. On the other hand, scientists with a local orientation, and those with a research orientation also tended to show the greatest tendency to remain with their organizations, while professionally oriented scientists also tended to show a similar inclination. The findings, as Friedlander contended:-

"clearly argue against the single cosmopolitan-local continuum For the most part, the results of the current study indicate a greater multi-dimensional

complexity of the property space of the orientations and values of research scientists." (p180)

The study by Hrebiniak and Alutto (1972) on the relationship between personal and role-related factors in the development of the organizational commitment of the school teachers and registered nurses revealed that both personal and role-related factors were significantly related to organizational commitment. However, the results of multivariate analyses showed that role-related factors were particularly important in explaining organizational commitment.

Personal factors that were found to have an impact on organizational commitment were sex, age, intentions to seek advanced formal education, levels of interpersonal trust, marital status, father's occupation and religious affiliations. In other words, female respondents were found to be more committed to the organization than their male counterparts. Younger respondents who had not invested a great deal in their careers were noted to be less committed to the organization than older respondents. Respondents who did not plan to seek further formal education were shown to have exhibited higher levels of organizational commitment than those who had plans for further formal education; and those who were uncertain about their educational intentions. Higher levels of interpersonal trust were also noted to be associated with higher degrees of organizational commitment.

As expected, respondents who were single appeared to be more likely to seek alternative employments than their counterparts who were married or those who were

separated. Interestingly, respondents who were from the blue-collar background were found to be less committed to the organization than those who were from the white-collar or professional background. Respondents who were Protestants were found to have exhibited higher levels of organizational commitment than those who were Catholics or who were with other formal affiliations. The above findings on the effects of father's occupation and religious affiliations introduced, as the researchers felt, the possibility that organizational commitment could be affected by background or preorganizational conditions.

The role-related factors that had strong effects on organizational commitment were dissatisfaction with reward policies, role tension and total number of years in the organization. For example, organizational commitment was noted to be inversely related to the degree of dissatisfaction with organizational reward and recognition policies. This, as the researchers pointed out, supported the argument by, for example, Grusky (1966) that an individual's commitment to his organization varied as a function of his organization's reward structure, or the concept of inducements-contributions balances and rates of job progress held by Lee (1971). In other words, the findings, as commented by Bartol (1979) later, indicated that professionals would tend to have a stronger organizational commitment and experience less role stress in organizations in which they perceived the reward system as giving a significant weight to professional behaviour.

Role tension and role ambiguity were also found to be inversely related to organizational commitment. In other words, as the level of tension or stress increased

among the respondents, the level of commitment decreased significantly. Years of experience in the organization was found to be positively associated with commitment in that the greater the experience or seniority, the less the desire to leave the organization. These findings supported the notion of the side-bet theory held by, for example, Becker (1960) that organizational commitment was influenced by exchange transactions and was partially a structural or accrual phenomenon affected by the length of service in the organization and its attendant investments. Surprisingly, role conflict (disparity between professional and organizational expectations), which was another role-related factor was noted to have little impact on organizational commitment. In other words, there was little conflict between professional and organizational commitment.

To sum up, the results of the study showed that role-related factors appeared to be primarily important in explaining the development of organizational commitment. Of the role-related factors, the levels of tension and number of years of experience were the most important variables in predicting commitment. The research, as the researchers concluded, thus:-

"suggests that commitment in utilitarian organizations is partially an exchange and partially a structural phenomenon. That is, commitment depends in part on perceptions of inducements-contributions balances, or similarly, the ratio of rewards received from the organization in relation to the costs incurred to receive

those rewards." (p569)

In contrast to the results obtained by Ritzer and Trice (1969), the findings by Hrebiniak and Alutto as explained above supported Becker's contention that commitment was an exchange and accrual phenomenon and the accumulation of side bets or investments in the employing system. However, Alutto, Hrebiniak and Alonso (1973) explained later that the discrepancies in the findings might be caused by the samples tested. The study by Hrebiniak and Alutto involved both male and female school teachers and nurses who were professional or semi-professional, whereas the respondents of the study by Ritzer and Trice were male personnel managers. Therefore, the discrepancies, as explained by Alutto et al (1973):-

"may be a function of differences in the characteristics of individuals in these occupations as well as alternative operationalizations of the concept 'commitment'." (p453)

Buchanan (1974) discovered, in his study of the organizational commitment of the managers from several business and government organizations, that certain work experiences of the managers appeared to have significant effects on their organizational commitment. These work experiences, as discovered by Buchanan, were personal importance, first-year group attitudes toward the organization, organizational dependability, organizational commitment norms, first-year job challenge, current group attitudes toward the organization and peer group cohesion.

However, it was noted that the impact of these experiences on the managers' commitment varied considerably with the tenure of the managers. For example, it was found that during the first stage (the first year) of their work career in the organization, the variables of group attitudes toward the organization and the first-year job challenge appeared to be the significant determinants of the managers' commitment; during the second stage (the second year through the fourth year), the variables of self-image reinforcement and personal importance seemed to be the more significant predictors of the commitment; and during the third stage (the fifth year onward), the group attitudes toward the organization, expectation realization and work commitment norms appeared to be the significant determinants of the commitment, especially the group attitudes toward the organization which appeared to have the greatest impact. In brief, the results showed that the commitment of the managers to their organization was largely a function of their work experiences. The findings were generally consistent with the arguments by the researchers such as Brown (1969), Sheldon (1971), Lee (1971), and Hrebiniak and Alutto (1972).

The side-bet theory by Becker (1960), and the argument by Ritzer and Trice (1969) were further examined by Aranya and Jacobson (1975) in their study on the organizational and occupational commitment of a group of system analysts in Israel.

The results gave little support to Becker's theory. However, the argument by Ritzer and Trice was supported. Ritzer and Trice, earlier on, argued that organizational or occupational commitment was a psychological phenomenon; and that where an occupation was partly bureaucratic and partly professional, there was a dual

commitment to both the occupation and organization. Aranya and Jacobson, therefore, concluded that:-

"the similarity of our results to those obtained by Ritzer and Trice with regard to the members of another occupation - personnel managers in the U.S. - indicates a broader validity of Ritzer and Trice's theory and casts further doubts on Becker's theory." (p21)

The relationships between the power (a structural variable) used by the organizations to control their lower participants (nonsupervisory employees), the employees' commitment to the organizations and the task performance were examined by Franklin (1975). The study focused on 265 blue-collar and white-collar workers of six different organizations. The six organizations included a general hospital, two newspapers, a small manufacturing plant, a creamery and a utilities service company.

The results showed that the newspaper, the utilities service company and the creamery tended to use less utilitarian power mixes than the manufacturing plant, the general hospital and the other newspaper. It was found that between the more utilitarian and less utilitarian organizations, the percentage of lower participants who were highly or moderately committed to the organizations (by a willingness to uphold the norms of the organizations, support the goals of the organizations and remain with the organizations) was higher in the less utilitarian organizations. On the other hand, the percentage of lower participants who were not committed to their organizations

was higher in the more utilitarian organizations.

It was interesting to note that there was no significant difference in the level of commitment for blue-collar workers in the less and more utilitarian organizations; however, there was a significant difference between the percentage of white-collar committed workers in both the less and more utilitarian organizations. It was noted that the less utilitarian power the organizations used, the greater the percentage of white-collar workers who were committed to the organizations. However, it was also noted that for both blue-collar and white-collar workers, the utilitarian power tended to decrease the commitment. *However, little or no relationship was found between the power used and task performance, or between commitment and task performance.*

In a study of the organizational identification of a group of nonmanagerial research scientists and engineers in a R & D laboratory, Rotondi (1975a) discovered that behaviour related to organizational identification might produce dysfunctional as well as functional outcomes in organizations. For example, it was noted in the study that the data for the total sample exhibited significant and inverse relationships between organizational identification and the variables of effectiveness and creativity. This indicated that individuals who identified with their employing organization were not apt to demonstrate any marked degree of creativity, thereby, as Rotondi contended:-

"reinforcing a dysfunctional interpretation of organizational identification in R&D environments."

(p104)

Interestingly, the relationship between organizational identification and occupational identification for the scientists was also found to be significantly inverse. This, as Rotondi explained, indicated that scientists were more likely to orientate toward professionalism and the relevant role skills at the expense of organizational commitment. However, the relationship between organizational identification and internal group identification was found to be small and insignificant for the whole sample group (both the scientists and engineers).

Rotondi concluded that the findings indicated that the dysfunctional aspects of organizational identification were associated with intrinsic job conditions such as creativity, challenging work, and interesting work. The absence of a significant direct relationship between identification and effectiveness, as Rotondi contended, raised serious doubts as to the operational usefulness of the identification concept in R and D organizations. He, therefore, cautioned that:-

"blanket endorsements of the benefits of organizational identification should be viewed with a certain amount of caution." (p107)

Another study on the organizational identification and group involvement of the members of a business school alumni of a university was carried out by Rotondi (1975b). Rotondi argued in the study that managers tended to exhibit a higher level

of organizational identification than nonmanagers and that managers' organizational identification tended to be directly associated with their occupational identification but unrelated to their work group identification and external group identification.

The overall results of the study, however, did not support the argument that managerial position was a pertinent factor to differentiate the commitment level of managers and that of nonmanagers. But it was noted that among the managers, the relationships between organizational identification and the variables of work group identification, occupational identification, and external group identification were statistically significant; however, the same significant relationships were not found among the nonmanagers.

The significant relationship between organizational commitment and professional commitment among the managers indicated that the managers were able to identify with both their employing organization and occupation, and that they were thus both local and cosmopolitan oriented. The compatibility displayed between organisational identification and work group identification by the managers showed that both the managers and their subordinates seemed to have perceived a goal congruency. The findings thus supported the notion of dual role orientation advanced by, for example, Glaser (1963), and Friedlander (1971).

On the other hand, the lack of significant relationships between organizational identification and the variables of work group identification, occupational identification, and external group identification among the nonmanagers appeared to

be consistent with the earlier findings by Rotondi (1975a) in his study on the organizational identification of a group of nonmanagerial scientists and engineers. Rotondi contended that in a very supportive work environment, group members might tend to identify with their organization through perceptions of mutual goal compatibility. However under competitive internal conditions, group goals might eventually displace organizational goals.

A model of antecedents and outcomes of employee commitment to organizations using a cross-validated framework was proposed and tested by Steers (1977) in his study of the antecedents and outcomes of the organizational commitment of the employees (including nurses and administrators) of a hospital and the scientists and engineers of a research laboratory. The antecedents of organizational commitment were classified by Steers into three categories. The three categories were: (a) personal characteristics which included the variables of need for achievement, age and education; (b) job characteristics which included the variables of task identity, optional interaction and feedback; and (c) work experiences which contained the variables of group attitudes, organizational dependability, personal importance to the organization, and realization of expectations.

The results showed that the three categories of antecedents were significantly related to commitment for both the samples; and represented important influences on commitment as suggested in the model. It was noted that of all the three categories, work experiences were the most closely associated with commitment for both the samples. The findings supported the arguments by, for instance, Sheldon (1971), Lee

(1971), and Buchanan (1974). Buchanan, for example, suggested that commitment was largely a function of work experiences. The association between the three categories of antecedents and commitment, also, as Steers pointed out, emphasized:-

"the diverse sources of factors affecting employee
commitment in organizations" (p51)

It was interesting to note that the specific variables that significantly and most strongly influenced the commitment of the employees of the organizations were the need for achievement, group attitudes toward the organization, education, organizational dependability, personal importance to the organization and task identity. The relationship between education and commitment was, however, inverse. The variables of opportunities for optional interaction, age and met expectations were also significantly related with commitment but only for the hospital sample, and the variable of feedback was also found to be significantly associated with commitment only for the scientists and engineers.

It was also noted that commitment was significantly related to desire and intent to remain in the organizations for both the samples. A relationship between commitment and attendance was also noted for the scientists and engineers and an inverse relationship between commitment and employee turnover was found in the hospital sample. However no significant relationship was found between commitment and overall performance for both the samples.

The influence of the variables such as the need for achievement, group attitudes toward the organization, education, organizational dependability, perceived personal importance to the organization, and task identity on the commitment in both the samples supported, as Steers pointed out, the exchange notion that employees expected to find a work organization where they could utilize their abilities, skills and satisfy many of their basic needs. When the organization was able to provide the opportunities for them to meet their needs, the employees would tend to be more committed to the organization; on the other hand, if the organization failed to provide the employees with the opportunities to meet such needs, their commitment levels would tend to diminish. The inverse relationship between commitment and education indicated, as Steers contended, that it might be more difficult for organizations to provide sufficient rewards to equalise the exchange for employees who had higher levels of education. Thus more highly educated employees would tend to be less committed to the organization, and would, perhaps be more committed to their profession.

In another study by Steers and Spencer (1977), which was focused on the effects of job scope and need for achievement on the organizational commitment and performance among a sample of 115 managers of a manufacturing firm, it was found that high-scope jobs were directly related to the managers' commitment to the organization, and the need for achievement did not moderate the relationship. In other words, jobs that were characterised by greater amounts of variety, autonomy, task identity and feedback enhanced employees' commitment. However, it was also noted that increases in job scope were associated with increased job performance only for

the employees who had high need for achievement, but not for those who had low achievement need. The results led the researchers to conclude that:-

"increasing the job scope of employee's work activities by providing greater amounts of variety, autonomy, feedback, and so forth, should serve to enhance employee commitment for most employees and employee performance for some." (p478)

The side-bet theory of commitment was further tested by Shoemaker, Snizek and Bryant (1977) in their study of the organizational and occupational commitment of a group of state and federal forest rangers.

The results indicated that among the federal rangers, there were positive and significant correlations between organizational commitment and the structural variables of age and length of service; and among the state rangers, there were also positive and significant correlations between organizational commitment and the variables of education and number of locations assigned. These findings partially supported the side-bet notion of commitment. However, it was noted that the variables such as education and age at becoming a ranger among the federal rangers; and the variables such as age and age at becoming a ranger among the state rangers were not significantly correlated with organizational commitment. Thus the results, as Shoemaker et al contended, cast doubt on the side-bet notion of commitment.

As for occupational commitment, it was found that there were no statistically significant correlations between occupational commitment and the various structural variables among the federal rangers. However, there was a significant relationship between occupational commitment and number of locations assigned among the state rangers. In addition, there were also negative but insignificant correlations between occupational commitment and variables such as education and length of training among the federal rangers; and between occupational commitment and age at becoming a ranger and length of training among the state rangers. These findings, as the researchers argued, cast doubt again on the side-bet explanation of commitment.

On the other hand, the social psychological variables such as job satisfaction and feelings of solidarity were found to be positively and significantly related to organizational commitment among the federal rangers. Similarly, job satisfaction was also found to be positively and significantly correlated with organizational commitment among the state rangers. These findings, as Shoemaker et al contended, validated the psychological explanation of commitment by Ritzer and Trice (1969).

Regarding occupational commitment, it was noted that job satisfaction and feelings of solidarity were also positively and significantly correlated with occupational commitment among the federal rangers. This, again, as the researchers pointed out, supported the argument by Ritzer and Trice.

In conclusion, Shoemaker et al felt that the side-bet theory appeared to be a better predictor of organizational commitment and the social psychological explanation

by Ritzer and Trice seemed to be a better predictor of both organizational and occupational commitment. However, the researchers pointed out that:-

"both explanations or sets of variables have some influence on commitment, and neither should be considered to the total exclusion of the other." (p602)

A study in the Asian context on the life-time commitment and turnover of Japanese employees in a Japanese organization was conducted by Marsh and Mannari (1977).

The results indicated that job satisfaction, cohesive relationship with fellow employees, perceived low job autonomy, and higher organizational status were significant predictors of the life-time commitment (or organizational commitment) of the male employees of the organization. Job satisfaction, cohesiveness with the group, and size of community were also found to be significant predictors of the life-time commitment of the female workers. Sex, however, was not found to have a significant relationship with life commitment. As these predictors (i.e. job satisfaction, employee cohesiveness, and status) were more universal than distinctively Japanese sources of commitment, the researchers felt that commitment predictors were universal and not culture-specific.

Stevens et al (1978) adopted a model which integrated the exchange (structural)

approach and psychological approach to commitment in their study of the managerial commitment of the managers in the federal government organizations. Stevens et al argued that in earlier career phases managerial commitment might be influenced more by psychological or personal factors than by side bets, since there had been little time for the managers to accrue. But with increasing tenure, personal factors might recede in importance, and the side-bet or cost-benefit factors might "lock-in" certain fixed elements in the exchange equation, making it more costly for the managers to leave and thereby insuring a certain "type" of commitment. Such managers, as Stevens et al pointed out, were committed to the organization, they might stay with the organization, but might shift or orient their energies to interests outside the organization or occupation. They were, therefore, economically committed but not psychologically committed.

The managerial commitment in the study was measured by both organizational commitment and the federal service commitment. The federal service commitment, as Stevens et al explained, shared some characteristics of occupational commitment, such as transferability across organizations, socially mandated set of expectations, and relatively continuous patterns of activities.

The results of the study indicated that work overload, years in the organization, positive change attitude and years on current position were significantly related to both organizational commitment and federal service commitment. Work overload, years in the organization, job involvement, skill level of subordinates and years on current position were significantly correlated with organizational commitment. Of these

variables, years in the organization appeared to be the best predictor of organizational commitment. Work overload, years on current position and positive change attitude were also noted to be related to organizational commitment in a negative direction. Of these negative predictors, work overload appeared to be the strongest predictor. The fact that years in the organization and work overload appeared to be the best predictors of organizational commitment gave support to the exchange or side-bet theory of commitment, and that job involvement also appeared to be a good positive predictor underlined the importance of psychological predispositions towards work. The findings, as Stevens et al pointed out, therefore:-

"generally support the hypotheses and usefulness of the composite research model." (p389)

Interestingly, age was not found to be related to organizational commitment. Level of education and importance of performance for promotion were found to be significantly associated with federal service commitment; however, level of education was related in a negative way. On the other hand, technical skill was not found to be associated with either organizational commitment or federal service commitment. The findings about the relationship between importance of performance criteria for promotion and federal service commitment suggested, as Stevens et al felt, that the managers who believed in the merit system were somewhat more committed to the federal service.

Work overload, years in the organization, years on position, and importance

of performance in promotion were considered as role-related factors by Stevens et al in the study. The overall results of the study indicated, therefore, that role-related factors were important predictors of both organizational and federal service commitment. These results appeared to be quite in consistence with the findings by Hrebiniak and Alutto (1972), which stated that role-related factors were more important in predicting organizational commitment.

Other variables such as sex, organizational size, centralization of authority and percent of supervision were not found to be significantly associated with either organizational commitment or federal service commitment.

The researchers pointed out in their conclusion that both the role theory and exchange theory were useful in explaining commitment, but they added that:-

"commitment is a complex facet of organizational behaviour that is only partially explained by existing theories." (p394)

A study of work values and organizational commitment was done by Kidron (1978). Data were collected from three different settings (i.e. an insurance company, a hospital and a personnel department). A distinction was made between moral commitment (internalization of organizational values and goals) and calculative commitment (alternative jobs that provided slightly better outcomes).

The results indicated that the work values or Protestant ethic values of the respondents were related more to moral commitment to the organization than calculative involvement. In other words, the respondents who had high Protestant ethic values tended to express high moral commitment, while those who had low Protestant ethic values tended to express low moral commitment.

Two approaches to explanation of job attitudes (i.e. the need-satisfaction paradigm and the social information processing model) were discussed by Salancik and Pfeffer (1978). Salancik and Pfeffer contended that the need-satisfaction model tended to emphasize personal characteristics or personal disposition rather than situational factors, therefore, there was a need to explore situational constraints as an alternative explanation for work attitudes and behaviour. The researchers contended that the definition of the relationship between individuals and the environment took place in a social context and was influenced by that context, and that:-

"such sense-making activity by individuals can be analysed, then, only by understanding the processing of social information." (p226)

The social information processing model as explained by Salancik and Pfeffer, emphasized the effects of the social context of work, and the presence of the consequences from past choices or actions on work attitudes. This premise, the researchers felt, led inexorably to the conclusion that one could learn most about an individual's behaviour by studying the informational and social environment within

which that behaviour occurred and to which it adapted. The researchers argued that the process of attributing attitudes or needs from behaviour itself affected by commitment processes, by the saliency and relevance of information, and by the need to develop socially acceptable and legitimate rationalizations for actions. Therefore, both an individual's attitudes and need statements as well as the characteristics of job were affected by informational social influence. One important source of information was the individual's immediate social environment which provided him with cases that he could use to construct and interpret events. The social environment also provided him with information about what his attitudes and opinions should be.

The researchers contended that commitment affected the creation of attitudes from behaviour by constraining how an individual made sense of his reactions to his environment. Commitment occurred, as explained by the researchers, when behaviour was made under conditions of choice, when it was irrevocable, when it was public and when it was explicit. Thus the researchers argued that the degree of commitment derived from the extent to which "a person's behaviours are binding". He felt that four characteristics of behavioural acts made them binding, and hence determined the extent of commitment. These four characteristics of behavioural acts were: explicitness; revocability; volition; and publicity.

In a study on the relationship between organizational loyalty, professional commitment, and research productivity of a group of researchers in the basic sciences of a university, Jauch, Glueck and Osborn (1978) found that organizational loyalty and professional commitment were independent. Organizational loyalty was found to be

unrelated to productivity, and its interaction with professional commitment provided no explanation of the unique variance in the research productivity over the main effect of professional commitment. It was interesting to note that the researchers who had the strongest professional commitment also appeared to have higher productivity. Jauch et al, therefore, felt that if professional commitment led to productivity, then it appeared that administrators in organizations should pay for researchers for attendance at professional meetings, pay for professional dues, provide for adequate professional libraries, and encourage colloquia and professional meetings at site. These kinds of activities, as Jauch et al argued, should promote an environment where researchers used and developed their knowledge and skills, worked with their competent colleagues, helped to build a professional reputation, and the like. It appeared, as Jauch et al contended:-

"that these factors are important to professional commitment, and academic research productivity might be enhanced." (p91)

Professionalism was used as a predictor of organizational commitment, role stress, turnover and turnover expectancy by Bartol (1979) in her study of a group of computer specialists.

The results of the study indicated that professionalism was related to greater degrees of organizational commitment. It was also found that professionalism did not seem to have a relationship with role stress or turnover. In fact, professionalism was

noted to be a negative predictor of turnover expectancy. The results supported the arguments advanced by, for example, Glaser (1963), Goldberg et al (1965), Friedlander (1971), and Rotondi (1975b) against the notion that there was an inherent conflict between professionals and their employing organizations.

As noted in the study, the differential results for the various professionalism dimensions associated with both organizational commitment and turnover expectancy were, as Bartol argued:-

"consonant with arguments that professionalism should
be considered a multidimensional construct." (p820)

The results obtained in the study also indicated that perceptions of the reward system as valuing professional behaviour were associated with higher organizational commitment and lower role stress, turnover and turnover expectancy.

Research in early 1980s The antecedents of the commitment to the organization of the nursing professionals were examined by Brief and Aldag (1980). Two groups (A & B) of hospital nurses were studied. Group A consisted of 131 registered nurses and Group B consisted of 130 registered nurses. Two sets of variables were used by the researchers as indicators of antecedents of the organizational commitment. One set of variables contained the affective reactions of the nurses to the various facets of their job. The facets were: (a) satisfaction with the work itself; (b) satisfaction with supervision; (c) satisfaction with pay; (d) satisfaction with promotional opportunities; and (e) satisfaction with co-workers. These facets

were identified by Smith, Kendall and Hulin (1969) as indicators of job satisfaction and were used by Smith et al in their Job Descriptive Index (JDI) to measure job satisfaction. The other set of variables consisted of a number of attributes of the nurses themselves. These attributes were, age, tenure, nursing education, adherence to the Protestant work ethic ideals and family responsibilities.

The results of Group A indicated that the variables regarding satisfaction with the work itself, supervision, promotional opportunities and co-workers were positively and significantly correlated with organizational commitment, especially satisfaction with the work itself which showed the strongest correlation with organizational commitment. The attributes of age, adherence to the Protestant work ethic ideals were also found to be positively and significantly correlated with organizational commitment. A negative but significant relationship was also found between nursing education and organizational commitment, and between family responsibilities and organizational commitment. Interestingly, the variables of tenure and satisfaction with pay were not found to be related to organizational commitment.

The correlates obtained from Group A were then used to obtain a regression equation which was cross-validated in Group B. The results were able to explain 42 per cent of the variance in the organizational commitment of Group B.

The negative correlation between nursing education and organization commitment reinforced, as Brief and Aldag felt:-

"the view that professional identification and

organizational commitment are in conflict; therefore, indices of professionalism should continue to be incorporated into models which are designed to explain levels of organizational commitment." (p217)

The findings, therefore, seemed to reinforce the notion of incompatibility between professional orientation and organizational orientation advanced by, for instance, Gouldner (1957-1958).

The strong relationship between satisfaction with the work itself and organizational commitment indicated that satisfaction with the work itself seemed to be the principal antecedent of organizational commitment. This, as Brief and Aldag explained, seemed to indicate that:-

"the student nurse's expectations are commonly not fulfilled in practice and that such disenchantment with the profession is a major factor contributing to the high rates of turnover and inactivity exhibited by nursing personnel." (p216)

O'Reilly and Caldwell (1980) did a study on the impact of intrinsic and extrinsic factors on the job satisfaction and commitment of a group of M.B.A. graduates.

The results suggested that both the intrinsic factors (i.e. intrinsic interest in the job, own feelings about the job, responsibility the job provided, and opportunity for advancement) and the extrinsic factors (i.e. external pressures such as finances and family, location of the job, and salary) that the individual considered in making a job choice, as well as whatever was experienced on the job had a direct impact on subsequent job satisfaction and organizational commitment. It was found that both the intrinsic factors and extrinsic factors (except for external pressures) were correlated positively with satisfaction and commitment; and the external pressures were related to satisfaction and commitment in a negative direction. However, a further analysis revealed that the extrinsic job feature (i.e. salary) was positively related to future tenure intention, and negatively related to job satisfaction. The results appeared, therefore, to be consistent with the argument by Salancik (1977), which said that extrinsic justifications for behaviour and instrumental orientations to work might decrease commitment and satisfaction; or the manner in which the job choice was made might affect future job attitude and tenure.

The four characteristics of behavioural acts to determine commitment as suggested by Salancik (1977) were tested again in a study on the effects of postdecisional justification on the job satisfaction and commitment of a group of new employees (M.B.A. graduates) by O'Reilly and Caldwell (1981). It was discovered that volitionality and irrevocability were significant predictors of the commitment and job satisfaction of the respondents after six months of their initial employment. The perceived irrevocability of the choice and the behavioural commitment were also found to be negatively related to employee turnover two years later.

The researchers also noted that the interactions of the sufficiency of the original justifications for accepting the job and the saliency of these justifications (after respondents began working) had exerted a significant impact on satisfaction and commitment. The interaction between the salary accepted and the sacrifice required to take the job were also found to be significant predictors of behavioural commitment and attitudinal commitment but not for job satisfaction. For instance, respondents who accepted the job offers at less than the top salary (insufficient justification condition) and who had not received any serious inquiries about alternative jobs evinced the highest level of satisfaction and commitment. However, when insufficiently justified subjects received inquiries about other jobs, their level of satisfaction and commitment were lower. Individuals who received other job offers were less satisfied and committed than those with no other job offers. Similar arguments on the impact of external environmental factors on organizational commitment were raised also later, by Bateman and Strasser (1984) in their study of the organizational commitment of employees of the nursing departments. Bateman and Strasser contended that the potential significance of "environmental alternatives" should continue to be pursued in any research on organizational commitment. The researchers felt that employees' perceptions of potential market alternatives would affect the value they placed on their current organizational affiliation.

It was also noted in the study by O'Reilly and Caldwell that individuals remained most committed either if they accepted a high salary with little personal sacrifice, or if they accepted a low salary with substantial personal sacrifice.

The findings thus indicated, as the researchers felt, that the way an individual made his job-choice decision could affect his future attitudes and behaviour during his employment; and that the behaviour during the initial employment period might act to bind the employee to the firm through a process of "cognitive realignment" of previous attitudes. The researchers, therefore, contended that:-

"the social information - processing aspects of recruitment and early employment should be more explicitly considered by managers." (p614)

Similar arguments were raised by Salancik (1977), and Salancik and Pfeffer 1978 as discussed earlier.

In a study on the relationship between organizational commitment and organizational effectiveness of employees of the bus services organizations, Angle and Perry (1981) found that organizational commitment was positively correlated with age and negatively correlated with educational level. These findings were consistent with the findings by, for example, Sheldon (1971), Hrebiniak and Alutto (1972), Steers (1977), and Stevens et al (1978). Angle and Perry also discovered that females were more strongly committed to their organizations than males. These findings appeared to be consistent with those obtained by, for example, Hrebiniak and Alutto (1972).

A study on the relationships between organizational commitment and demographic characteristics, job characteristics, job satisfaction, professional behaviour

and organizational climate was carried out by Welsch and LaVan (1981) in a health care institution. The respondents included nursing personnel and other professionals.

It was found that demographic characteristics such as age, hierarchical levels, tenure and length of professional employment were significantly related to organizational commitment. These findings supported the contention by researchers such as Sheldon (1971), Lee (1971), Hrebiniak and Alutto (1972), and Steers (1977). However, contrary to the findings by, for example, Lee (1971), Steers (1977), Shoemaker et al (1977), and Brief and Aldag (1980), education level was not found to be significantly related to commitment in this study.

It was noted that satisfaction with work and satisfaction with promotion were also significantly related to commitment. However satisfaction with pay was not found to be significantly associated with commitment.

Job characteristics such as role conflict, role ambiguity, power and team work were noted to be significantly related to organizational commitment, however, the relationships between commitment and role conflict and role ambiguity appeared in a negative direction.

The number of professional journals read which was one of the variables of professional behaviour was also found to be significantly associated with professional commitment. Other variables of professional behaviour such as membership in professional organizations, professional meetings attended, attendance of internal

seminars and external seminars were not significantly related to commitment. These findings did not, therefore, seem to be able to support the arguments by researchers such as Gouldner (1957-1958), who linked professional attitudes to a cosmopolitan orientation rather than a local or organizational orientation.

All organizational climate variables (i.e. communication, decision making, leadership, motivation and goal setting) were found to be significantly and positively associated with commitment.

Farrell and Rusbult (1981) proposed a theoretical model called investment model to explain the causes of, and interrelationships among job satisfaction, commitment and turnover. The investment model suggested that job satisfaction was primarily a function of the rewards and costs associated with the job; and that job commitment was a function of rewards, costs, investments and job alternatives; and that job turnover was to be predicted more directly by job commitment.

The researchers argued that pay, opportunity for promotion, job autonomy, task variety and task identity were some of the examples of job rewards. Inadequate resources, lengthy travel to work, unfair promotion practices and undesirable shifts were some of the examples of job costs.

The researchers contended that job satisfaction increased when rewards increased and costs decreased; and that rewards and satisfaction were positively related to commitment, and costs were negatively related to commitment. As pointed out

earlier, similar arguments regarding these relationships were also supported by, for example, Hrebiniak and Alutto (1972), and Buchanan (1974).

Farrell and Rusbult added that job alternatives were negatively related to commitment. In other words, if an individual's job alternatives were poor (e.g. over supply of similarly qualified workers) his commitment to his current job or organization would be greater. Pfeffer and Lawler (1980), for example, earlier on, also demonstrated that job alternatives were negatively associated with intent to remain in the organization.

The investment model contended that the final determinant of commitment was investment, for example, length of service, acquisition of nonportable skills, retirement programmes and so on. As mentioned earlier, similar concepts of the relationships between investments and commitment were introduced by, for example, Becker (1960 in his discussion of side bets, Sheldon (1971), or Hrebiniak and Alutto (1971). Further support of the hypothesized positive relationships between investments and commitment was also given by, for example, Buchanan (1974), Aranya and Jacobson (1975), and Pfeffer and Lawler (1980).

Two studies were thus designed by Farrell and Rusbult to test the validity of the investment model in predicting commitment. Sixty-four male and 64 female students of an introductory business management course in a college participated in the first study, and 107 male industrial workers and 56 female industrial workers took part in the second study.

The results of the first study showed that respondents who were in the high reward condition had greater satisfaction with their task than did those who were in the low reward condition. On the other hand, those in the high cost condition indicated that they were less satisfied with their task than were those in the low cost condition. The investment size, however, was not found to have any significant impact on satisfaction, but the variations in alternative value were noted to have significant effects on satisfaction. For example, those who had low alternative value tended to experience greater satisfaction than did those who had high alternative value. As predicted, high reward value, low cost value, low alternative value, and large investment size were found to be related to greater commitment and less turnover. Job satisfaction was also noted to have a significant relationship with job commitment and turnover. However, it was noted that between commitment and satisfaction, commitment seemed to have a stronger relationship with turnover.

The results of the second study indicated that both reward value and cost value were significantly correlated with job satisfaction, but job satisfaction was not significantly correlated with alternative value or investment size. As expected, job commitment was significantly correlated with satisfaction, reward value, cost value, alternatives and investment size. The findings thus provided support to the investment model. Finally, intent to turnover was also found to be significantly correlated with job commitment.

In brief, the results obtained from the two studies lent support to the investment model as a means to predict job satisfaction, job commitment and job

turnover; and the contention that job commitment was better predicted by a combination of reward and cost values, alternative value, and investment size. The results also argued in favour of the suggestion that job commitment was a more complex phenomenon than job satisfaction; and that job commitment was additionally influenced by the quality of job alternatives of the worker concerned and the magnitude of his job investments.

Morris and Sherman (1981), in their review of the literature, contended that:-

"although a great deal has been learned about potential influences on organizational commitment from these studies, no single, widely accepted set of commitment antecedents has emerged to endure repeated testing."
(p512)

One of the factors, as the researchers pointed out, that might have accounted for this was that:-

"few studies have used multivariate analytical techniques to identify potential determinants of commitment....."
(p512)

Therefore, a multivariate model to predict commitment was proposed and tested by the researchers in their study of organizational commitment of workers in three

organizations involving care and training of mental health. The model was based on the theoretical framework suggested by Steers (1977) in his study.

As mentioned earlier, Steers felt that the antecedents of organizational commitment could be grouped into three categories (i.e. personal characteristics, job characteristics and work experiences). Similarly, Morris and Sherman also classified the determinants of commitment into the three categories suggested by Steers. However, in addition to age and education, the variable of sense of competence was included in the personal characteristics; role conflict and role ambiguity were used to represent the role characteristics; and supervisor consideration and initiating structure were included as the variables for work experiences.

The results revealed that the variables of sense of competence, role conflict, education, initiating structure, age and consideration were significant predictors of organizational commitment; and role conflict and education were associated with commitment in a negative direction. In other words, the variables included in the three categories of the determinants of commitment suggested by Steers were proved to be important components in the model proposed by Morris and Sherman. The findings thus lent a strong support to the model suggested by Steers. The results concerning age and education were also consistent with the findings by, for example, Sheldon (1971), Lee (1971), Hrebiniak and Alutto (1972), Steers (1977), and Welsch and LaVan (1981).

It is interesting to note that sense of competence - a variable under the personal

characteristics appeared to be a highly significant determinant of commitment, and this, as the researchers held, suggested that nonextrinsic factors might be important variables that influenced commitment. It was also noted that of the two variables included in the role characteristics, role conflict was a significant predictor of commitment but role ambiguity did not appear to be so. The two variables under the work experiences (i.e. initiating structure and consideration) were also found to be significant determinants of commitment.

The results of a further examination and analysis of the generalizability of the model indicated that the "nuisance" variables such as job level, job focus and organizational membership did not significantly influence the functional structure of the model or change its ability to predict the levels of commitment. In other words, the model appeared to be generalizable across differences in job focus, hierarchical level and the three organizational samples included in the study.

To conclude, the findings from the study supported the notion held by Steers that all the three categories of the antecedents to commitment proposed in his model represented important predictors of commitment; the findings also enhanced the generalizability of the model by sampling different independent variables to represent each of Steer's three categories of antecedents. Interestingly, as mentioned earlier, Stevens et al (1978) also followed Steer's categories of antecedents in their study, but the results showed that role-related variables were more important predictors of commitment than were other categories of variables.

A study on the professional commitment of the Canadian Chartered Accountants in public practice was carried out by Aranya, Pollock and Amernic (1981).

It was hypothesized in the study that three major factors had influenced the professional commitment of the accountants. These three factors were organizational commitment, professional-organizational conflict and satisfaction with rewards. It was also hypothesized that the impact of these three factors on the professional commitment was moderated by organizational levels.

The results indicated that organizational commitment was the most powerful predictor of the professional commitment of the accountants in all organizational levels. It was found that accountants who had higher organizational commitment appeared also, to have higher professional commitment. The results, therefore, showed that organizational commitment and professional commitment might not be necessarily in conflict with each other as indicated by the findings of other researchers such as Gouldner (1957-1958). On the other hand, the results supported the arguments raised by, for example, Bennis et al (1957-1958), Glaser (1963), Goldberg et al (1965), Lee (1971), and Friedlander (1971).

It was interesting, however, to note that the organizational commitment of the higher organizational levels appeared to be higher than their professional commitment; on the other hand, the organizational commitment of the lower organizational levels seemed to be lower than their professional commitment.

Satisfaction with income was found to have a positive influence on professional commitment. However, the effect varied between the organizational levels. The effect seemed to be more at the higher organizational levels.

Professional-organizational conflict was noted to have a significant and negative impact on the professional commitment at the lower organizational levels (i.e. semi-seniors and seniors). This, as the researchers explained, could be due to the fact that when the level of the individual in the organization increased, he would be more experienced and be in a better capacity to resolve conflicts or become less sensitive to conflicts. The results of the study led the researchers to conclude that:-

"professional commitment can be increased considerably by increasing organizational commitment..... Increasing the level of income, or the level of satisfaction with it, would contribute positively to professional commitment only for higher levels of the CA (Chartered Accountant) organization." (p278)

An interesting model using two distinguished processes - the normative process and instrumental process - as behavioural determinants to predict organizational commitment was proposed by Wiener (1982). Wiener argued that commitment was the totality of internalized normative pressures to act in such a way that met organizational interests. Organizational identification and generalized values of loyalty and duty were viewed by Weiner as the immediate determinants of organizational

commitment. Therefore, commitment, as Weiner contended, could be influenced by both personal predisposition and organizational interventions.

The normative approach believed that some people were more likely to develop commitment toward a particular organization than were other people. This commitment predisposition, as Weiner suggested, was determined by the particular configuration of two dimensions (i.e. generalized loyalty and duty, and value congruency) prior to entry into the organization. Therefore, policies and practices of recruitment and selection adopted by the organization might have an impact on the ultimate level of members' commitment. However, Weiner felt that the general values of loyalty and duty could not be significantly modified by organizational inventions, but the individual value congruency could be affected by organizational practices, particularly "expressive" organizational socialization whereby the values, norms and beliefs of members could be brought in line with those of the organization.

Weiner argued that two conditions should exist if socialization efforts were to be effective in increasing commitment. First, cognitive-instrumental and affective evaluations of members should be positive. To achieve this, the organization must carry out effective instrumental-motivational programmes and create conditions conducive to job satisfaction. Second, a related condition that could enhance the success of organizational socialization required that utilitarian organizations considered the adoption of loyalty and duty into their own organizational value system.

The investment model advanced by Farrell and Rusbult (1981) was further

tested by Rusbult and Farrell (1983) in a longitudinal study of the job satisfaction, commitment and turnover of a group of junior staff accountants and registered nurses.

The researchers contended in the study that declines in job rewards, increases in job costs, divestiture, or improving alternatives should lead to reduced job commitment, and in turn, job turnover. They felt that job rewards (e.g. high pay, autonomy, variety and so on) should be salient to workers even during early stages of a job whereas the costs associated with a given job (e.g. unexpected variations in work load, inadequate resources, unfair promotion practices and so on) tended to become more noticeable over time. Investments in a job might, as the researchers argued, consist of resources that were intrinsic to the job (e.g. nonportable training), or resources that were extrinsic, but inextricably connected to the job (e.g. housing arrangements that facilitated travel to and from work, friends at work, and extraneous benefits uniquely associated with a particular job). Since investments tended to accumulate over time, the impact of investments on job commitment should similarly increase over time; as workers continued to invest resources in the job, it should become increasingly costly to give up the job and lose invested resources, thus the relationship between investments and commitment should become stronger.

As predicted by the investment model, the results of the study indicated that high job rewards and low job costs tended to increase job satisfaction whereas high rewards, low costs, poor alternative quality and large investment size appeared to produce better job commitment. The impact of job rewards on satisfaction and commitment seemed to remain relatively constant whereas job costs appeared to exert

an increasingly powerful influence over time. Investment size was also shown to have exerted a greater impact on job commitment with the passage of time. It was also noted that employees who left their organizations had experienced a greater decline in rewards, increase in costs, increase in alternative quality, and decrease in investment size than did those who stayed with their organizations.

The results, therefore, lent good support to the investment model of commitment.

In a study to test the side-bet theory of commitment, Meyer and Allen (1984) found that age and tenure were positively correlated with organizational commitment. This, as the researchers contended, suggested that:-

"employees who are older and who have been employed longer with a particular organization have a stronger affective commitment to it and are more satisfied with their jobs." (p378)

In a study of the organizational-professional conflict of American and Canadian accountants, Aranya and Ferris (1984) found that the organizational and professional commitment of accountants working in a professional organization was significantly higher than those employed in nonprofessional organizations and that the perception of organizational-professional conflict in professional organizations was significantly lower than that in nonprofessional organizations.

It was also discovered that level of organizational commitment was affected by organizational levels. For example, the organizational commitment of managers was found significantly lower than that of partners; and higher than that of staff members. However, the level of professional commitment of partners was not found significantly different from that of managers. On the other hand, the level of organizational-professional conflict was also found to be inversely related to the positions in the organizational hierarchy. The organizational-professional conflict of managers, for example, was noted to be higher than that of partners, but lower than that of staff members. The level of perceived conflict was also found to have varied according to organizational settings. It was higher in nonprofessional organizations than in professional organizations.

The results thus indicated that a greater compatibility might exist between organizational and professional norms and values in professional organizations than in nonprofessional organizations. They also suggested that organizational commitment and professional commitment could exist side by side, and might not be inherently incompatible as contended by researchers such as Gouldner (1957-1958). The findings, therefore, were consistent with the arguments raised by, for example, Bennis (1957-1958), Glaser (1963), Goldberg et al (1965), Lee (1971), Friedlander (1971), Bartol (1979), and Aranya et al (1981).

It was also noted that the interaction of organizational and professional commitment was significantly and negatively related to the perceived organizational-professional conflict. In other words, a combination of high organizational

commitment and high professional commitment tended to lower conflict; on the other hand, a combination of low organizational and low professional commitment tended to increase conflict. These results seemed to support the findings by Ritzer and Trice (1969), Aranya and Jacobson (1975) and Stevens et al (1978), which implied that the links between organizational commitment and professional commitment, and the perception of organizational-professional conflict were psychological phenomena.

Finally, the results also showed that the organizational-professional conflict was associated with job satisfaction and turnover intentions.

Luthans, McCaul and Dodd (1985) conducted a study to compare the levels of organizational commitment among American, Japanese and Korean workers. A representative sample of employees was selected from widely diverse organizations in America, Japan and Korea.

The results indicated that the level of organizational commitment was significantly higher among the American employees, while the levels of organizational commitment among the Japanese and Korean employees were similar. In other words, both Japanese and Korean employees were less organizationally committed than American employees. The findings, therefore, refuted, as the researchers contended:-

"the widespread belief that Japanese workers are more committed to the organizations that employ them than are their U.S. counterparts." (p217)

The results also revealed that there were significant relations between organizational commitment and age and tenure among the American, Japanese and Korean employees. It was noted that the interactions between country and age and tenure were not significant. In other words, the relationship held across the countries. The findings, therefore, supported the conclusion by Marsh and Mannari (1977) that commitment predictors were universal and that organizational commitment was not based on culture-specific norms and values.

Research after 1985 In a study of a sample of male and female professional accountants, Aranya, Kushnir and Valency (1986) discovered that there was a significant sex difference in organizational commitment; female professionals were found to be less committed to their organization than their male counterparts. However, it was also noted that sex differences did not contribute significantly to the variance in organizational commitment beyond the effects of the demographic variables (i.e. age and organizational level) and cognitive-affective variables (i.e. overall job satisfaction and low-order need satisfaction).

To test the commitment model suggested by Mowday et al (1982), Pierce and Dunham (1987) conducted a study on the organizational commitment of a group of hospital employees. Briefly, the model related an individual's organizational commitment to : (a) his personal characteristics, job/role expectations, and pre-employment propensity to organizational commitment; and (b) his initial work experiences and experienced responsibility.

The personal characteristics measured in the study included the variables of sex, age, education, number of dependents and number of previous employers during the past three years. The personality variables included growth need strength, locus of control and work as a central life interest. The variables reflecting job/role expectations were job complexity, leader initiating structure, consideration, participation in unit decision making, instrumentality of good performance for the receipt of intrinsic reward, and expectancy perceptions. The variables reflecting initial work experiences that would affect experienced responsibility were peer cohesion, job complexity, leader initiating structure, consideration and participation in unit decision making.

The results showed that the propensity for organizational commitment brought to the organization by the employees, and the sense of experienced responsibility created as a result of the initial work experiences appeared to be the two primary significant predictors of the employees' organizational commitment during the early employment period. The personal characteristics and job/role expectations that were carried to the organization by new employees were also found to be significantly related to the propensity for the organizational commitment. The variable (job complexity) of initial work experiences was also significantly associated with the experienced responsibility. In addition, it was also noted that after the first three months on the job, the behavioural intentions regarding turnover and absenteeism were significantly related to the organizational commitment in a negative direction and that the organizational commitment was also significantly associated with the total time lost due to absenteeism during the first three months of employment.

To sum up, the results of the study provided strong support to the model proposed by Mowdy et al (1982) about the major linkages in the determinants of the organizational commitment; and the results, as Pierce and Dunham pointed out:-

"also alert us to the critically important early employment period and the experiences of the new employee." (p175)

Organizational experiences, as the researchers contended, especially those stemming from the design of the job, could produce a sense of experienced responsibility for work outcomes that would have a major and functional impact on the subsequent development of organizational commitment. Steers (1977) also suggested, earlier on, that an employee who believed that his job and/or his organization had made use of his valued skills was more likely to engage in an exchange with the organization and return greater commitment.

The issue regarding the development of professional role orientations was taken up by Cornwall and Grimes (1987) in their study of the relationship between professional role orientations and behaviour of the full-time faculty and administrators in a large research-oriented university. Four items were used to measure professional behaviour. These four items were number of publications in professional journals the respondent had had in the previous three years, number of national professional associations in which the respondent was a member, number of national professional

association meetings the respondent had attended in the past three years, number of offices in national professional associations the respondent had held in the past three years.

The results showed that the number of offices in national professional associations held by individuals had influences on their professional commitment, commitment to organizational goals, organizational immobility, and concern for advancement. The number of publications that individuals had had was also found to have an impact on their professional commitment. The influence of offices held on professional commitment suggested, as the researchers argued, that recognition by individuals' professional peers heightened their commitment to the profession. The impact of professional associations on organizational immobility suggested that external recognition through holding national offices led to more exposure to external opportunities. This, as the researchers pointed out, in turn, might cause individuals to reassess their attitudes about their willingness to leave their present organization as they obtained better information regarding their ability to leave and the desirability of alternative positions.

It was also found that satisfaction with teaching had an influence on the correlations between offices held and concern for advancement and commitment to organizational goals. This implied that those who did not hold office might be more satisfied with teaching and more committed to organizational goals. Age and rank were found to be extraneous variables related positively to offices held and negatively to concern for advancement. These results implied that since individuals had already

achieved recognition from their external peers, they no longer perceived the pursuit of such recognition as involving much risk. Finally the association between the number of publications and professional commitment suggested, as the researchers explained, that success at publications led to satisfaction with research which heightened individuals' commitment to the profession.

In conclusion, the findings did not support Gouldner's (1957-1958) assumption that professional role orientations led to certain professional behaviour. The researchers, therefore, concluded that the results of the study:-

"do not permit the specification of casual relationship between professional behaviours and role orientations..... no simplified generalizations are possible from the results regarding how role orientations develop nor the impact that behaviours have on the development process." (p295)

An attitudinal model of organizational commitment was developed and tested by DeCotiis and Summers (1987) in their study using the sample of a group of restaurant managers.

In contrast to the findings by researchers such as Sheldon (1971), Lee (1971), Hrebiniak and Alutto (1972), Buchanan (1974), and Steers (1977), the results of the study showed that personal characteristics did not have strong effects on organizational

commitment. Decotiis and Summers, therefore, contended that there was no "commitment-type" of individuals in organizations; in other words, individuals, as the researchers argued, were not predisposed to commit to an organization by virtue of some unique configuration of personal characteristics.

However, it was found that autonomy (a variable classified under organizational climate in the study) had a strong and positive impact on commitment. Decision making and communications which were treated as variables under organizational processes were also noted to have a significant impact on commitment through cohesiveness (a variable grouped under organizational climate). One interpretation of these results, as the researchers explained, could be that participation in decision making and clear downward communications affected directly group cohesiveness which in turn affected communications through the individual's understanding of the organizational goals and values; and through the individual's role involvement. The findings, therefore, tended to support the earlier findings by, for example, Hrebiniak and Alutto (1972), Buchanan (1974), and Steers (1977).

It was also discovered that three facets of job satisfaction (i.e. satisfaction with co-workers, hours worked and the job in general) were strongly associated with commitment; motivation and morale were also found to be significantly and strongly related to commitment. These relationships, as the researchers argued, seemed to indicate that the goals and values of a successful organization were salient to its members and that the existing and anticipated success (morale) induced goal identity and role involvement.

Turnover and desire to leave the organization, on the other hand, were also found to be related to satisfaction and commitment. However, commitment was found to have a stronger predictive power for desire to leave and motivation, while job satisfaction appeared to be slightly more predictive for voluntary turnover. This, as the two researchers contended, indicated that commitment-building was a longer-term process; whereas job satisfaction was rather a shorter-term phenomenon. The findings appeared to lend support to the concept of the relationships between met-expectations/needs, satisfaction and commitment advanced by researchers, such as Steers (1977).

A study was carried out by Parasuraman and Nachman (1987) to examine the correlates of commitment to the organization, and commitment to the music profession of a group of musicians in a symphony orchestra.

The results revealed that there was a distinct difference between factors that influenced commitment to the orchestra and factors that affected commitment to the music profession. It was found that the dominant factors that strengthened orchestra commitment were age and leadership attention (consideration leadership), whereas the factor that weakened commitment to the orchestra was felt stress. On the other hand, the main factors that determined commitment to the music profession were full-time employment status and job involvement. Felt stress again appeared to be a factor that decreased professional commitment.

Interestingly, sex, tenure in the orchestra, and tenure as a professional musician

were not found to be related to either orchestra commitment or professional commitment. However, felt stress was noted to have given rise to strong thoughts about quitting the orchestra, and high levels of orchestra commitment tended to diminish intention to leave the organization. On the other hand, professional commitment was not found to have significant effects on either thoughts about quitting or intention to leave.

The findings that age was a dominant factor of organizational commitment seemed to imply that age had limited the musicians' options and increased the value of current investments. The findings thus lent support to the arguments by, for example, Becker (1960), Sheldon (1971), Hrebiniak and Alutto (1972), Steers (1977), Morris and Sherman (1981), and Pierce and Dunham (1987). The strong negative relationships between felt stress, and organizational and professional commitment were consistent with the findings by Hrebiniak and Alutto (1972), which indicated that tension was an important variable that affected commitment.

A study of organizational commitment in the Asian context was carried out by Alvi and Ahmed (1987) in Pakistan. Data were collected from employees in different types of occupations in Karachi City in Pakistan. A model based on the theoretical framework proposed by Steers (1977) was developed and tested by the two researchers. Three main sets of variables - personal characteristics, exchange-based variables; and psychological and other factors were used to predict organizational commitment. The personal characteristics included age, education, sex and occupation; the exchange-based variables were pay, job security, promotion, union

affiliation, tenure and type of organization; and the psychological and other factors included job satisfaction, peer friendliness, skill development, interesting work, task identity, authority, tardiness, intention to stay and competence.

The results showed that there were significant relationships between organizational commitment and the three sets of predictor variables; and that the psychological variables appeared to have a greater impact on commitment than the other two sets of variables for both the male and female groups. This, as the researchers explained, indicated that the fulfilment of workers' psychological needs, along with others, was a very important predictor of the organizational commitment of these workers.

The specific variables of the three sets of predictors that were found to be significantly related to commitment for both the males and females were age, occupation, pay, tardiness, peer friendliness and intention to stay. However, contrary to the findings by researchers such as Hrebiniak and Alutto (1972), Steers (1977), Stevens et al (1978), and Morris and Sherman (1981), age was found to be related to commitment in a negative direction for both the males and females.

The other exchange-based variables such as type of organization, tenure and promotion and other psychological variables such as interesting work, task identity and authority turned out to be significant and positive predictors only for the male sample. Strangely, commitment was noted to have significant but inverse relationships with job satisfaction and skill development for both the groups.

Interestingly, competence was found to have a significant and positive impact on commitment only for the female sample. The relationship between education and commitment (though not significant for both the samples) was in a negative direction. This seemed to be consistent with the findings by, for example, Steers (1977), and Morris and Sherman (1981).

To conclude, the results of the study were, in general, able to support the model proposed by, for instance, Steers (1977) as a guide for identifying determinants of organizational commitment. The findings, as the researchers argued, pointed out that :-

"any organization which fulfils its workers' psychological needs, along with others, enhances their commitment to it even in a developing economy."
(p278)

Luthans, Baack and Taylor (1987) proposed a model in their study of organizational commitment. The model was based on the framework suggested by Weiner (1982), which categorized the antecedents of commitment into three groups known as personal-demographic variables, organizational relationships and person-organization fit. Data were collected from employees from a wide variety of organizations. The variables included in the personal-demographic group were locus of control, age, educational level, organizational tenure, position tenure and time with

supervisor. The organizational relationships were indicated by leader initiating structure behaviour and satisfaction with supervision. The person-organization fit was indicated by the interaction between leader initiating structure and locus of control.

The results revealed that the demographic variables were positively related to organizational commitment and that the personal attribute of internal locus of control was also positively related to commitment, regardless of age, education, position, organization tenure and time with supervisor. Leader initiating structure was found to have a direct impact on organizational commitment; and have moderating effects on the relationship between locus of control and commitment. Finally it was noted that satisfaction with supervision also had direct effects on organizational commitment. The findings regarding the significant relationships between commitment and the demographic factors such as age, education and tenure supported the arguments by, for example, Lee (1971), Steers (1977), and Angle and Perry (1981). The findings concerning the significant impact of leader initiating structure on commitment were consistent with the contention by, for instance, Morris and Sherman (1981).

In a recent study conducted by Colarelli, Dean and Konstans (1987) on the effects of personal and situational influences on job outcomes of a group of professionals, it was found that both personal and situational variables predicted job outcomes, but their relative influence depended on the outcome measure. Situation variables (e.g. job feedback, autonomy and job context) accounted for the most variance in job performance, general job satisfaction and organizational commitment,

whereas personal variables (e.g. cognitive ability, socioeconomic status and career goals) accounted for the most variance in promotability, internal work motivation and turnover. The combined set of variables explained the most variance in organizational commitment and job satisfaction, somewhat less in job performance and promotability, and relatively little in turnover and internal work motivation.

An exchange perspective based on work rewards and work values was used by Mottaz (1988) in his recent study on the determinants of organizational commitment of workers from six diverse organizations.

It was discovered in the study that work rewards appeared to have a very strong and positive impact on organizational commitment, while work values appeared to have weaker and negative effects. However, it was noted that different types of work rewards tended to show a different degree of impact on commitment. For example, the intrinsic task rewards (i.e. task involvement, task significance and task autonomy) appeared, by far, to be the most powerful determinants of organizational commitment. In other words, it was the nature of the task itself that determined an employee's attitude towards his organization. Thus tasks which were considered interesting, meaningful and autonomous would tend to provide a stronger and more positive impact on an employee's organizational commitment.

The extrinsic social rewards (i.e. helpful and supportive supervisors and friendly co-workers) were also found to be important determinants of organizational commitment, but the impact was not as strong as that of the intrinsic rewards. These

findings lent support to the contention by researchers such as March and Simon (1958), Buchanan (1974), Salancik (1977), and Mowday et al (1982). March and Simon (1958), for example, felt that the more general the supervision, the stronger the tendency of subordinates to identify with the organization; or the more supervisors were employee-oriented rather than production-oriented, the stronger the tendency of subordinates to identify with the organization. Salancik (1977) and Mowday et al (1982) also held that, in general, high levels of employee commitment should be associated with the kind of supervision which was not overly tight or close. For instance, supervisors who allowed their subordinates greater discretion over how their job was performed would tend to increase the subordinates' felt responsibility. Mowday et al (1982) also felt that group cohesiveness was generally associated with high levels of interaction and felt responsibility among members, which in turn, would tend to lead to greater social involvement in organizations and commitment. Similarly, the degree of social involvement of employees in organizations was found to be positively related to commitment by, for instance, Sheldon (1971) and Buchanan (1974).

The extrinsic organizational rewards were found to have the least influence on organizational commitment. Of all the organizational rewards, only the variables of promotional opportunity and pay appeared to have some significant and positive effect on commitment.

On the other hand, work values indicated by respondents were found to have corresponded well with work rewards. For example, it was noted that respondents

tended to assign the greatest importance to intrinsic task rewards; and this was followed by extrinsic social rewards and organizational rewards. Thus it appeared that there was a strong correspondence between work-related values and the determinants of organizational commitment. In other words, in addition to the traditional rewards, workers seemed to be looking for autonomy, meaningfulness and challenge in their work.

Interestingly, it was noted that the relationships between organizational commitment and the demographic variables such as sex, education, marital status, job tenure and family income tended to be spurious, as their effects on commitment were found to be indirect and primarily through work rewards and work values.

In brief, the findings of the study suggested, as contended by Mottaz, that it might be necessary for managers:-

"to achieve an exchange balance between work demands
and work values," (p479)

if the managers intended to develop and maintain high levels of organizational commitment. As Mottaz argued, workers entered an organization with specific desires or work values; the more their experiences in the organization were congruent with their values, the more likely they would be committed to the organization. Similar arguments were advanced also by Steers (1977), for example, in his explanation of the exchange notion of commitment.

In a very recent study of the job satisfaction and organizational commitment of workers in human service organizations, Glisson and Durick (1988) examined the differences between the predictors of satisfaction and the predictors of commitment within the same work environment, using job characteristics, organization characteristics and worker characteristics as the three categories of predictors. The argument was based on the assumption that job satisfaction was a function of experience in performing job tasks; and commitment was a function of beliefs about the organization. The characteristics of job tasks included role conflict, role ambiguity, skill variety, task identity and task significance; the characteristics of organization consisted of work group size, work group budget, organization age, work group age, leadership and type of service; and the characteristics of workers were years in the organization, years of experience, age, sex, education and salary.

The results indicated that the characteristics of job tasks were the best predictors of satisfaction. Of these variables, role ambiguity and skill variety emerged to be the strongest significant predictors, and the effect of role ambiguity on satisfaction was in a negative direction. The other two categories of predictors did not appear to have a strong impact on satisfaction. On the other hand, the organization characteristics appeared to be the best significant predictors of commitment; of the variables in this category, organization age and leadership appeared to have the largest impact. These findings reinforced the view expressed by Steers (1977) regarding the belief in using organizational dependability as a predictor of commitment; and the argument raised by Morris and Sherman (1981) concerning the impact of leadership on commitment.

Two other variables under the organization characteristics (i.e. the size of work group and type of service) were also found to be significant predictors of commitment, though their impact was not as strong as organization age and leadership. A variable under the workers characteristics (i.e. education) was also noted to be a significant predictor of commitment, but again, the impact was not as strong as organization age and leadership. These findings, therefore, appeared to give support to the notion advanced by, for instance, Steers (1977); and the arguments by, for example, O'Reilly and Caldwell (1981) that workers could create commitment by rationalizing the available options for leaving their organizations.

In a study of a group of the Army and Navy Reserve Officer Cadets, Mathieu (1988) found that satisfaction with job characteristics (e.g. training variety, autonomy and challenge) had significant and positive influences on organizational commitment, and that role strain also exhibited significant and negative effects on organizational commitment. This, as Mathieu contended, seemed to indicate that the amount of role strain experienced by individuals represented a particularly strong factor in the organizational commitment process.

It was also noted that early military socialization (a personal characteristic) did not seem to have an influence on organizational commitment, but achievement motivation (a job characteristic) was positively related to organizational commitment.

A very recent study on organizational commitment in the Asian context was carried out by Putti, Aryee and Tan (1989). The researchers examined the relationship

between the work values and organizational commitment of workers in an electronics factory in an Asian country.

The results showed that work values were significantly related to organizational commitment. However, the intrinsic work value scale appeared to be more strongly related to commitment than the extrinsic work value scale. The findings seemed to be quite consistent with the arguments by, for example, Hall et al (1970). Thus Putti et al contended that:-

"it may be fair to say that work values which have been demonstrated to be related to commitment in the Western industrial societies also hold true in the Asian context." (p283)

The findings, therefore, lent support to the arguments by Marsh and Mannari (1977), and Luthans et al (1985) that commitment predictors were universal and that organizational commitment was not based on culture-specific norms and values.

Interestingly, the common demographic variables (except education) such as marital status, sex, age, tenure, income and job level did not appear to have a significant relationship with commitment. Education was found to be significantly related to commitment but, again, the relationship did not appear to be strong.

As work value was found to be related to organizational commitment, the

researchers concluded that:-

"organizations that wish to enhance the commitment of their employees should ensure a congruence between organizational rewards and the work values of employees. Furthermore, attempts to enhance commitment should emphasize intrinsic rewards." (p284)

In a very recent study of the organizational commitment of nurses in a large hospital, Gray (1989) found that personal characteristics and experience (e.g. sex, race, educational background, type of nursing training, length of employment, and extent of post-basic training) were not significant predictors of organizational commitment. The findings, therefore, appeared to contradict those reported earlier by researchers such as Hrebiniak and Alutto (1972), Steers (1977), Brief and Aldag (1980), and Morris and Sherman (1981).

However, it was noted that the domestic relations variables (e.g. the degree to which work had interfered with family life, and the presence of children) were significantly associated with organizational commitment, and the relationship between interference with family life and organizational commitment appeared to be in a negative direction. In other words, the nursing work seemed to have created a significant interference with the family life of the nurses, and this seemed to have resulted in a negative impact on the nurses' levels of organizational commitment.

Surprisingly, gender ideology was noted to have a strong impact on organizational commitment, and the relationship also appeared to be in a negative way, with nurses who had a feminist gender ideology having lower levels of organizational commitment.

Summary

Although the antecedents of commitment or variables that affect commitment have appeared to be widely diverse as discussed earlier, one could, as suggested by Mowday et al (1982), generally group the antecedents into the four main categories; namely: personal characteristics, job characteristics/roles, work experiences, and organizational structure. Accordingly, the determinants or predictors of commitment discussed in this chapter are grouped under the above four main headings at Appendices 1 to 8 by the researcher of the current study for the sole purpose of easy reference.

As witnessed in the review of the literature in this chapter, the grouping of the antecedents tended to vary from researcher to researcher. For example, tenure or years in the organization was grouped under role-related factors by Hrebiniak and Alutto (1972), and Stevens et al (1978); however, the same variable was categorised as a personal characteristic by, for instance, Steers (1977), and DeCotiis and Summers (1987). Job challenge, as another example, was treated as a factor under work experiences by, for instance, Reichers (1985); but it was considered as a job characteristic by, for example, Mathieu (1988). Leader behaviour or leadership was

regarded as a variable under work experiences by, for example, Morris and Sherman (1981); interestingly, the same variable was considered as a role characteristic by Pierce and Dunham (1987). Role conflict and role ambiguity were treated as factors under organizational structure by DeCotiis and Summers (1987), whereas the two determinants were regarded as job characteristics by Glisson and Durick (1988).

Commitment vs Job Satisfaction

A review of the literature will reveal that researchers generally like to differentiate between commitment and job satisfaction. Questions have been raised by researchers whether job satisfaction forms part of commitment or commitment forms part of job satisfaction. The views, however, have varied from researcher to researcher.

Job satisfaction is generally considered as a feeling or an affective response or orientation toward a job, or the specific facets of a job. Smith, Kendall and Hulin (1969), for example, felt that these feelings were associated with a perceived difference between what was expected as a fair and reasonable return and what was experienced in relation to the alternatives available in a given situation. Their relation to behaviour depended upon the way in which the individual expected that form of behaviour to help him achieve the goals he had accepted. Payne, Fineman and Wall (1976) felt that job satisfaction was focused upon a particular, and concerned a person's affective response to his job. Similarly, Bluedorn (1982) also defined job satisfaction as the affective orientations of individuals to the work roles. Brooke,

Russel and Price (1988) argued that job satisfaction was a positive emotional state reflecting an affective response to the job situation.

In contrast to commitment, this affective response or feeling is more rapidly formed, and the satisfaction is more transitory in nature. Porter et al (1974), for example, also attempted to differentiate between job satisfaction and organizational commitment in their study. The researchers felt that organizational commitment represented:-

"a related but more global evaluative linkage between the employee and the organization that includes job satisfaction among its specific components." (p604)

However, they added that though we would expect commitment and satisfaction to be related, each construct appeared to contribute information about the individual's relationship to the organization. To the researchers, the development of organizational commitment appeared to require an individual to think in fairly global terms about his relationship to the organization during the initial employment period. A relatively greater amount of time would, therefore, be required for the individual to determine his level of commitment to the organization than would be the case with his level of job satisfaction. On the other hand, the degree of one's job satisfaction, as the researchers pointed out, appeared to be largely associated with specific and tangible aspects of the work environment and might represent a more rapidly formed affective response than did commitment. The individual's job satisfaction might, therefore, be

more transitory in nature.

Similarly, Porter et al (1976) pointed out the differences between using job satisfaction and using commitment as an approach to study the relationship between employee attitudes and work outcomes. The researchers felt that the former approach had focused on measuring satisfaction with various aspects of the immediate work situation. Such a focus, as the researchers contended, could be considered an indirect approach to study attitudes predictive of turnover. On the other hand, the latter approach which had focused on organizational commitment was more direct and might include attitude measures pertaining to the individual's degree of commitment to the employing organization or his intentions concerning staying or leaving. However, the researchers added that:-

"with respect to organizational commitment, it is obvious that it is not totally unrelated to job satisfaction." (p88)

They agreed with the views expressed by Porter et al (1974) that commitment might be a more global and stable evaluative linkage between the employee and his organization that included job satisfaction as a component. In addition, as the researchers contended, commitment might represent a set of feelings more closely connected to the individual's desire to stay attached to a particular work situation. In this regard, as they argued:-

"it is important to keep in mind that when an employee terminates, he severs his ties with an organization; however, he may not necessarily also be relinquishing a set of job duties, since he may assume the same type of job in a new organization." (p88)

The researchers, therefore, concluded that in comparison with job satisfaction, measuring specific intentions to leave would seem to be a more direct measure of feelings relevant to the act of eventual turnover.

Mowday et al (1979) pointed out the differences also, by stating that:-

"commitment emphasizes attachment to the employing organization, including its goals and values while satisfaction emphasizes the specific task environment where an employee performs his or her duties." (p226)

They felt that though day-to-day events in the work place might affect an employee's level of job satisfaction, such transitory events should not cause an employee to seriously re-evaluate his attachment to the overall organization.

Farrell and Rusblt (1981) regarded job satisfaction as positivity of affect toward one's job, and primarily a simple function of the rewards and costs associated with the job. Job commitment, on the other hand, was considered by the researchers

as a function of the rewards and costs (satisfaction) derived from the job, the quality of the individual's job alternatives, and the magnitude of the individual's investment in the job. The researchers argued that job commitment was a much more complex phenomenon than job satisfaction. They felt that satisfaction with a job was primarily a function of the good and bad qualities of that job, but commitment to a job was additionally influenced by the quality of the worker's job alternatives and the magnitude of his job investments.

Bateman and Strasser (1984) did not agree with the arguments that job satisfaction was less stable and more rapidly formed than commitment. The two researchers argued that:-

"the validity of this perspective is not altogether clear."

(p97)

They contended that:-

"in fact, there exists a viable alternative perspective that suggests that commitment to an organization may be a cause rather than a result of job satisfaction." (p97)

Williams and Hazer (1986) was, however, of the view that as an attitude, both commitment and job satisfaction were affective responses, but the researchers contended that commitment was distinguished from job satisfaction in that the former

was an affective response to the whole organization whereas the latter represented an affective response to the specific aspects of the job.

Job Satisfaction Measurement

Numerous measurement scales have been developed by researchers to measure job satisfaction as a result of these voluminous concepts and theories. However, job satisfaction has been measured usually by administering a questionnaire consisting of items dealing with satisfaction with various aspects of a job.

Hoppock (1935), for example, perhaps, was one of the earliest researchers to use survey methods and attitude scales in examining the problem. He developed an instrument to measure the overall job satisfaction of, for instance, a group of teachers and administrators. Respondents were asked to indicate their responses according to a seven-point scale in a questionnaire. The scores were then summed up to yield a possible range of overall job satisfaction. A Spearman-Brown reliability coefficient of 0.93, for instance, was reported for the questionnaire.

Many researchers tended to follow the lead of Hoppock in using self-reports to measure job satisfaction. The formats developed included, for example, Likert scales, faces scales, and lists of adjectives requiring a "yes", "no" or "?" answers.

Porter (1961, 1962), for instance, developed a questionnaire on need satisfactions to determine job satisfaction. The questionnaire was focused on a set of

personal needs drawn upon Maslow's theory of need hierarchy to measure respondents' perceived fulfilment deficiencies in security, social, esteem, autonomy and self-actualization needs. There were 13 items in the questionnaire which were related to Maslow's theory of motivation. Respondents were asked to indicate their responses on a seven-point rating scale. Sheridan and Slocum (1975), for example, reported test-retest reliability correlations for the scores as 0.45 for machine operators and 0.67 for managers.

Smith et al (1969) developed a scale known as Job Descriptive Index (JDI) using a list of adjectives to indicate affective feelings about a job. The JDI included five subscales or facets of a job pertaining to work, supervision, pay, promotions and co-workers. Each subscale contained nine or eighteen items. Respondents were asked to describe their work by placing a check mark against each item under the five subscales. Although each subscale was developed to tap a different feature of work, the scores for the items under the subscales were often summed across to indicate overall job satisfaction. The JDI was described as the most carefully developed instrument for job satisfaction measurement. Hunt, Osborn and Schuler (1978), for example, reported an alpha coefficient of internal reliability of 0.93 for the scale. The JDI is used in the current research, further details will, therefore, be given in Chapter Three.

Hackman and Oldham (1975) designed a broad-ranging instrument which was labelled as Job Diagnostic Survey (JDS) to measure job and an individual's reactions to his work. The instrument consisted of five items inserted in two different sections

of the questionnaire, with a seven-point response scale ranging from strongly disagree to strongly agree. Two items were scored reversely. The JDS was operated on the researchers' theoretical framework about the causal relationship between the core job dimensions, critical psychological states and personal affective reactions to the job. The JDS was initially used to indicate overall job satisfaction. Hackman and Oldham cited the internal reliability coefficient of the instrument in one of their studies as 0.76.

Within this broad-ranging instrument, the researchers also included a fourteen-item measure to tap five specific areas of satisfaction: namely pay, job security, social, supervisory and growth. The first four areas were referred to by the researchers as work context satisfaction; and the fifth area as growth satisfaction which was concerned with intrinsic features of the job. Again, a seven-point response scale (from extremely dissatisfied to extremely satisfied) was used, and scores were averaged within each subscale to indicate specific satisfactions. The reliability of the questionnaire was reported by Oldham, Hackman and Stepina (1978) as from 0.64 (for social) to 0.87 (for supervisory).

Warr, Cook and Wall (1979) designed a fifteen-item scale to measure overall job satisfaction. Respondents were required to indicate their satisfaction or dissatisfaction with each of the 15 features of their job on a seven-point scale. A total score, ranging from 15 to 105 was taken, with higher scores representing high overall job satisfaction. The items used in the scale were short and robust; and easily

understood especially by blue-collar workers of modest educational attainment. The scale was developed to cover both intrinsic and extrinsic job facets. The intrinsic subscale consisted of Items 2, 4, 6, 8, 10, 12 and 14; and the extrinsic subscale contained Items 1, 3, 5, 7, 9, 11, 13 and 15. The alpha coefficients of the intrinsic subscale were reported by the researchers as 0.79 and 0.85, and those of the extrinsic subscale were 0.74 and 0.78 in two principal samples.

The scales mentioned above are examples of some of the instruments commonly used or cited in the literature. As the volume of instruments developed is large, it is not possible at all to list all instruments here for discussion. The proliferation of measures can be witnessed in the book produced by Cook, Hepworth, Wall and Warr (1981) in which the researchers gave a coverage of about 249 measures of work attitudes, values and perceptions. The researchers pointed out that the book:-

"draws upon more than 4000 research reports." (PV)

Consequences of Commitment

In the review of the literature, one will notice that a large volume of research has been focused on determining the outcomes of commitment. What are the outcomes of commitment? Are committed workers better motivated and more productive? Do employees who are highly committed tend to show low levels of turnover, absenteeism, tardiness and other negative behaviour? Are organizations that

consist of highly committed members more likely to be effective?

Many researchers have seen the positive relationships between commitment and the outcomes of commitment. However, researchers such as Whyte (1956), March and Simon (1958), Rotondi (1975a), and Salancik (1977) have pointed out the negative aspects of commitment in their studies. Mowday et al (1982) has also mentioned the potential dangers of high commitment. In a recent study by Randall (1987), the researcher argued that high levels of organizational commitment might result in severe negative consequences for individuals within the organization and for the organization itself. Management and organization researchers are, therefore, anxious to find out more definite answers to these questions. The interest in this area can be witnessed in the voluminous collection of empirical studies in the literature. Porter et al (1974), for example, pointed out that the problem of employee turnover, for instance, had continued to plague organizations in recent years. Bluedorn (1982) felt that:-

"interest in the topic of turnover has never been higher
than has been demonstrated over the last five years."
(p135)

The commonly noted outcomes of commitment are, as pointed out by Mowday et al (1982), job performance, tenure with the organization, absenteeism, tardiness, and turnover. However, Mowday et al also noted that of these five possible outcomes, the most predictable behaviour consequence of commitment was employee turnover; this may be the reason why turnover has become the most commonly studied variable as

reported by, for example, Bluedorn (1982), and Reichers (1985). Interest in employee turnover has been stimulated largely by its demonstrated negative relationship with organizational commitment. As a result, Meyer et al (1989) noted that:-

"there has been comparatively little research, however, examining the link between organizational commitment and work-relevant behaviour other than turnover."
(p152)

The studies by, for example, Porter et al (1974), Porter et al (1976), Steers (1977), Angle and Perry (1981), Michaels and Spector (1982), Bluedorn (1982), Rusbult and Farrell (1983), Werbel and Gould (1984), Williams and Hazer (1986), and DeCotiis and Summers (1987) showed that organizational commitment was a significant predictor of employee turnover. However, as the area related to the consequences of commitment is not a major focus of the current study, further review on the literature pertaining to commitment outcomes will not be reported in this chapter.

Critical Evaluation

In this chapter the general issues of organizational commitment and professional commitment have been examined. The various concepts and theories of commitment, the different types of measurement of commitment, and the antecedents and outcomes of commitment have also been discussed. Commitment study seems to

have captured the tremendous interest of researchers. However, organizational commitment seems to have received more research attention than professional commitment.

Theories and concepts Diverse views on commitment have been expressed by researchers, and many models of study have been proposed in the literature. However, as noted by Mowday et al (1982), it has appeared that:-

"no real consensus exists with respect to construct definition." (p21)

It has also appeared that no single model may be considered as the best for the study of commitment. Two major approaches (i.e. the exchange approach and the psychological approach) to the research of commitment have emerged. These two approaches have included many different models of study. Each approach seems to have a different focus and has placed emphasis on different areas of interest because of the different assumptions of the researchers. Each seems to have its strengths and weaknesses in the theoretical conceptualizations and operationalizations.

The exchange approach, for example, adopted by researchers such as Becker (1960), Grusky (1966), Sheldon (1971), Hrebiniak and Alutto (1972), Farrell and Rusbult (1981), and Rusbult and Farrell (1983) seems to have focused on the exchange and investment aspects of commitment or attitudinal outcomes; and argued on the basis of an "economic rationale". As mentioned earlier, Becker (1960), for

example, regarded commitment as a disposition to engage in a consistent line of activity as a result of the accumulation of side-bets that would be lost if the activity was discontinued. To him, commitment came into being when a person, by making a side bet, linked extraneous interests with a consistent line of activity. The notion of consistent lines of activity implied a rejection by the actor of feasible alternatives.

He saw several alternative courses open to him, each having something to commend it, but chose one which best served his purposes. Sheldon (1971) maintained that investments produced commitment, and that investments might develop with or without the person being aware of their development. Hrebiniak and Alutto (1972) pointed out that commitment was an exchange and accrual phenomenon dependent on the employee's perception of the ratio of inducements to contributions and the accumulation of side bets or investments in the employing system. Farrell and Rusbult (1981) and Rusbult and Farrell (1983) contended that commitment was a function of rewards, costs, investments and alternatives; and that declines in rewards, increases in costs or improving alternatives led to reduced commitment. The researchers felt that investments accumulated over time; and as workers continued to invest resources in the job, it would become increasingly costly to lose the investments.

However, studies by, for example, Ritzer and Trice (1969) showed that commitment was a social-psychological phenomenon rather than a structural phenomenon as suggested by, for example, Becker (1960). The arguments were supported by Shoemaker et al (1979).

On the other hand, the psychological approach which was advanced by researchers such as, Buchanan (1974), Porter et al (1974), Dubin et al (1975), Steers (1977), Angle and Perry (1981), and Bateman and Strasser (1984) appears to have taken a totally different view by focusing on the affective and psychological aspects of commitment or ongoing behavioural outcomes. Emphasis seems to have been placed on an individual's acceptance and internalization of organizational goals and values. Buchanan (1974), for example, considered commitment as a partisan, affective attachment to the goals and values of an organization, to one's role in relation to the goals and values, and to the organization for its own sake. Porter et al (1974), Porter et al (1976), and Steers (1977) argued that commitment was characterized by an individual's strong belief in and acceptance of the organization's goals and values; his willingness to exert considerable effort on behalf of the organization; and his definite desire to maintain organizational membership. Aranya et al (1981), and Aranya et al (1986) supported the arguments, and Aranya et al (1981) adopted a similar approach to conceptualize professional commitment.

The exchange approach has appeared to be more reasonable in explaining commitment. Researchers, however, have still been unable to conclude which particular model is the best approach to the study of commitment. As Morris and Sherman (1981) have pointed out, both the exchange and psychological approaches:-

"have rich theoretical underpinnings and, perhaps, much usefulness as frameworks within which to investigate the commitment process." (p525)

On the other hand, since commitment is considered a complex facet of organizational behaviour, perhaps, as Stevens et al (1978) suggested, an integrated consideration of the full range of relevant factors that may influence commitment may be a better solution; or as Morrow (1983) suggested, the construct may be dismantled to reflect its "multiple foci"; or as Reichers (1985), and Randall (1987) proposed, a "multiple-commitments approach" may be more "precise and meaningful." However, in spite of the vast differences in concepts and theories that have existed in the commitment literature, there appears to be a common component which views commitment as a sense of attachment to a work organization or profession; some researchers seem to have emphasized the attachment in terms of such behaviour as investing in a course of action, while others seem to have highlighted an affective or emotional aspect.

However, in view of the rapid economic development in Singapore, the commitment and employee turnover problems faced by the local organizations as reported in Chapter One, and the cultural background and social characteristics of the people, the researcher of the current study tends to go along with the exchange approach especially the side-bet theory suggested by Becker (1960), Sheldon (1971), and Hrebiniak and Alutto (1972); and the investment model proposed by Farrell and Rusbult (1981), and Rusbult and Farrell (1983), which may hold true or be more acceptable in the Singapore context. The validity of the approach will, therefore, be investigated further by the researcher in the current study.

Antecedents of commitment Various determinants of organizational

commitment and professional commitment have also been identified by researchers. These determinants are generally grouped by researchers into four categories under the headings of personal characteristics, job characteristics/roles, work experiences, and organizational structure. However, different findings have been reported in the literature. There seems to be no definite conclusion to indicate which particular variable or category of variables are the most stable predictors or determinants of commitment.

For example, personal characteristics such as tenure (length in the organization) and age were found to be significant predictors of organizational commitment by, for instance, Sheldon (1971), Lee (1971), Hrebiniak and Alutto (1972), Welsch and LaVan (1981), Meyer and Allen (1984), and Luthans et al (1987). However, researchers such as Brown (1969), Patchen (1970), Brief and Aldag (1980), Parasuraman and Nachman (1987), and Putti et al (1989) discovered that tenure did not have an impact on organizational commitment; and Ritzer and Trice (1969), Shoemaker et al (1977), Stevens et al (1978), and Putti et al (1989) indicated that age did not have a relationship with organizational commitment. Similarly, length in the organization and age were found to be significant determinants of professional commitment by Hrebiniak and Alutto (1972); however, Shoemaker et al (1977) indicated that length in the organization and age did not have a significant impact on professional commitment. The issues relating to the relationships between personal variables and commitment will, therefore, be further investigated in the current study.

Role ambiguity (a variable under job characteristics/ roles), as another

interesting example, was not found to be a determinant of organizational commitment by, for instance, Morris and Sherman (1981); but it appeared to be a significant predictor of organizational commitment in the studies by Welsch and LaVan (1981), and Glisson and Durick (1988). A possible explanation for these discrepancies, may be, as Goldberg et al (1965), and Alutto et al (1973) suggested, because of the different samples used in the studies; or, perhaps, it is due to the different measuring instruments used by the researchers, or different underlying assumptions and conceptualizations that the researchers have taken in their research, as Alutto et al (1973) explained:-

"discrepancies in the empirical findings may be a function of differences in the characteristics of individuals in these occupations as well as alternative operationalizations of the concept 'commitment'."
(p453)

The question whether organizational commitment is culture-specific has also been raised. Researchers such as Marsh and Mannari (1977), Luthans et al (1985), and Putti et al (1989) argued that commitment predictors were universal and that organizational commitment was not based on culture-specific norms and values.

Dual role orientation The issues of dual role orientation by professionals in organizations have also been discussed in the chapter. Gouldner (1957-1958), and Blau and Scott (1963), for example, saw an inherent conflict between localism

(organizational commitment) and cosmopolitanism (professional commitment) in organizations. On the other hand, researchers such as Glaser (1963), Friedlander (1971), Rotondi (1975b), Bartol (1979), Aranya et al (1981), and Aranya and Ferris (1984) argued in favour of the compatibility between organizational commitment and professional commitment. To these researchers, organizational commitment and professional commitment, in fact, could exist side by side in organizations. However, there appears to be lack of conclusive evidence as to how these two different role orientations can be best compromised; or how the special knowledge and skills of professional employees can be best maintained, so that a reasonable degree of organizational commitment can be obtained from these employees. Perhaps, a possible solution is, as suggested by Bennis et al (1957-1958), to create some kind of reward system where professionals can pursue their professional functions for which they are trained; or, as proposed by Miller (1967), to modify the organizational structure by providing "more professional incentives" and lessening the degree of "organizational control" for professional employees; or, as Ritzer and Trice (1969) felt, it was possible that members might be tied to organizations through their commitment to an occupation, since the organizations provided the opportunity to pursue the occupation; or as Thornton (1969-1970) pointed out, to create a kind of organizational situation which was perceived by professionals "as reaffirming and exemplifying certain principles of professionalism"; or as Sheldon (1971) suggested, to encourage social involvements to reinforce the effect of investments and mitigate the negative effects of professional commitment and thus increase organizational commitment; or to encourage a certain reward system which is perceived by professionals as valuing professional behaviour in the organization, as proposed by Hrebiniak and Alutto

(1972), and Bartol (1979).

It has appeared that in spite of the tremendous efforts put forth by researchers in this area, some theoretical issues have remained unresolved. For example, the question whether professional role orientation influences professional behaviour, or professional behaviour influences professional role orientation has mostly remained unanswered.

Commitment measurement Studies pertaining to commitment measurement have been discussed. Many different scales of commitment measurement have been proposed by researchers. Each scale seems to have focused on a different area of interest based on the underlying assumptions and conceptualizations of the researchers. However, in spite of the large number of different scales, two prevalent trends seem to have emerged in the literature. These two trends have been identified by Ferris and Aranya (1983) as "calculative" and "moral" trends. Researchers such as Ritzer and Trice (1969), and Hrebiniak and Alutto (1972) seem to be the representatives of the calculative trend; and Porter et al (1974), and Steers (1977), for example, seem to belong to the "moral" trend.

The scales grouped under the calculative trend appear to have focused generally on the investment or exchange aspects of commitment; on the other hand, the scales under the moral trend seem to have generally concentrated on the affective or psychological elements of commitment. However, Meyer and Allen (1984) argued that the Ritzer-Trice scale and Hrebiniak-Alutto scale seemed to have tapped largely

the affective aspects of commitment rather than the "continuance commitment" as conceptualized by, for example, Becker (1960).

As each trend seems to have focused on different aspects of commitment on the basis of the researchers' basic assumptions and arguments about commitment, there appears to be no conclusive evidence to indicate which trend or scale is supposed to be the most appropriate instrument to be used in commitment study. Perhaps, as a guide, one has to consider carefully the objectives one intends to achieve in one's study, the target population and the theoretical assumptions and framework one intends to follow when one decides on the instrument to be used for commitment study; and then, as pointed out by, for example, Alutto et al (1973), employ:-

"measurement instruments sensitive enough to accurately
tap underlying attitudes and predispositions." (p453)

Nevertheless, it appears in the literature that commitment has generally been measured in three directions. One has focused on measuring the degree of an individual's willingness to identify with his organization/profession; the other has focused on measuring the degree of an individual's willingness to stay with his organization/profession, if a comparable, slightly or more attractive alternative is available; and the third has concentrated on finding out the degree of an individual's willingness to exert considerable effort on behalf of the organization. Generally, the instrument developed by Hrebiniak and Alutto (1972) seems to have slightly more advantages than other scales in that the instrument may be used to measure

organizational commitment and professional commitment simultaneously for the same population, and the questions used in the instrument can be easily interpreted by respondents.

Commitment vs job satisfaction The issues whether job satisfaction should be considered as a predictor of commitment or consequence of commitment have emerged in the studies. Again, the views have varied considerably. Researchers have appeared to be unable to arrive at a definite conclusion. On the one hand, Porter et al (1974), for example, argued that organizational commitment represented a more global evaluative linkage between an employee and his organization that included job satisfaction among its specific components. Other researchers such as Marsh and Mannari (1977), Brief and Aldag (1980), Curry et al (1986), and Williams and Hazer (1986) were of the view also that job satisfaction should be regarded as a causal antecedent of commitment. But, on the other hand, Bateman and Strasser (1984), for instance, suggested that job satisfaction should be taken as an outcome of commitment.

However, many of the researchers seem to have considered job satisfaction as a cause of organizational commitment rather than an outcome of commitment on the basis that commitment is a more global and stable evaluative linkage between an employee and his organization. To these researchers, commitment may represent a set of feelings more closely connected with the individual's desire to stay attached to a particular work situation, whereas job satisfaction may be largely associated with the specific and tangible aspects of the work environment and may represent a more

rapidly formed affective response to the job; it may be more transitory in nature.

Job satisfaction measurement . The studies pertaining to job satisfaction measurement have been brought up for discussion. Like commitment, numerous scales to measure job satisfaction have been developed or proposed by researchers. Each scale seems to have placed emphasis on different areas of interest or focused on the different facets of a job based on the researchers' basic assumptions or conceptualizations of job satisfaction. As a result, it appears that there has been no agreed conclusion by researchers to indicate which particular scale is the most reliable instrument or what is the best way to measure job satisfaction. Probably, the best measure, to cite what Wanous and Lawler (1972) have commented:-

"may depend upon what independent or dependent
variable the satisfaction measure is to be related to;"
(p105)

or, as Locke (1976) has argued:-

"a logically valid measure of job satisfaction would be
one that integrates and is consistent with all the
pertinent evidence one has concerning the employee's
feelings about his job;" (p1338)

or, perhaps, as Gruneberg (1979) has said, the best measure:-

"depends on what variable overall satisfaction is related to." (p3)

Conclusion To conclude, what has appeared to be generally agreed upon by the researchers is that commitment is a complex phenomenon and that there are diverse views about what constitutes commitment, how commitment is measured and the outcomes of commitment. A comprehensive attempt to identify the complex nature of commitment, and to incorporate these complexities in operationalizing the commitment construct has appeared to be generally lacking. Scholl (1981) has pointed out this problem, as he argued that:-

"although the literature on commitment is extensive, a comprehensive definition of the term and a model of the commitment process that incorporates divergent points of view does not exist." (p589)

Many questions have, therefore, still remained unanswered in spite of the tremendous amount of efforts and work carried out by researchers in the area. Issues regarding, for example, the most appropriate interpretation or definition of commitment, the best way to measure commitment, the most reliable predictors of commitment, the most appropriate strategy to resolve conflict between organizational commitment and professional commitment, and the most stable predictors of outcomes of commitment have still remained unsettled. Perhaps, future research on commitment should concentrate more on these unsettled issues, and find some more definite

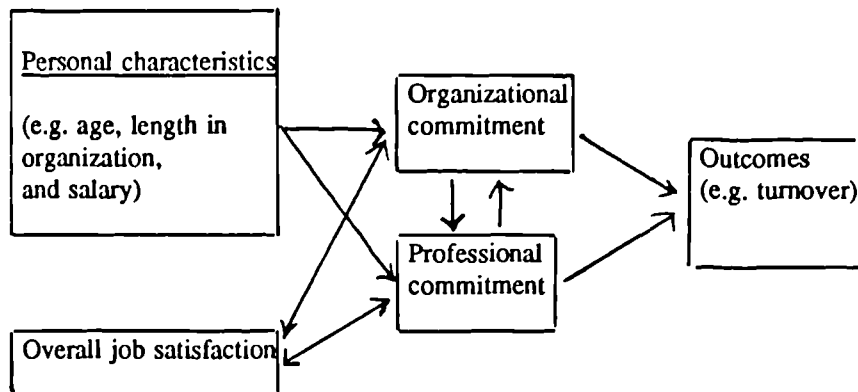
answers or solutions to some of these unanswered questions, so that more light may be thrown on the commitment literature.

The current study undertaken by the researcher is carried out in the Asian context of the Singapore society which is characterized by a multi-racial culture, high result-orientation, high achievement, intolerance of inefficiency, and a forward looking mentality. This highly goal-oriented environment has provided the current researcher with an opportunity to examine further some of the important issues pertaining to the organizational commitment and professional commitment of a group of nursing personnel in Singapore.

As mentioned in Chapter One, the current study intends to examine the levels of organizational commitment and professional commitment of the nursing professionals in the various health-service organizations. It also attempts to investigate the impact of the nurses' personal characteristics on their organizational commitment, and the relationships between the nurses' overall job satisfaction and their organizational commitment and professional commitment. The exchange or investment approach to commitment will be used as a theoretical framework, and the following model of commitment will serve as a guide in the study:-

Figure 4

Model of Commitment



The following hypotheses are thus formulated and will be tested in the current study. The results of the testing will be discussed in chapter Four:-

Hypothesis I : Nurses are committed more to their profession than to their organizations, irrespective of their organizational affiliation to the public or private sector.

Hypothesis II : Nurses in the private hospitals tend to be more committed to their organization than nurses in the government hospitals.

Hypothesis III :

a) The nurses' age is positively related to their commitment to the organization, irrespective of their

organizational affiliation to the public or private sector.

b) The nurses' tenure in the organization is positively related to their commitment to the organization, irrespective of their organizational affiliation to the public or private sector.

c) The nurses' salary level is positively related to their commitment to the organization, irrespective of their organizational affiliation to the public or private sector.

Hypothesis IV : The overall job satisfaction of the nurses tends to be related more to their commitment to their profession than to their organization, irrespective of their organizational affiliation to the public or private sector.

Outcomes of commitment (e.g. turnover), as suggested in the model will not be examined in the study. It is hoped that the study will throw some light on the area of commitment research, and provide more insights into some of the issues which have been unsettled, and thus make useful contributions to the literature.

CHAPTER THREE

METHODOLOGY

This chapter will focus on the methodology used in the current study. First, a brief description on the sample chosen for the current study will be presented. Next, a discussion on the questionnaires or instruments used in the study will be given. This will be followed by a brief account of the procedures adopted for administering the questionnaires. Finally, a brief description of the statistical techniques used for data analysis will be included.

Sample of Study

To test the above hypotheses, nurses from ten hospitals in Singapore were chosen for the current study. Of these organizations, six are government hospitals and four, private hospitals. There are altogether seven government hospitals and six private hospitals in Singapore. The six government hospitals chosen for the study are large hospitals and the one that has not been included in the study is a small hospital. Two private hospitals did not agree to participate in the study. The private hospitals are relatively new organizations; they are, therefore, smaller in terms of size, facilities and staff strength in comparison with government hospitals.

The issues regarding employee commitment, job satisfaction and turnover are generally considered as private and confidential by many local organizations.

Generally local organizations are reluctant to reveal the details about the issues of employee commitment, job satisfaction and labour turnover. An organization which has a low level of employee commitment and job satisfaction, or a high rate of labour turnover is generally considered an unattractive organization by job seekers and will, therefore, face the difficulty in recruiting new staff in the tight labour market. Because of this, all the participating hospitals have indicated that the names of their organizations should not be disclosed. Alphabetical letters will be used, instead, in the study to represent the participating hospitals. Thus, A,B,C,D,E and F will represent the six government hospitals; and G,H,I and J will represent the four private hospitals. Of the six participating government hospitals, Hospital E is the largest, with approximately a total number of 1080 nurses at the time the questionnaires were administered. Hospital A is the smallest, with approximately a total number of 410 nurses. Of the four participating private hospitals, Hospital G is the largest, with approximately a total number of 290 nurses. Hospital J is the smallest private hospital with approximately a total number of 100 nurses. Among the government hospitals, Hospital A and Hospital C are specialized hospitals, and the rest are general hospitals. Hospital A is a mental hospital and Hospital C is a maternity hospital. All the private hospitals in Singapore including the four participating ones are general hospitals. There is no specialized private hospital in Singapore. Of the two private hospitals which did not agree to participate in the study, one was a very new hospital which was established in late 1986, about one and a half years before the current study was conducted.

A list of the nursing staff was obtained from the management of each of the

hospitals. A nurse whose number appeared to be even in the list was included in the study. The sample represented about 50 per cent of the total nursing population of the 10 participating hospitals. The purpose of choosing those whose numbers appeared to be even in the list of the staff was to ensure that the selection of the sample for the current study was done on a random basis. The following research questionnaires were used in the study:-

- a) Personal data
- b) Hrebiniak-Alutto organizational commitment scale
- c) Hrebiniak-Alutto professional commitment scale
- d) Job Descriptive Index (JDI)

Samples of the above questionnaires are attached at Appendices 9 - 12.

Commitment Measurement Scale

The commitment scale developed by Hrebiniak and Alutto (1972) was used in the current study to measure the levels of the organizational commitment and professional commitment of the respondents. The questionnaire was originally developed by Ritzer and Trice (1969) in which respondents were asked to indicate whether they would definitely leave their organization/profession, or they were uncertain at the moment, or they would definitely not leave their organization/profession if they were offered the following inducements:-

- a) With (1) No, (2) a slight, or (3) a large increase in pay;
 - b) With (1) no more, (2) a little more, or (3) much more freedom;
 - c) With (1) no more, (2) a little more, or (3) much more status;
 - d) With (1) no more, (2) a little more, or (3) much more responsibility;
- and
- e) With (1) no more, (2) a little more, or (3) much more opportunity to get ahead.

The organizational commitment or professional commitment score could range from 5 to 25, with a higher score representing a higher degree of commitment. The test-retest reliability indices ranged from 0.84 to 1.0, as reported by Ritzer and Trice.

Hrebiniak and Alutto (1972) redeveloped the above scale later by deleting the variable of "responsibility", because, as they explained:-

"of its possible ambivalence as a positive or negative
inducement condition." (p449)

The variable of "opportunity to get ahead" was also replaced by the inducement, "friendliness" of co-workers. However, Hrebiniak and Alutto commented that of the 12 items in the scale, the most consistent ones were the four "slight increase" items (i.e. slight increase in pay, freedom, status and friendliness). A Spearman-Brown reliability coefficient of 0.79 for the scale was reported by Hrebiniak and Alutto.

Basically, both the Ritzer-Trice scale and Hrebiniak-Alutto scale were developed on the basis of the exchange or reward-cost arguments about commitment. The scales, therefore, tapped largely the calculative involvement of an individual with his organization/profession. The Hrebiniak-Alutto scale (especially the four "slight increase" items) has been widely used by researchers. Kidron (1978), for example, used the four "slight increase" items to measure the organizational commitment of employees in three different organizations. The Spearman-Brown reliability indices were, as reported by Kidron, 0.89, 0.88 and 0.75.

A study was carried out by Ferris and Aranya (1983) to test the characteristics of the full Hrebiniak-Alutto scale and the Organizational Commitment Questionnaire developed by Porter et al (1974). A reliability coefficient for the Hrebiniak-Alutto scale was, as reported by Ferris and Aranya, 0.88 when it was used to measure organizational commitment. The scale was used also by Ferris and Aranya to measure professional commitment by replacing the word "organization" in the scale with "profession". A reliability coefficient of 0.93 was reported. Ferris and Aranya, therefore, concluded that the results of the study:-

"compare favourably with the reliability coefficients reported in previous studies.... and provide additional support regarding the homogeneity of the questionnaire items." (p92)

Parasuraman and Nachman (1987) used the Hrebiniak-Alutto scale to measure

the organizational commitment and professional commitment of a group of musicians. The reliability coefficient for the organizational commitment scale was reported as 0.86 and that for the professional commitment scale was 0.91.

The Hrebiniak-Alutto scale was used in the current study on the ground that it is easier to be administered. The scale can be used to measure both the organizational commitment and professional commitment of the same population simultaneously. The items in the scale can be easily understood by respondents such as nurses in the Singapore health-service organizations, whose educational standard is generally not too high. The scale does not require respondents to take up too much time to respond to the items, therefore, chances of getting respondents to complete the questionnaire in full are higher.

The respondents of the current study were asked to indicate whether they would definitely leave their present organization/profession, or they were uncertain at the moment, or they would definitely not leave the present organization/profession under the conditions listed at Appendix 10 and Appendix 11 respectively. An indication that they would definitely leave the present organization/profession was given a score of one; an indication that they were uncertain at the moment was given a score of two; and an indication that they would definitely not leave the present organization/profession was given a score of three. The total score indicated the level of commitment, with a higher score indicating the higher level of commitment. The Spearman-Brown formula was used in the current study to test the reliability of the scale. The results are given at Table 1. The reliability coefficients for the

organizational commitment scale used in the current study are 0.78 and 0.93, and the reliability coefficients for the professional commitment scale are 0.90 and 0.96. The reliability coefficients for the two scales in the current study appear, therefore, to be acceptable.

Table 1

Spearman-Brown Coefficients of Organizational
Commitment Scale and Professional
Commitment Scale

Scale	Reliability Coefficient		
Organizational Commitment	0.78**	and	0.93**
Professional Commitment	0.90**	and	0.96**

** P < 0.01

Job Descriptive Index (JDI)

The Job Descriptive Index was developed by Smith et al (1969). It has been used to measure an employee's satisfaction with the five areas or facets of a job. These five areas are the type of work, the supervisor, the pay, the opportunities for promotion and the co-workers on the job. Each area of the job constitutes a subscale of measurement. For each subscale, there is a list of adjectives or short adjectival phrases describing the particular facet of the job. Details of the subscales are at Appendix 12. Respondents are asked to indicate their responses to each item under

the subscales by circling a "Yes", "No" or "?" against the item. A "?" indicates uncertainty of feeling at the moment of responding to the item. The scores for the subscales are"-

- a) Three points are given for a "yes" for a positive item;
- b) Three points are given for a "no" for a negative item;
- c) No point is given for a "yes" for a negative item;
- d) No point is given for a "no" for a positive item;
- and
- e) One point is given for a "?" for any item.

Items such as "the work is fascinating", "the work is satisfying", and "the work is good" are considered positive; and items such as "the work is routine", "the work is boring" and "the work is tiresome" are considered negative. Satisfaction for a particular area of the job is computed by summing up the score of the subscale; and overall satisfaction is computed by totalling all the scores of the five subscales, with a higher total score indicating a higher level of overall satisfaction. There are altogether 72 items in the whole scale. However, the item, "satisfactory profit sharing" under the subscale of pay was deleted from the scale in the current study, as it did not appear to be applicable to the organizations being studied in the current research.

The JDI has been considered by many researchers as the most carefully constructed measure of job satisfaction. It has been widely used by researchers and practitioners. As reported by Smith et al (1969), the instrument has been subjected

to an extensive programme of validation. Smith et al reported reliability coefficients for the instrument as from 0.80 to 0.88. Evans (1969) tested the scale and commented that the scale had demonstrated both convergent and discriminant validity. Similarly, the validity and reliability of the scale were well supported by Dunham, Smith and Blackburn (1977). The stability of the scale was also supported by Schneider and Dachler (1978). Johnson, Smith and Tucker (1982) reported the test-retest coefficients of the JDI as from 0.68 to 0.88, and 0.70 to 0.78; and the alpha coefficients as from 0.75 to 0.91, and from 0.80 to 0.93. Hunt et al (1978) cited an alpha coefficient of internal reliability of 0.93. The Spearman-Brown formula was used in the current study to determine the reliability of the five subscales. The results are indicated at Table 2. As indicate in Table 2, the reliability coefficients of the subscales used in the current study appear to be acceptable.

Table 2

Spearman-Brown Coefficients of Job Descriptive Index

Subscale	Reliability Coefficient		
Work	0.77**	and	0.79**
Supervision	0.87**	and	0.91**
Pay	0.67**	and	0.70**
Promotions	0.70**	and	0.75**
Co-workers	0.87**	and	0.91**

** P < 0.01

The JDI was chosen in the current study on the ground that it has appeared to have several advantages over other instruments. First the items under each subscale

appear to be simple and easily understood. Respondents may not have to make abstractions or understand long vague sentences with several qualifications. Second, the JDI does not appear to ask respondents directly how satisfied they may be with their job; instead, it asks them to describe their job. Third, the score of the subscales do not appear to be affected by acquiescence or "yes-saying" and "no-saying" tendencies. Fourth, the items are written in a check-list format with short phrases. Thus the time required to complete the items is short and the instrument can be administered easily.

Piloting of Questionnaires

Before the above questionnaires were sent to the respondents, a group of 60 nurses representing the various participating hospitals were approached to try out the questionnaires. This was deliberately done in order to ensure that accurate data and responses were collected when the questionnaires were finally administered to the respondents. These nurses were briefed verbally by the researcher of the current study at a gathering. The objectives and other details of the study were also explained to the nurses verbally. The proposed questionnaires were then given to the nurses for completion. The nurses were told to read each item in the questionnaires very carefully, respond to the items spontaneously, and report to the researcher if they had any difficulty in interpreting the items. The nurses were asked to complete the questionnaires during their free time and return the questionnaires the next day. A meeting with the nurses was held again the next day when the completed questionnaires were returned. A thorough discussion on the questionnaires was held

during the meeting in order to find out from the nurses whether they really understood each item of the questionnaires and whether they had come across any difficulty or ambiguity when responding to the items.

Based on the comments and suggestions of the nurses, some of the items in the proposed questionnaires were then reworded or reedited. For example, the words "in the new organization" were added to each item under the organizational commitment scale, and the words "in the new job" were added to each item in the professional scale. The items, "with no more freedom to be creative", "with slightly more freedom to be creative", "with no more status", "with slightly more status" "with much more status" and so on in the original Hrebiniak-Alutto scale were reworded as "with no more freedom to be professionally creative in the new organization/new job", "with slightly more freedom to be professionally creative in the new organization/new job," "with the same status in the new organization/new job", "with slightly higher status in the new organization/new job", and "with much higher status in the new organization/new job". As mentioned earlier, the item "satisfactory profit sharing" under the subscale of pay in the Job Descriptive Index was deleted as the nurses felt that it was not applicable at all to their organizations.

A second test on the understanding of the questionnaires was held with another group of 50 nurses after the items had been reworded or reedited. The nurses confirmed, after completing the questionnaires, that all the items in the questionnaires were very clear and that they did not have any difficulty in understanding the items.

Administration of Questionnaires

The questionnaires were finally sent to the nurses in the various participating hospitals. As mentioned earlier, a nurse (irrespective of his/her rank in the organization) whose number appeared to be even in the list provided by the hospitals was given a set of the questionnaires. A letter explaining the objectives and other details of the study was attached (sample of the letter is attached at Appendix 13). The respondents were told that the questionnaires were anonymous and that participation in the study was voluntary. They were also assured that their responses would be treated in absolute confidence and that only group data would be used for the study. A sealed box was placed at the personnel office of each participating hospital. The respondents were asked to return their completed questionnaires to the researcher within two weeks in a self-addressed envelope either by mail or by dropping it in the sealed box at the personnel office. All the sealed boxes were collected by the researcher after two weeks, and were opened by him personally.

A total of about 2554 sets of the questionnaires were sent to the respondents, and a total of about 2477 sets of the completed questionnaires were returned; of this, 2424 sets were usable. Of the 2424 sets of usable questionnaires, 2051 were from the government hospitals and 373 were from the private hospitals. Table 3 gives a breakdown of the number of sets of questionnaires sent to the respondents and the number of the sets of the questionnaires returned by the respondents. Table 4 provides the rates of return and usable sets of the questionnaires.

Table 3

Number of Sets of Questionnaires Sent and Returned

Hospital	No. of Sets Sent	No. of Sets Returned	No. of Usable Sets
A	205	200	196
B	450	440	429
C	410	397	386
D	240	230	225
E	540	530	523
F	310	300	292
G	145	142	141
H	92	87	87
I	102	97	96
J	60	54	49
Total	2554	2477	2424

Table 4

Rates of Return and Usable Sets

Hospital	Rate of Return	Rate of Usable Sets
A	98%	98%
B	98%	98%
C	97%	97%
D	96%	98%
E	98%	99%
F	97%	97%
G	98%	99%
H	95%	100%
I	95%	99%
J	90%	91%
Total	96%	98%

As this was the first time that a study on commitment and job satisfaction in respect of nurses in the health-service organizations had ever been conducted in

Singapore, the nurses appeared to be very enthusiastic to respond to the study. In addition, the 110 nurses who had participated in the two trial runs of the proposed questionnaires, together with the management of the participating organizations concerned, took an active part in assuring the respondents of the confidentiality of the study and in encouraging the respondents to respond to the questionnaires, complete them in full and return them to the researcher on time. As a result, the return of the questionnaires was very encouraging and the rate of usable completed questionnaires was very high. As indicated in Tables 3 and 4, a total of about 96 per cent of the respondents returned the questionnaires to the researcher; and of this figure, 98 per cent were usable sets of the questionnaires. The data were keyed into the computer, and the personal data of the respondents analysed by the statistical programme are shown at Appendix 14.

Method of Analysis

The data collected from the questionnaires returned from the respondents were keyed into the computer. The subprogrammes of the Statistical Package for the Social Sciences - X System (SPSS -X) were used or will be used to analyse the data.

As mentioned earlier, the subprogramme of Frequencies was done to obtain the frequency distribution of the personal items of the entire sample and the general profile of the respondents. The analysis of the profile will be given in Chapter Four. The Spearman-Brown formula was then applied to determine the reliability coefficients of the Hrebiniak-Alutto organizational commitment scale, the Hrebiniak-

Alutto professional commitment scale, and the Job Descriptive Index which were used in the current study.

In Chapter Four, the subprogramme of Condescriptive will be utilized to calculate means and standard deviations to ascertain the difference between the organizational commitment level and professional commitment level of the entire population and the two separate groups (i.e. the government hospitals and private hospitals). This will be followed by a T-Test to determine the significant level of the difference between the organizational commitment and professional commitment.

The subprogramme of Pearson Correlation will be applied to determine the relationships between the organizational commitment (dependent variable) and the personal factors (independent variables) of age, length of employment in the present organization (i.e. tenure in the organization) and salary level of the entire population and the two separate groups. A first-order partial correlation and a second-order partial correlation will then be used separately to find out the direct impact and the intervening effects of the three personal factors on the organizational commitment. In addition, the subprogramme of Crosstabs may be run to see whether there are additional data that may be used to analyse the relationships between the organisational commitment and the personal factors of age, tenure and salary level among the nurses. The personal variable of job title or rank may also be used to determine the effect of this variable on organizational commitment through the variables of age, tenure and salary level.

Finally the Pearson Correlation will be used again to assess the relationships between the overall job satisfaction of the nurses and their organizational commitment and professional commitment for the whole population and the two separate groups. The Fisher's Z-transformation will be applied to see the significant level of the differences existing in the relationships between the overall job satisfaction and the organizational commitment, and the overall job satisfaction and the professional commitment.

CHAPTER FOUR

ANALYSIS OF DATA

The chapter will focus on the analysis of the data collected from the respondents through questionnaires. A brief account of the profile of the respondents or the distribution of the personal data will be given. This will then be followed by the presentation of the results relating to the testing of the hypotheses, through the statistical techniques under the subprogrammes of the SPSS-X. Finally, a summary of the results of the testing will be given.

Distribution of Personal Data

As explained in Chapter Three, two major groups of nurses participated in the current study. One major group consisted of nurses from the government hospitals, and the other were nurses from the private hospitals. The nurses whose number appeared to be even in the staff list provided by the hospitals were given a set of questionnaires to respond. The subprogramme of Frequencies under the SPSS-X was used to examine the profile or the distribution of the personal data of these two groups of nurses. The results of the relevant items are presented at Tables 5 and 6 for discussion. Table 5 shows the profile of the nurses from the government hospitals and Table 6 presents the profile of the nurses from the private hospitals.

Table 5

Profile of Respondents
(Government Hospitals N = 2051)

Description	No of Persons	Percentage
<u>Sex</u>		
Male	189	9.20%
Female	1862	90.80
	-----	-----
	2051	100.00%
<u>Age</u>		
Below 20 years	55	2.70%
20 - 24	467	22.80
25 - 29	296	14.40
30 - 34	375	18.30
35 - 39	217	10.60
40 - 44	308	15.00
45 and above	333	16.20
	-----	-----
	2051	100.00%
<u>Nursing Experience</u>		
Below 1 year	89	4.30%
1 - 3	309	15.10
4 - 6	231	11.30
7 - 9	176	8.60
10 - 12	135	6.60
13 - 15	253	2.30
16 and above	858	41.80
	-----	-----
	2051	100.00%
<u>Length of Employment in Present Hospital</u>		
Below 1 year	285	13.90%
1 - 3	521	25.40
4 - 6	341	16.60
7 - 9	157	7.70
10 - 12	126	6.10
13 - 15	174	8.50
16 and above	447	21.70
	-----	-----
	2051	100.00%

Table 5 (Continued)

Profile of Respondents
(Government Hospitals N = 2051)

Description	No of Persons	Percentage
<u>Monthly Salary</u>		
Under \$500	172	8.40%
\$500 - 999	676	33.00
\$1000 - 1499	764	37.30
\$1500 - 1999	258	12.60
\$2000 - 2499	158	7.70
\$2500 - 2999	20	1.00
\$3000 and above	3	0.10
	-----	-----
	2051	100.00%
<u>Current Job Title</u>		
Pupil Assistant		
Nurse	118	5.8%
Midwife	35	1.7
Assistant Nurse	439	21.4
Student Nurse	240	11.7
Staff Nurse	1023	49.9
Nursing Officer	184	9.0
Higher Nursing Officer	10	0.5
Principal Nursing Officer	2	0.1
	-----	-----
	2051	100.00%
<u>Ethnic Group</u>		
Chinese	1363	66.5%
Malay	378	18.4
Indian	252	12.3
Others	58	2.8
	-----	-----
	2051	100.00%
<u>Religion</u>		
Buddhist	538	26.2%
Christian	670	32.7
Muslim	400	19.5
Hindu	160	7.8
Others	280	13.7
Not Specified	3	0.1
	-----	-----
	2051	100.00%

Table 6

Profile of Respondents
(Private Hospitals N = 373)

Description	No of Persons	Percentage
<u>Sex</u>		
Male	10	2.70%
Female	363	97.30
	-----	-----
	373	100.00%
<u>Age</u>		
Below 20 years	4	1.10%
20 - 24	46	12.30
25 - 29	64	17.20
30 - 34	102	27.30
35 - 39	76	20.40
40 - 44	34	9.10
45 and above	47	12.60
	-----	-----
	373	100.00%
<u>Nursing Experience</u>		
Below 1 year	10	2.70%
1 - 3	20	5.40
4 - 6	43	11.50
7 - 9	48	12.90
10 - 12	53	14.20
13 - 15	74	19.80
16 and above	125	33.50
	-----	-----
	373	100.00%
<u>Length of Employment in Present Hospital</u>		
Below 1 year	104	27.90%
1 - 3	108	29.40
4 - 6	76	20.40
7 - 9	48	12.90
10 - 12	11	2.90
13 - 15	8	2.10
16 and above	18	4.80
	-----	-----
	373	100.00%

Table 6 (Continued)

Profile of Respondents
(Private Hospitals N = 373)

Description	No of Persons	Percentage
<u>Monthly Salary</u>		
Under \$500	15	4.00%
\$500 - 999	92	24.70
\$1000 - 1499	138	37.00
\$1500 - 1999	97	26.00
\$2000 - 2499	20	5.40
\$2500 - 2999	8	2.10
\$3000 and above	3	0.80
	-----	-----
	373	100.00%
<u>Current Job Title</u>		
Pupil Assistant		
Nurse	24	6.4%
Midwife	9	2.4
Assistant Nurse	84	22.5
Student Nurse	9	2.4
Staff Nurse	194	52.0
Nursing Officer	44	11.8
Higher Nursing Officer	7	1.9
Principal Nursing Officer	2	0.5
	-----	-----
	373	100.00%
<u>Ethnic Group</u>		
Chinese	275	73.7%
Malay	40	10.7
Indian	36	9.7
Others	22	5.9
	-----	-----
	373	100.00%
<u>Religion</u>		
Buddhist	75	20.1%
Christian	155	41.6
Muslim	45	12.1
Hindu	21	5.6
Others	76	20.4
Not Specified	1	0.2
	-----	-----
	373	100.00%

Sex As shown in Tables 5 and 6 more than 90 per cent of the respondents from both the government and private hospitals are female. This is a natural phenomenon in the Singapore society, as male job seekers generally do not prefer to take up the nursing job. In addition, female patients (particularly young patients) are generally not happy to be attended by male nurses. As a result, health-service organizations, particularly private hospitals have generally tended to recruit female nurses rather than male nurses so that female patients will not be too upset if they visit these hospitals and are attended by female nurses. All the private health-service organizations are self-supporting organizations, and their financial resources have depended, to a great extent, on the number of patients they have.

Age Table 5 indicates that about 68 per cent of the respondents from the government hospitals are younger nurses who are below the age of 40. However, it is noted from Table 6 that the percentage of the younger nurses who are below the age of 40 has gone up to 78 in the private hospitals. Although the majority of the respondents from both the government and private hospitals are younger nurses, the percentage of those from the private hospitals appears to be much higher.

The average retirement age for nurses in both the government and private hospitals is 50. However, nurses who reach the age of 45 years can also apply for consideration for early retirement. It, therefore, appears to be normal that quite a large population of nurses in both the government and private hospitals tends to be younger nurses. In addition, the private hospitals are relatively new organizations established in the early 1980s; therefore, the percentage of younger nurses tends to

be higher than that in the government hospitals.

Nursing experience It is noted from Table 5 that about 51 per cent of the respondents from the government hospitals are nurses who have at least 10 years of nursing or professional experience. Similarly, about 68 per cent of the respondents from the private hospitals as shown in Table 6, are nurses who have at least 10 years of nursing experience. The percentage seems to be slightly higher in the private hospitals. This, as explained before, may be due to the fact that the private hospitals do not have their own schools of nursing to train their nurses. Thus qualified and experienced nurses in the government hospitals are often lured to join the private hospitals. Therefore, the percentage of experienced and qualified nurses tends to be slightly higher in the private hospitals.

Tenure It is interesting to note that about 64 per cent of the respondents from the government hospitals are nurses, as indicated in Table 5, who have a rather short tenure (or length of service in the organization) which is less than 10 years. In contrast, Table 6 shows that approximately 90 per cent of the respondents from the private hospitals tends to have a tenure of less than 10 years. Apparently, the percentage of nurses who have a short tenure of less than 10 years appears to be very much higher in the private hospitals than in the government hospitals. Again, the trend appears to be natural as the private hospitals are relatively new organizations, and the nurses, therefore, tend to have a shorter tenure in the organizations.

Salary Table 5 indicates that almost 79 per cent of the respondents from the government hospitals have come from the lower salary group (i.e. drawing a monthly salary below or equal to \$1499 in Singapore dollars). On the other hand, Table 6 shows that about 66 per cent of the respondents from the private hospitals are from the same salary group. In other words, a large population of the nurses in both the government and private hospitals tends to belong to the lower income group. However, the percentage appears to be higher in the government hospitals than in the private hospitals. This does not appear to be surprising, because, as explained in Chapter One, the salary levels of the nurses in the private health-service organizations are generally higher than those in the public health-service organizations.

Current job title Among the nurses who responded to the study, about 50 per cent are staff nurses and about 23 to 25 per cent are *qualified junior nurses* holding the ranks of Midwife and Assistant Nurse in both the government and private hospitals. The respondents who are trainee nurses (i.e. Pupil Assistant Nurses and Student Nurses) are about 17 per cent in the government hospitals and nine per cent in the private hospitals. The percentage of respondents who are senior nurses (i.e. Nursing Officers, Higher Nursing Officers and Principal Nursing Officers), performing nursing and supervisory functions is about 10 per cent in the government hospitals and 14 per cent in the private hospitals. It is noted that the percentage of the trainee nurses who are on probation or under training is slightly higher in the government hospitals than in the private hospitals. This does not appear to be surprising as the size of the private hospitals is comparatively smaller

than that of the government hospitals. The percentage of the senior nurses, on the other hand, appears to be slightly lower in the government hospitals than in the private hospitals. This trend, again, does not appear to be unusual, since the private hospitals have made use of status or other monetary incentives to attract qualified nurses to join their organizations.

Ethnic group It is noted that the majority of the respondents (about 67 per cent in the government hospitals and 74 per cent in the private hospitals) are nurses who belong to the Chinese ethnic group. The next large group of respondents are nurses who have come from the Malay ethnic group. This group constitutes about 18 per cent in the government hospitals and 11 per cent in the private hospitals. Respondents who belong to the Indian ethnic group constitutes about 12 per cent in the government hospitals and 10 per cent in the private hospitals. The above trend appears to be normal, as explained in Chapter I, the Chinese ethnic group constitutes about 76 per cent of the total population in Singapore and the Malay ethnic group constitutes about 15 per cent. As issues relating to ethnic groups may be sensitive in this region, the data will, therefore, not be used in the current study.

Religion As shown in Tables 5 and 6, almost 60 per cent of the respondents are either Buddhists or Christians, about 18 per cent of the respondents are Muslims and approximately seven per cent are Hindus. The trend is also expected, as the majority of the respondents are Chinese; and Buddhism and Christianity are the common religions among the Chinese. Religion may also be

a sensitive issue in this region, therefore, the data will also not be used in the current study.

Testing of Hypotheses

The hypotheses stated in Chapter Two were tested through the use of the various statistical techniques. The hypotheses, together with the results of the testing are presented in the following section:-

Hypothesis I : Nurses are committed more to their profession than to their organizations, irrespective of their organizational affiliation to the public or private sector.

To test this hypothesis, the subprogramme of Condescriptive under the SPSS-X was used to calculate the means and standard deviations of the entire sample's level of commitment to the organization and the level of commitment to the profession. The subprogramme of T-Test (a two-tailed test) was then applied to determine the level of significance of the differences in the mean scores and standard deviations for the organizational commitment and professional commitment. The results are shown at Table 7.

Table 7

Means and Standard Deviations for
Organizational Commitment and
Professional Commitment
of Entire Sample
(N=2424)

Commitment	Mean	Standard Deviation	T-Value
Organizational	25.02	5.07	-20.53**
Professional	27.22	6.25	

** p < 0.01

As indicated in Table 7, the mean score for the organizational commitment of the entire sample is 25.02, and the standard deviation is 5.07. On the other hand, the mean score for the professional commitment is 27.22 and the standard deviation is 6.25. The mean score of the entire sample for the professional commitment, therefore, appears to be very much higher than that for the organizational commitment. The difference in the mean scores appears to be highly significant ($p < 0.01$). The results thus seem to indicate that the nurses tend to be more committed to their nursing profession than to their own organization.

Subsequently, the entire sample was divided into two major groups (i.e. the nurses in the government hospitals as one group and the nurses in the private hospitals as another group). The means and standard deviations for the organizational commitment and professional commitment were computed again for each group. A two-tailed T-Test was then applied to determine the level of significance of the differences in the mean scores and standard deviations for each

group. The results are shown at Table 8.

As shown in Table 8 the mean score for the organizational commitment of the nurses in the government hospitals is 25.01 and the standard deviation is 5.08, and the mean score for the professional commitment of the same group is 27.24 with a standard deviation of 6.25. The difference in the mean scores appears to be highly significant ($p < 0.01$). Table 8 also indicates that the mean score for the organizational commitment of the nurses in the private hospitals is 25.06 with a standard deviation of 5.07. On the other hand, the mean score for the professional

Table 8

**Means and Standard Deviations for
Organizational Commitment and
Professional Commitment of
Government and Private
Hospitals**

Commitment	Government Hospitals (N = 2051)		Private Hospitals (N = 373)		T Value
	Mean	Std Dev	Mean	Std Dev	
Organizational	25.01	5.08	25.06	5.07	-19.05**
Professional	27.24	6.25	27.11	6.23	-7.62**

** $p < 0.01$

commitment of the same group is 27.11 and the standard deviation is 6.23. The difference in the mean scores is also significant ($p < 0.01$). The results in Table 8 thus indicate that the mean scores for the professional commitment for the two separate groups appear to be significantly higher than the mean scores for the

organizational commitment. The results, therefore, tend to confirm that the nurses seem to be committed more to their profession than to their organization irrespective of their organizational affiliation to the public or private sector. Hypothesis I is, therefore, supported.

Hypothesis II : Nurses in the private hospitals tend to be more committed to their organization than nurses in the government hospitals.

To test the hypothesis, the subprogramme of Condescriptive was carried out again to compute the means and standard deviations of the organizational commitment of the nurses in the private hospitals and those in the government hospitals. The subprogramme of T-Test (a two-tailed test) was done to ascertain the significant level of the difference in the mean scores for the organizational commitment of these two groups of nurses. The results are presented at Table 9.

Table 9

**Means and Standard Deviations for
Organizational Commitment of
Government and Private
Hospitals**

	Government Hospitals (N = 2051)		Private Hospitals (N = 373)		
	Mean	Std Dev	Mean	Std Dev	T Value
Organizational	25.01	5.08	25.06	5.06	-0.15

As shown in Table 9 the mean score for the organizational commitment of the nurses in the government hospitals is 25.01 and the standard deviation is 5.08. On the other hand, a mean score of 25.06 and a standard deviation of 5.06 are obtained for the organizational commitment of the nurses in the private hospitals. The difference between the two mean scores does not appear to be significant at all ($p > 0.05$). The results seem, therefore, to show that there is no significant difference in the mean scores for the organizational commitment of the nurses in both the private and government hospitals. Hypothesis II is, therefore, not supported.

Hypothesis III :

(a) The nurses' age is positively related to their commitment to the organization, irrespective of their organizational affiliation to the public or private sector.

(b) The nurses' tenure in the organization is positively related to their commitment to the organization, irrespective of their organizational affiliation to the public or private sector.

(c) The nurses' salary level is positively related to their commitment to the organization, irrespective of their organizational affiliation to the public or private sector.

To test these hypotheses, the subprogramme of Pearson Correlation was done to determine the relationships between the personal variables of age, tenure in the organization and salary level; and the level of the organizational commitment of the entire sample. The results are shown at Table 10.

Table 10

**Pearson Correlation between Age, Tenure
and Salary Level and Organizational
Commitment of Entire Sample
(N = 2424)**

Personal Variable	Organizational Commitment
Age	0.26**
Tenure in Organization	0.21**
Salary Level	0.27**

** p < 0.01

The results in Table 10 show that the nurses' age ($r=0.26$), tenure in the organization ($r=0.21$) and salary level ($r=0.27$) are significantly ($p < 0.01$) and positively correlated with their organizational commitment. Of the three correlations, the relationship between the nurses' salary level and their organizational commitment appears to be relatively higher. In other words, when the nurses's age or their length of service in the organization, or their salary level increases; their level of commitment to the organization also seems to increase.

The entire sample was then divided into two major groups again (i.e. nurses

in the government hospitals and nurses in the private hospitals). For each major group, the subprogramme of Pearson Correlation was run again to see the relationships between the nurses' age, tenure in the organization and salary level; and the commitment to the organization. Table 11 presents the results of these two major groups.

Table 11

**Pearson Correlation between Age, Tenure and
Salary Level and Organizational Commitment
of Government and Private Hospitals**

	Government Hospitals (N = 2051)	Private Hospitals (N = 373)
Personal Variable	Organizational Commitment	Organizational Commitment
Age	0.26**	0.26**
Tenure in Organization	0.21**	0.21**
Salary Level	0.27**	0.27**

** P < 0.01

Interestingly, the results in Table 11 appear to be quite similar to those shown in Table 10. Table 11 shows that the relationships between the age ($r=0.26$), tenure in the organization ($r=0.21$) and salary level ($r=0.27$) of the nurses in the government hospitals are positively and significantly ($p < 0.01$) correlated with their level of organizational commitment. Of the three correlations, the degree of the relationship between the nurses' salary level and their organizational commitment seems to be relatively higher. Similarly the results in Table 11 also

indicate that the age ($r=0.26$), tenure in the organization ($r=0.21$) and salary level ($r=0.27$) of the nurses in the private hospitals are positively and significantly ($p < 0.01$) correlated with the organizational commitment, and the degrees of correlations appear to be identical to those of the government hospitals. Again, the degree of the relationship between the nurses' salary level and their organizational commitment seems to be relatively stronger.

However, as the relationship between salary level and organizational commitment appears to be relatively higher for both the government and private hospitals as shown above, it is felt that the salary level may be an important intervening factor that has affected the strength of the relationships between the variables of age and tenure, and the organizational commitment. The subprogramme of Partial Correlations was, therefore, applied to determine whether the salary level was an intervening factor.

A first-order partial correlation was run to see the relationship between age and the organizational commitment of the entire sample at first, and then the separate groups (i.e. nurses in the government hospitals as one group, and nurses in the private hospitals as another group), with tenure being held constant. The results are presented at Table 12.

As shown in Table 12, age is directly and positively correlated with the organizational commitment ($r=0.17$) of the entire sample when tenure is partialled out. The correlation is highly significant ($p < 0.01$). Age is also directly and

positively correlated with the organizational commitment when the entire sample is divided into the government and private hospitals. The relationship between age and the organizational commitment is, in the case of government hospitals, $r=0.17$; and $r=0.18$ in the case of the private hospitals, when tenure is controlled. The correlations appear to be significant ($p < 0.01$) in both cases.

Table 12

Partial Correlation between Age and Organizational Commitment (Controlling for Tenure) of Entire Sample, Government and Private Hospitals

	Entire Sample (N=2424)	Government Hospitals (N=2051)	Private Hospitals (N=373)
Personal Variable	Organizational Commitment	Organizational Commitment	Organizational Commitment
Age	0.17**	0.17**	0.18**

** $p < 0.01$)

The results in Table 12, therefore, seem to confirm that tenure may not be a factor intervening in the relationship between age and organizational commitment.

A second-order partial correlation was then performed to compute the degree of correlation between age and the organizational commitment of the entire sample first, and then the separate groups, with tenure and salary level being held constant. The results are at Table 13.

Table 13

Partial Correlation between Age and Organizational Commitment (Controlling for Tenure and Salary Level) of Entire Sample, Government and Private Hospitals

	Entire Sample (N=2424)	Government Hospitals (N=2051)	Private Hospitals (N=373)
Personal Variable	Organizational Commitment	Organizational Commitment	Organizational Commitment
Age	0.07**	0.07**	0.09**

** $p < 0.01$

The results in Table 13 indicate that age has a very low degree of direct correlation with the organizational commitment ($r=0.07$) of the entire sample when both tenure and salary level are held constant, though the correlation appears to be significant ($p < 0.01$). Table 13 also shows that the direct correlation between age and the organizational commitment of the nurses in the government hospitals and those in the private hospitals appears to be equally low, when tenure and salary level are controlled. The degree of correlation is $r=0.07$ in the case of the government hospitals; and $r=0.09$ in the case of the private hospitals. However, the correlations appear to be significant ($p < 0.01$). The weak direct relationship between age and the organizational commitment of the entire sample and the government and private hospitals, when tenure and salary level are partialled out, seems to indicate that salary level may be an important factor affecting the relationship between age and organizational commitment.

A first-order partial correlation was, therefore, computed again to ascertain the degree of the relationship between tenure and the organizational commitment of the entire sample, and, at the same time, of the separate groups, with salary level being held constant. The results are presented at Table 14.

Table 14

Partial Correlation between Tenure and Organizational Commitment (Controlling for Salary Level) of Entire Sample, Government and Private Hospitals

	Entire Sample (N=2424)	Government Hospitals (N=2051)	Private Hospitals (N=373)
Personal Variable	Organizational Commitment	Organizational Commitment	Organizational Commitment
Tenure	0.07**	0.06**	0.09**

** p < 0.01

As shown in Table 14 the strength of the direct correlation between tenure and the organizational commitment ($r=0.07$) of the entire sample appears to be weak, when salary level is held constant, though the correlation seems to be significant ($p < 0.01$). In other words, salary level appears again, to be a factor that seems to have affected the relationship between tenure and organizational commitment; when the effect of the factor is partialled out the relationship between tenure and organizational commitment is weakened. Similarly, the direct relationship between tenure and the organizational commitment also appears to be low when the entire sample is divided into government hospitals and private hospitals. The degree of correlation for the government hospitals is $r=0.06$ and that

for the private hospitals is $r=0.09$, even though, the correlations appear to be significant ($p < 0.01$) in both cases. The results tend to confirm that salary level appears to have a significant intervening effect on the relationship between tenure and organizational commitment.

The Crosstabs tables were also created to examine the relationships between age, tenure and salary level, and the organizational commitment among the nurses. However, no particularly important data were yielded.

Though the job title or rank of the nurses is not the focus of the current study, it was felt that it might be useful, incidentally, to explore the possible effects of the variable on organizational commitment through the variables of age, tenure and salary level. The entire population was, therefore, divided into four subgroups according to the job title or rank of the nurses. Group I consisted of 391 trainee nurses (i.e. Pupil Assistant Nurses and Student Nurses). These nurses were new recruits who had just joined the labour market. They were undergoing basic nursing training at the time when the questionnaires were administered. Group II were 567 qualified junior nurses (i.e. Midwives and Assistant Nurses) who had entered the service as Pupil Assistant Nurses and who had completed the basic nursing training. Group III comprised 1217 Staff Nurses. They were qualified nurses who had entered the service as Student Nurses and who had completed the basic nursing training. Group IV were 249 senior nurses whose duties included supervisory or administrative functions. They were Nursing Officers, Higher Nursing Officers and Principal Nursing Officers. The Pearson Correlation was run for the four subgroups and the results are presented at Table 15.

Table 15

**Pearson Correlation between Age, Tenure and
Salary Level, and Organizational Commitment
of Subgroups of Entire Population
(N = 2424)**

Subgroup	Age	Tenure	Salary Level
I (Trainee Nurses N=391)	0.12*	0.09	0.17**
II (Qualified Junior Nurses N=567)	0.18**	0.14**	0.22**
III (Staff Nurses N=1217)	0.21**	0.16**	0.17**
IV (Senior Nurses N=249)	0.14*	0.03	0.11

* P < 0.05

** P < 0.01

It appears from Table 15 that there are significant differences among the four subgroups in terms of the degrees of the relationships between age, tenure and salary level, and organizational commitment. For example, the degree of correlation between age and the organizational commitment of Subgroup III appears to be significantly the highest ($r=0.21$, $P<0.01$), and that of Subgroup I appears to be significantly the lowest ($r=0.12$, $P<0.05$); the degrees of correlation between tenure and the organizational commitment of subgroups I and IV appear to be the lowest ($r=0.09$ for Subgroup I, and $r=0.03$ for Subgroup IV) and not significant at all ($p>0.05$); and the degrees of correlation between salary level and the organizational commitment of subgroups I, II and III seem to be significantly

higher ($r=0.17$, $p<0.01$ for Subgroup I, $r=0.22$, $p<0.01$ for Subgroup II, and $r=0.17$, $p<0.01$ for Subgroup III), and that of Subgroup IV appears to be lower and not significant at all ($r=0.11$, $p>0.05$). The results thus show that job title seems to have an effect on the organizational commitment of the entire population through age, tenure and salary level. However, as job title is not a major focus of the current study, no further analysis will be presented here.

In brief, the results obtained from Tables 10 - 15 explain that salary level appears to be a key personal variable that has affected the relationships between the other two personal variables (i.e. age and tenure) and organizational commitment. In other words, it is through salary level, that age and tenure appear to have created an impact on organizational commitment. However, job title, on the other hand, also seems to have some influence on organizational commitment through age, tenure and salary level.

Taken as a whole, it may be, therefore, possible to conclude that, when the nurses' salary level increases, their commitment to the organization also tends to increase; or when the nurses' age increases or when their tenure in the organization increases, their commitment to the organization also tends to increase, irrespective of their organizational affiliation to the public or private sector, provided that their salary level also increases at the same time. Hypotheses III (a), (b) and (c) are, therefore, supported.

Hypothesis IV : The overall job satisfaction of the

nurses tends to be related more to their commitment to the profession than to their organization, irrespective of their organizational affiliation to the public or private sector.

To test this hypothesis, the subprogramme of Pearson Correlation was performed to compute the degree of the relationship between the nurses' overall job satisfaction and their organizational commitment; and the degree of the relationship between their overall job satisfaction and professional commitment. A Fisher's Z - transformation was also calculated to assess the significant level of the difference between the degrees of correlations. Table 16 indicates the results.

Table 16

**Pearson Correlation between Overall Job
Satisfaction and Organizational
Commitment and Professional
Commitment of Entire Sample
(N=2424)**

Commitment	Overall Job Satisfaction	Fisher's Z
Organizational	0.14**	3.20**
Professional	0.22**	

** p < 0.01

As shown in Table 16, the overall job satisfaction of the nurses appears to be significantly correlated with both the commitment to the organization and the profession. However, of the two correlations, the overall job satisfaction seems to

have a higher degree of significant relationship with the professional commitment ($r=0.22$, $p<0.01$) than with the organizational commitment ($r=0.14$, $p<0.01$). The Fisher's Z-transformation ($Z=3.20$) indicates that the difference between the two correlations appears to be highly significant ($p<0.01$).

The entire population was then separated again into two major groups (i.e. nurses in the government hospitals and nurses in the private hospitals). The Pearson Correlation was run again to see whether there were differences existing in the relationships between overall job satisfaction and organizational commitment and professional commitment when the nurses were divided into two major groups. The Fisher's Z transformation was also applied to test the significant level of the differences. The results are shown at Table 17.

Table 17

**Pearson Correlation between Overall Job
Satisfaction and Organizational
Commitment and Professional
Commitment of Government
and Private Hospitals**

Government Hospitals (N = 2051)			Private Hospitals (N = 373)		
Commitment	Job Satisfaction	Fisher's Z	Commitment	Job Satisfaction	Fisher's Z
Organizational	0.17**	-3.51**	Organizational	-0.07	-0.21
Professional	0.28**		Professional	-0.06	

** p < 0.01

Table 17 indicates that the relationship between the overall job satisfaction

and professional commitment of the nurses in the government hospitals appears to be significantly higher ($r=0.28$, $p<0.01$) than that between the overall job satisfaction and organizational commitment ($r=0.17$, $p<0.01$); and the difference between these two relationships appears to be significant ($Z=-3.51$, $p<0.01$). However, in the case of nurses in the private hospitals, there appears to be no significant relationships between the overall job satisfaction and organizational commitment; and between the overall job satisfaction and professional commitment. Hypothesis IV is, therefore, partially supported.

Summary

The analysis of the data has indicated that younger nurses who are below the age of 40 seem to be the major respondents of the current study. Of these younger nurses, about 68 per cent are from the government hospitals and 78 per cent are from the private hospitals. However, it has also been noted that approximately 51 per cent of the nurses who are from the government hospitals have at least 10 years of nursing experience and 68 per cent of the nurses who are from the private hospitals have similar nursing experience. The analysis has also pointed out that of the respondents from the government hospitals, about 64 per cent seem to have a short tenure of less than 10 years, whereas in the case of the private hospitals, 90 per cent of the respondents appear to have a similar short tenure in the organization.

Interestingly, it has been found from the analysis that about 79 per cent of

the respondents from the government hospitals seem to have come from the lower salary group, whereas 66 per cent of the respondents from the private hospitals seem to have come from a similar salary group. Comparatively, therefore, more respondents from the government hospitals seemed to have belonged to the lower salary group.

It has been noted that about 50 percent of the respondents from both the government and private hospitals are staff nurses, and 23 to 25 per cent are qualified junior nurses. Respondents who are trainee nurses have constituted about 17 per cent in the government hospitals and nine per cent in the private hospitals. Senior nurses whose duties included supervisory or administrative functions are about 10 per cent in the government hospitals and 14 per cent in the private hospitals. The analysis has also indicated that the vast majority of the respondents (about 67 per cent in the government hospitals and 74 per cent in the private hospitals) have come from the Chinese ethnic group, and that about 60 per cent of the respondents from both the government and private hospitals are either Buddhists or Christians.

The analysis of the data has also shown that the nurses who have participated in the study, irrespective of their organizational affiliation, appear to be committed more to their nursing profession than to their organizations, and that it may not be appropriate to assume that nurses in the private hospitals tend to be more committed to their organization in comparison with their counterparts in the government hospitals.

It has been noted from the analysis that the personal factors of age, tenure and salary level of the nurses seem to have created a significant impact on their commitment to the organization, irrespective of their organizational affiliation to the public or private sector. However, of these three personal factors, salary level seems to have more direct impact on the organizational commitment than the other two personal factors of age and tenure. The impact of age and tenure on the organizational commitment appears to be indirect; it is through salary level that age and tenure appear to have effects on the organizational commitment. In other words, salary level seems to be a better and more direct predictor of the organizational commitment than age and tenure as far as these nurses are concerned.

Finally, through the analysis of the data, it has been found that the overall job satisfaction of the nurses in the government hospitals tends to have more significant relationship with their commitment to the nursing profession rather than with their commitment to the organization. However, in the case of the nurses in the private hospitals, the overall job satisfaction seems to have no significant relationships with the nurses' organizational commitment and professional commitment.

The findings, implications and conclusions derived from the analysis of the data and the limitations of the current study will be discussed in detail in the next chapter.

CHAPTER FIVE

FINDINGS AND CONCLUSIONS

This chapter will focus on the findings and conclusions of the current study. The chapter will first discuss the findings derived from the testing of the hypotheses. This will then be followed by the discussion on the implications of the findings. Finally the limitations of the study will also be presented.

Findings and Discussion

A group of 150 nurses ranging from trainee nurses to senior qualified nurses were selected randomly from the ten participating hospitals by the researcher to help to clarify the findings. The nurses were interviewed by the researcher individually and in small groups. Some of these nurses had participated in the current research by responding to the questionnaires and some had not. The results obtained from the analysis of data in Chapter Four were shown to the nurses and detailed discussions were held during the interview. The findings are presented in the following section.

Hypothesis I: Nurses are committed more to their profession than to their organization, irrespective of their organizational affiliation to the public or private sector.

The analysis of data in the preceding Chapter has indicated that the nurses tend

to show more commitment to their nursing profession than to their organization. Several factors appear to lend support to these findings. *These factors are presented as follows:-*

Meaningfulness of profession Nursing is a unique profession which differs from many other occupations. The job of a nurse involves the life of a patient. The code of nurses emphasizes that the fundamental responsibilities of a nurse are to promote health, prevent illness, restore health and alleviate suffering. In fulfilling these responsibilities, nurses render their meaningful services not only to individuals but also to the community and society.

To do the job successfully, nurses are required to have a certain job aptitude or personal quality. It has, therefore, always been the policy of the health-service organizations that they should recruit the right people to do the nursing job. The Ministry of Health - the central authority for recruiting nursing personnel for government health-service organizations, for example, has stated clearly, as mentioned in Chapter One, in its recruitment exercises for nursing staff that candidates who wish to apply to join the nursing service, should possess the required job aptitude, in addition to the necessary educational qualifications. Some of the criteria for assessing aptitude are repeated in the following for discussion purposes. A candidate should, for example,

- a) have a liking for people;
- b) have a caring attitude;
- c) be willing to study hard and work hard;

- d) be willing to make adjustments in personal life;
- and
- e) like meeting people and making new friends.

Candidates applying for the job are assessed carefully during the selection process. Only those who have the right aptitude and satisfy the selection procedures are recruited to the service. Similar assessment criteria and selection procedures have also been used by the private health-service organizations to recruit their nursing staff. Therefore, candidates who are accepted for the nursing service generally possess the required job aptitude which may have, to a certain extent, affected the nurses' attitude towards the profession.

Many of the nurses whom the researcher interviewed said that they chose the nursing service from many other professions available because they liked the nursing, and felt that it was a very meaningful and challenging profession. They were proud of being able to render a very useful and meaningful service to people, the community, the society and mankind as a whole, by being, for example, able to help alleviate the pain and suffering of people, prevent illness and diseases, and promote a healthier and more rugged society. "This service", as they added, "appears to be rewarding. And the feeling that nurses are rendering a meaningful service to mankind tends to grow stronger as time goes by". As Bennis et al (1957-58) pointed out earlier:-

"for the majority of nurses the profession is an idealized

image, something vaguely equivalent to a personal identity. It represents a symbol, internalized by the individual nurse, which stands more for a way of life than a codified body of knowledge" (p496).

The findings seem to be consistent with the contention raised by researchers such as Bennis et al (1957-58), Ritzer and Trice (1969) and (1970), Aranya and Jacobson (1975), and Shoemaker et al (1977). Ritzer and Trice, for example, argued that commitment to an occupation or profession was a psychological phenomenon based on the subjective meaningfulness of the occupation, and that commitment to the organization would arise only when the occupation had no really meaningful base to which one might commit himself, or when the occupation became unrewarding. The researchers added that once an individual had been psychologically committed there were a series of structural constraints which, over time, served to increase that commitment. Therefore, as the researchers argued, meaningfulness depended both on the structure of the occupation and the nature of the individual. Studies by Aranya and Jacobson (1975), and Shoemaker et al (1977) appeared to support the psychological arguments by Ritzer and Trice.

Basic training in nursing As mentioned earlier, all nurses have to undergo a two-year full-time basic nursing training (if they enter the service as Pupil Assistant Nurses) or a three-year full-time basic nursing training (if they enter the service as student Nurses) in the government School of Nursing before they become qualified nurses. Nurses in the private health-service organizations also attend their basic

training in the government School of Nursing as the private health-service organizations do not have their own training schools.

The training programme conducted by the School of Nursing appears to be strenuous. The content of the programme is comprehensive, covering a wide variety of subjects ranging from the basic knowledge, skills and attitude required for nursing practice to pharmacy, management and ward administration, counselling, human relationship and community care and service. The core value of the nursing profession, the code of ethics, the responsibilities of the nursing profession to society and the intrinsic reward aspects of the profession are also stressed in the course of training. Trainees should attend all the subjects covered by the programme, and their performance is constantly reviewed and evaluated by the tutors. They are required to pass the tests and examinations before they can be registered by the Board of Nursing and certified as qualified nurses. As the training programme is strenuous, and the duration is long, those who do not have a real liking for the profession or those who are not able to pass the examinations will leave the service straight away before they complete the training.

The intensified and comprehensive training during the early stage of the nursing career seems to have created a good impact on the process by which the nurses' "occupational identification" - a term used by Becker and Carper (1956) - is internalized and has enhanced their identification with the profession. Many of the nurses interviewed, for instance, pointed out that they were not interested in other professions simply because these professions may not be able to provide them with

"such an opportunity to acquire a large amount of specialized professional knowledge and skills through a comprehensive training programme, and the constant guidance and evaluation of the tutors". The arguments seem to be quite consistent with the notion of "occupational personality" or "occupational identification" suggested by Becker and Carper (1956). The researchers felt that:-

"occupational identifications are internalized by the individual in the course of his entrance into and passage through a set of training institutions..." (p289)

They argued that in the course of training the trainee began to learn the techniques of the profession and acquire a pride in his technical abilities through the evaluations of his instructors and comparisons of his own work with that of others. And finally, the trainee began to take over an image as the holder of that particular "specialized position" and the ideology might serve to "insulate" him against other professions. The researchers were of the view that the "mechanism of acquisition of ideology" operated to produce commitment to the profession. The findings also tend to support the concepts of cosmopolitans and locals suggested by, for example, Gouldner (1957-1958). Gouldner argued that professionals tended to be more committed to their professions partly because of their:-

"relatively complex, seemingly mysterious skills, derived from long formal training." (p288)

The nurses interviewed added that since the training was very strenuous and the duration was long; and they had spent so much time and effort to complete the training it would be "really a big waste of time and effort" if they were to quit the profession. In other words, it would be too costly to change the profession since so much investment had already been made. The arguments, therefore, also appear to lend support to the "side-bet" or investment theory suggested by, for example, Becker (1960), Grusky (1966), Sheldon (1971), Hrebiniak and Alutto (1972), Alutto et al (1973), or the investment model proposed by Farrell and Rusbult (1981), and Rusbult and Farrell (1983).

Sense of security The nursing profession is universal. It is needed everywhere. The shortage of qualified nurses has become a common problem in almost every country in the world, and will become more acute as a result of the rapid increase of the world population. Unlike many other professions, the demand for qualified nurses will never decline and the need for the nursing profession will never come to a stand still.

Many of the nurses interviewed indicated that they were not prepared to quit the profession as it had provided them with a strong sense of security. They said that the nurses were fully aware that the demand for nurses was almost everywhere, and if they were not wanted in one organization they would be needed by another; or if they were not happy with the existing organization they could immediately leave for another organization without any difficulty, as long as they did not change the profession. They felt that the professional knowledge and skills that they acquired

during the training in the School of Nursing and during the course of their work had made them feel very secure even in the time of economic recession, and that few other professions would give them such a sense of security. In other words, to cite what the side-bet notion of commitment has suggested, side bets were made because of the sense of security provided by the profession.

The society in Singapore, as mentioned in Chapter I, is getting more and more affluent as a result of the rapid development of the economy of the country. This has resulted in a great demand for a home nursing or private nursing service, as more people can afford the service. Nurses who wish to earn extra income will be able to get a part-time home nursing job, or work as part-time private nurses in addition to their full-time employment in their organizations. Few other professions in Singapore would, as the nurses pointed out, provide them with such an opportunity to "double" their income. In other words, the profession, as Becker (1960) argued in his research, had made the nurse act:-

"in such a way as to involve other interests of his,
originally extraneous to the action he is engaged in..."
(p35)

The findings, therefore, appear to support the side-bet theory expounded by, for example, Becker (1960), Grusky (1966), Sheldon (1971), and Hrebiniak and Alutto (1972); and the investment model suggested by Farrell and Rusbult (1981), and Rusbult and Farrell (1983).

Difficulty in adapting to different profession The long period of professional training during the early stage of the professional career has, on the one hand, provided the nurses with useful professional knowledge and skills, but, on the other hand, created potential difficulty for them in adapting themselves to other professions.

The nurses interviewed, for example, indicated that many of them were not prepared to take a new profession because they were worried about the uncertainty and the difficulty that they might have in adapting themselves to the new profession after having been so accustomed to the nursing service or having so adjusted their style of working to the profession. In other words, as Becker (1960) contended, a person who hesitated to take a new job or profession might be deterred by a complex of side bets, for example, the loss of ease in doing his work because of his success in adjusting to the particular conditions of his present job or profession. The nurses, therefore, had tried to "bet the ease of performance" of their existing profession on remaining where they were, and been committed to stay with the profession or continued "a consistent line of behaviour", as the side-bet theorist said, in order not to lose the "side bets" that they had already made; or as Farrell and Rusbult (1981) and Rusbult and Farrell (1983) said, the commitment was enhanced because the investment size had increased.

The findings, therefore, appear to be quite in line with the arguments put forth by Becker (1960), Hrebiniak and Alutto (1972) and others or the investment model suggested by Farrell and Rusbult (1981), and Rusbult and Farrell (1983).

Units assigned It has been the practice of the health-service organizations (both in the private and public sectors) to rotate the duties of their nurses within the same organizations or between the organizations (in the case of the public sector). This has been deliberately done to enrich the nurses' experience in the nursing profession and, also, to enhance their knowledge of the various aspects of the organizations. Nurses are, therefore, transferred from one unit to another within the same organizations or from one organization to another (in the case of the public sector).

The nurses interviewed indicated that the nursing profession had provided them with the opportunity of being able to work in different work units, organizations or job locations. This, as they said, had not only enabled them to enrich their professional knowledge and skills as nurses (i.e. increase the investment size in the profession, as Farrell and Rusbult (1981) or Rusbult and Farrell (1983) said); but also made the nursing profession more interesting. This opportunity, as they added, might be lacking in many other professions. The change of work unit or job location generally did not create too much uncertainty simply because the change was arranged among the units in the same organization or from one government organization to another government organization (in the case of the public sector).

The findings appear to lend support to the study by, for example, Shoemaker et al (1977) who found that the number of work locations or places assigned to the state rangers were significantly and positively correlated with their professional commitment; or the study by Farrell and Rusbult (1981) or Rusbult and Farrell (1983).

Professional competence and authority Like doctors and other medical practitioners, nurses must be able to gain the confidence and trust of their clients so that they can do their job efficiently. To do so, nurses must always maintain a high professional standard and image by being seen not only as technically competent but also as being able to put aside personal interests and to adhere closely to a service "ideal - devotion" to the clients' interests. Thus, in addition to the basic training provided in the School of Nursing during the initial period of employment as mentioned earlier, the health-service organizations have also provided in-service courses regularly within the organizations for nurses to keep up with the latest medical technology and upgrade their technical competence and also, to reinforce their service ideal of placing their clients' interests above personal interests.

The nurses interviewed pointed out that the profession was interesting as it had enabled them to have opportunities to have direct contact with their clients. They felt it rewarding when the clients, because of their professional competence and image, came to seek their professional views, listen to their professional advice, follow their professional instructions; or even reveal to them some highly personal or confidential information. They added that few other professions would provide them with such opportunities (or investments as the side-bet theory or investment model of commitment said), and such an amount of authority or influence over their clients to win their confidence and trust.

Wilensky (1964) contended in his study on "professionalization" that one of the factors that governed the success of the claim to a professional status was the

degree to which the practitioners conformed to a set of moral norms that characterized the established profession. The norms, as the researcher stated,:-

"dictate not only that the practitioner do technically competent, high-quality work, but that he adhere to a service ideal - devotion to the client's interests more than personal" (p140)

Ritzer (1971), in his study on "individual professionalism" argued that:-

"where a person lies on the individual professional continuum depends on how many of the following attitudinal and experiential characteristics he possesses and to what degree he possesses each" (p62)

One of the characteristics suggested by Ritzer was "authority over clients", or the extent to which clients felt that they could leave important judgements relating to them in the hands of the individual professional, for example, the amount of influence of the nurses on their clients as mentioned earlier.

The findings thus appear to lend support to the side-bet notion suggested by Becker (1960) and others, or the investment model proposed by Farrell and Rusbult (1981), and Rusbult and Farrell (1983), or the arguments raised by Wilensky (1964) and Ritzer (1971).

To sum up, the variables such as the meaningfulness of the nursing profession, basic training in nursing, sense of security, difficulty in adjusting to a different profession, units assigned, and professional competence and authority seem to help explain why the nurses tend to be committed more to their profession than to their organization.

Hypothesis II: Nurses in the private hospitals tend to be more committed to their organization than nurses in the government hospitals.

One would generally assume that nurses in the private hospitals would be more committed to their organization than their counterparts in the government hospitals because of the various attractive incentives such as higher salaries, better fringe benefits, better facilities, more advanced equipment, and better physical environment offered by the private hospitals. However, interestingly and surprisingly, the assumption has turned out to be untrue. The analysis of data in Chapter Four indicates that nurses in the private hospitals do not tend to be more committed to their organization than nurses in the government hospitals.

As explained earlier, Becker (1960), in his explanation of the concept of commitment, argued that commitment came into being when a person, by making a side bet, linked extraneous interests with a consistent line of activity. He contended that the notion of consistent lines of activity seemed to imply a rejection by the actor of feasible alternatives. The actor saw several alternative courses open to him, each

having something to commend it, but chose one which best served his purposes.

Farrell and Rusbult (1981), and Rusbult and Farrell (1983) in their investment model of commitment contended that commitment was a function of rewards, costs, investments and alternatives, and that greater commitment was encouraged by higher rewards, lower costs, greater investment sources and poorer quality alternatives.

A further examination of the results obtained from the analysis of data in Chapter Four has revealed that the following factors related to the side-bet notion or investment model of commitment may be used to explain why there appears to be no significant difference in the level of organizational commitment between nurses in the private hospitals and nurses in the government hospitals.

Job security The private hospitals are self-supporting organizations. The growth and survival of the organizations are determined largely by the profits that they can make. If the organizations make good profits, the staff will be given better salaries and other financial incentives. But, if the organizations are not able to make good profits, members of the staff may be retrenched right away. Thus to some nurses, working in private hospitals was, as the nurses interviewed said, in fact, a risk; and they were not prepared to take such a risk, in spite of the fact that the demand for qualified nurses was high, and nurses would not have much difficulty in getting a job, if they were retrenched. However, others, because of the attractive incentives offered by the private hospitals may be happy to take the risk. Thus the alternative value may go up and chances of them staying with the employing organizations may go down.

On the other hand, the government hospitals are not operated on a profit-loss basis. The survival of the government hospitals does not depend on profits. The retrenchment of staff is almost not in existence in government organizations. If a nurse is found redundant in one government hospital she can be transferred to another government hospital without losing her job. As the nurses interviewed pointed out, "job security is almost guaranteed", though the incentives offered by the government hospitals have appeared to be much less attractive.

Therefore, government nurses who prefer to have a steady job may perceive the job security offered by the government hospitals as a better investment or reward than the incentives offered by the private hospitals. As a result, side bets in the employing organizations will be made; and the nurses concerned will tend to stay with the employing system or be committed to the organizations in order not to lose the investment or reward. On the other hand, government nurses who are attracted by the incentives offered by the private hospitals may perceive the incentives as better investments than job security. As a result, side bets will be difficult to be made in the employing organizations; and the nurses concerned will tend to leave the employing system for the private hospitals. Similarly, if nurses in the private hospitals perceive job security as a better alternative, they may leave their employing organizations to join the government health-service organizations.

The findings, therefore, appear to be consistent with the side-bet theory advanced by Becker (1960), Sheldon (1971), Hrebiniak and Alutto (1972) and others; and the investment model suggested by Farrell and Rusbult (1981), or Rusbult and

Farrell (1983).

Retirement benefit schemes The different retirement benefit schemes adopted by the health-service organizations in Singapore may have also played a major part in influencing the nurses' commitment to their organization. Nurses who joined the nursing service in the government health-service organizations before 1973 were placed by the government on the Pension Scheme which was a retirement fringe benefit offered by the government to its employees. Under the Pension Scheme, the government, as the employer, is required to contribute a certain sum of money every month as savings for its employees during the employment. These savings are known as pensions for the old age. Employees are not permitted to withdraw the pensions before they reach an approved retirement age. The pension or pension right of a government employee will be forfeited right away if he leaves the service before the approved retirement age. However, when the employee retires at the approved retirement age, a lump sum of money from the savings in the fund will be paid to him by the government. This lump sum is known as gratuity. In addition, the employee will also be given a pension every month as long as he lives during the retirement. Free medical attention is also provided for those who retire under the Pension Scheme during the retirement.

The Central Provident Fund (CPF) Scheme is another type of retirement fringe benefit offered by employers to employees. It is a compulsory savings fund for workers with contributions from both employers and employees. Under the scheme both employers and employees are required to contribute a certain sum of money to

the fund monthly during the employment. Employees are not allowed to withdraw the fund contributed before reaching an approved retirement age. However, the savings in the fund will not be forfeited if employees leave their organizations or cease to work before the approved retirement age. In addition, employees are allowed to use the savings they have in the fund for the types of investments approved by the government (eg. purchasing houses for residential purposes, investments in the stock exchange and government bonds). The CPF Scheme is a very common staff benefit scheme adopted by private sector organizations. When an employee retires under the CPF Scheme, he has to reserve about \$30,000 (in Singapore dollars) from the savings in the fund for monthly expenses, but he is permitted to withdraw the balance of the savings. The employee will be paid a sum of \$300 from the savings every month for his monthly expenses until the savings are exhausted.

The government, in order to lighten its financial burden resulting from the pensions provided for its employees, decided in 1973 that all junior officers (including nurses) in the government service should be given a chance to opt for the Pension Scheme or CPF Scheme, and that newly recruited junior officers including junior nurses should be placed on the CPF Scheme from the year onward. Many junior government nurses seemed to have opted for the CPF Scheme during the exercise in 1973.

The advantages of the Pension Scheme are that employees do not have to contribute to the savings, therefore, the amount of their take-home salaries per month is not affected; and that a monthly pension is given to them as long as they live during their retirement; and, also, free medical attention is provided. However, the

disadvantages of the Scheme are that the savings in the fund will be forfeited immediately if they leave the government service before the approved retirement age; and that they are not allowed to use the savings for any investments.

On the other hand, the advantages of the CPF Scheme are that the savings in the fund will not be forfeited if employees leave the service or organization before the approved retirement age; and that they are permitted to use the savings for the approved investments. But the disadvantages of the Scheme are that employees are required to contribute a certain sum of their monthly salaries to the fund, therefore, the amount of their monthly take-home salaries will be less; and that no amount of payment will be given during their retirement if their savings in the fund are exhausted. In addition, no free medical attention is provided for employees during the retirement. Thus which scheme is a better investment or reward depends on how the nurses concerned perceive it or what they look for. If the government nurses consider the Pension Scheme a good investment or reward, side bets will tend to take place, or if they consider that the cost of leaving the employing organization may be higher than the reward, they will tend to stay with the organization and the chances of their commitment to their organization may be higher.

The nurses interviewed, therefore, pointed out that government nurses who were attracted by the advantages of the Pension Scheme and who considered it as a better investment would tend to stay with the government health-service organizations in order not to lose the pensions. However, those who were attracted by the advantages of the CPF Scheme and viewed the Scheme as a better reward would have

opted for the Scheme during the exercise in 1973, and many of them would have left the government health-service organizations for the private health-service organizations. The nurses interviewed added that generally those who were on the CPF Scheme (e.g. nurses in the private health-service organizations) had a tendency to move more frequently from one organization to another as they would not have to worry about losing their retirement benefits.

In other words, if government nurses perceived more advantages than disadvantages in the Pension Scheme, sidebets would generally be made, and they would be less willing to leave the employing system in order not to lose the pensions. Expressed in another way, if government nurses perceived the CPF Scheme as a poorer alternative, they would tend to be more committed to their employing organization. The findings, therefore, appear to lend support to the side-bet notion of commitment suggested by Becker (1960) and others, or the investment model of commitment proposed by Farrell and Rusbult (1981), and Rusbult and Farrell (1983).

Medical benefits and flexible time Government nurses and their dependants are provided with free medical attention during their employment. Government nurses who are on the Pension Scheme are also given free medical attention during their retirement. On the other hand, nurses in the private health-service organizations do not enjoy the same kind of medical benefits that government nurses have in their organizations. Medical fees for nurses in the private health-service organizations are only partly subsidized by the organizations. Nurses will have to bear part of their medical expenses if incurred. To some nurses, free medical attention may be a good

investment for them in the organization and, therefore, they may not want to lose these benefits by leaving the employing system. However, to other nurses, as the nurses interviewed argued, it might not be an incentive at all, as they did not really need it often.

The system of flexitime has been practised in the private health - service organizations. Generally nurses in these organizations are allowed to make a request for arranging for them to work at the shift or time that may best suit their convenience if they have special reasons to make the request. The flexitime system has been one of the special attractions of the private health-service organizations. However, the system of flexitime has never been in existence at all in the government health-service organizations because of the rigid bureaucratic rules and regulations. Nurses in the government organizations are expected to follow the work schedule that has been arranged for them by the management, irrespective of whatever reasons they may have. Thus as the nurses interviewed pointed out, to some nurses, for instance, young married female nurses, the flexibility of working time might be a strong incentive for them to stay with the organization, as these nurses had to look after their young children at home; or to those who did a part-time study and needed to attend classes, the system of flexitime would be a "big attraction". However, to others, the flexitime might not be an incentive at all, as they were prepared to work at any shift that had been arranged for them.

Thus if government nurses consider free medical attention offered by the government hospitals as a good investment or reward, side bets will take place, they

may thus be reluctant to leave the government hospitals in order not to lose the medical benefits. If they are not interested in the medical benefits offered by the government hospitals, side bets will not be made, and thus free medical attention may not influence their organizational commitment. Likewise, if nurses in the private hospitals consider free medical attention as a better reward, chances of them leaving their organizations to join the government hospitals may be higher.

Similarly if private nurses perceive the system of flexitime as a good investment or reward, side bets will take place in the organizations, and chances of them staying with their employing organizations will increase and their commitment will thus be enhanced. On the other hand, if the nurses do not consider the system as a good investment, side bets will not be made, and their organizational commitment may not thus be enhanced. Likewise, if government nurses regard the system of flexitime as a good quality alternative, chances of them leaving the government hospitals for the private ones may go up and their organizational commitment may go down.

The findings thus appear to be consistent with the arguments raised by Becker (1960) and others; or the investment model proposed by Farrell and Rusbult (1981), and Rusbult and Farrell (1983).

Annual salary increment Although both the public and private health-service organizations have salary schemes for their nursing personnel, the practice that the government health-service organizations have followed to grant salary increments for

government nurses is different from that which the private health-service organizations have adopted for their nursing staff. Nurses in the government hospitals, get a fixed amount of salary increment annually in accordance with their salary schemes until they reach the maximum point of increment in the schemes. The annual salary increment is not affected by the profits or loss of the organizations.

On the other hand, the amount of the annual salary increment for nurses in the private hospitals is generally determined by the profits that the organizations will be able to make for that particular year and the performance of the nurses concerned as well. If the organizations are able to make high profits and the nurses' performance is good, the amount of salary increment for the nurses for the year may be high. However, if the organizations are not able to make good profits, the nurses' salary increment for the year may be low or they may not get any increment at all, even though their work performance may be outstanding.

Therefore, which practice has appeared to be more attractive will depend on how the nurses concerned perceive it. As the nurses interviewed pointed out, to those who preferred a steady and fixed amount of annual increment, the practice followed by the government hospitals might be more attractive; however, to those who preferred to get a "quick and good profit" the practice adopted by the private hospitals might be more attractive. In other words, as the side-bet theory and investment model of commitment have suggested, if the nurses view the practice used in the government hospitals as an attractive investment, and the cost of leaving the employing organizations may be high, side bets will take place and they may tend to be

committed to the organizations. On the other hand, if the practice followed by the private hospitals is considered as a good investment by the nurses, chances of their commitment to the private hospitals may be high.

The findings appear, therefore, to be in line again with the notions of commitment proposed by the side-bet theory and the investment model.

Pressure from management The fees charged by the private hospitals are very much higher than those charged by the government hospitals. As a result, patients in the private hospitals tend to be much more demanding and expect a higher quality of service from the hospitals. The management of the private hospitals, in order to meet their clients' expectations and satisfy their needs, tend to use more pressure on their personnel for a higher standard of service. Therefore, the nurses working in the private hospitals, as the nurses interviewed pointed out, seemed to have been constantly "working under pressure" to meet their customers' demand.

On the other hand, the fees charged in the government hospitals are comparatively lower, patients are generally less demanding and have a lower expectation of the service provided. Thus the pressure from the management on the staff in the government hospitals does not appear to be as great as that in the private hospitals. To some nurses, as the nurses interviewed felt, this might be a good inducement for them to work in the government hospitals. In other words, to cite what the side-bet notion of commitment or the investment model have said, the lighter work pressure from the management in the government hospitals might be a good

or reward to some nurses, and it would thus encourage them to remain with the organizations in order not to lose this investment or reward. However, to some private nurses who considered the work pressure as a challenge, as the nurses interviewed said, the pressure from the management might not have any impact on their membership with the organizations.

The findings, therefore, appear to lend support to the side-bet notion of commitment or investment model of commitment.

"Moonlighting" As explained earlier, the demand for private nursing in Singapore has increased rapidly in the last few years. Private health-service organizations, in order to let their nursing personnel have some additional financial gains, have generally allowed their nursing staff to hold part-time jobs of private nursing outside their organizations. Moonlighting has, therefore, become a common practice in the private hospitals. According to the nurses interviewed, qualified private nurses holding two or three paid part-time jobs were not unusual in private health-service organizations. On the other hand, the government health-service organizations, because of the rigid bureaucratic rules and regulations do not permit their nursing staff to take a paid part-time job outside the organizations. Moonlighting is, therefore, a taboo in the government hospitals.

Thus to those who have extra energy and who are anxious to get some side income, "moonlighting" may be a good investment and may increase their side bets in the organizations; or it may appear to be a good reward to offset other alternative

values, and thus enhance their organizational commitment. However, to those who are not interested in part-time jobs, moonlighting may not be a good investment or reward at all, and thus have little effect on their organizational commitment.

The findings thus appear to support the side-bet theory or investment model of commitment.

Special holiday scheme As an incentive to attract nurses to join and remain with the organizations, the private hospitals have offered their nursing staff a special holiday scheme, in addition to annual leave. Under the scheme, nurses are entitled to have four holidays with pay when they are married. In addition, nurses can generally make a special request for permission to use their own annual leave if they need more holidays for their honeymoon. On the other hand, no such special scheme has ever existed in the government health-service organizations. Government nurses are required to follow their leave rosters strictly.

Thus to some government nurses, especially those who are young and not married, this special holiday scheme may be a good attraction or incentive for them to join the private hospitals. If this is the case, the alternative value for these nurses may go up and chances of them staying with the government organizations may go down. Similarly, to some private nurses, the special scheme may appear to be a good investment. As a result, side bets or investments will increase and chances of them being committed to their employing organizations may go up. On the other hand, to some other nurses (e.g. those who are married) the special scheme may not be an

incentive at all. Thus the scheme may not have any impact on their organizational commitment.

The findings thus appear again, to be in line with the side-bet notion or investment model of commitment discussed earlier.

Demand for nurses by foreign countries Foreign countries such as Australia, New Zealand, America, Canada, Brunei, Hong Kong, Saudi Arabia, Oman and other oil-producing Arab countries which have an acute shortage of qualified nurses have come to Singapore to recruit qualified nurses to work in their hospitals. In order to attract local nurses to go overseas, these foreign countries have offered a very much more attractive salary scheme and package of fringe benefits to Singaporean nurses. This has created good job opportunities for the nurses in both the public and private health-service organisations in Singapore, and, also generated a great impact on their organizational commitment. Many nurses from both the government and private hospitals have gone to work in the overseas countries.

According to the nurses interviewed, countries such as Australia, New Zealand, America, Canada, Saudi Arabia and Oman had appeared to be particularly "lucrative". For example, local nurses of the countries such as Australia and Canada generally did not prefer to work on Saturdays, Sundays or public holidays. On the other hand, many foreign nurses in these countries were happy to work on Saturdays, Sundays or public holidays for a very attractive pay. In addition, like local nurses, foreign nurses, if they are confirmed in the service and become permanent staff of the organizations,

chances of getting the organizations to sponsor them for further education, for example, to study for a university degree, would be very high. In the oil-producing countries such as Saudi Arabia and Oman, transport, food and lodging were provided free for foreign nurses, as part of the fringe benefits. In addition, personal income was free from tax in these countries. According to the nurses interviewed, the amount of income that a Singaporean nurse would get in a month in the foreign countries such as those mentioned above was about two to three times what a nurse would get in Singapore.

Thus as the nurses interviewed pointed out, to those who were interested in working in foreign countries, the offers by the countries such as those mentioned above were really "irresistible". However, to those who were not able to work in foreign countries because of family problems, different climate, age, different environment and so on, the offers by the foreign countries might not be attractive at all. In other words, to cite what Becker (1960) and others have argued, to those who are interested in working in foreign countries, the financial gains from the foreign countries may act to decrease their side bets in their existing organizations and thus affect their organizational commitment. However, to those who are not able to work in foreign countries, the financial gains from the foreign countries may not have effects on their side bets in the existing organizations. Similarly, to cite what Farrell and Rusbult (1981) or Rusbult and Farrell (1983) have proposed, to those who like to work in foreign countries, the alternative values may be more than enough to offset the costs of leaving the present employing system and thus encourage them to leave the organizations. But to those who are not able to work in foreign countries, the

costs of leaving the employing organizations may be too high, and the financial gains (or alternative values) from the foreign countries may not be good enough to offset the costs; thus the chances of them leaving their employing organizations may be small.

The findings, therefore, appear to be consistent with the side-bet theory of commitment, or the investment model of commitment, or the contentions raised by Pfeffer and Lawler (1980), O'Reilly and Caldwell (1981), and Batemen and Strasser (1984). The researchers have found a significant correlation between organizational commitment and job alternatives or job offers in their studies.

For comparison purposes, Table 18 shows the approximate amount of income (excluding fringe benefits) in Singapore dollars that a qualified nurse of, say, five years' nursing experience, for instance, a Registered Staff Nurse would get in a month in Singapore or in some of the foreign countries mentioned above in 1988 during which the survey for the current study was conducted.

Table 18

**Approximate Monthly Income of a Registered Staff
Nurse in Singapore and Other Countries**

Country	Monthly Income in Singapore Dollars
Singapore (Government Hospitals)	\$1200
Singapore (Private Hospitals)	\$1700
Saudi Arabia	\$4500
Oman	\$4500
Australia	\$3500
Canada	\$3500
Brunei	\$2500
Hongkong	\$2300

To sum up, there appear to be advantages or incentives for nurses to work in the government hospitals as well as in the private hospitals. Similarly, there also appear to be disadvantages or discentives for nurses to work in the government or private hospitals. What appears to be an incentive for a nurse may be a disincentive for another nurse. Likewise, what may be considered as a disadvantage by one nurse may appear to be an advantage to another nurse. Thus if the nurse perceives more advantages than disadvantages for her to work in the employing system, she may, as Becker (1960) has said, by making a side bet, link extraneous interest with a consistent line of activity, and the chances of her rejecting other feasible alternatives

may go up and organizational commitment may thus be enhanced; or as Farrell and Rusbult (1981), and Rusbult and Farrell (1983) have proposed, the rewards and investments perceived by the nurse may go up and the costs may go down, and the chances of the nurse remaining with the organization may thus increase.

On the other hand, if the nurse perceives more disadvantages than advantages for her to work in the employing organization, then her side bets in the employing system may go down or the rewards and investments perceived by her may go down and the costs may go up. Thus the chances of her accepting other feasible alternatives and leaving the employing organization may thus be higher.

The extent to which the offers by the health-service organizations in the foreign countries have affected both the government and private hospitals depends also on how the nurses perceive the offers. Some may consider the offers attractive and leave their organizations; some may not be attracted at all.

The arguments presented above may thus help to explain why nurses in the private hospitals do not tend to be more committed to their organization than their counterparts in the government hospitals; or why there appears to be no significant difference in the level of organizational commitment between nurses in the private hospitals and nurses in the government hospitals.

Hypothesis III:

- a) The nurses' age is positively related to their

commitment to the organization, irrespective of their organizational affiliation to the public or private sector.

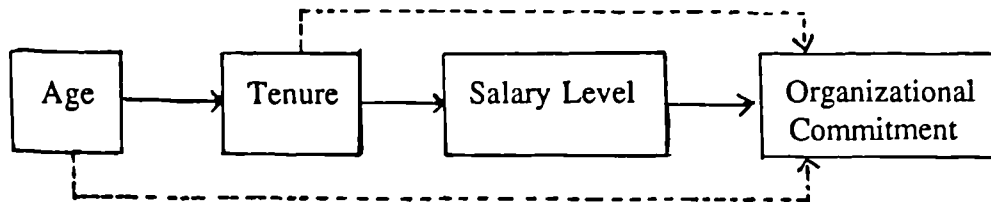
- b) The nurses' tenure in the organization is positively related to their commitment to the organization, irrespective of their organizational affiliation to the public or private sector.
- c) The nurses' salary level is positively related to their commitment to the organization, irrespective of their organizational affiliation to the public or private sector.

The analysis of data in Chapter Four shows that the nurses' age, tenure in the organization and salary level are positively related to their commitment to the organization; and that the job title or the rank of the nurses seems to have influenced their organizational commitment through the variables of age, tenure and salary level. However, a further analysis indicates that salary level is the key variable that has affected the relationships between age and tenure, and the commitment to the organization. In other words, the extent to which the nurses' age and tenure are related to their organizational commitment is determined by their salary level. These relationships may be illustrated by the following diagram:-

Figure 5

Relationships between the Nurses' Age, Tenure and Salary

Level and Their Organizational Commitment



Several factors seem to have contributed to the findings. These factors are presented in the following:-

Age vs pension scheme As mentioned earlier, older nurses in the government health-service organizations (e.g. those who joined the government nursing service before 1973) have been placed by the government on the Pension Scheme which is a retirement benefit scheme for government employees. The government, as the employer, is required to contribute a certain amount of money monthly to the fund for its employees during their employment. The longer the employees remain in the government service, the bigger the amount of money they will have in the fund. Thus older nurses, particularly those who have a long period of service have generally accumulated a large amount of pension with the government. In other words, to cite what Becker (1960) has argued, side bets are made because of the pension fund; or what Farrell and Rusbult (1981), and Rusbult and Farrell (1983) have contended, the investment size has increased because of age. However, under the bureaucratic rules governing the Pension Scheme, an employee's pension right will be terminated immediately and his pension will be forfeited once he leaves the government service

before he reaches the approved retirement age. This has discouraged many older government nurses from leaving the government health-service organizations for fear of losing the considerable sum of savings (or investments) they have had in the fund. However, the Pension Scheme does not affect nurses in the private health-service organizations as these people are under a different retirement benefit scheme as mentioned earlier.

The nurses interviewed, especially those who were from the government hospitals, indicated that age seemed to be an important deterrent that had prevented many government nurses from leaving their organizations. They said that many older nurses were committed to remaining with the government health-service organizations or agreed to work under the bureaucratic rules in force simply because they were not prepared to lose the "hard-earned" pensions. However, they added that if the offers (e.g. salaries) by private health-service organizations were high enough to offset the accumulated amount of money *they had in the fund within a short period of time (e.g. three years)*, they might accept the offers and leave the government health-service organizations without much hesitation. In other words, as the investment model suggested, the nurses might be tempted to leave the employing system if the alternative value was higher.

The findings appear to be consistent with the side-bet theory advanced by, for example, Becker (1960), and Hrebiniak and Alutto (1972); and the investment model proposed by Farrell and Rusbult (1981), and Rusbult and Farrell (1983). Becker argued, for instance, that a man who wished to leave his current job might find that,

because of the bureaucratic rules governing, for instance, the organization's pension fund, he was unable to leave the organization without losing the considerable sum of money he had in that fund. Therefore, any decision made by the individual to accept a new job involved the side bets he had placed for himself by the rules in the structure of the system. Farrell and Rusbult (1981), and Rusbult and Farrell (1983) felt that one of the variables that had affected commitment was alternative value.

Age vs adaptability to new environment As mentioned earlier, Becker (1960) in his "Notes on the Concepts of Commitment" argued that a person who hesitated to take a new job might be deterred by a complex of side bets, for example, the loss of ease in doing his work because of "his success in adjusting to the particular condition of his present job" or environment. This may be another major reason why older nurses were not so eager to leave their organizations or take a new job from other organizations.

The nurses interviewed, especially the older ones, felt that when nurses got older they were less inclined to move from one organization to another because of the "fear of the probable difficulty" in adapting themselves to a new work environment after having been so accustomed to the existing environment and the "old routines". To older nurses, as they said, working in a new environment involved the "trouble of re-orientation" and the risk of losing the ease in performing their job. Thus the older the nurses were the less prepared they would be to take the risk especially working in a foreign country where adjustment to a new environment might be even harder, unless the immediate benefits (e.g. salaries and fringe benefits) offered by the new

organization were very "attractive" and more than enough to "compensate for the trouble"; or as the investment model suggested, the alternative value was very much higher than the costs.

Again, the findings appear to support the side-bet theory advanced by, for example, Becker (1960) and others and the investment model suggested by, for example, Farrell and Rusbult (1981) and Rusbult and Farrell (1983). Farrell and Rusbult (1981), for instance, argued that commitment was best predicted by the reward and cost values, alternative value and investment size and that:-

"length of service, acquisition of non-portable skills, and retirement programmes are common job investments. Such investments serve to increase commitment by increasing the costs of leaving the association" (p 82);

and

Rusbult and Farrell (1983) reported that :-

"investment size was shown to exert greater impact on job commitment with the passage of time" (p429).

Age vs availability of jobs in market Older nurses, because of the longer years of service in the organizations, generally draw a higher salary, and, in the case of government organizations, have a bigger amount of savings in the pension fund.

To leave one organization for another they must be sure that the benefits (e.g. salaries) that they will obtain from the new organization are high or attractive enough to offset the costs (e.g. the amount of the existing salaries, and the loss of the pension and seniority). Thus health-service organizations generally are not too keen to attract older nurses to join their organizations because of the bigger amount of salaries and fringe benefits that they may have to offer.

In addition, older nurses have been trained in old methods, thus private health-service organizations may need a much longer time to equip them with the knowledge required for handling the modern equipment used in their organizations. On the contrary, younger nurses are generally equipped with the knowledge of modern technology and are more familiar with new equipment. Thus not much training will be necessary before they are able to handle the modern equipment. Therefore, private health-service organizations generally prefer younger nurses in order to lower their manpower and training costs. As a result, job opportunities for older nurses may not appear to be as abundant as those for younger nurses. This has, therefore, limited the mobility of older nurses.

The nurses interviewed pointed out, for instance, that nurses of older age (e.g. those who were above the age of 40) generally tended to negotiate for a much higher salary, status, and a much more attractive package of fringe benefits before they accepted an offer by another organization. This had tended to limit their job scope in the market, as organizations could get younger nurses easily at a "cheaper rate". As Salancik (1977) pointed out:-

"it is cheaper to buy their commitment at an early age than it would be when they become industry hot-shots".

(p13)

As nurses became older the job opportunities would tend to be narrower; or the alternatives would tend to be lesser. The nurses interviewed added that, for some older and married nurses, accepting a job in a foreign country was almost impossible as this would involve the consideration of migrating their families to the foreign country where they were going to work or leaving their families totally behind in Singapore. To these nurses, "the cost of working in a foreign country would be too great to be borne".

The findings appear, therefore, to be consistent with the side-bet theory expounded by, for example, Becker (1960), and Hrebiniak and Alutto (1972) or the investment theory of commitment advanced by, for example, Farrell and Rusbult (1981), or Rusbult and Farrell (1983) who, as pointed out earlier, suggested that commitment was a function of reward and cost values, alternative value and investment size. The findings also tend to support the contentions raised by O'Reilly and Caldwell (1981) that individuals with fewer job opportunities or no job alternatives tended to be more committed to their organizations.

Tenure vs criteria for promotion In line with the structural notion or side-bet theory of commitment, the length of service in the organization should be positively related to the growth of side bets or investments in the organization. As

Hrebiniak and Alutto (1972) pointed out, length of service suggested the accumulation of organizational resources and the development of an employee's organizational career. Grusky (1966) also contended that time invested in the organization became a valued resource itself while the privileges associated with the length of service made it easier for the individual to derive some organizational rewards, for example, upward mobility.

Educational qualification, merit and seniority (i.e. tenure or length of service in the organization) are some of the important criteria used by both the public and private health-service organizations for promotion of their staff. Generally, nurses who have higher seniority (i.e. longer years of service in the organization) and better work performance tend to have better chances of promotion. Thus nurses who have a longer tenure in the organization generally tend to remain with their organizations in the hope that their seniority may, in one way or the other, help them to gain a promotion. In some private health-service organizations, some nonfinancial types of awards (e.g. gold watches, certificates of appreciation and plaques) are presented to nurses who have longer of years of service in the organizations in order to encourage them to stay with the organizations.

The nurses interviewed, for example, pointed out that usually those who had put in a longer tenure in their organizations did not appear to be too keen to leave their organizations because they did not want to lose their seniority, or to cite what Becker (1960) has contended, the side bets; or what Farrell and Rusbult (1981), and Rusbult and Farrell (1983) have suggested, the investment. Unless the incentives (e.g.

salaries) offered by another organization were attractive and are sufficient to compensate for the loss of seniority. In other words, the nurses, as what Becker (1960) has argued, seemed to have acted in such a way as to involve other interests of theirs, "originally extraneous to the action they are engaged in", directly in that action; and as Farrell and Rusbult (1981), and Rusbult and Farrell (1983) have put it, the commitment seemed to have been influenced by the kinds of "rewards, costs, alternative values and investment size" they had in mind.

The findings thus appear to be quite consistent with the arguments by, for example, Becker (1960), Grusky (1966), Hrebiniak and Alutto (1972), Farrell and Rusbult (1981), and Rusbult and Farrell (1983) as cited earlier.

Tenure vs peer relationship A worker's relationship and identification with his peers or work group tends to increase when his tenure in the organization advances. Generally an intimate and cohesive relationship with his peers will tend to follow, if the worker remains with the work group for a longer period of time. Some workers are committed to stay with their organization simply because they are not prepared to lose this intimate relationship (or investment, as the side-bet theory has suggested) which will take time to develop in a new organization.

The nurses interviewed were of the view that many nurses whom they knew hesitated to leave their employing organizations simply because they had developed a close, cohesive relationship with their peers in the work groups through the long years of service in the organizations, and they did not want to lose this "valuable"

relationship. They said that because of this intimate relationship in the work groups, the nurses were able to understand each other better, help each other, and appreciate each other's work and contribution to the group. They added that, this "relationship might be hard to come by in a new group".

The arguments presented by these nurses appear to lend support to the side-bet theory and investment model of commitment or the contentions raised by Bennis et al (1957-1958). Hrebiniak and Alutto (1972), for example, contended that side bets or investments (e.g. the "valuable" friendship in the case of the nurses mentioned above) increased over time and as the investments increased, the attractiveness of the other organization tended to decline. As discussed earlier, Farrell and Rusbult (1981) and Rusbult and Farrell (1983) in their investment model suggested that commitment was a function of rewards, costs (e.g. losing the "valuable" relationship in the case of the nurses), alternative values and investment size (e.g. tenure in the organization in the case of the nurses mentioned above).

Pfeffer and Lawler (1980) pointed out also that people who stayed with the organization and were insufficiently rewarded were probably those who valued more highly other benefits such as "collegial relations, location, the academic environment, or something else". Earlier on, Bennis et al (1957-1958) also argued that there were two major areas in which nurses might gain their success or recognition and might thus enhance their organizational commitment. They could rise to success in terms of financial reward through administrative or educational positions. In this case the nurses might have to change their role from that for which they were trained to that

of the administrator or educator. The other path of success, as Bennis et al contended, was:-

"a static one devoid of the usual institutional symbols
but deriving recognition and praise from colleagues for
performing necessary functions skilfully" (p497).

The findings also appear to support the studies by other researchers such as Sheldon (1971), Buchanan (1974), Marsh and Mannari (1977), Shoemaker et al (1977), Alvi and Ahmed (1987), and Mottaz (1988) who found the relationship between social involvement or peer cohesiveness with organizational commitment.

Tenure vs ease of performing job When a worker's tenure in the organization increases, his experience in doing the job in the current organization (or his investment size) may also increase; and, as *Salancik (1977)* contended, his "expertise" may then "become increasingly specific to his current organization." The "specific expertise" to the current organization may, on the one hand, increase the worker's ease of performing his current job; but, may, on the other hand, decrease his adaptability to a new job in a new organization. As time goes by, these side bets and investments in the current organization will go up, and the worker's chances of being employed elsewhere or leaving the current organization will go down. That was why, as the nurses interviewed said, nurses who had a longer tenure in the organizations were not too keen to leave their current organizations because of the fear of the difficulty or uncertainty that they might encounter in the new organizations, unless the salaries and other incentives offered were high enough to compensate for the risk of

losing the ease and competence in doing the job.

The findings, therefore, appear to be in line with the side-bet notions of commitment suggested by Becker (1960) and others, or the investment theory expounded by Farrell and Rusbult (1981), and Rusbult and Farrell (1983), or the points raised by Salancik (1977).

Salary vs materialistic society The analysis of data has shown that the salary variable seems to be the key predictor of the organizational commitment of the nurses. The findings do not appear to be surprising in this highly materialistic and task-oriented society of Singapore. Singapore has achieved a high economic growth since its independence in 1965. The economy grew by leaps and bounds in the 1970s and the 1980s. The society gets affluent as the economy grows and prospers. The rapid economic growth and the increasing affluence of the society have been accompanied by an all-round improvement in the quality of life as manifested in a higher standard of health, better housing, better education for school children and many other public services and amenities. However, like many other fast developing countries in the world, prosperity and material well-being have also given rise to new problems, for example the growing cult of materialism.

For most of the people in Singapore, the cult of materialism takes the form of an obsessive preoccupation with the pursuit and acquisition of pecuniary and material gains, and the honorific display of wealth. As Ho (1989) pointed out:-

"acquisitiveness has become the very soul of society, penetrating almost every aspect of social life and thought." (p678)

Earlier on, Chew (1976) also raised the point that:-

"having been aroused consistently to a job-getting and money-making consciousness, Singaporeans, not surprisingly, have highly developed acquisitive instincts." (p152)

During the 1970s there appeared to be fast developing among Singaporeans a system of values whereby the worth or significance of any person, object or activity was calculated exclusively in terms of an actual or potential pecuniary value. Thus it has been with the market value of any person; his services or goods in terms of dollars and cents that matter most.

In fact, throughout the 1970s and 1980s, the spirit of cupidity had become so pervasive that many Singaporeans tended to equate their notions of success, social status and happiness in life with mere acquisition of material possessions. Thus the so-called four "Cs" - motor car, colour television set, air conditioner and club membership (exclusive clubs) had become the commonly accepted symbols of higher social status and prestige that most Singaporeans were aiming to possess. In addition, possession of luxurious private houses, shopping in expensive department stores,

overseas holidays, eating in expensive or exclusive restaurants and so on have also been common characteristics of the rich and the middle income group. The rich and the higher income group have set the trend in conspicuous consumption and competitive methods of enhancing their prestige; it is only a matter of time before the other income groups begin to emulate their life styles.

Negotiating for higher salaries or income as a means of achieving material satisfaction and a higher social status has, therefore, become the common pursuit of the working class. Nurses are, of course, no exception. Therefore, organizations (both the public and private) have to rely on pay (i.e. money) as an incentive to attract workers. The government, for example, has to review and revise the salaries for its employees once every five years in order to compete with the private sector. Private sector organizations, on the other hand, have also jacked up the salaries and other financial incentives in order to retain or recruit their workers. This has directly or indirectly intensified workers' acquisitive instincts.

As the nurses interviewed frankly admitted, "money is important to everybody not just the nurses. It provides us with material comforts and enhances our social status and prestige. The only way for nurses to get more money is through negotiation for higher salaries and other financial gains". They argued that "since job opportunities are almost everywhere and we can afford to pick and choose the organization we like, we should take advantage and make full use of the opportunities, and make ourselves worthwhile (in terms of dollars and cents)". In other words, to cite what Farrell and Rusbult (1981) or Rusbult and Farrell (1983) have said,

alternatives are almost everywhere.

The findings appear to be consistent again, with the side-bet theory or exchange notion of commitment expounded by researchers such as Becker (1960), Sheldon (1971), and Hrebiniak and Alutto (1972), or the investment model suggested by Farrell and Rusbult (1981), and Rusbult and Farrell (1983) as cited before.

Salary vs intrinsic rewards Behavioural scientists, for example, McGregor (1967) argued that generally when workers joined an organization, they tended to bring along with them, directly or indirectly, certain potential capabilities, for example, capability for solving problems and capability for creativity; and hoped that the organization would create a kind of opportunity or environment to enable them to use these potentialities and thus satisfy some of their intrinsic needs. Similarly, Maslow (1954), for example, also contended that when workers joined an organization, they brought with them, a set of needs, ranging from the basic physiological needs for food and shelter to the higher level needs for self-esteem and self-actualization; and hoped that the organization would provide them with opportunities to satisfy these needs. The scientists argued that the extrinsic rewards (e.g. salary and fringe benefits which helped to satisfy the lower level needs) were essential for workers' performance; but the intrinsic rewards (e.g. opportunities for solving work problems, participating in decision making, achievement, personal development and growth, and advancement) were equally important for workers' motivation and excellent performance. O'Reilly and Caldwell (1980) also contended in their study that workers who made their job choices on intrinsic bases (e.g. opportunity for growth and advancement) would be

more satisfied and committed than those who made the decision based on extrinsic factors. However, as McGregor pointed out, some managers assumed that motivating workers to work was a "mechanical" problem and relied, therefore, on extrinsic rewards and punishments as the appropriate methods to control workers' behaviour. Intrinsic rewards were generally ignored by these managers.

Singapore, as pointed out earlier, is a highly result-oriented society. The socio-economic and political environment is regimented and over dominated by work concerns. Organizations in Singapore are operated in a highly task-oriented environment and characterized by intolerance of failure and inefficiency. Health-service organizations are no exception. The highly task-oriented environment, together with the growing cult of materialism and the spirit of cupidity of the society, as mentioned earlier, seems to have encouraged organizations to believe that motivating workers to work and get good results is a "mechanical" problem. Thus extrinsic rewards and punishments are generally used as a strategy to motivate workers to produce results. In the health-service organizations where acute shortage of qualified nurses or high turnover of nursing staff has been a serious problem, extrinsic rewards such as high salaries and attractive fringe benefits as short-term measures to overcome the manpower problem are particularly emphasized and focused. As a result, intrinsic rewards are generally ignored or overlooked. Opportunities for workers' participation in decision making, job autonomy, personal growth and development and so on are not common at all in these organizations.

The nurses interviewed, for example, indicated that the organizations "seem to

assume that people work for money only and that as long as people are satisfied with the pay and the fringe benefits that they are getting, they should be happy to work for the organizations". The organizations, therefore, seemed to have focused their attention only on the extrinsic aspects of rewards and ignored the intrinsic aspects which the nurses "have been desperately looking for". The nurses interviewed pointed out that many nurses felt that they were just like a "robot" in their organizations. Everything, routine or nonroutine, seems to have been planned or "programmed" for them by the management, a highly routine work or duty schedule was also no exception. They had hoped to have "some say" or opportunities to participate in making decisions that would affect them or have some job autonomy (e.g. a major say in scheduling their work, deciding on routine work procedures); however, as they said, "such opportunities are hard to come by or non-existent". They were looking "eagerly" for opportunities for personal achievement, growth and development, and yet, apart from the regular in-service courses organized within their own organizations, there hardly any opportunity for them to get the organizations' support for them to attend courses they preferred outside the organizations for personal growth and development. They were anxious to get some feedback on how well they had performed their job. However, the performance appraisal system used in the organizations did not permit supervisors to give such feedback. Therefore, many of them did not actually know what was expected of them.

The nurses interviewed contended that since intrinsic rewards had been much neglected and the extrinsic rewards and punishments had become the major focus of interest by the health-service organizations, and money had been frequently used as

a means to buy the service, nurses had no other alternative but to focus also, on financial gains in terms of higher salaries. Apart from financial gains, as they argued, "what else could we look forward to or invest in our organizations?" In other words, as Deci (1972) argued earlier on:-

"the presence of money as an external reward suggests to the subjects that they 'should probably not render this activity without pay', that is, they should not be so intrinsically motivated to do the activity". (p113)

This, as Deci contended, could lead the subjects to a process of "cognitive reevaluation" of the activity from one which was intrinsically motivated to one which was motivated by the "anticipation of money". After all, as the nurses interviewed stressed, higher income would help to provide them, in one way or other, with material comfort (e.g. possession of the four "Cs") which would, in turn, help to upgrade their social status and put them "on par" with others. Perhaps, as they added, this was what the management of the health-service organizations had "in mind all the time".

Going to work in foreign countries such as Australia, Canada and New Zealand was, as the nurses interviewed pointed out, a good example of the nurses' "desperate search" for opportunities for personal growth and development to satisfy some of their intrinsic needs. It seemed, according to the nurses, that the opportunities for personal development offered by the health-service organizations (e.g. to study for a degree in

a university) in these countries were much more attractive, apart from higher salaries and better fringe benefits. This might, as the nurses interviewed felt, help to explain why money had become a major focus of interest for the nurses, and why the salary level had appeared to be the key predictor of the nurses' commitment to their organization, and why the nurses were so eager to respond to the questionnaires during the survey for the current study as they hoped that through the findings of the current study, the health-service organizations concerned might come to know that extrinsic rewards and punishments were important, but intrinsic rewards which were lacking in the organizations were equally essential to the nurses, and that the dependence solely on monetary rewards or punishments and the neglect of the intrinsic motivation of the staff affected their commitment to the organization; and that once the rewards had lost their attractiveness to the staff, "their degree of commitment to the organization would drop right away".

The findings appear to support Farrell and Rusbult (1981) and Rusbult and Farrell (1983) who argued that the degree of commitment was determined by reward values (e.g. autonomy, variety and task identity) cost values, alternative value and investment size, thus if the individual found that the rewards in the organization were less attractive and the cost of leaving the organization was lower and the alternative value (offered by another organization) was higher, his commitment to the organization would be lowered. The findings also appear to be consistent with the cognitive evaluation theory suggested by, for example, Deci (1972), or the theoretical literature on intrinsic and extrinsic motivation and commitment proposed by, for example, Salancik (1977). The findings also, in one way or other, appear to support

the studies by, for example, Brown (1969), Hall et al (1970), Patchen (1970), O'Reilly and Caldwell (1980), Welsch and LaVan (1981), DeCotiis and Summers (1987), and Mottaz (1988) where the researchers found a significant impact of employees' intrinsic needs (e.g. participating in decision making, opportunity for advancement) on their commitment to the organization. Mottaz discovered that intrinsic rewards (e.g. task involvement and task autonomy) seemed to be the most powerful determinants of organizational commitment.

The findings seem also, to support Calder and Staw (1975) who, earlier on, pointed out that increasing extrinsic rewards might lead individuals to perceive their behaviour as under the control of the rewards and that this, in turn, might reduce their intrinsic motivation to do the job; or the views raised by Ross (1975) that a highly salient reward caused an individual "to perceive his behaviour as extrinsically motivated".

Influence of job title The analysis of data has also indicated that the job title that the nurses were holding seems to have some influence on their organizational commitment through their age, tenure and salary level. For example, the degree of impact of age on the organizational commitment appears to be significantly higher among the qualified junior nurses, Staff Nurses and Senior Nurses than that among the trainee nurses. The findings seem to be natural as the trainee nurses were new recruits and did not have enough work experience, therefore, the impact of their age on the organizational commitment might not be prominent at this stage.

The degree of the relationship between tenure and organizational commitment seems to be significantly higher among the qualified junior nurses and Staff Nurses than that among the trainee nurses and Senior Nurses. The findings also appear to be normal as the qualified junior nurses and Staff Nurses were the only two groups who were eligible for consideration for promotion to Senior Nurses, and tenure as explained earlier, was one of the important criteria used by the health-service organizations to assess their nurses' suitability for promotion.

The degree of the relationship of salary level and organizational commitment appears to be significantly higher among the trainee nurses, qualified Junior Nurses and Staff Nurses than that among the Senior Nurses. The findings appear to be normal too as the demand for nurses in these groups is higher; in addition, the salary level of these three groups is very much lower than that of the Senior Nurses. Therefore, the nurses in these three groups might be *more anxious to negotiate for* higher salaries if opportunities arose.

To sum up, the variables such as the Pension Scheme, adaptability to a new work environment, availability of jobs in the market, promotion criteria, peer relationship, ease of performing the job, the materialistic society and the emphasis on the extrinsic rewards by the health-service organizations may help to explain why the nurses' age and tenure appear to be positively correlated to their organizational commitment; and why the salary level appears to be the key predictor of the nurses' organizational commitment and affects the relationships between the nurses' age and tenure and their organizational commitment.

Hypothesis IV : The overall job satisfaction of the nurses tends to be related more to their commitment to the profession than to their organization, irrespective of their organizational affiliation to the public or private sector.

The analysis of data in Chapter IV indicates that the overall job satisfaction of the nurses in the government hospitals tends to be related more to their professional commitment than to their organizational commitment. However, in the case of the nurses in the private hospitals, the overall job satisfaction does not appear to have a significant relationship either with the professional commitment or the organizational commitment. The following factors may explain these interesting findings:-

Extrinsic rewards vs intrinsic rewards Salancik (1977), for example, argued that the degree of commitment derived from the extent to which a person's behaviour was binding. Four characteristics of behavioural acts made them binding. These were explicitness, revocability, volition and publicity. He contended that when a choice was made under pressure or constraints, the outcome of the decision was likely to be valued less and the individual concerned would tend to be less satisfied with or committed to the choice. But when a choice was made free from extrinsic justifications, the individual concerned would tend to be more satisfied with or committed to the decision. Similarly, O'Reilly and Caldwell (1980) indicated that individuals who made their choices based on intrinsic factors seemed to be more satisfied with or committed to the decision than those who made their choices based

on extrinsic considerations. O'Reilly and Caldwell (1981) also raised the point that individuals who had made the original decision volitionally from among a number of offers and free from external constraints, and who had perceived the choice to be irrevocable were more satisfied with and committed to the decision. Farrell and Rusbult (1981), and Rusbult and Farrell (1983) suggested in their investment model of commitment that intrinsic rewards affected satisfaction and commitment. Earlier on, researchers such as Lepper and Greene (1975) also pointed out the importance of self-determination as a determinant of subsequent satisfaction and commitment. This might explain why the nurses in the government hospitals seemed to see a closer relationship between the overall job satisfaction and the professional commitment than between the overall job satisfaction and the organizational commitment as their decision to join the nursing profession was made free from extrinsic justifications or constraints.

The nurses interviewed, (specially those from the government hospitals) for instance, pointed out that when they decided to join the nursing service and make it the profession for their career, the decision was made free from any pressure, constraint or influence by others. There were many other professions or jobs available in the market at the time they were making the job choice. The extrinsic features of these professions or jobs appeared to be equally attractive as those offered for the nursing service. However, they chose, of their own will, the nursing service as their profession simply because the profession appeared to suit their personality and ability well; and the health-service organizations, as they expected, should be able to provide them with an environment or opportunities to grow and develop with the

organizations, and satisfy some of their intrinsic needs. However, they began to realize, after joining the organizations, that such opportunities were very limited. Intrinsic rewards were absent in the organizations; and extrinsic rewards and punishments were emphasized. Money, for example, was used to buy their service; and punishments were imposed if they were not able to produce desired results. In addition, in many of the health-service organizations, nurses are required to perform various administrative routines such as filling in forms, keeping records, or the duties of a maintenance man such as reporting leaking pipes, fused bulbs, broken windows, jammed doors or serving meals, in addition to the normal nursing duties. Nurses in these organizations are frequently locked in the conflict between the need to attend to the tedious administrative routines and the need to devote more time to their patients. The administrative routines, according to the nurses interviewed, had occupied a large portion of the nurses' time and deprived them of the opportunity to use their professional expertise. The lack of opportunities for professional fulfilment and the emphasis on extrinsic aspects of rewards had thus resulted in the nurses' dissatisfaction or frustration with the job.

Government nurses who were attracted by the extrinsic rewards offered by the private health-service organizations would leave the government organizations right away. The nurses interviewed added that once a nurse decided to leave the government organization because of extrinsic rewards, her major interests would be focused on financial gains; monetary rewards would thus become her main expectation; satisfaction with the job or organization, would be of little or no concern at all to her. If she was not satisfied with the job in one private organization she

could move to another private organization without any difficulty, as job opportunities were available everywhere. Thus, as Ross (1975) pointed out:-

"intrinsic interest is most likely to wane when the reward is highly salient, that is, when it is a central focus of the subject's attention". (p252)

Similarly, Salancik (1977) also argued that in general we would expect that when the "instrumental basis" for work (e.g. work in exchange for money) was salient, it would reduce a person's felt responsibility, and that the knowledge of the "instrumental basis" for one's activity interfered with one's finding enjoyment in the task. He added that by focusing on the instrumental basis for an activity, an individual's attention was diverted from the activity itself. Thus he did not find enjoyment in the task because he was not looking for it. And he was not looking for it because his attention was focused on the personal outcomes of the task.

As explained earlier, the private health-service organizations were self-supporting organizations, the survival and growth of the organizations depended largely on the profits that the organizations were able to make. If the organizations made profits, the staff might be given more financial rewards; if the organizations failed to make profits, the staff would be retrenched right away. The tie between the employers and employees was generally determined by the profits that the organizations were able to make; and satisfaction or dissatisfaction with the job would, as the nurses interviewed pointed out, not bother the nurses at all. If the organizations

did not make enough profits, the nurses would have to leave the organizations, even though they had high satisfaction with the job.

However, those who were not attracted by the extrinsic rewards given by the private health-service organizations or, for some other reasons, had decided to remain with the government health-service organizations generally shifted their focus from the organizations to the profession itself to look for intrinsic rewards and job satisfaction; after all, nursing was the profession that they had chosen by themselves free from any pressure or constraints from many other professions available, and, as they said, they had "never regretted" choosing the profession. In other words, to cite what Holland (1975) had explained, the choice of a profession was an expressive act which reflected the decision maker's "motivation, knowledge, personality and ability"; and as Salancik (1977) or O'Reilly and Caldwell (1981) argued, the choice was irrevocable and volitional. This, as the nurses interviewed pointed out, might help to explain why the overall job satisfaction had appeared to be related more to professional commitment rather than organizational commitment, as far as the nurses in the government hospitals were concerned; and why the overall job satisfaction did not appear to be significantly related either to professional commitment or organizational commitment, as far as the nurses in the private hospitals were concerned, as a vast majority of the nurses in the private health-service organizations had come from the government health-service organizations.

The findings appear, therefore, to lend support to the arguments or concepts raised by, for example, Lepper and Greene (1975), Ross (1975), Salancik (1977),

O'Reilly and Caldwell (1980), O'Reilly and Caldwell (1981), and the investment model of commitment proposed by Farrell and Rusbult (1981), and Rusbult and Farrell (1983).

To sum up, the over emphasis on extrinsic rewards and the neglect of intrinsic satisfaction of the nursing staff by the local health-service organizations seem to have contributed to the findings that the overall job satisfaction appears to be related more to the professional commitment than to the organizational commitment of the nurses in the government hospitals; and that the overall job satisfaction does not seem to have a significant relationship either with the professional commitment or organizational commitment of the nurses in the private hospitals.

Summary

The results of the analysis show that nurses, irrespective of their organizational affiliation to the public or private sector tend to be committed more to their profession than to their organization, and some of the factors that may have given rise to these findings appear to be, for example, the meaningfulness of the nursing profession, basic training in nursing, sense of security, probable difficulty of nurses in adapting themselves to a different profession, and the professional competence and authority of nurses. The findings seem to be consistent with the side-bet theory of commitment expounded by, for instance, Becker (1960), Grusky (1966), Sheldon (1971), and Hrebiniak and Alutto (1972); or the investment model of commitment developed by, for example, Rusbult and Farrell (1981), and Farrell and Rusbult (1983); or the social-

psychological notions of commitment suggested by, for instance, Ritzer and Trice (1969); or the cosmopolitan - local concepts of commitment proposed by researchers such as Gouldner (1957-1958), and Bennis et al (1957-1958); or the concepts of professionalism raised by, for instance, Wilensky (1964), and Ritzer (1971).

The analysis of data also indicates that the level of the organizational commitment of the nurses in the government hospitals does not appear to be significantly different from that of the nurses in the private hospitals, in spite of the various attractions offered by the private hospitals. Some of the variables that may have led to these findings seem to be the job security, retirement benefit schemes, medical benefits and flexi time, annual salary increment, pressure from management, moonlighting, and demand for nurses by the foreign countries, and the nurses' perception of the effects of these variables. The findings appear to lend support to the side-bet theory of commitment proposed by Becker (1960) and others; or the investment model of commitment suggested by, for example, Rusbult and Farrell (1981), and Farrell and Rusbult (1983); or the arguments raised by researchers such as Pfeffer and Lawler (1980), O'Reilly and Caldwell (1981), and Bateman and Strasser (1984).

The results of the analysis also indicate that the nurses' age, tenure and salary level appear to be correlated positively to their organizational commitment, and that the salary level seem to be the key predictor of the organizational commitment and have influenced the relationship between the age and tenure and the organizational commitment, irrespective of the nurses' organizational affiliation to the public or

private sector. Some of the factors that seem to have contributed to these findings are the Pension Scheme, inadaptability of the nurses to a new work environment, availability of job opportunities in the market, criteria used by the health-service organizations in promoting their nursing staff, peer relationship, ease of performing the job, the materialistic society of Singapore and the lack of intrinsic rewards for the nursing staff. The findings appear, in one way or other, to be in line with the side-bet theory of commitment; or the investment model; or the contention raised by Bennis et al (1957-1958); or the cognitive evaluation theory expounded by Deci (1972); or the views on the consequences of a highly salient reward raised by Ross (1975); or the theoretical literature on intrinsic and extrinsic motivation and commitment raised by, for example, Salancik (1977); or the arguments by Brown (1969), Hall et al (1970), Patchen (1970), Buchanan (1974), Marsh and Mannari (1977), Shoemaker et al (1977), O'Reilly and Caldwell (1980), Pfeffer and Lawler (1980), O'Reilly and Caldwell (1981), Alvi and Ahmed (1987), and Mottaz (1988).

Finally, the analysis of data also shows that the overall job satisfaction of the nurses in the government hospitals tends to be related more to their commitment to the profession than to their organization, and that the overall job satisfaction of the nurses in the private hospitals does not appear to have a significant relationship either with their professional commitment or organizational commitment. The major factors that appear to have contributed to these findings are the highly salient extrinsic rewards used by the health-service organizations. The findings appear to be consistent with the views raised by researchers such as Lepper and Greene (1975), Ross (1975), Salancik (1977), O'Reilly and Caldwell (1980), O'Reilly and Caldwell (1981), and the

investment model expounded by Farrell and Rusbult (1981), and Rusbult and Farrell (1983).

In the final analysis, the findings have lent good support to the exchange approach to commitment, particularly the side-bet concepts of commitment expounded by Becker (1960), Sheldon (1971), and Hrebiniak and Alutto (1972); and the investment model or notions of commitment advanced by Farrell and Rusbult (1981), and Rusbult and Farrell (1983). The researchers considered commitment as an outcome of inducement/contribution transactions between an individual and his organization (or profession), with an explicit emphasis on the instrumentalities of membership as the primary determinant of the member's accrual of advantage or disadvantage in the ongoing process of exchange. The concepts suggested by these researchers have appeared to be valid and hold true in the Singapore society; and thus they have appeared to be more reasonable means of predicting commitment in the Singapore context.

The purpose of the current study as explained in Chapter One has been accomplished; and the various hypotheses (with the exception of Hypothesis II) formulated in Chapter Two have been supported; and the statements under these hypotheses have appeared to be generally reinforced.

Conclusions

Implications for Singapore

The findings that nurses, irrespective of their organizational affiliation to the public or private sector, seem to be committed more to their profession than to their organization, imply that the nurses appeared to have a liking for the profession. Viewing the findings from a macro perspective, it is encouraging to know that the nurses still continued to participate in the profession and were happy to render their valuable service to society or mankind as a whole. The investments (e.g. training) that the health-service organizations had made on these nurses, and the efforts that the Nursing Association of Singapore (a professional body for trained nurses in Singapore) had made to promote the nursing profession were really not a waste; and society had benefited from these investments.

The recruitment policy and selection procedures that the health-service organizations had pursued to select their nurses appeared to be appropriate and worthwhile continuing. The basic training provided for the nurses at the beginning of their professional career in the School of Nursing, the in-service training programmes provided for them within the organizations at a later stage to upgrade their professional image and competency, and to reinforce their attitude towards serving their clients, the rotation of the nurses' duties or transfer of the nurses within the organizations or between the organizations with the objectives of enhancing their knowledge and experience appeared to be good organizational strategies. The health-service organizations, may, therefore, like to continue these strategies.

On the other hand, the Nursing Association of Singapore, in its role as an organization to promote nursing professionalism may, as a long-term strategy to strengthen their nurses' membership with the profession, organize more professional activities such as encouraging nurses to do research on areas related to the nursing profession, publishing research articles, conducting more training programmes, holding more professional meetings and gatherings where nurses from different organizations will have opportunities to meet and discuss their common interests; or encouraging nurses to read more professional journals (e.g. the World Health Forum, Psycho-Social Nursing, Nursing Management, Nursing Administration, Gerontological Nursing and so on); or work with the School of Nursing to review the curriculums of the training programmes that the school has had for nurses in order to upgrade their professional knowledge and expertise.

In addition, the health-service organizations may also organize more international seminars or conferences on subjects relating to the nursing profession or professionalism to provide opportunities for local nurses to exchange their professional views, experience and expertise with nurses from other countries so as to broaden their professional outlook. The health-service organizations may also like to arrange with their counterparts in foreign countries such as Australia, New Zealand and Canada for an exchange programme under which local nurses can be attached to the health-service organizations in these countries to widen the scope of their professionalism and enhance their professional interests.

The Civil Service Institute, in its role as an agency of training and consultancy,

may help the health-service organizations to upgrade the quality of their training programmes for nurses; for example, to equip them with the knowledge of modern nursing technology (e.g. ultrasonography and endoscopy), or to highlight the meaningfulness and the challenging aspects of the nursing profession (e.g. the valuable contribution of nurses to society and mankind) and the core value of the profession so that their commitment to the profession may be further enhanced.

The findings that nurses in the private hospitals do not seem to be more committed to their organization when compared with nurses in the government hospitals, and that of the three variables (age, tenure and salary level) that seem to have influenced the organizational commitment of the nurses, salary level appears to be the key predictor of the organizational commitment of both the nurses in the government and private hospitals, imply that both the government and private health-service organizations may have to reconsider using financial rewards (e.g. money) as a main strategy to attract nurses to join their organizations, or encourage the nurses to maintain their membership with the employing system.

As explained earlier, Singapore has achieved high economic growth. The economic success has not only improved the income level of workers in all walks of life but also the quality of life of the society. The average income level of a worker in Singapore, though, not the highest in the world, is one of the highest in Asia. The average income that a Singaporean worker (especially a nurse) gets a month is adequate for him to meet the costs of living in Singapore. The income that a nurse is able to get a month is, in fact, higher than that which workers of some other

professional groups. Therefore, financial rewards may not be the only best policy or strategy to win nurses' loyalty or commitment to the organization. What appears to be missing in the health-service organizations or what the nurses seem to have been looking for is something else; something beyond the extrinsic rewards; something beyond what money is capable of providing. It is, as the nurses interviewed have said, something that may satisfy some of their intrinsic needs; or something that they think will quench their thirst for inner motivation.

The findings that:-

- (a) the nurses in the government hospitals seem to see a closer relationship between the overall job satisfaction and the professional commitment rather than between the overall job satisfaction and the organizational commitment;

and

- (b) the nurses in the private hospitals do not appear to see any significant relationship between the overall job satisfaction and the organizational commitment or the professional commitment,

may further support the arguments that intrinsic aspects of rewards are something that the nurses in both the government and private hospitals seem to have been looking for.

It is, therefore, hoped that both the government and private health-service organizations will consider the possibility of putting more emphasis now on intrinsic aspects of rewards as new organizational strategies to satisfy their nurses'

expectations, and to enhance their organizational commitment. The interview with the nurses has revealed some insights into what the nurses have been desperately searching for. These are, for example:-

Opportunities for further education As the nurses interviewed pointed out, the nurses have been looking forward anxiously to opportunities for personal growth and development. The health-service organizations may, therefore, like to examine critically their manpower development strategy, and then consider the possibility of having a proper career development system whereby their nursing personnel's career in the organizations can be carefully planned and developed. Suitable training and further education (e.g. certificates in Critical Care Nursing, Public Health Nursing, Operating Theatre Nursing, Midwifery, Paediatric Nursing and so on) may be provided according to the career path of the nursing staff. Promising nurses or those who have shown good potential may then be sponsored by the organizations for taking up relevant studies in the universities leading to degrees in Nursing Education, Nursing Administration and so on, as has been done by the health-service organizations in Australia and some other overseas countries.

Participative management Participative management seems to be lacking in the health-service organizations. As the nurses interviewed have said, nurses were treated like robots; "everything seemed to have been decided or programmed" for them. They longed to have "some say" in decisions that might affect themselves or their work, but such opportunities seemed to be hard to come by.

The health-service organizations may, therefore, like to consider giving their nursing personnel more job autonomy or allowing them to have more "say", or participate more often in decisions that may affect their work, for example, scheduling their work, selecting equipment that they will use, deciding on the procedures or work methods to be followed, arranging leave rosters and so on. Active participation in decision making encourages employees to think that they are important in the organization and that their valuable experience and suggestions are essential to the decisions. Employees who participate in decision making will become more "ego-involved" with the resulting decisions and develop a sense of ownership of the decisions. The chances of the individuals and the work group supporting the decisions may, therefore, be higher. This may then increase the likelihood that the employees will perceive common interests and goals with the management, and thus reduce the psychological cleavage between the management and employees, even though the management may retain the final say.

The health-service organizations may, therefore, like to conduct some feedback survey from time to time as an organizational strategy to gauge their nursing personnel's views on the issues affecting their work and morale before decisions are made. Suggestion boxes may be another measure to encourage their nursing personnel to participate in the decision making process. A committee comprising management and nursing representatives may be formed to evaluate the suggestions made by the nurses. In addition, regular meetings between nursing supervisors and subordinates may be held to discuss and solve their work problems. Supervisors should be encouraged to bring to the attention of the management the problems they have

discussed with their work groups. The meetings between the management and nursing supervisors may also be held regularly to evaluate the decisions proposed by the nursing work groups, or to resolve the problems encountered by the nursing work groups.

As an alternative strategy to encourage nurses' participation in problem solving and decision making, the health-service organizations may like to consider introducing the Management By Objectives (MBO) technique in the organizations whereby nursing superiors and subordinates can jointly set goals for the latter to achieve and periodically assess the progress towards the goals. MBO has many implications; in one respect, it is a motivation technique, since its goal-setting, participation and feedback components can and do enhance motivation.

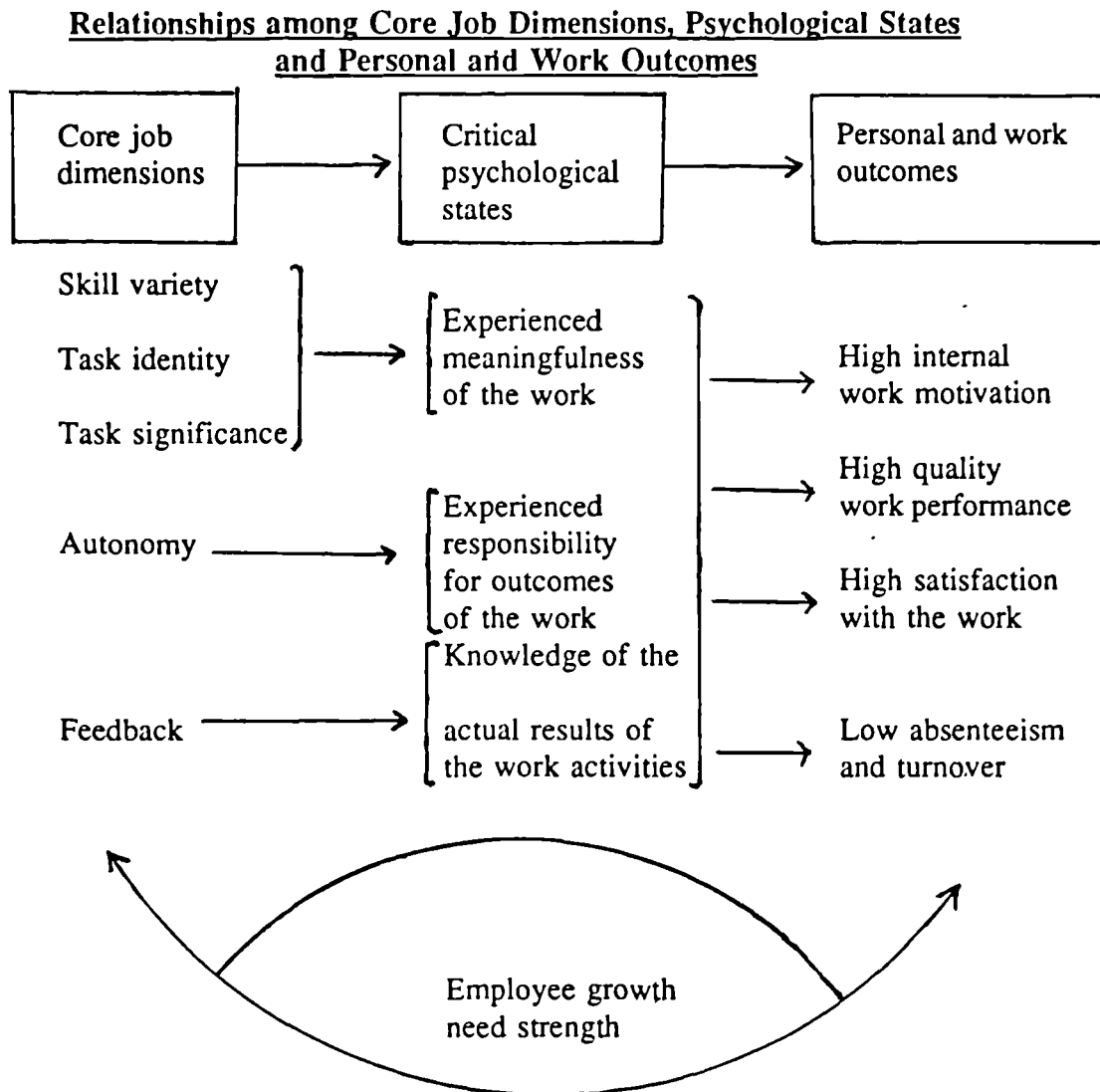
Job redesign The job or work itself, in fact, can serve as a prolific source of numerous intrinsically valued outcomes such as feelings for achievement, recognition and personal growth and development. Thus the way jobs are designed and structured can be an important factor in determining the motivation and satisfaction of employees at work, and create a substantial impact on their behaviour and attitudes.

The nurses interviewed, for example, pointed out that nurses in many of the local health-service organizations seem to have been torn in the conflict between the need to attend to the administrative routines such as filling in forms, keeping records, doing the maintenance man's job on the one hand, and the need to perform the normal

nursing duties on the other hand. In some health-service organizations, because of the shortage of clerical staff, nurses are also assigned to do full-time clerical work at, for example, the registration counters. The tedious administrative routines have taken a large portion of their time, made the job less meaningful and less challenging; and thus deprived them of the opportunities for personal achievement, growth and development at work.

The health-service organizations may, therefore, like to critically examine the job that their nurses have been instructed to perform in terms of the relationships among the core dimensions of the job, the psychological states that may be created by the job, and the personal and work outcomes that may be brought about by the job, so that the job may be redesigned and improved. The relationships may be illustrated in the following diagram:-

Figure 6



Source: J.R. Hackman, G. Oldham, R. Janson, and K. Purdy, "A New Strategy for Job Enrichment", California Management Review, Summer, 1975.

To improve the core job dimensions (i.e. to increase the skill variety, task identity, task significance, task autonomy and feedback) the organizations may have to remove the tedious administrative routines completely from the nursing personnel as the first step, then restructure the job in such a way that highly specialized tasks may be combined into one larger work module, natural nursing submits may be

formed to increase the nurses' ownership of the job, more time may be provided for the nurses to have direct contact with their clients, more authority may be given to the nurses to decide on matters such as work schedules, work methods and procedures as mentioned earlier, and more feedback channels may be created to enable the nurses to know their work performance. This will, as it is hoped, in turn, enable the nurses to focus their full attention on their professional duties and responsibilities, have more opportunities to utilize a variety of their valued professional skills, knowledge and experience, see the meaningful achievement or outcome of their work; and thus enhance their growth need strength and internal motivation and satisfaction.

Team work Group solidarity and cohesiveness create high levels of interaction and felt responsibility among members which, in turn, lead to greater social involvement and commitment in the organization. The health-service organizations may, therefore, like to develop a strategy whereby their nursing personnel may have opportunities to talk and interact with one another closely, help and care for each other, and establish informal friendship with employees of other work units. A cohesive work group enables members to solve their work problems together, provides them with opportunities to receive recognition and praise from the group for performing the necessary functions skilfully.

Performance appraisal For many employees, the vital outputs of a well-designed and properly administered performance appraisal system are good opportunities for personal growth and development. Generally, the major opportunities for growth and development occur at the work site, and nurses, as

mentioned earlier, are no exception. An employee's growth is a continuous process and is primarily an individual responsibility and opportunity. However, the organization concerned may facilitate or hamper the growth opportunities through the environment that it establishes at the work place. The amount and quality of teaching, counselling, coaching information and feedback that the organization provides for its employees may further facilitate their growth and development.

However, according to the nurses interviewed, the health-service organizations have adopted a so-called closed or confidential performance appraisal system to assess their nurses' work. As it is a confidential system, no feedback on the performance is given to a nurse. As a result, how well or poorly the nurse has performed her job is generally unknown; and she does not have the faintest idea of where she stands. For some people, being deprived of feedback can be a very stressful and frustrating thing. Others, though, they may not show overt signs of minding very much, are unlikely to learn and improve. The health-service organizations, may, therefore, like to take a critical look at their current performance appraisal system and consider the possibility of introducing a well designed and open appraisal system whereby both nursing supervisors and their subordinates can participate in the flow of job knowledge and job-related information. The subordinate will be given adequate feedback on how well she has done her job and where she stands, and in addition, an opportunity to make decisions concerning the kind of growth and development that she personally desires. Growth and development in the process are, of course, not a once-a-year occurrence or a particular event occurring at some specified time. Growth and development are continuous processes that end only when the individual makes that determination.

However, an open appraisal system with adequate feedback enhances these processes.

A well designed performance appraisal system can therefore, be a very valuable tool for attracting, motivating and retaining professional and technical employees. When integrated with the organizational reward system, an effective performance appraisal takes on a new dimension of importance in the management of professionals. Defining, appraising and rewarding professional employees' performance is, therefore, clearly a critical link in the fully integrated human resources management system in the organization.

The system should be linked with the career development plan for the nursing staff of the organizations. Efforts should be made by the management concerned to train their nursing supervisors in evaluating the key responsibilities of subordinates, evaluating the results achieved by subordinates versus the expectations or performance goals set by the management, establishing performance goals for subordinates for the next year, getting an agreement from subordinates on the plans for achieving the goals set, identifying the areas and developing a plan for subordinates' growth and development, and getting an agreement between supervisors and subordinates on actions to be taken to fulfil the plan. The growth and development plan may include recommendations for job transfer, skill-oriented courses, management development courses, further education in universities or colleges as mentioned earlier or overseas attachment. The MBO technique, as explained earlier, may be used to enhance the ability of both supervisors and subordinates to set performance goals and evaluate the progress towards these goals.

Congruence of professional and organizational goals It is generally assumed that professionals tend to be oriented to external groups and thus be less loyal to their organizations; and that professional commitment generally tends to come into conflict with organizational commitment; or that professional commitment is not compatible with organizational commitment in organizations. However, studies by researchers such as Glaser (1963), Thornton (1969-1970), Friedlander (1971), Rotondi (1975b), and Aranya et al (1981) have shown that, in fact, professional commitment can be made compatible with organizational commitment in organizations and that professionals can be encouraged to orientate themselves to inner groups; and thus be more loyal to their organizations if they are able to see the goals and work of their organizations as being congruent with their own organizational goals.

It is, therefore, suggested that the health-service organizations consider the likelihood of having special dialogue sessions frequently with their nursing personnel as another organizational strategy whereby the goals and work of the organizations can be explained clearly to their nurses; and whereby the goals of their nursing staff can be made known clearly to the management. Special and sincere efforts should be made by the management during the special dialogue sessions to integrate the goals of their nursing personnel with the goals of the organizations, or to make the nurses see how their goals can be made congruent with the goals and work of the organizations, and how the principles of the nursing professionalism can be reaffirmed and exemplified by the organizations. As mentioned earlier, the congruence of goals will, in one way or other, reduce the strains between organizational expectations and professional expectations, and bring professionals closer and be more committed to

their organizations.

To help the health-service organizations to foster their nurses' commitment to the organizations, the Civil Service Institute, in its role as an agency of training and consultancy, may assist the health-service organizations in focusing their attention on developing the appropriate organizational strategies to meet the intrinsic aspects of motivation and satisfaction of their nursing personnel by, for example:-

- a) examining and identifying the training and education needs of the nurses and developing a proper career development system for the organizations to cater to their needs;
- b) encouraging the management to involve their nursing personnel in the process of problem solving and decision making which affects the work of the nurses, and allow the nurses to have more job autonomy;
- c) conducting feedback or opinion surveys regularly to gauge the nurses' feelings and opinions about their work and organizations;
- d) evaluating critically the structure of the job that the nurses have been told to perform, and exploring the possibility of redesigning the job to enhance the dimensions of skill variety, task identity, task significance task autonomy and feedback so that the job itself may become a prolific source of feelings for achievement, recognition and personal growth and development;
- e) training the nurses in developing team work by taking them through the stage of an undeveloped team to the stages of an experimenting

team and consolidating team to the final stage of a mature team;

- f) developing an open performance appraisal system with an adequate feedback mechanism on the nurses' performance, and with ample opportunities for the nurses concerned to participate in deciding the plan for their personal growth and development;

and

- g) facilitating the process of the regular dialogue sessions between the nurses and the management whereby the goals of the nursing personnel and those of the organizations can be integrated, or the principles of the nursing professionalism can be reaffirmed and exemplified by the management.

In addition, the Institute may organize regularly training programmes on topics such as Manpower Planning, Personnel Management, Job Description, the OD Intervention Techniques, Management by Objectives, Leadership, Interpersonal Relationship, Conflict Management, Conference Leadership, Transactional Analysis, Team Work, Problem Solving, Job Design, Job Satisfaction, Job Enrichment, Quality of Working Life, Communication, Performance Appraisal Interviewing Technique and so on to train the management staff, nurses and other personnel of the health-service organizations concerned in carrying out the organizational strategies mentioned earlier effectively. Follow up actions may also be taken by the Institute regularly to evaluate the effectiveness of the training programmes, and improve the programmes whenever necessary.

The Nursing Association of Singapore, in its role as a professional organization to look after the interest and welfare of nurses may be interested in seeing that the health-service organizations provide an environment that is conducive for nurses' personal growth and development, and intrinsic motivation and satisfaction. Thus the Association may, from time to time, hold meetings, seminars or discussions with its nursing members; or conduct feedback surveys to gather nurses' views and opinions on what the health-service organizations should do if the organizations expect their nurses to be loyal to the organizations or strengthen their membership with the organizations. The Association may then recommend these views and suggestions to the management of the organizations concerned for consideration.

On the other hand, the Association may like to consider using some of the findings in the current research as a basis, and work together with the health-service organizations on what the organizations should consider for the nurses' personal growth and career development in their organizations, what the organizations should do to encourage the nurses' participation with the management in the process of problem solving and decision making on the issues concerning the nurses' work and interest in the organizations, how the current job of the nurses should be restructured to enhance the nurses' intrinsic motivation and satisfaction, how the current performance appraisal system should be improved to provide the nurses' with sufficient and appropriate feedback on their work performance and opportunities for personal growth and development, and finally, how the goals of the nurses could be integrated or fused with those of the organizations to become a common aim of pursuit.

In conclusion, it is very encouraging to learn that nurses in Singapore, irrespective of their organizational affiliation to the public or private sector, appear to have a liking for the nursing profession and have continued to participate in the profession; and have not withdrawn from the labour market, in spite of the rapid changes that have taken place in the society. However, the health-service organizations and the Nursing Association of Singapore should not be too contented with this phenomenon. Instead, conscious efforts must be made by the organizations to sustain their nurses' interest in or commitment to the profession, so that they can continue to render their valuable service to man and society.

However, from a micro point of view, the health-service organizations are also anxious to see that their nursing personnel will also show more interest in or commitment to the organizations. The organizations will incur great fiscal loss and their human resource development plan and programmes will be upset if the nursing personnel's commitment to the organization is low and the turnover rate is high. The costs that will be incurred will be, for example, the manpower costs related to recruiting and selecting a replacement, socializing the replacement in regard to the norms of the organization, over payment of the replacement during the period of learning, overtime work performed by others during the period between the turnover and the replacement's achievement of full capacity, and achieving a social adjustment between the nursing unit and its new members. These costs will go up and will thus create an undesirable impact on the cost of delivering health services to the society.

Like other fast developing countries, Singapore has been experiencing many

changes in society. For example, changes in technology, communications, the educational system, the social life, the composition of labour force, the people's outlook and so on. The younger, more mobile and more highly educated labour force has shown an increasing desire to "do its own thing", and an increasing concern for the quality of working life in organizations. Workers are interested in high salaries and, at the same time, more concerned about opportunities for autonomy, personal growth and development, meaningful and challenging jobs and personal choice and freedom. As analysed earlier, nurses may be a good example. It may be likely that more workers now, and, also, in the immediate future will expect a kind of reward system that emphasizes excitement, challenge, achievement, and social relevance, as well as security and money. When the expectations are not met, dissatisfaction with the work or the organization will tend to occur. If money is highly valued and if satisfaction is not derived from the work itself, then dissatisfaction with pay will tend to occur. This dissatisfaction may finally lead to turnover. The organizational strategies that organizations (e.g. the health-service organizations) have pursued to motivate their workers may be, to a certain extent, outdated now.

To cope with these changes and expectations effectively the health-service organizations may have to be constantly aware of the needs of their nursing staff and develop appropriate strategies to meet these needs. The OD Interventions such as Diagnostic Activities and Survey Feedback Activities are some of the techniques that the health-service organizations may use, from time to time, to help them obtain a more accurate and comprehensive feedback on the morale, and needs and expectations of their nursing employees. The OD Interventions such as Team Building Activities,

Intergroup Activities, Education and Training Activities, Technostructural Activities, Process Consultation Activities, Grid Organization Development Activities, Coaching and Counselling Activities, Life-and Career Planning Activities, and Planning and Goal Setting Activities are some of the techniques that may help the organizations to establish a conducive climate that may facilitate the process of discussions between the management and the nursing personnel on the ways and means that may be used to meet the nurses' needs and expectations.

It is hoped that through the current study the health-service organizations concerned will have a better idea of what their nursing personnel have been looking for and how to satisfy them with what they have been searching for in order to strengthen their membership with their profession and with their employing organizations as well. As mentioned before, the nurses concerned had pointed out earlier that no similar study on their commitment and satisfaction had been conducted before, and they really hoped that through the current study their voices could be heard, loud and clear, by the management. This explained why they were so eager to participate in the current study, and why the return rate of the survey questionnaires was so high.

Finally the Civil Service Institute, together with the Nursing Association of Singapore may consider providing assistance to the health-service organizations in developing and implementing appropriate organizational strategies to meet the needs and expectations of the nurses.

Limitations

Design and methodology The design for the current study and the instruments used in the study to measure commitment and job satisfaction have focused mainly on respondents' attitude towards their organizations or profession or their attitudinal outcomes. The behavioural aspects of respondents have not been included in the study. Thus there is no indication whether the attitude of the respondents as shown in their commitment level is related to the behavioural consequences of the respondents such as leaving the organizations, being absent from work, having grievances, or causing disciplinary problems. Several questions may arise as a result of these limitations. For example, does the rate of employee turnover tend to be higher in the health-service organizations where the level of the staff's organizational commitment or professional commitment is lower? Conversely, does the rate of employee turnover tend to be lower in the organizations where the nurses' organizational commitment or professional commitment is higher? Do nurses who are committed to their organizations or profession tend to perform better or exert higher levels of effort at work in the organizations than those who are not committed? Conversely, do nurses who are more productive or show better work performance tend to be more committed to their organizations or profession? Do the organizations whose nurses show a higher level of organizational commitment or professional commitment tend to be more effective than those whose nurses show a lower level of commitment either to the organizations or profession?

Because of these limitations, even though the findings, have managed to

establish some predictors of nurses' attitude towards their organizations, they have not been able to predict the nurses' behavioural consequences in the organizations. Thus even though the concepts of commitment and job satisfaction suggested in the current study, may help the health-service organizations, the Civil Service Institute and the Nursing Association of Singapore to gauge the nurses' attitude towards their organizations or profession, they are not able to enable these organizations to predict the behavioural consequences of the nurses.

Research sample The sample for the current study has been focused on nurses in the health-service organizations in Singapore - a highly developed and affluent city which is characterized by high achievement orientation, high materialism, and intolerance of failure and inefficiency. Several questions may thus arise. For example, will the results of the study be different if the study is carried out in a less developed and less affluent city or rural area in a neighbouring country with different social and cultural characteristics? Will the concepts of commitment and job satisfaction discussed in the current study be accepted in organizations in the neighbouring country? ,

Predictors of professional commitment The current study has established some significant relationships between some personal variables of the nurses and their organizational commitment, and the results of data analysis have also shown that salary level seems to be the key predictor of the nurses' organizational commitment. However, predictors of the nurses' professional commitment have not been discussed in the study. Some interesting questions may, therefore, be raised. For example, what

will the predictors of the professional commitment of the nurses be? Will the predictors of the organizational commitment appear to be the same predictors of the professional commitment of the nurses? Will the salary level appear to be the same key predictor of the professional commitment? If not, what will be the key predictor? Issues such as these have not been dealt with in the current study.

Cause and effect relationships The correlation analyses that were used in the current research to analyse the data collected during the survey do not seem to imply cause and effect relationships. Questions may thus be asked. For example, if the variables are related, does it imply that one has caused the other? This may not necessarily be true.

Limitation of time Like many other studies on organizations, the data gathered during the survey for the current research represent only one particular period of time. Obviously, conditions or circumstances may have changed over time; and new things may have taken place or developed. This may be one of the limitations of static research.

Instruments Four inducement factors have been included in the instruments used in the current study to measure organizational commitment as well as professional commitment. These four inducements are pay, freedom to be creative, friendliness and status. Questions may arise as a result of this. For example, are these the only four inducements that may affect an individual's commitment to his organization or profession. If there are additional inducements, what are they?

Should these additional inducements be added to the instruments? If so, what will the results be?

Implications for Future Study

To overcome the limitations such as those discussed above, researchers of future studies may like to look into the possibility of including the data relating to the behavioural consequences of respondents, and establishing the relationship between their commitment or job satisfaction and their behavioural outcomes. For example, a longitudinal study on the possible impact of the organizational commitment or professional commitment on the employee turnover or absenteeism from work in the health-service organizations across a period, say, six months to one year may be a possible solution. Data on employee turnover or absenteeism in these organizations may be collected during this period, and comparisons of the degree of impact of the organizational commitment or professional commitment on the behavioural consequences may then be made among these organizations.

Alternatively, data on the nurses' work performance in the organizations may be collected from supervisors or managers through questionnaires or interviews; and efforts may be made to determine whether there is any relationship between organizational commitment or professional commitment with employee work performance, if so, the degree of the relationship may also be established and comparisons among the organizations may also be made.

Future studies may also explore the possibility of increasing the sample size of research to include health-service organizations in some towns or cities of the neighbouring countries, for example, Malaysia and Indonesia where social characteristics, cultural background, economic conditions and composition of ethnic groups are entirely different from those found in Singapore.

Researchers of future studies may also like to consider whether it will be possible to include some other inducement factors in the research instruments to measure commitment rather than just confining themselves to the four inducements used in the current study. Similarly, researchers may also wish to explore the possibility of using two separate or different instruments instead of one to measure the two different types of commitments; that is, one instrument for organizational commitment and another separate instrument for professional commitment.

Future research may also like to focus on the issues relating to the professional commitment of the nurses in the health-service organizations. *One key issue that* needs to be investigated in future is predictors of the professional commitment.

One possible way to solve the problems relating to the cause and effect relationships of the variables mentioned earlier is to monitor the variables under study over some time span to see if changes in one variable are accompanied by a corresponding change in any other variables. Researchers of future studies may, therefore, like to examine this possibility.

Finally, researchers of future studies may wish to validate the data collected for research during a survey at regular intervals, say, once a year for a certain period of time, before conclusions of the study are made, in order to reflect changes that may take place during the period of study, for example, changes in the government policy, changes in the labour market conditions, changes in the union's policy, economic changes and so on. The possible impact of these changes on commitment and job satisfaction may also be determined and analysed before conclusions are reached.

It is hoped that researchers of future studies will explore more possible solutions to the limitations in addition to those recommended above, so that more light will be thrown on the commitment literature and more useful knowledge and suggestions will be provided for the health-service organizations, the Civil Service Institute as an agency of training and consultancy, and the Nursing Association of Singapore as a professional body of nurses.

Appendix 1

Relationship between Personal Characteristics and Organisational Commitment

Researcher	Variable	Relationship
Grusky (1966), Lewis (1967), Hall et al (1970), Sheldon (1971), Lee (1971), Hall and Schneider (1972), Hrebiniak and Alutto (1972), Buchanan (1974), Shoemaker et al (1977), Stevens et al (1978), Welsh and LaVan (1981), Meyer and Allen (1984), Alvi and Ahmed (1987), and Luthans et al (1987)	Tenure, years of service or length in organisation	Related
Brown (1969), Patchen (1970), Hall and Schneider (1972), Brief and Aldag (1980), Parasuraman and Nachman (1987), Putti et al (1989), and Gray (1989)	Tenure, years of service or length in organisation	Not related
Mottaz (1988)	Years of Service	Related Indirectly
Lewis (1967), Sheldon (1971), Lee (1971), Hrebiniak and Alutto (1972), Steers (1977), Brief and Aldag (1980), Angle and Perry (1981), Welsch and LaVan (1981), Morris and Sherman (1981), Meyer and Allen (1984), Luthans et al (1985), Pierce and Dunham (1987), Alvi and Ahmed (1987), Luthans et al (1987) and Parasuraman and Nachman (1987)	Age	Related
Ritzer and Trice (1969), Shoemaker et al (1977), Stevens et al (1978), and Putti et al (1989)	Age	Related
Shoemaker et al (1977)	Age at becoming a ranger	Not related

Appendix 1 (cont'd)

Researcher	Variable	Relationship
Lee (1971)	Skill and experience	Related
Lewis (1967), Lee (1971), Steers (1977), Shoemaker et al (1977), Brief and Aldag (1980), Morris and Sherman (1981), Angle and Perry (1981), Pierce and Dunham (1987), Luthans et al (1987), Glisson and Durick (1988), and Putti et al (1989)	Education	Related
Ritzer and Trice (1969), Shoemaker et al (1977), Welsh and LaVan (1981), Alvi and Ahmed (1987), and Gray (1989)	Education	Not related
Mottaz (1988)	Education	Related indirectly
Hrebiniak and Alutto (1972), Angle and Perry (1981), Aranya et al (1986), and Pierce and Dunham (1987)	Sex	Related
Marsh and Mannari (1977), Stevens et al (1978), Parasuraman and Nachman (1987), Putti et al (1989), and Gray (1989)	Sex	Not related
Mottaz (1988)	Sex	Related indirectly
Lewis (1967), Sheldon (1970), Lee (1971), Marsh and Mannari (1977), Welsch and LaVan (1981), and Aranya and Ferris (1984)	Job status or hierarchical position	Related
Hall et al (1970), Hall and Schneider (1972), Rotondi (1975b), and Putti et al (1989)	Job status or hierarchical position	Not related
Brief and Aldag (1980), O'Reilly and Caldwell (1980), and Pierce and Dunham (1987)	Family responsibilities	Related
Hrebiniak and Alutto (1972)	Marital status	Related
Mottaz (1988)	Marital status	Related indirectly

Appendix 1 (cont'd)

Researcher	Variable	Relationship
Ritzer and Trice (1969), and Putti et al (1989)	Marital status	Not related
Morris and Sherman (1981), and Alvi and Ahmed (1987)	Sense of competence	Related
Steers (1977)	Need for achievement	Related
Alvi and Ahmed (1987)	Personal competence	Related
Luthans et al (1987)	Locus of control	Related
Gray (1989)	Number of Children	Related
Ritzer and Trice (1969)	Number of Children	Not related
Kidron (1978), and Brief and Aldag (1980)	Protestant works values	Related
Putti et al (1989)	Intrinsic work values	Related
Lee (1971), O'Reilly and Caldwell (1980) and (1981), Bateman and Strasser (1984), Alvi and Ahmed (1987), and Mottaz (1988)	Salary or income	Related
Lewis (1967), Welsch and LaVan (1981), and Putti et al (1989)	Salary or income	Not related
Mottaz (1988)	Family Income	Related indirectly
Lewis (1967)	Concern for organization's reputation	Related
Hrebiniak and Alutto (1972)	Father's occupation	Related
Lewis (1967)	Attitudes towards health, life and insurance benefits and retirement policies	Not related

Appendix 1 (cont'd)

Researcher	Variable	Relationship
Mathieu (1988)	Early military socialization (e.g. length of parent's military experience)	Not related
Hrebiniak and Alutto (1972)	Intentions to seek advanced formal education	Related
Hrebiniak and Alutto (1972)	Religious affiliations	Related
Stevens et al (1978)	Change attitude	Related
Stevens et al (1978)	Job involvement	Related
Salancik and Pfeffer (1978), and O'Reilly and Caldwell (1981)	Behavioural acts	Related
O'Reilly and Caldwell (1980)	Job locations	Related
Rusbult and Farrell (1983)	Investment size	Related
Gray (1989)	Training	Not related
Gray (1989)	Interference of work with family life	Related
Gray (1989)	Gender ideology	Related
Alvi and Ahmed (1987)	Occupation	Related

Appendix 2

Relationship between Personal Characteristics and
Professional Commitment

Researcher	Variable	Relationship
Becker and Carper (1956)	Time spent in programmes	Related
Sheldon (1971), Hrebiniak and Alutto (1972), and Stevens et al (1978)	Years of service	Related
Parasuraman and Nachman (1987)	Sex	Not related
Parasuraman and Nachman (1987)	Tenure or length of service	Not related
Hrebiniak and Alutto (1972)	Age	Related
Shoemaker et al (1977), and Stevens et al (1978)	Age	Not related
Aranya and Amernic (1981)	Income	Related
Parasuraman and Nachman (1987)	Full-time employment and status	Related
Stevens et al (1978)	Change attitude	Related
Stevens et al (1978)	Level of education	Related
Ritzer and Trice (1969)	Level of education	Not related
Stevens et al (1978)	Sex	Not related
Ritzer and Trice (1969)	Occupational level	Not related
Pierce and Dunham (1987)	Propensity for commitment	Related
Parasuraman and Nachman (1987)	Job involvement	Related
Shoemaker et al (1977)	Education and length of training	Not related

Relationship between Job Characteristics/Roles
and Organizational Commitment

Researcher	Variable	Relationship
Brown (1969), Patchen (1970), Hall and Schneider (1972), Buchanan (1974), and Mathieu (1988)	Job challenge or opportunities for achievement	Related
Steers (1977), Steers and Spencer (1977), and Alvi and Ahmed (1987)	Task identity	Related
Steers (1977), Steers and Spencer (1977), and Colarelli et al (1987)	Job feedback	Related
Welsch and LaVan (1981), and Morris and Sherman (1981)	Role conflict	Related
Welsch and LaVan (1981), and Glisson and Durick (1988)	Role ambiguity	Related
Morris and Sherman (1981)	Role ambiguity	Not related
Marsh and Mannari (1977), Steers and Spencer (1977), DeCotiis and Summers, (1987), Colarelli et al (1987), Mottaz (1988), and Mathieu (1988)	Job autonomy	Related
Hrebiniak and Alutto (1972)	Role tension	Related
Rotondi (1975a), and O'Reilly and Caldwell (1980)	Intrinsic job conditions	Related
Mathieu (1988)	Role strain	Related
Stevens et al (1978)	Work overload	Related
Alvi and Ahmed (1987)	Interesting work	Related
Colarelli et al (1987)	Job context	Related

Appendix 3 (Cont'd)

Researcher	Variable	Relationship
Mottaz (1988)	Task involvement and task significance	Related
Steers (1977)	Optional interaction	Related
Welsch and LaVan (1981)	Power and teamwork	Related
Pierce and Dunham (1987)	Job complexity	Related
Stevens et al (1978)	Skill levels of subordinates	Related
Mathieu (1988)	Skill variety	Related
Stevens et al (1978)	Years on position	Related
Stevens et al (1978)	Technical skills in promotion	Not related
Mathieu (1988)	Skill variety	Related
Hrebiniak and Alutto (1972), Bartol (1979), O'Reilly and Caldwell (1980), Farrell and Rusbult (1981), Welsch and LaVan (1981), Alvi and Ahmed (1987), and Mottaz (1988)	Reward systems/policies, advancement or promotion opportunities	Related
Parasuraman and Nachman (1987)	Felt stress	Related
Hall et al (1970)	Higher order needs and self-fulfilment	Related
Mathieu (1988)	Training variety	Related

Appendix 4

Relationship between Job Characteristics/Roles and
Professional Commitment

Researcher	Variable	Relationship
Bartol (1979)	Role stress	Not related
Parasuraman and Nachman (1987)	Felt stress	Related
Stevens et al (1978)	Work overload	Related
Stevens et al (1978)	Years on current position	Related
Stevens et al (1978)	Importance of performance for promotion	Related
Steven et al (1978)	Technical skill in promotion	Not related
Aranya and Amernic (1981)	Professional-organizational conflict	Related

Relationship between Work Experience and
Organizational Commitment

Researcher	Variable	Relationship
Brief and Aldag (1980), Welsch and LaVan (1981), Morris and Sherman (1981), Parasuraman and Nachman (1987), Luthans et al (1987), Glisson and Durick (1988), and Mottaz (1988)	Leadership or supervision	Related
Gouldner (1957-1958), Lewis (1967), Sheldon (1971), and Weiner (1982)	Social involvement or social life among staff	Related
Patchen (1970), Buchanan (1974), Marsh and Mannari (1977), Shoemaker et al (1977), Alvi and Ahmed (1987), and Mottaz (1988)	Peer group cohesiveness or solidarity with co-workers	Related
Farrell and Rusbult (1981), and Rusbult and Farrell (1983)	Cost value, rewards and alternative value	Related
Hrebiniak and Alutto (1972), Buchanan (1974), Steers (1977), and Glisson and Durick (1988)	Organizational dependability	Related
Pierce and Dunham (1987)	Previous job experience	Related
Hall et al (1970)	Self-identity	Related
Hall and Schneider (1972)	Self- fulfilment needs	Related
Buchanan (1974), Steers (1977), and DeCotiis and Summers (1977)	Met expectations	Related
Brown (1969), Buchanan (1974), and Steers (1977)	Personal power or personal importance	Related
Buchanan (1974), and Steers (1977)	Group attitudes	Related

Appendix 5 (cont'd)

Researcher	Variable	Relationship
Patchen (1970)	Chances of using one's ability	Related
Buchanan (1974)	Self-image	Related
Lee (1971), and Pierce and Dunham (1987)	Sense of experienced responsibility	Related
Pierce and Dunham (1987)	Job expectation	Related
Salancik and Pfeffer (1978), and Bateman and Strasser (1984)	Social information processing	Related
Welsch and LaVan (1981)	Number of professional journals read	Related
Lewis (1967), and Cornwell and Grimes (1987)	Number of publications published	Related
Hrebiniak and Alutto (1972)	Interpersonal trust	Related
Rotondi (1975a)	Internal group identification	Not related
Buchanan (1974)	Work commitment norms	Related
Rotondi (1975b)	Internal and external work group identifications	Related
O'Reilly and Caldwell (1981)	Job alternatives	Related
Cornwell and Grimes (1987)	Number of offices held in professional associations	Related
Welsch and LaVan (1981)	Membership in professional organizations	Not related

Appendix 5 (cont'd)

Researcher	Variable	Relationship
Welsch and LaVan (1981)	Professional meetings	Not related
Welsch and LaVan (1981)	Internal and external seminars	Not related
Shoemaker et al (1977)	Number of locations assigned	Related

Relationship between Work Experience and
Professional Commitment

Researcher	Variable	Relationship
Becker and Carper (1956)	Technical interest and skills	Related
Becker and Carper (1956)	Social involvement	Related
Sheldon (1971)	Professional skills	Related
Hrebiniak and Alutto (1972)	Intention to seek an advance degree	Related
Parasuraman and Nachman (1987)	Felt stress	Related
Cornwell and Grimes (1987)	Number of publications published and number of offices held in professional associations	Related
Patchen (1970)	Perception of organizational interests	Related
Shoemaker et al (1977)	Number of locations assigned	Related
Shoemaker et al (1977)	Solidarity	Related

Appendix 7

Relationship between Organizational Structure and
Organizational Commitment

Researcher	Variable	Relationship
Gouldner (1957-1958)	Use of organizational rules and regulations	Related
Lewis (1967), Brown (1969), Patchen (1970), Welsch and LaVan (1981), and DeCotiis and Summers (1987)	Participation in decision making	Related
Franklin (1975)	Power to control employees	Related
Welsch and LaVan (1981), and DeCotiis and Summers (1987)	Organization communication	Related
Alvi and Ahmed (1987)	Centralization of authority	Related
Stevens et al (1978)	Centralization of authority	Not related
Glisson and Durick (1988)	Work group size and work group budget	Related
Stevens et al (1978)	Organizational size	Not related
Stevens et al (1978)	Percent of supervision	Not related
Welsch and LaVan (1981)	Goal setting	Related
Alvi and Ahmed (1987)	Type of organization	Related
Glisson and Durick (1988)	Type of service	Related

Relationship between Organizational Structure
and Professional Commitment

Researcher	Variable	Relationship
Stevens et al (1978)	Organizational size	Not related
Stevens et al (1978)	Percent of supervision	Not related
Stevens et al (1978)	Centralization of authority	Not related

Appendix 9

In this section you are requested to kindly provide some information about yourself. Please tick (✓) the appropriate blank boxes.

1. Sex

Male

0	
---	--

Female

1	
---	--

2. Age

Less than 20 years

0	
---	--

20 - 24 years

1	
---	--

25 - 29 years

2	
---	--

30 - 34 years

3	
---	--

35 - 39 years

4	
---	--

40 - 44 years

5	
---	--

45 years and above

6	
---	--

3. Marital Status

Single

0	
---	--

Married

1	
---	--

Others

2	
---	--

4. Number of dependents (i.e. people who depend on you financially)

None

0	
---	--

One

1	
---	--

Two

2	
---	--

More than two

3	
---	--

5. Ethnic Group

Chinese

0	
---	--

Malay

1	
---	--

Indian

2	
---	--

Others

3	
---	--

6. Religion

Buddhist

0	
---	--

Christian

1	
---	--

Hindu

2	
---	--

Muslim

3	
---	--

Others

4	
---	--

7. Years of nursing experience
(Since the time you joined the service)

Under 1 year

0	
---	--

1 - 3 years

1	
---	--

4 - 6 years

2	
---	--

7 - 9 years

3	
---	--

10 - 12 years

4	
---	--

13 - 15 years

5	
---	--

16 years and above

6	
---	--

8. Length of employment in present hospital/clinic

Under 1 year

0	
---	--

1 - 3 years

1	
---	--

4 - 6 years

2	
---	--

7 - 9 years

3	
---	--

10 - 12 years

4	
---	--

13 - 15 years

5	
---	--

16 years and above

6	
---	--

Appendix 9 (Cont'd)

9. Current job title

Pupil Assistant Nurse

0	
---	--

Midwife

1	
---	--

Assistant Nurse

2	
---	--

Student Nurse

3	
---	--

Staff Nurse

4	
---	--

Nursing Officer

5	
---	--

Higher Nursing Officer

6	
---	--

Principal Nursing Officer

7	
---	--

Others () Please specify

8	
---	--

10. Hospital/clinic ownership

Private

0	
---	--

Government

1	
---	--

11. Salary

Under \$500

0	
---	--

\$500 - 999

1	
---	--

\$1000 - 1499

2	
---	--

\$1500 - 1999

3	
---	--

\$2000 - 2499

4	
---	--

\$2500 - 2999

5	
---	--

\$3000 and above

6	
---	--

12. Educational Background

Not completed secondary education

0	
---	--

Completed GCE "O" or equivalent

1	
---	--

Completed GCE "A" or equivalent

2	
---	--

Completed college education

3	
---	--

Completed university education

4	
---	--

13. Nature of health care provided by your hospital/clinic
- | | | |
|-------------|----------------------------|--------------------------|
| General | <input type="checkbox"/> 0 | <input type="checkbox"/> |
| Specialised | <input type="checkbox"/> 1 | <input type="checkbox"/> |
14. Opportunities provided by your present organization for further education (e.g. attending courses)
- | | | |
|------|----------------------------|--------------------------|
| Good | <input type="checkbox"/> 0 | <input type="checkbox"/> |
| Rare | <input type="checkbox"/> 1 | <input type="checkbox"/> |
| None | <input type="checkbox"/> 2 | <input type="checkbox"/> |
15. Your intention to seek higher education related to your profession in the near future
- | | | |
|-----------------|----------------------------|--------------------------|
| Yes, definitely | <input type="checkbox"/> 0 | <input type="checkbox"/> |
| Likely | <input type="checkbox"/> 1 | <input type="checkbox"/> |
| Unlikely | <input type="checkbox"/> 2 | <input type="checkbox"/> |
| No, definitely | <input type="checkbox"/> 3 | <input type="checkbox"/> |
16. Your interest in reading professional nursing publications
- | | | |
|-----------------------|----------------------------|--------------------------|
| Very interested | <input type="checkbox"/> 0 | <input type="checkbox"/> |
| Interested | <input type="checkbox"/> 1 | <input type="checkbox"/> |
| Not quite interested | <input type="checkbox"/> 2 | <input type="checkbox"/> |
| Not interested at all | <input type="checkbox"/> 3 | <input type="checkbox"/> |
17. Member of professional association (e.g. nursing association)
- | | | |
|--------------------------------|----------------------------|--------------------------|
| Yes | <input type="checkbox"/> 0 | <input type="checkbox"/> |
| Will be one in the near future | <input type="checkbox"/> 1 | <input type="checkbox"/> |
| No | <input type="checkbox"/> 2 | <input type="checkbox"/> |

Appendix 10

Assume that you have been offered a job as a nurse by another hospital/clinic. Would you leave your present HOSPITAL/CLINIC under any of the following conditions. Please tick (✓) your response in the following blank boxes. Please tick only one box for each question.

	Yes, I will definitely leave my present hospital/clinic	Uncertain (Undecided)	No, I will definitely not leave my present hospital/ clinic
1. With no increase in pay in the new organisation	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
2. With a slight increase in pay in the new organisation	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
3. With a large increase in pay in the new organisation	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
4. With no more freedom to be professionally creative in the new organization	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
5. With slightly more freedom to be professionally creative in the new organization	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
6. With much more freedom to be professionally creative in the new organisation	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>

Appendix 10 (Cont'd)

- | | | | | |
|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|
| 7. | With the same status in the new organisation | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |
| 8. | With slightly higher status in the new organisation | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |
| 9. | With much higher status in the new organisation | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |
| 10. | To work with people who are a little friendlier in the new organisation | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |
| 11. | To work with people who are more than a little friendlier in the new organisation | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |
| 12. | To work with people who are much more friendly in the new organisation. | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |

Appendix 11

Assume that you have been offered a new job in a non-nursing profession. Would you leave your present PROFESSION (NURSING) under any of the following conditions. Please tick (✓) your response in the following blank boxes. Please tick only one box for each question.

	Yes, I will definitely leave my present profession	Uncertain (Undecided)	No, I will definitely not leave my present profession
1. With no increase in pay in the new job	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
2. With a slight increase in pay in the new job	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
3. With a large increase in pay in the new job	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
4. With no more freedom to be professionally creative in the new job	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
5. With slightly more freedom to be professionally creative in the new job	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
6. With much more freedom to be professionally creative in the new job	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>

Appendix 11 (Cont'd)

- | | | | | |
|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|
| 7. | With the same status
in the new job | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |
| 8. | With slightly higher
status in the new job | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |
| 9. | With much higher status
in the new job | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |
| 10. | To work with people who
are a little friendlier
in the new job | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |
| 11. | To work with people who
are more than a little
friendlier in the new
job | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |
| 12. | To work with people who
are much more friendly
in the new job | <input type="checkbox"/> 0 <input type="checkbox"/> | <input type="checkbox"/> 1 <input type="checkbox"/> | <input type="checkbox"/> 2 <input type="checkbox"/> |

Appendix 12

Below are various aspects of your job (e.g. work, pay, promotion etc.) and the words or phrases which describe each of the aspects. Please read the words or phrases and think about your job carefully. If the word or phrase in each item below describes your feeling toward your job, tick (✓) a Y for Yes in the blank Y box. If the item does not describe how you feel about your job tick a N for No in the blank N box. However, if you do not know how you feel exactly about the item, tick a ? for Uncertain in the blank ? box. Please tick only one box for each word or phrase.

WORK

	<u>Y</u>		<u>?</u>		<u>N</u>	
Fascinating	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>
Satisfying	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>
Boring	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>
Good	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>
Creative	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>
Respected	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>
Hot (pressure from work)	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>
Pleasant	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>
Useful	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>
Tiresome	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>
Healthful	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>

Appendix 12 (Cont'd)

	<u>Y</u>	<u>?</u>	<u>N</u>
Challenging	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
On your feet (taxing)	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Frustrating	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Simple	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Endless	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Gives sense of accomplishment	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>

SUPERVISION (The way you see your Supervisor)

	<u>Y</u>	<u>?</u>	<u>N</u>
Asks my advice	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Hard to please	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Impolite	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Praises good work	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Tactful	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Influential	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Up-do-date	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Doesn't supervise enough	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Quick tempered	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>

Appendix 12 (Cont'd)

	<u>Y</u>	<u>?</u>	<u>N</u>
Tells me where I stand	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Annoying	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Stubborn	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Knows the job well	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Bad	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Intelligent	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Leaves me on my own	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Lazy	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Around when needed	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>

PAY

	<u>Y</u>	<u>?</u>	<u>N</u>
Income adequate for normal expenses	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Barely live on income	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Bad	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Income provides luxuries	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>
Insecure	<input type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input type="checkbox"/> 2 <input type="checkbox"/>

	<u>Y</u>	<u>?</u>	<u>N</u>
Less than I deserve	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
Highly paid	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
Underpaid	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>

PROMOTIONS

	<u>Y</u>	<u>?</u>	<u>N</u>
Good opportunity for advancement	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
Opportunity somewhat limited	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
Promotion on ability	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
Dead end job	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
Good chance for promotion	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
Unfair promotion policy	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
Infrequent promotions	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
Regular promotions	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
Fairly good chance for promotion	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>

CO-WORKERS

	<u>Y</u>	<u>?</u>	<u>N</u>
Stimulating	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>
Boring	<input checked="" type="checkbox"/> 0 <input type="checkbox"/>	<input type="checkbox"/> 1 <input type="checkbox"/>	<input checked="" type="checkbox"/> 2 <input type="checkbox"/>

Appendix 12 (Cont'd)

	<u>Y</u>	<u>?</u>	<u>N</u>
Slow	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Ambitious	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Stupid	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Responsible	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Fast	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Intelligent	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Easy to make enemies	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Talk too much	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Smart	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Lazy	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Unpleasant	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
No privacy (give me no privacy)	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Active	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Narrow interests	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Loyal	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>
Hard to meet	<input type="text" value="0"/> <input type="text"/>	<input type="text" value="1"/> <input type="text"/>	<input type="text" value="2"/> <input type="text"/>

RESEARCH ON COMMITMENTS IN ORGANIZATIONS

Dear Sir/Madam

We would like to solicit your help and support to conduct a survey. The objective of this survey is to ascertain how professionals, e.g. nurses like you feel about the conditions under which you work and the effects on your perception of nursing as a profession. On the basis of this knowledge, the conditions under which you and your colleagues work may be improved. Please read each question in the attached questionnaires carefully and answer as correctly as possible. There is no right or wrong answer. The correct response is how you personally feel about each question.

The researchers are on the staff of the School of Management, National University of Singapore and the Civil Service Institute, Singapore. They do not have anything to do with your organisation's administration. So feel free to answer as truthfully as possible.

The questionnaires are anonymous. Your responses will be treated in absolute confidence. They will be used only for the research purpose. Only group data or information will be used. Therefore, there is no way of identifying individual respondents.

Kindly return your completed questionnaires by the attached self-addressed envelope at your earliest convenience to the following address:-

Mr Ang Chin Tong
Civil Service Institute
Heng Mui Keng Terrace
SINGAPORE 0511

As incomplete questionnaires are not usable, we would be grateful if you would kindly see that all questions are answered completely.

If you would like to make enquiries, please telephone Mr Ang Chin Tong of the Civil Service Institute at 7729975, you are always welcome.

Thank you for your support and co-operation.

Researchers:

Dr Joseph M. Putti (Associate Professor)
Dr Samuel O. Aryee (Lecturer)
School of Management
National University of Singapore
Ang Chin Tong (Programme Manager)
Civil Service Institute

Demographic Data of Respondents
(Entire Population N = 2424)

Description	No of Person	Percentage
<u>Sex</u>		
Male	199	8.00%
Female	2225	92.00
	-----	-----
	2424	100.00%
<u>Age</u>		
Below 20 years	57	2.00%
20 - 24	513	21.10
25 - 29	360	14.80
30 - 34	477	19.70
35 - 39	293	12.00
40 - 44	343	14.00
Above 44	381	16.00
	-----	-----
	2424	100.00%
<u>Marital Status</u>		
Single	1046	43.00%
Married	1356	56.00
Others	22	1.00
	-----	-----
	2424	100.00%
<u>No of Dependents</u>		
None	571	24.00%
One	438	18.00
Two	672	28.00
More than two	743	30.00
	-----	-----
	2424	100.00%
<u>Ethnic Group</u>		
Chinese	1640	68.00%
Malay	418	17.00
Indian	288	12.00
Others	77	3.00
	-----	-----
	2424	100.00%

Appendix 14 (Cont'd)

Description	No of Person	Percentage
<u>Religion</u>		
Buddhist	613	25.00%
Christian	826	34.00
Hindu	181	7.00
Muslim	445	18.00
Others	358	15.00
Not Specified	4	0.00
	-----	-----
	2424	100.00%
<u>Nursing Experience</u>		
Below 1 year	99	4.10%
1 - 3	329	13.57
4 - 6	274	11.30
7 - 9	224	9.24
10 - 12	188	7.76
13 - 15	327	13.49
Above 16	982	40.51
	-----	-----
	2424	100.00%
<u>Length of Employment in Present Hospital</u>		
Below 1 year	389	16.00%
1 - 3	629	25.95
4 - 6	417	17.20
7 - 9	206	8.50
10 - 12	137	5.65
13 - 15	182	7.50
Above 16	463	19.10
Not Specified	1	0.00
	-----	-----
	2424	100.00%
<u>Current Job Title</u>		
Pupil Assistant Nurse	142	5.86%
Midwife	45	1.86
Assistant Nurse	523	21.58
Student Nurse	249	10.27
Staff Nurse	1216	50.17
Nursing Officer	228	9.41
Higher Nursing Officer	17	0.70
Principal Nursing Officer	4	0.17
	-----	-----
	2424	100.00%

Appendix 14 (Cont'd)

Description	No of Person	Percentage
<u>Hospital Ownership</u>		
Private	373	15.40%
Government	2051	84.60
	-----	-----
	2424	100.00%
<u>Salary</u>		
Under \$500	187	7.71%
\$500 - 999	767	31.64
\$1000 - 1499	903	37.25
\$1500 - 1999	355	14.65
\$2000 - 2499	178	7.34
\$2500 - 2999	28	1.16
Above \$3000	6	0.25
	-----	-----
	2424	100.00%
<u>Educational Background</u>		
Not completed secondary education	108	4.46%
Completed GCE "O" or equivalent	2067	85.27
Completed GCE "A" or equivalent	227	9.36
Completed College education	18	0.74
Completed University education	4	0.17
	-----	-----
	2424	100.00%

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