

# **The Effect of Workplace Exposure on Professional Commitment: A Longitudinal Study of Nursing Professionals.**

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Philosophy**

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## **Abstract**

The behaviour of employees is increasingly being recognised as the critical factor in achievement of organisational effectiveness. Therefore, the need to address inefficiencies that are derived from the organisation-employee relationship is being recognised as important to organisational success. For many years the concept of organisational commitment provided the means to develop theory in relation to organisation-employee relationships. More recently, however, other types of work-related commitments have been identified as having importance to the organisation-employee relationship.

In the contemporary political-economic context, professionals are increasingly becoming employees of organisations which operate according to market or quasi-market principles. There are some fundamental differences between professional occupations and non-professional occupations. These differences may have consequences for the relationship between professional employees and their employing organisation. The differences may also have consequences for other work-related outcomes for professional employees in ways that are different from the work-related outcomes of non-professional employees. Importantly, for professional employees commitment to the profession is developed during the pre-workplace entry educational experiences and may have consequences for the retention of professional employees within organisations, as well as retention within the profession. Therefore, the commitment of professional employees to their occupation may be both an antecedent to and a consequence of other work-related outcomes. However, to date, professional commitment has not been studied from a developmental perspective and the effect of workplace exposure on professional commitment is not understood.

This thesis reports the findings of a study in which a theoretical model of the relationship between professional commitment prior to workplace entry and professional turnover intention was evaluated using path analysis. The relationships included in the model were between commitment to the profession as both an antecedent to, and a consequence of organisational-professional conflict, job satisfaction and organisational commitment, as well as the relationship that each of

these variables may have to organisational turnover intention and professional turnover intention. A repeated measures design was used with a sample of nursing professionals. Professional commitment before entry to the workplace was measured, and after a period of workplace exposure, professional commitment was again measured, as well as the other work-related outcomes identified in the model. The Blau (2003) occupational commitment measure was used to measure the pre-and-post workplace entry levels of professional commitment. The thesis also examined the factor structure of the Blau (2003) occupational commitment measure.

The results of the model evaluation indicated that it is a plausible model of the identified relationships. Examination of the factor structure of the Blau (2003) occupational commitment measure indicated that it is best represented by five rather than four components. This research found that professional commitment was quite stable in the initial period of workplace exposure. The research findings also indicated that the relationship between professional commitment and organisational commitment was mediated by job satisfaction and that organisational-professional conflict and job satisfaction were directly related to organisational commitment. The research found that job satisfaction and professional commitment after a period of workplace exposure were related to organisational turnover intention, but that organisational commitment was not. The final major research finding was that organisational turnover intention was the only workplace variable in the model that was directly related to professional turnover intention.

This research has contributed to the organisational behaviour literature through the development and initial evaluation of a model of the relationship between professional commitment prior to workplace entry and professional turnover intention. The results of the model suggested that when organisations provide professional employees with workplace experiences that are professionally, as well as personally satisfying, they promote retention of professional employees with their own organisation, as well as retention of professionals within the profession.

This research recommends that for organisations that employ professionals, the model of the organisation-professional employee relationship that is likely to promote the retention of professional employees both within the organisation and within the profession, is a partnership model. Conflict resolution principles are recommended to inform the partnership model of the organisation-professional employee relationship. In addition, the empowering leadership style is recommended

for organisations that employ professionals, because it is better matched to the employment mode and characteristics of professional employees.

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# **1 Introduction**

This chapter introduces the research that is reported in this thesis. It identifies the background to the research; the research problem and the research questions; the justification for the research and the methodology and methods used. This chapter provides an overview of the chapters of the thesis and definitions of the key terms used in the thesis are also provided.

## **1.1 Background to the Research**

In Australia, there are skill shortages in a number of professions (Department of Employment and Workplace Relations (DEWR) 2004). Skill shortages are considered to exist ‘...when employers are unable to fill or have considerable difficulty in filling vacancies for an occupation... at current levels of remuneration and conditions of employment, and reasonably accessible location’ (Department of Education Science and Training (DEST) 2002, p. 4). Included in the occupations with skills shortages are the professional occupations of Engineering, Accountancy, Nursing, Dentistry, Pharmacy and Allied-Health Professionals (DEWR 2004). The Department of Science, Education and Training (DEST 2002) indicates that a contributor to skills shortages is the movement of workers, qualified in a particular skill, into other skilled occupations. It does not, however, distinguish between professional and non-professional occupations, nor does it indicate the contribution of the movement of professionals from one profession to another non-professional occupation to the skills shortages within professions. While there is some information available regarding the movement of workers among certain trades, the DEST report indicates that there is a ‘...significant information gap in our understanding of ‘how many’ and ‘why’ workers leave an occupation’ (DEST 2002, p. 6). Additionally, Sullivan (1999) notes that research in relation to motivators for adults to change occupations, is scarce.

There is a need to increase knowledge in relation to the movement of workers among occupations, particularly where this movement exacerbates skill shortages. This research argues that professional employees have distinct needs in the workplace. It also argues that where the skill shortages are among professional occupations, knowledge regarding the specific needs of professional employees

needs to be increased to ensure that appropriate management practices are developed in order to increase retention of professional employees (Lee, Carswell & Allen 2000).

## **1.2 The Research Problem, and Research Questions**

Changes to the global economy that have taken place in recent decades, which include globalisation, restructuring, outsourcing, and downsizing have drastically altered the traditional paradigm of mutual employee-organisation loyalty (Meyer, Allen & Topolnytsky 1998). Driven by their interest in behavioural outcomes in relation to organisational commitment, much of the literature in relation to work-related commitments has, to date, given primacy to commitment to the organisation over the other targets of work-related commitment (Brooks & Wallace 2006). While other targets of work-related commitment have been identified, they are generally used to add to the explanation of why employees remain with or choose to leave an organisation (Gallagher & Parks 2001). Thus commitment to the organisation has been considered the primary commitment to which all other work-related commitments relate. However, as Gallagher and Parks (2001) point out, the literature in relation to organisational commitment is based on the assumption that the relationship between the organisation and the employee is ongoing or continuing; an assumption, which they argue, is unrealistic, as well as outdated in the current economic environment. Therefore, extant theory regarding the development of organisational commitment and the concomitant beliefs regarding the development of other targets of work-related commitment are possibly based on assumptions about employee behaviour in response to workplace conditions that may be rapidly becoming obsolete.

In the contemporary organisation, the key to organisational retention may be to enhance the effect of the employee's commitment to targets of work-related commitment other than the organisation (Meyer, Allen & Topolnytsky 1998). A number of authors, (e.g. Cooper-Hakim & Viswesvaran 2005; Lee, Carswell & Allen 2000; Mir, Mir & Mosca 2002) have suggested that under the conditions of the contemporary work environment, employees are shifting their focus of commitment from the organisation to their occupation or profession. The recent global economic changes have transformed the relationship between employees and their organisations, therefore, there is a need to rethink the experiences that the

organisation provides to the employee to maintain commitment to the organisation (Meyer, Allen & Topolnytsky 1998).

Another result of the changes to the global economy is that increasingly, members of professional occupations are working as employees of non-professional organisations in the contemporary workplace. Professionals are being employed in the private sector because their professional knowledge and expertise is needed to deal with the complexities of the highly competitive and unstable globalised market (Hanlon 1997). In addition, public sector organisations, in which many professionals have been traditionally employed, are seeking to operate according to quasi-market principles (Exworthy & Halford 1999b). Furthermore, in response to broader socio-economic changes many occupations have become professionalised (Middlehurst & Kennie 1997; Neal & Morgan 2000). Thus, it may be that employees are not only shifting the focus of their work-related commitment to their occupation but that for many employees' the relationship that they have with their occupation is also different from that which is generally understood in the organisational behaviour research literature.

Occupational commitment has been consistently identified as the best predictor of intent to change occupations (Blau 2000; Cohen 1998; Lee, Carswell & Allen 2000). However, the occupational commitment literature does not make a clear distinction between professional and non-professional occupations. It therefore, does not account for the differences in the relationship that members of professional occupations have to their occupation from members of non-professional occupations.

In order to gain their professional qualifications and thus be granted entry to the profession and licensure to practise, professionals are educated over a sustained period of time at the tertiary education level (Neal & Morgan 2000). During this time they are socialised to that profession and develop commitment to it (Beck & Wilson 2001; Friedson 2001). Thus, unlike members of non-professional occupations, whose exposure to the organisation and the occupation usually occur concurrently and their socialisation to both entities coincides, members of professional occupations have already experienced a sustained period of exposure to the professional occupation and socialisation to it, prior to their entry to the employing organisation (Beck & Wilson 2001). This suggests that for professional employees, professional commitment may be considered to be an antecedent to work-related experiences, and in particular may be considered to be an antecedent to organisational commitment.

Therefore, the difference between the occupational socialisation of members of professional occupations and non-professional occupations means that the commitment of professional employees to their occupation, and its relationship to other work-related outcomes, may need to be understood differently from the commitment of non-professional employees to their occupation and its relationship to other work-related outcomes.

Furthermore, the values of professionalism to which members of professional occupations are socialised during their professional education may clash with the values of the organisation in which members of professional occupations are employed (Shafer, Park & Liao 2002). This may in part be because the orientation of professionalism is to the provision of service, whereas the orientation of the organisations in which they are employed may be to profit-maximisation or cost minimisation. This conflict between the organisational and professional values has been shown to have consequences for the organisational commitment of professional employees (Bamber & Iyer 2002; Shafer, Park & Liao 2002), and may have consequences for the professional commitment of professional employees.

The dynamics of the development and maintenance of professional commitment may also have relevance to professional, as well as, organisational turnover. However, professional commitment has not yet been studied from a developmental perspective (Beck & Wilson 2001). Therefore, its relationship with organisational commitment is not known from a developmental standpoint. Nor is its relationship with organisational and/or professional turnover intention understood.

Lee, Carswell and Allen (2000) have suggested that work-related experiences may affect commitment to the profession. On the other hand, Mueller and Lawler (1999) have argued that because the profession is not a formal unit of the organisation then commitment to the profession is unchanged by workplace experiences. Knowledge of the development and maintenance of professional commitment is scant and increased knowledge may be used to inform management policy and practice in relation to retention of professional employees in organisations and in professions. Such knowledge is particularly relevant to professions where there are workforce shortages.

The purpose of the research can be considered in terms of four fundamental research questions. These are:

1. What are the relationships between professional commitment organisational-professional conflict, job satisfaction and organisational commitment?
2. What is the relationship between exposure to the workplace (in terms of organisational-professional conflict, job satisfaction and organisational commitment) and professional commitment?
3. Which of these variables are related to organisational turnover intention?
4. Which of these variables are related to professional turnover intention?



### **1.3 Justification for the Research**

Historically, organisational commitment theory and the related research have made important contributions to the understanding of organisational behaviours, in relation to matters such as work performance, organisational citizenship behaviours, organisational retention and organisational turnover intention (Meyer & Allen 1997). Underpinning organisational commitment theory and research is the assumption that employees who are committed to the organisation will more effectively meet organisational requirements and will be less likely to leave the organisation (Mathieu & Zajac 1990). Studying the antecedents and consequences of organisational commitment has been an important area of research, which has contributed to organisational behaviour theory, particularly in relation to organisational turnover intention (Meyer & Allen 1997).

However, many of the assumptions on which much of this theory is based may have become obsolete in the changed social and economic circumstances of the twenty-first century. In the traditional paradigm of organisational commitment theory, the organisation was cast as the only target of employee's work-related commitment (Gallagher & Parks 2001). Concessions were made after recognition of Reichers' (1985) theoretical contribution that the organisation was comprised of multiple constituencies to which an employee may be committed. However, because organisational commitment research tends to have an organisational focus (Brooks & Wallace 2006), the organisation is generally cast as the primary target of employees' several work-related commitments, in theory regarding work-related commitments (Gallagher & Parks 2001). Thus, although the work-related commitment research has recognised that employees may have several targets of work-related commitment, the research has continued to have an organisational commitment focus and has perpetuated the assumption that employees' primary target of work-related commitment is the organisation. More recently, however, Lee, Carswell and Allen (2000) have proposed that in the light of the reorganisation of the social and economic circumstances relating to work, employees are shifting the primary target of commitment from the organisation to their occupation.

Furthermore, in the twenty-first century, the organisation-employee relationship is not only likely to be characterised by greater uncertainty about the

longevity of the relationship, but the terms of the relationship may have been changed because the employee is now more likely to be a member of a profession. While the terms of the altered organisation-employee relationship, when the employee is a member of a profession, have been considered and researched from a sociological perspective (e.g. Dent et al. 2004; Kitchener, Kirkpatrick & Whipp 2000; Hinings & Greenwood 2002), there has been scant research from the organisational behavioural perspective.

Despite the workforce shortages that are affecting a number of occupations in Australia (DEWR 2004) the reasons relating to intent to change from working in one occupation to another occupation has received little empirical research attention to date (Blau & Lunz 1998; Blau, Tatum & Ward-Cook 2003; Sullivan 1999). The body of research literature that relates in any way to the choice to leave a professional occupation is, on the whole, limited to research that relates to occupational or career commitment. Occupational commitment has been consistently identified as the strongest predictor of intent to change occupations (Blau 2000; Cohen 1998; Lee, Carswell & Allen 2000). However, the occupational commitment literature is not specific to professions and the researchers have purposely used the terms 'occupation' or 'career' to be inclusive of professional and non-professional occupations (Carson & Bedeian 1994; Lee, Carswell & Allen 2000). This thesis argues, however, that professional employees have unique needs in the workplace and that management practices specific to their needs are required. There is therefore, a need for research that expressly examines the professional commitment of professional employees and distinguishes commitment of professionals to their occupation from the commitment of non-professionals to their occupation.

This research draws from the literature in relation to work-related commitment and organisational-professional conflict research to build and evaluate a theoretical model of the relationships between professional commitment, organisational-professional conflict, job satisfaction and organisational commitment from a developmental perspective. The model also includes the relationships between these variables and organisational turnover intention and professional turnover intention.

The profession of nursing was considered to provide an appropriate context for the investigation of the relationships identified in the research. This is because high levels of job dissatisfaction, turnover between health care organisations and loss

of nurses from the nursing workforce are contributing to the current shortage of nurses in Australia and most countries throughout the world (Aiken et al. 2001; Albaugh 2003; Goodin 2003; Johnson & Preston 2001; Murray 2002). Furthermore, the nursing literature is rich with discussion of the conflict between the professional values that are associated with nursing and the organisational environments in which nursing takes place (Apker, Ford & Fox 2003; Austin, Bergum & Goldberg 2003; Clark 1997; Corley 2002; Doane 2002; MacIntosh 2003; Philpin 1999). Importantly, this research distinguishes between those members of the occupation of nursing who are professionals and those members of the occupation who are non-professional.

## **1.4 Methodology and Methods**

The methodology of this research is quantitative. The research has a repeated measures design (Creswell 1994). The research is based on a self-report survey completed at Time One by a sample of nursing professionals who were about to enter, or had only recently entered, the workplace for the first time as a qualified, licensed professionals and again at Time Two after a period of approximately six months exposure to the workplace. Workplace exposure constitutes a 'natural intervention' in the research design, therefore, the research may also be considered to have a quasi-experimental design (Creswell 1994).

The survey measures used were:

- The Blau (2003) Occupational Commitment Measure
- The Organisational-Professional Conflict Scale (Shafer, Park & Liao 2002)
- The Organisational Commitment Scale (Bozeman & Perrewe 2001),
- Job Satisfaction (Price 2001)
- Organisational Turnover Intention (Bozeman & Perrewe 2001)
- Professional Turnover Intention adapted from (Bozeman & Perrewe 2001).

These measures are discussed in detail in Chapter Four, Section 4.4.

The analysis of the data involves three stages. These are:

1. Examination of the Blau (2003) occupational commitment measure using exploratory and confirmatory factor analysis, and examination of the scale reliability (Cronbach's Alpha) of all measures used.
2. Examination of differences between the Time One and Time Two measures of the Blau (2003) occupational commitment measure using a number of parametric statistical methods.
3. Evaluation of the theoretical model and the relationships between the variables using path analysis.

Stages One and Two of the data analysis are reported in detail in Chapter Five. Stage Three is reported in detail in Chapter Six. The theoretical model of the proposed relationships among the variables is identified and considered in detail in Chapter Four, Section 4.3.

## **1.5 Outline of the Thesis**

This thesis has seven chapters. This first chapter introduces the research, and outlines its main aims, as well as the methodology and methods used to conduct the research. This chapter provides definitions of the key terms used in the research and outlines the scope and limitations of the research. Chapter Two considers issues that relate to the research. Chapter Two reviews literature in relation to work-related commitment. It identifies the distinction that is made between targets of work-related commitment and the components of commitment in the work-related commitment literature. Also that commitment to the organisation is generally assumed to be the target of commitment to which all other work-related commitment targets ultimately relate. Literature that considers the measurement of occupational commitment is reviewed in Chapter Two and matters that are relevant to the developmental differences between the occupational commitment of members of professional and non-professional occupations are identified.

Chapter Two also considers the ideals of professionalism and notes that the conditions associated with membership of a professional occupation distinguish members of professional occupations from members of non-professional occupations. These differences are therefore, likely to result in differences in the relationship of members of professional occupations with their occupation and their employing organisation from the relationship of members of non-professional occupations with their occupation and their employing organisation. Chapter Two delineates the meaning of the term ‘professional’ when it is used in this thesis. It also reviews literature in relation to organisational-professional conflict. The chapter identifies the small body of research that has investigated the relationship between organisational-professional conflict and organisational turnover intention. However, there appears to be no published research literature that has examined the relationship between professional commitment and organisational-professional conflict when professional commitment is considered as both an antecedent to and a consequence of organisational-professional conflict. In addition, the chapter identifies that there appears to be no published research literature in which the relationships between organisational-professional conflict, job satisfaction, organisational commitment, professional commitment, organisational turnover intention and professional turnover

intention have been simultaneously investigated. Chapter Two also identifies the workplace variables that may be relevant to the relationship between professional commitment and professional turnover intention and which are included in the theoretical model that has been developed for this research.

In Chapter Three, the reasons for the choice of the research sample are identified. The chapter identifies that within the occupation of nursing there are nursing professionals and non-professional nurses. To ensure that the sample population reflects the interests of the study (Aldridge & Levine 2001) the research sample is comprised entirely of nursing professionals. This chapter examines the reasons that underpin the world wide workforce shortages in the occupation of nursing and identifies that an important contributor to the workforce shortage is professional turnover.

Chapter Four provides a consideration of the methodology of the research and the methods that were implemented in the collection and analysis of the data. This chapter also provides a detailed discussion of the threats to the validity of the research and the means used to remedy or minimise those threats. Ethical considerations pertaining to the collection and storage of data in this research are also discussed.

Chapter Five is the first of the two chapters which report the results of this research. The first section of this chapter is devoted to the analysis of the factor structure of the Blau (2003) occupational commitment measure. This measure is considered to be applicable to both professional and non-professional occupations as is the Meyer, Allen and Smith (1993) measure of occupational commitment from which it was developed. The second section of Chapter Five examines the mean scores of the components of the Blau (2003) occupational commitment measure at the Time One and Time Two data collections and makes demographic analyses at each time of the data collection, as well as a repeated measures comparison of the component means.

Blau (2003) argued that the Blau (2003) occupational commitment measure has a four-factor structure, but the results of the confirmatory factor analysis in this sample demonstrated a five-factor structure. The results of the comparisons of the means of each occupational commitment component showed that the highest mean score of the five components of occupational commitment was found for the affective professional commitment component at both Time One and Time Two. This was

followed by the investment costs commitment component, the emotional costs commitment component, the normative commitment component and the limited alternatives commitment component. This pattern was unaltered at Time Two despite a significant decrease in the mean of the affective professional commitment component from Time One to Time Two and a significant increase in the mean of the limited alternatives commitment component.

Chapter Six reports the results of the evaluation of the theoretical model using path analysis. Estimations of the model were made using the full Blau (2003) occupational commitment measure, as well as its individual components. Because this research sampled members of a professional occupation, the commitment is referred to as professional commitment. The results identified a good fit between all estimations of the theoretical model and the data. However, the non-affective commitment component estimations of the model did not show significant relationships with other variables in the data and were not considered further. In terms of the fundamental research questions the results of the full Blau (2003) occupational commitment measure estimation of the model indicated that

1. Professional commitment prior to workplace entry is related to job satisfaction, and organisational-professional conflict is related to job satisfaction and organisational commitment.
2. Professional commitment is quite stable in the initial period of workplace exposure.
3. Job satisfaction and professional commitment after a period of workplace exposure are the factors that are related to organisational turnover intention.
4. Organisational turnover intention is the only factor that is related to professional turnover intention.

The results of the affective professional commitment component estimation of the model indicated that

1. Affective professional commitment prior to workplace entry is related to job satisfaction and organisational commitment, and organisational-professional conflict is related to job satisfaction and organisational commitment.
2. Affective professional commitment is less stable in the initial period of workplace exposure and is related to job satisfaction.
3. Job satisfaction and organisational commitment are the factors that are related to organisational turnover intention.

4. Affective professional commitment and organisational turnover intention are related to professional turnover intention.

Chapter Seven presents a discussion of the findings of the research and their implications for theory. It also makes recommendations for policy and practice in relation to the management of professional employees in the workplace. The theoretical implications of the research are that professional employees give precedence to commitment to profession over their commitment to the organisation. Furthermore, that organisational commitment is contingent on the workplace experiences that are provided by the employing organisation. Importantly, the findings of the research suggest that experiences which are both personally and professionally satisfying are needed to promote organisational commitment and to reduce organisational turnover intention.

The recommendation of the research, that a partnership model of management supported by conflict resolution principles and an empowering leadership style is the most appropriate to promote organisational and professional retention among professional employees, is made in Chapter Seven. Chapter Seven also makes recommendations for future research. These recommendations include further refinement of the measure of professional commitment, and research which is conducted over a longer period of time with a larger sample that includes members of more than one professional occupation to allow multi-group analyses.



## 1.6 Definitions used in the Research

**Job Satisfaction:** Job satisfaction is considered to be a positive emotional state (Jernigan, Joyce & Kohut 2002) or an attitude (Lok & Crawford 2001) that individuals have about their job or job experiences.

**Non-Professional Occupation:** A non-professional occupation is an occupation that has not sought or gained professional status. In this research, non-professional occupations are distinguished from professional occupations, which are those occupations that have gained and maintained professional status through the process of professionalisation (Neal & Morgan 2000).

**Nursing Professional:** In this research the term nursing professional refers to a nurse who has graduated from a three-year professional preparation period at a University and is licensed to practise as a nurse, by the professional association that regulates the profession of nursing in the relevant Australian State or Territory.

**Organisational Commitment:** A number of definitions of organisational commitment are evident in the literature (Mir, Mir, & Mosca 2002). The definition of organisational commitment that will be used in this research is that which originated with Porter, Steers, Mowday and Boulian (1974) and is that organisational commitment is ‘...the strength of an individual’s identification with and involvement in a particular organisation.’ (Bozeman & Perrewe 2001, p. 161). Three dimensions of organisational commitment are proposed in this conceptualisation. These are that the individual has a strong belief in and acceptance of the organisation’s goals and values, that the individual has a willingness or motivation to exert considerable effort on behalf of the organisation and that the individual has a strong desire to maintain membership in the organisation (Bozeman & Perrewe 2001; Mir, Mir & Mosca 2002).

**Organisational-Professional Conflict:** Organisational-professional conflict exists when an organisation’s values are incompatible with the values of the profession whose members are employed by that organisation (Bamber & Iyer 2002). Organisational-professional conflict may also be present when a professional’s employing organisation requires adherence to organisational norms that are incompatible with the ethics of the employee’s profession (Brierley & Cowton 2000).

**Organisational Turnover Intention:** Price (2001, p. 600) considers organisational turnover to be ‘...the movement of members across the boundaries of an organisation’ and notes that most turnover research attention has been given to members leaving an organisation rather than entering it. Price (2001) distinguishes voluntary turnover from involuntary turnover. In this research the term organisational turnover intention will indicate voluntary turnover intention.

**Professional:** In this research the term professional refers to members of an occupation that has exclusive jurisdiction and a legally protected position over a particular division of labour in both internal and external labour markets (Friedson 2001). This protected position is based on qualifying credentials gained through formal education which is obtained outside of the labour market (Friedson 2001). Furthermore, this education permits them to practise with independence and discretion within a particular discipline (Friedson 2001). The professional is also required to adhere to particular standards and professional ethics in the practice of their profession (Middlehurst & Kennie 1997). The education, practice standards and ethics of professionals are defined and monitored by a professional association which is formed by the members of the profession (Neal & Morgan 2000). In order to retain their membership within the profession and thus their license to practise, the professional is required to act in accordance with the work standards and ethical codes that are laid out by the professional association (Pearson et al 2002). Furthermore, where the work that organisations require employees to perform is defined and controlled by legislation that relates to professionals, the organisation is legally obliged to ensure that only licensed members of the relevant profession are employed to do that work.

**Professional Commitment:** This research defines professional commitment as the psychological link between a person and his or her profession. Lee, Carswell and Allen. (2000, p. 800) conceptualise occupational commitment as ‘... a psychological link between a person and his or her occupation’. They argue that a person with a stronger commitment to their occupation will have more positive feelings about their occupation and will identify with it more strongly than a person who has a weaker commitment. Occupational commitment is an inclusive term used in the literature to denote and investigate commitment in relation to all occupations whether professional or non-professional (Lee Carswell & Allen 2000; Snape &

Redman 2003). This research will distinguish commitment to a non-professional occupation from commitment to a professional occupation on the basis that commitment made to a profession is likely to be qualitatively different from commitment to a non-professional occupation. This is because entry to a profession requires significant prior investment in educational preparation where attitudes to the profession may be formed through the professional socialisation that is an integral part of professional education (Lee Carswell & Allen 2000). Additionally, the distinction between commitment to a non-professional occupation from commitment to a professional occupation is made in this research, because there are privileges and rewards associated with membership of a professional occupation that are not necessarily associated with membership of a non-professional occupation (Friedson 2001; Middlehurst & Kennie 1997).

**Professional Employee:** Professional employees are defined in this research as members of a professional occupation who practise their profession as employees of a public or private sector organisation rather than as an independent practitioner or member of a professional service firm.

**Professionalism:** According to Friedson (2001) professionalism is the set of institutions, whereby members of an occupation are able to control their own work rather than being under the control of consumers or managers. Professionalism is distinguished from the economic paradigms of the free market and bureaucracy in that its primary trade is not in property, capital or labour but in knowledge (Friedson 2001; Middlehurst & Kennie 1997). Friedson (2001) argues that in the ideal the essential elements of professionalism are considered to be, that the work is specialized and officially recognized as having a body of theoretically based knowledge and skills that can be exercised with discretion. Further, that the occupation has exclusive jurisdiction and a legally protected position over a particular division of labour in both internal and external labour markets. This protection is based on the qualifying credentials defined by the occupation. The formal education to gain the qualifying credentials is controlled by the occupation and is obtained outside of the labour market. Moreover, professionalism asserts an ideology that commitment to doing good work and the quality of the work done takes precedence over economic imperatives (Friedson 2001).

**Professionalisation:** This is the term that is used to describe the process by which occupations gain recognition as professions and how the professional status, once gained, is consolidated and services improved (Neal & Morgan 2000).

**Professional Occupation:** A professional occupation is an occupation that has gained and maintained professional status through the process of professionalisation. In this research, professional occupations are distinguished from non-professional occupations, which are those occupations that have not sought or gained professional status.

**Professional Organisation:** According to Pinnington and West (2003) professional organisations are organisations that are formed by a partnership among a group of professionals from the same occupation, such as law, medicine or accountants. Professional organisations are for the most part decentralised, with authority distributed among the partners who also have a great deal of autonomy in their decision-making (Pinnington & West 2003). The strategy of professional organisations is developed through the collective interests of the partners rather than through centralised strategic planning (Pinnington & West 2003).

**Professional Turnover Intention:** In this research professional turnover intention refers to voluntary intention to leave the profession to work in another profession or occupation. It does not refer to temporary absence from employment in the profession due to life circumstances such as childbearing, child rearing or illness, or permanent withdrawal from the profession due to permanent injury or retirement.

**Professional Values:** This research uses the term professional values to describe the values that a member of a profession holds in relation to their profession. These values include the values that are general to the concept of professionalism, as well as to the specific values that are associated with the ethical standards prescribed by the particular profession.

**Workplace:** In this research workplace is used as a general term to refer to the world of work. It is drawn from Meyer and Allen (1997) who used the term 'commitment in the workplace' to reflect the recognition that there are a number of entities in relation to work to which individuals may become committed.

## **1.7 Conclusion**

This chapter has introduced the research that is reported in this thesis. The background to the research and the research itself has been outlined, as well as the contributions to the literature that the research makes. Justifications for the research have been outlined and the methodology and methods used in the research have also been outlined. This chapter has provided an outline of the chapters of the thesis, as well as definitions of the key terms used in the thesis. Chapter Two considers issues that relate to the research. It reviews literature in relation to work-related commitment, the meaning of professionalism and the definition of professional used in the thesis, as well as literature in relation to professional commitment, organisational-professional conflict and professional turnover intention.

## **2 Research Issues – Work-Related Commitment, Professionalism, Professional Commitment and Workplace Exposure**

### **2.1 Introduction**

This chapter reviews current theoretical and research literature in relation to work-related commitment. This review of literature contributes to the conceptual foundation for the research, which uses path analysis to evaluate a model of the effect of workplace exposure on professional commitment. In doing so the research examines the relationships between commitment to the profession prior to, or soon after, workplace entry and organisational-professional conflict, job satisfaction, organisational commitment and commitment to the profession after a period of exposure to the workplace. The relationships of each of these variables to organisational turnover intention and professional turnover intention are also included in the model.

The review of the literature examines the concept of work-related commitment and discusses the distinction that is made in the contemporary work-related commitment literature between targets of commitment and components of commitment. Targets of commitment are identified as the work-related entities, such as the organisation, occupation, supervisor, union or work-group that individuals may become committed to, and to which their commitment may have implications for various work-related outcomes such as turnover intention, organisational-citizen behaviours, in-role performance and job satisfaction, as well as implications for other targets of commitment. The components of commitment are identified in the literature review, as the reasons underlying an individual's commitment to the various targets of commitment. Importantly, it is noted that differences in the components of one target of commitment may have implications for other commitment targets.

The literature review examines the conceptual development of work-related commitment and identifies that traditionally, organisational behaviour research has given primacy to organisational commitment and has considered it as the work-related commitment to which all other commitment targets lead. Since occupational or professional commitment is not generally considered to be a prime target of work-related commitment, the relationship between professional commitment and organisational turnover intention is not well understood.

The review of literature notes that unlike employees of non-professional occupations, development of commitment to the occupation precedes development of commitment to the organisation. This is because of the sustained period of socialisation to the profession that professionals are exposed to through the process of their tertiary-level education preparation for work in the profession. Thus for professionals, professional commitment may be considered to be an antecedent to other forms of work-related commitment. However, examination of the literature identifies that research that examines professional commitment prior to workplace entry and its relationship to other work-related outcomes, such as organisational-professional conflict, job satisfaction, organisational commitment and professional commitment after a period of workplace exposure is yet to be published. Moreover, the relationships between these variables and organisational turnover intention, as well as professional turnover intention have not yet been considered in the published research literature.

In recent decades, significant and sustained changes in the economy of the market have altered the traditional paradigm of mutual employee-organisation loyalty with the result that many employees may be shifting their prime loyalty from their employing organisation to their occupation. Such changes, it is argued, point to the need for a shift in focus of organisational behaviour research from organisational commitment as the prime form of work-related commitment to occupational or professional commitment. Concurrent with the changes in the economy of the market, professionals are increasingly being employed in bureaucratic organisations. In addition to this, a number of occupational groups, whose members have traditionally worked as employees of organisations, have undergone the process of professionalisation. Furthermore, as public sector organisations are increasingly seeking to adopt quasi-market principles, many professional groups are finding that their relationship with their employing organisation is changing.

This chapter identifies the parameters within which the term ‘professional’ is used in the research. It also examines contemporary theory in relation to professionalism and the ideals that inform the role of professionals in society. Furthermore, the values associated with professionalism, which form the distinction between professional and non-professional occupations, are identified. It is noted, however, that although the values of professionalism are distinct from those of the free market and the organisational control of production, professionals are nonetheless subject to the socio-political and economic

circumstances of the culture and the era in which they exist. In addition, the chapter notes that occupations may undergo the process of professionalisation and thus attain societal acceptance as a profession.

In this chapter, the literature in relation to organisational-professional conflict is reviewed, as it has been considered as either an antecedent to or consequence of professional commitment. Moreover, the relevance of organisational-professional conflict to organisational commitment, organisational turnover intention and professional turnover intention is considered worthy of study, in a work environment where professionals are increasingly employed in bureaucratic organisations, whose market-oriented values, may come into conflict with the service-oriented values of professions. It is noted that the literature in relation to organisational-professional conflict *per se* is limited, but there is evidence in the literature that conflict between the values of their employing organisations and their values as professionals is the cause of both personal concern to professionals and concern for the future of the role of professionals in society.

The chapter also identifies that there is a significant knowledge gap in regard to the relationship between professional commitment and organisational turnover intention as well as the relationship between professional commitment and professional turnover intention among professional employees. This knowledge gap may be attributable to:

- Inadequate clarity in the distinction between professional and non-professional occupations
- the lack of longitudinal or developmental research in relation to professional commitment,
- the dearth of research in relation to professional turnover intention
- the lack of longitudinal research in relation to the effect that exposure to workplaces, where there may be conflict between the values of the profession and the organisation, may have on the commitment of professional employees.

The review of the literature therefore, provides the conceptual framework for the proposed research, in which a theoretical model of the relationships between professional commitment prior to workplace entry, organisational-professional conflict, job satisfaction, organisational commitment and professional commitment after a period of workplace exposure and the



relationships between these variables and organisational, as well as professional turnover intention is developed and evaluated.

## **2.2 Overview of the Theoretical and Research Literature in Relation to Work-Related Commitment.**

Changes to the global economy in recent decades have prompted several authors (e.g. Lee, Carswell & Allen 2000; Meyer, Allen & Topolnysky 1998; Mir, Mir & Mosca 2002) to suggest that the traditional paradigm of mutual employee-organisation loyalty is also changing and employees may be changing their primary target of commitment from the organisation to their occupation. In this section, the literature in relation to work-related commitments is reviewed. The literature in relation to occupational commitment and its measurement is also reviewed. The distinction between commitment and motivation is considered. Additionally, the differences between the development of occupational and professional commitment are considered.

### **2.2.1 Work-Related Commitment**

For many years the concept of commitment in relation to work has been a subject of organisational-behavioral research (Lee, Carswell & Allen 2000). Meyer and Herscovitch (2001) consider that:

Commitment is a force that binds an individual to a course of action of relevance to one or more targets. As such, commitment is distinguishable from exchange-based forms of motivation and from target relevant attitudes, and can influence behavior even in the absence of extrinsic motivation or positive attitudes. (Meyer & Herscovitch 2001, p. 301)

Cooper-Hakim and Viswesvaran (2005, p. 241) consider that commitment may be generally defined as ‘... a willingness to persist in a course of action’. When applied to the workplace, the concept of commitment has been used to develop knowledge in relation to a number of work-related outcomes which include employee turnover, job performance, organisational citizenship behaviour and attendance (Meyer, Becker & Vandenberghe 2004).

A number of theoretical frameworks have been applied to the concept of organisational commitment and/or organisational turnover intention. These include, but are not limited to, Social Exchange Theory (Aselage & Eisenberger 2003), Social Identity Theory (Ashforth & Mael 1989; van Dick et al. 2004), theory in relation to the psychological contract between employees and

organisations (Aselage & Eisenberger 2003; Rousseau 2001) and person-organisation fit (Kristof 1996; Valentine, Godkin & Lucero 2002).

While all of these theoretical frameworks have made important contributions to the understanding of organisational commitment and organisational turnover intention, none has attempted to develop theory that specifically attempts to understand the nature of work-related commitment. The most prominent work in development of a conceptual understanding of commitment in relation to work-related targets is that of J. P. Meyer and his various associates.

Meyer's work has built on the foundations of other prominent authors in relation to organisational commitment, such as Mowday, Steers and Porter (1979, 1982) and Reichers (1985) to develop a conceptual understanding of work-related commitment that includes the various targets of employees' commitment, as well as the nature of commitment in the workplace (Meyer & Allen 1997). According to this theory, employees may be committed to a number of targets of commitment, which may affect their behaviours within and/or intentions to leave or stay in the organisation (Meyer & Allen 1997). Furthermore, according to Meyer and Allen (1997) the psychological bases of commitment to the various possible targets can be conceptualised, and thus operationalised, as having a number of components, all of which add to the explanation of why an employee may persist in a course of action in relation to a particular target of commitment (Meyer & Herscovitch 2001).

For many years the concept of work-related commitment has been dominated by commitment to the organisation (Carmeli & Gefen 2004). Organisational commitment emerged in the early 1960's as a distinct construct (Swales 2002) and has provided an important means to develop knowledge in relation to organisation-employee relationships (Cooper-Hakim & Viswesvaran, 2005). There is a stream of work-related commitment research literature that is almost exclusively focused on commitment to the organisation and has sought to develop models which identify the antecedents, correlates and outcomes of organisational commitment and to establish the relationships among the variables (Gallagher & Parks 2001). However, as knowledge in relation to work-related commitment has developed, many other commitments that are associated with work have been identified and researched (Carmeli & Gefen, 2004). This other stream of research in work-related commitment has de-emphasised the primacy of commitment to the organisation and has identified and studied the nature of the relationships among the many targets (also described in the literature as foci or

forms) of work-related commitment (Gallagher & Parks, 2001). While this 'proliferation' of work-related commitments has led to much discussion about either the conceptual validity of the commitment targets (Carmeli & Gefen, 2004) or how commitment targets should be classified and understood (Bosshoff & Mels 2000; Meyer, Allen & Smith 1993), it is generally recognised that the various commitment targets that may be relevant to work, are useful in the development of organisation-employee relationships.

### **2.2.2 Targets of Work-Related Commitment**

Reichers is attributed as being the first to recognise that individuals working in organisations may have multiple work-related commitments (Meyer & Allen 1997; Swailes 2002). Reichers (1985) pointed out that just as job satisfaction could be measured in a global sense or could be understood in terms of specific satisfactions with various job elements, so too could organisational commitment be understood from a global, as well as from the multiple work commitments approach. Rather than being viewed as a singular and monolithic in nature Reichers maintained that organisations should be understood as 'coalitional entities' (Reichers 1985; p. 469) to which employees may form different levels of attachment and commitment. These entities, which are now identified in the literature as targets (and may also be identified as forms or foci) of commitment, Reichers (1985) identified as rank and file employees, clients/customers, top/managers/owners or the general public. In addition, Reichers (1985) argued that employees are aware of the variety of goals and values that are espoused by the various coalitional entities.

The various targets of work-related commitment discussed in the literature include, but are not limited to, commitment to the employing organisation, commitment to a profession or occupation, commitment to teams and leaders, commitment to goals, career commitment (Meyer & Herscovitch 2001), as well as commitment to unions (Hackett, Lapierre & Hausdorf 2001) and commitment to work itself, regardless of the type of job or the employing organisation (Swailes 2002). In addition, the literature recognises the importance of non-work commitments, such as family, religion and voluntary activities to the organisation-employee relationship (Swailes 2002). The benefit of accounting for the various targets of work-related commitment is considered to be that it will enhance the validity of the work-related commitment measures used to understand and predict behaviours in the workplace (Cooper-Hakim & Viswesvaran 2005). This is supported by the findings of several research studies

which have demonstrated improved prediction of intent to quit the organisation, in-role performance and organisational-citizenship behaviours, when multiple targets of commitment are accounted for in measurement of workplace commitment (Bentein, Stinglhamber & Vandenberghe 2002).

In her pioneering work that recognised the targets of work-related commitments Reichers (1985) recognised the importance of reference groups such as occupations, professions or unions in the commitment profile of employees. Furthermore, she drew attention to the likelihood that conflicts among the various forms of commitment may contribute to commitment to the organisation in a way that is complex and at times problematic and may not be adequately reflected in global measures of organisational commitment. While it is recognised in the literature that work-related commitments have the potential to complement or conflict with each other, the relationships among conflicting and complementary commitments are not yet well understood (Meyer, Becker & Vandenberghe 2004). There is a need therefore, to establish the relationships between particular commitment forms and particular outcomes and examine the strength of the relationships.

Reichers' primary interest, as has been the interest of many commitment researchers, was in the contribution of the relationships among other possible commitments to the employees' commitment to the organisation. The idea that the various targets of commitment contribute to other targets of commitment within and beyond the workplace has nevertheless enabled subsequent research to investigate the complexity of the relationships among the targets of work-related commitment and to draw the research focus away from its exclusive attention on organisational commitment (Gallagher & Parks 2001). Importantly, Gallagher and Parks (2001) point out that the literature in relation to organisational commitment is based on the assumption of an ongoing or continuing relationship between the organisation and the employee – an assumption which they argue, is unrealistic, as well as outdated in the current economic environment.

### **2.2.3 Components of Work-Related Commitments**

The history of the work-related commitment literature has been plagued with differences in the way that commitment has been conceptualised (Meyer & Allen 1997; Meyer & Herscovitch 2001). Theory in relation to the components of commitment has been developed in an attempt to identify the different kinds of reasons that an individual may feel bound to a course of action in relation to a particular target of commitment (Meyer & Allen 1997).

Becker (1992) built on O'Reilly and Chatman's (1986) pioneering work which drew attention to the psychological bases of commitment. Becker (1992) demonstrated the added predictive benefits of distinguishing the bases of commitment from the forms of commitment. O'Reilly and Chatman's (1986) explanation of the bases of commitment drew on the extant psychological attachment theories of the time and argued that:

...the basis for one's psychological attachment may be predicated on three independent foundations: (a) *compliance* or instrumental involvement for specific, extrinsic rewards; (b) *identification* or involvement based on a desire for affiliation; and (c) *internalization* or involvement predicated on congruence between individual and organizational values. (O'Reilly & Chatman 1986, p. 493)

O'Reilly and Chatman (1986) argued that the different foundations of attachment represented separate dimensions of commitment.

In 1991, Meyer and Allen developed the three components of commitment approach as the means to describe and measure the processes by which the 'willingness to persist' aspect of commitment could be explained in relation to organisational commitment (Meyer & Allen 1997). While they acknowledged O'Reilly & Chatman's (1986) contribution to the research by sensitising researchers to the difference between the bases of commitment and the target of commitment, Meyer and Allen argued for a re-conceptualisation of the bases of commitment on the grounds that the research using these concepts was having difficulty in demonstrating the conceptual difference between internalisation and identification, as well as the conceptual relevance of compliance to other work-related outcomes (Meyer & Allen 1997). By utilising empirical findings, attempts made in the literature to account for the various uni-dimensional conceptualisations of commitment, and efforts identified in the literature to ground knowledge in relation to commitment in a pre-established theoretical context or a combination of these (Meyer & Herscovitch 2001), Meyer and Allen argued that employees' psychological attachment to the organisation could be explained in terms of three components of commitment which they identified as 'affective commitment', 'normative commitment' and 'continuance commitment' (Meyer & Allen 1997).

Meyer and Allen (1997, p. 11) described affective commitment as '... the employee's emotional attachment to, identification with, and involvement in the organisation.' They identified continuance commitment to be the term used to refer to the awareness that an employee may have of the costs that are associated

with leaving an organisation. They used the term normative commitment to indicate the feeling of obligation to continue employment in the organisation (Meyer & Allen 1997). Thus they argued, a high level of affective commitment would indicate that the employee continues with the course of action in relation to the form of commitment because they *want* to. A high level of continuance commitment indicates that the decision to continue is based on the feeling that they *need* to do so and a high level of normative commitment indicates that the decision to continue is based on the feeling that they *ought* to persist with the particular course of action in relation to the particular form of commitment (Meyer & Allen 1997).

In their review of the 'antecedents of organisational commitment' literature Meyer and Allen (1997) indicated that higher levels of affective commitment can be accounted for by three general and complementary processes. The first of these is where organisations provide an environment that is seen as supportive, fair and where the employees feel that their contribution is important. The second is where through satisfying their needs, meeting their expectations and enabling them to achieve their personal goals the organisational environment provides psychologically rewarding experiences that enhance the employee's perception of self-worth. The third is where the employee attributes their experiences at work to be a reflection of the organisation's concern for employees (Meyer & Allen 1997). These three processes contribute to the employee's sense of belief that they *want* to belong to the organisation (Beck & Wilson 2001).

In contrast to the quantity of empirical studies performed in relation to affective commitment much less research has been done in relation to continuance commitment and normative commitment (Meyer & Allen 1997). Continuance commitment is thought to develop in response to the employee's belief that personal or career costs will be involved in leaving the organisation or that they have few transferable skills or that there are few employment alternatives available to them (Meyer & Allen 1997). Thus continuance commitment reflects the sense of employees remaining with the organisation because they feel that they feel that they *have* to. Normative commitment is thought to be partly based on cultural and familial beliefs that employees should be loyal to their organisation in addition to the norm of reciprocity, that employees should remain loyal to an organisation that has invested in them (Meyer & Allen 1997).

The three-component model of commitment has been tested widely in the work-related commitment research community (Meyer et al. 2002; Swailes

2002). Although the multidimensional models of commitment were developed from examples based in the organisational commitment literature (Meyer & Herscovitch 2001), the research evidence demonstrates that they may be applied to other targets of commitment (Irving, Coleman & Cooper 1997; Meyer, Allen & Smith 1993; Stinglhamber, Bentein & Vandenberghe 2002). Additionally there is evidence to support its applicability in other countries and cultures (Vandenberghe et al. 2001).

#### **2.2.4 Occupational/Professional Commitment**

Meyer, Allen and Smith (1993) demonstrated that the three-component model of commitment that had been developed in relation to organisational commitment could be applied to commitment to occupations and professions. While they named the measure the occupational commitment scale, they identified that the term 'occupational' commitment was used to enable the measure to be inclusive of both occupations and professions arguing that both professionals and non-professionals may be committed to the work that they do (Meyer, Allen & Smith 1993). Furthermore, they pointed out that the term 'career commitment' was also used in the literature. However, they chose not to use this term for the scale, because of the ambiguity of meaning that career may imply. Instead they preferred the term occupation to ensure that the inference of an individual's relationship with a particular line of work was clear (Meyer, Allen & Smith 1993). Meyer, Allen and Smith (1993) developed the three-component occupational commitment measure in a sample of Canadian nurses. Since then the Meyer, Allen and Smith (1993) occupational commitment measure has been used in several reported studies which have included a number of occupational groups which include professional and non-professionals (Irving, Coleman & Cooper 1997; Stinglhamber, Bentein & Vandenberghe 2002), or homogeneous groups of professionals (Chang, Du & Huang 2006; Snape & Redman 2003).

Blau (2003) hypothesised that commitment to an occupation or profession can be explained by four components. Extending on the work of Meyer, Allen and Smith (1993) and Carson, Carson and Bedeian (1995), Blau (2003) argued that the continuance commitment scale of the Meyer, Allen and Smith (1993) occupational commitment measure did not properly define occupational commitment, because it did not fully account for the reasons why an individual may persist in a course of action in relation to their occupation. He argued that this was because it did not distinguish between continuation in the occupation because of the costs involved in leaving, and continuation because of



limited alternatives being available. Blau (2003) therefore added a further two components to the definition and measurement of occupational commitment. According to Blau (2003), the components of occupational commitment include those of affective and normative commitment as described and measured by Meyer, Allen and Smith (1993), as well as the measures of *accumulated occupational costs* and *limited occupational alternatives* which were derived from the concept of occupational entrenchment as described and measured by Carson, Carson and Bedeian (1995).

Carson, Carson and Bedeian (1995, p. 303) identified three dimensions of occupational entrenchment and described them as 'emotional costs', 'career investments costs' and 'limitedness of career alternatives'. They argued that the concept of entrenchment in a career reflects less of a sense of a psychological attachment to an occupation and more of a sense that individuals may remain in an occupation because of the investments that they have made in their occupation, or because they feel that the occupational alternatives available to them are limited (Carson, Carson & Bedeian 1995). The occupational investments may be in terms of time and effort, as well as the emotional investment that they have in the occupation. Blau (2003) argued, however, that his comparative confirmatory factor analyses provided support for the two-factor structure of occupational entrenchment rather than the three-factor structure. He therefore argued that replacing the continuance commitment measure of the Meyer, Allen and Smith (1993) occupational commitment measure with the occupational entrenchment measure from Carson, Carson and Bedeian (1995) produced a measure comprised of four components. Blau (2003) argued that this measure would provide an expanded understanding of occupational commitment because it accounts for commitment that may be due to the sense that there are limited opportunities to obtain work in another occupation in addition to commitment that is due to the costs associated with leaving an occupation.

### **2.2.5 Targets and Components of Commitment**

Meyer and Herscovitch (2001) argue that prediction of behaviour is more accurate when the measure of commitment used in research reflects both aspects of commitment, that is, the target of commitment, or the work-related entity to which commitment is directed, and the components of commitment, which describe the underlying reasons for the course of action in relation to the form of commitment is chosen. More recent discussions of work-related commitment reflect a general agreement that there are many targets in the workplace to which

individuals may be committed and commitment to those targets may be understood in terms of the components of commitment (Cooper-Hakim & Viswesvaran 2005; Meyer, Becker & Vandenberghe 2004; Meyer & Herscovitch 2001). However, the combination of all possible targets of commitment with all components of commitment creates a highly complex model that may become impractical to test or use (Meyer & Allen 1997).

Inevitably, the targets of commitment and related outcomes will be deemed relevant according to the interests of a particular research undertaking. However, use of a model of commitment which includes different targets, as well as components of commitment requires more precise framing of research questions (Meyer & Allen 1997). Such research should explicitly state the component of commitment that is relevant to the behaviour or attitudes being studied in the research in addition to the particular constituency within the organisation that will be affected (Meyer & Allen 1997). The components of commitment are thus distinguishable from the target of commitment in that a target of commitment refers to a work-related target of commitment such as the organisation, occupation, work-group, supervisor, union or other similar work-related entity, whereas the components of commitment refer to the processes by which an individual's commitment to any work-related target develops (Meyer & Allen 1997).

#### **2.2.6 Commitment rather than Motivation**

Meyer and Herscovitch (2001) argued that commitment could be distinguished from other related attitudes such as exchange theories of motivation on the grounds that commitment may influence behaviour in a way that is independent from other motives and attitudes. They pointed out that it is possible that commitment to a particular target may result in behaviours that may seem to be contrary to the immediate motives or interests of the committed individual. More recently, Meyer, Becker and Vandenberghe (2004) noted the conceptual similarities between motivation and commitment. They pointed out that the two concepts have generally been treated as being distinct because they have not only arisen from two distinct research traditions but that the research in relation to each concept has had distinct goals. They noted that theory in relation to motivation has typically been used to explain task performance and has been important to the development of goal-setting theory. Work-related commitment, on the other hand, found early prominence as a means to understand organisational turnover (Meyer, Becker & Vandenberghe 2004). Meyer, Becker

and Vandenberghe (2004) recognised that more recently, motivation theory has been applied to work-related outcomes that were traditionally the realm of commitment research and similarly, commitment theory has been applied to work-related outcomes that have previously been the subject of motivation research.

Meyer, Becker and Vandenberghe (2004) attempted to further clarify the distinction between motivation and commitment, arguing that motivation frequently relates to factors that are external to the individual and is readily influenced by external regulation. Motivation, they argued, generally refers to the explanation of behaviours that have relevance in the short-term. On the other hand, commitment has its basis in factors that are internal and relating to the individual's own long-term goals and are thus less vulnerable to external regulation. Commitment therefore has relevance to behaviours that relate to longer term outcomes (Meyer, Becker & Vandenberghe 2004).

Rather than viewing motivation and commitment as entirely distinct entities, Meyer, Becker and Vandenberghe (2004) argued for an integrated theory of motivation and commitment to explain work-related outcomes. They argued that motivation and commitment are distinguished by the degree to which the work-related behaviour is informed by the level of external or internal regulation of the individual and the meaning that the accomplishment of a particular work-related goal has for the individual. Thus it may be that while two individuals are motivated to do work, the individual who has a higher level of external regulation in relation to a particular job and for whom accomplishment of the goal has little meaning, may be more attentive to immediate rewards or disincentives in their decision to continue in that job. They might therefore be seen, either by their own estimation or that of another, as having a low level of commitment to that job, which may be manifest in a higher level of intention to turnover, if the short-term disincentives outweigh the rewards.

In contrast, the individual who has a higher level of internal regulation and for whom the goal accomplishment has a great deal of meaning is likely to be less attentive to the short-term rewards and disincentives when making a decision to continue in a job. This individual may then be seen as having a higher level of commitment, which is manifest in a lower level of intention to turnover even in the face of short-term disincentives. Thus it may be seen that motivation and commitment are different parts of the same spectrum. In the same way that it is the level of blue that distinguishes lilac from mauve, it is the level of the individual's internal regulation and the personal meaning that accomplishment of

the goal has for the individual that distinguishes commitment from motivation. These matters thus inform 'the willingness to persist' (Cooper-Hakim & Viswesvaran 2005, p. 241) aspect of commitment and are therefore an important aspect of commitment theory.

### **2.2.7 The Development of Professional Commitment**

Meyer and Allen (1997) have suggested that the components of commitment to other targets of work-related commitment develop along similar lines to the components of organisational commitment. However, although there are a considerable number of correlational studies of the variables hypothesised to be antecedents of commitment to the organisation, very few empirical studies have been done to provide evidence for a model of the development of other targets of work-related commitment. Much of the research conducted thus far has not assessed the changes that occur to the components of individuals' targets of commitment over time but have instead analysed static levels of these components of commitment (Beck & Wilson 2001).

Beck and Wilson (2001) argue that in correspondence with other developmental theories, there are stages through which employees pass in the development of commitment. Moreover, that these stages include a re-evaluation of commitment phase and importantly that it is the employee's experiences that account for the changes in their attitudes and behaviours. Furthermore, Beck and Wilson (2001) contend that because work-related attitudes are not considered to be static but are believed to change over time, a developmental approach is needed to better understand work-related commitment. Theories of human development have been applied to development of commitment to organisations and Beck and Wilson (2001) argue that they may also be applied to other targets of work-related commitment such as commitment to a profession. An important assumption of human development theory is that the changes in attitudes and behaviours that are seen over time are the result of the experiences that an individual has, not the time itself (Beck & Wilson 2001). Thus, when applied to work-related commitment theory, it should be understood that the changes in commitment that take place over time are not due to time alone, but due to the experiences that occur during that time (Beck & Wilson 2001). That is, it is the experiences that covary during the time in which the individual is associated with the organisation or profession that bring about changes in commitment. Progress in understanding the relationships between work-related commitments and work-related outcomes therefore necessarily involves development of knowledge about

the nature of and the relationships between the experiences that covary with the workplace commitment of interest. These covarying experiences may include other forms of work-related commitment in addition to other work-related outcomes (Beck & Wilson 2001).

When applied to work-related commitment the developmental theories identify three common stages (Beck & Wilson 2001). The first is that at the pre-employment stage individual forms association with profession/organisation that they believe will fulfil their needs and aspirations and be congruent with their values (Beck & Wilson 2001). At the entry or socialisation stage individuals in the organisation or profession experience the range of aspects that relate to the profession/organisation and adapt to their new role within the profession or organisation (Beck & Wilson 2001). Finally, at the advancement/stabilisation stage individuals will act in ways that enhance or maintain their role within the profession or organisation. This stage may also involve some re-evaluation of their desire to remain with the profession and/or organisation (Beck & Wilson 2001).

Beck and Wilson (2001) argue that while the developmental process by which a target of work-related commitment such as organisational commitment or commitment to the profession might be similar, the time at which the commitment begins to develop may vary according to the target of commitment. They point out that organisational commitment is expected to develop as a result of the experiences that occur after organisational entry, but that development of commitment to an occupation begins after initial contact with the occupation. For occupations exposure to the employing organisation and the occupation occur concurrently, therefore, occupational commitment and organisational commitment are expected to also develop concurrently (Lee, Carswell & Allen 2000).

In contrast, for members of professional occupations, exposure to the profession first occurs during the period of their professional preparation which occurs prior to workplace entry (Beck & Wilson 2001; Friedson 2001). Therefore, when considering the developmental relationship between occupational commitment and organisational commitment, it is necessary to make the distinction between professional and non-professional occupations, because the process of commitment and socialisation professions is different from the process of commitment and socialisation to occupations (Parry & Murphy 2005).

Professionals are prepared for their workplace role in educational institutions that are separate from the workplace; therefore, their socialisation to the profession begins prior to entry to the workplace (Lee, Carswell & Allen 2000). Through the education that prepares them for their role in the workplace, professionals are socialised to the distinct cultural values of the profession (Friedson 2001; Lui, Ngo, & Tsang 2003). In addition to obtaining the knowledge and skills necessary to professional practise, a sense of commitment to the profession is developed during their professional education. This is because the shared experiences of their education and sense of professional community, cultivate identification with the profession and its values (Friedson 2001).

In contrast, for employees in non-professional occupations socialisation and commitment to the organisation and to the occupation usually begin at the same time and are therefore likely to occur concurrently, being influenced similarly by the experiences that occur within the workplace (Lee, Carswell & Allen 2000). Thus for professionals and non-professionals who are entering the workplace of their chosen occupation for the first time, organisational entry usually marks the beginning of socialisation to the organisation (Lee, Carswell & Allen 2000). For non-professional employees initial entry to the workplace also marks the beginning of their socialisation to the occupation. In contrast, for professional employees, socialisation to the profession is well advanced and may be nearing its completion when they enter into employment in an organisation (Beck & Wilson 2001).

These differences in the timing of organisational entry in relation to their occupational socialisation may produce considerable differences between the development of commitment of professionals to their professional occupation, and the development of the commitment of non-professionals to their non-professional occupation (Beck & Wilson 2001). Similarly, the difference in the timing of socialisation to the occupation for professional and non-professional employees may influence the development of other work-related outcomes. Since commitment to the profession is developed prior to workplace entry among professional employees, it may be seen as an antecedent to other workplace outcomes.

## **2.3 Professional, Professionalism and Professionalisation**

In this section, the literature in relation to professionalism and the professionalisation of occupations is reviewed identify the distinction that is made between professional and non-professional occupations in this thesis. This literature is also reviewed to demonstrate why a distinction needs to be made between commitment to a professional occupation and commitment to a non-professional occupation when researching the relationship between commitment to a professional occupation, organisational turnover intention and professional turnover intention among professional employees.

### **2.3.1 Professional**

The nature of and meaning of the term professional is contentious and contested (Middlehurst & Kennie 1997; Perkin 1989). In colloquial usage, the word 'professional' may refer to any occupation or service for which an individual receives payment. In this research, however, the term 'professional' is used to refer to members of an occupation that has exclusive jurisdiction and a legally protected position over a particular division of labour in both internal and external labour markets (Friedson 2001). This protected position is based on qualifying credentials gained through formal higher education that is obtained outside of the labour market (Friedson 2001). Furthermore, this education permits professionals to practise with independence and discretion within a particular discipline (Friedson 2001). The professional is also required to adhere to particular standards and professional ethics in the practice of their profession (Middlehurst & Kennie 1997). The education, practice standards and ethics of professionals are defined and monitored by a professional association formed by the members of the profession (Neal & Morgan 2000). All professionals are members of an occupation. However, professionals and professional occupations are distinguished from non-professionals and non-professional occupations by the unique attributes that characterise professions (Dietrich & Roberts 1997). These attributes are those that are associated with professionalism.

### **2.3.2 Professionalism**

The phenomenon of professionalism emerged in the Middle Ages (Perkin 1989). It is therefore, a relative new comer as an economic logic and stands in contrast to both the free market and the organisational control of production of goods and services (Friedson 2001). Arising from the intellectual specializations of the clergy, the law and later, medicine and university teaching, professionalism is distinguished from the economic paradigms of the free market and bureaucracy in that its primary trade is not in property, capital or labour but in knowledge (Friedson 2001; Middlehurst & Kennie 1997).

In this research, the term ‘professionalism’ refers to the set of institutions that enables members of an occupation to control their own work rather than being subject to the control of consumers or managers. This research does not use the term ‘professionalism’ to refer to the behaviours of professionals or the activities of professions. The research uses the trait approach (Dietrich & Roberts 1997) to describe professionalism. The trait approach describes the characteristics that are used in Anglo-American societies to distinguish professional occupations from non-professional occupations (Neal & Morgan 2000). The literature identifies that professionalism may be understood through various other approaches. Whether structural-functionalist, interactionist or critical (Lampe & Garcia 2003), ethnographic or historical (Neal & Morgan 2000), the other approaches, however, examine professionalism by considering the way in which it has been expressed by professions and professionals after being subjected to one or other elements of the social, political and economic context of the particular historical moment (Dietrich & Roberts 1997).

In particular, critiques of professionalism found in the literature primarily examine the ways that professionalism has been used by professions to achieve and maintain power in society (Lampe & Garcia 2003), and are adopted by authors according to the type of analysis that is particular to their research interests (Dietrich & Roberts 1997; Lampe & Garcia 2003; Neal & Morgan 2000). Such critiques tend to focus their attention on the behaviours of professions or of groups of professionals within a profession. In particular, the critiques focus on behaviours of professions or professionals that are distortions of or deviations from the ideals of professionalism. Such critiques therefore argue the shortcomings of professionalism based on the deviant behaviours of some individuals or groups, rather than the ideals on which professionalism is based. It is not within the scope of this research, nor is its purpose to debate the rectitude



of the professions or of professionals. This research instead, seeks to consider the essential nature of professionalism as conceptualised in the ideal.

The use of the trait approach does not imply that the characteristics of professionalism are historically fixed and have not been subject to influences from social, economic and political influences over time. Nor does it imply a belief that the ideals of professionalism are equally accepted and embraced by every profession or professional. The trait approach is considered relevant to the interests of this research because it describes characteristics of professionalism that have greater stability over time. Furthermore, the trait approach is used because it is this image of professionalism in the ideal form that is presented to students of the profession in the process of socialisation to the profession.

Friedson (2001) argues that in the ideal, the essential elements of professionalism are considered to be that the work is specialised and is officially recognised as having a body of theoretically based knowledge and skills that can be exercised with discretion. Further, that the occupation has exclusive jurisdiction and a legally protected position over a particular division of labour in both internal and external labour markets. This protection is based on the qualifying credentials defined by the occupation. The formal education to gain the qualifying credentials is controlled by the occupation and is obtained outside of the labour market (Friedson 2001; Neal & Morgan 2000). Moreover, in the ideal, professionalism asserts that commitment to doing good work and the quality of the work done takes precedence over economic imperatives (Friedson 2001).

At the heart of professional ideal is the belief that the wider social benefit takes precedence to individual gain (Friedson 2001; Lampe & Garcia 2003). Therefore, in the ideal, professionals have a different orientation to the world to that of the market or bureaucracy. This orientation is sometimes described as altruism (Stoddard et al. 2001) but more accurately, it is the belief that there is an intimate link between individual interests and collective interests and that co-operative rather than competitive behaviours, are best suited to serving the collective interest (Stilwell 2003). Thus the purpose of professionalism is to apply systematic theoretical knowledge to problems that individuals, groups or societies face (Lampe & Garcia 2003) with the commitment to doing good work and provision of a high quality of service taking precedence over economic requirements (Friedson 2001; Sullivan 2000). These principles stand in contrast to the assumptions of the free market and bureaucracy where exchange occurs

primarily to benefit certain individuals or groups and may or may not have a wider social benefit.

This is not to regard professionals as being separate from the broader economy. Professionals are an integral part of the economy and necessarily participate in the market (Friedson 2001). However, although professionals consider that their purpose is to provide a service they are emphatically not servants (Friedson 2001). The professional's primary allegiance within the economic system is to the application of professional knowledge to the situation that the client brings to the client-professional transaction (Lampe & Garcia 2003). In the professional ideal, the professional therefore determines the service that is provided in accordance with the presenting problem and the application of their professional knowledge. Independent of the market and polity the professional ideal holds that the over-riding goal in decision-making is 'the greater good' rather than the wishes of the consumer or bureaucracy (Friedson 2001). In contrast to transactions in the market or bureaucracy where the available funds and the payer determine the service, the first point of responsibility for a professional is to the standards of practice and behaviour as defined by the profession, rather than to requirements set by the employer (Stilwell 2003). This gives the professional an independence that is not available to non-professional employees. It also places on them a responsibility that is not required of non-professional employees.

Ethics and the ethical practise of the profession are deeply embedded in the ideal of professionalism. Governments have, for centuries, granted professions the privilege of monopoly over their specific areas of practice and the associated autonomy to practise and set fees for their services on the express understanding that they develop and maintain the standards particular to their profession (Haines & Sutton 2003). The role of professionals in society is thus inextricably linked to perpetuation of ethical standards and practice. The code of ethics is determined and maintained by the profession (Friedson 2001; Neal & Morgan 2000). These codes have been developed to both protect the wellbeing of clients and their confidence in the profession. The codes of ethical conduct also serve to protect the reputation of the profession from practitioners and practices that would harm clients and/or bring the profession into disrepute (Neal & Morgan 2000).

Governments entrust professional associations formed by the members of the profession with the responsibility to define and monitor the education, practice standards and ethics of professionals (Neal & Morgan 2000). The

separation of the education of professionals from the workplace has traditionally enabled professional associations to maintain the standards of practice required for admission to the profession, as well as ethical standards and codes of conduct (Friedson 2001). Professional socialisation involves the cultivation of the values and norms associated with their chosen profession in addition to acquisition of the knowledge and skills necessary to professional practice (Lui, Ngo & Tsang 2003). It is through their education that professionals are socialised to the distinct cultural values of the profession (Friedson 2001). Through the shared experiences of their education and sense of professional community that is developed in the process of their education, professionals develop identification with and a sense of commitment to the profession (Friedson 2001).

### **2.3.3 Professionalisation**

The earliest occupations to be recognised as professions were divinity, medicine and the law in the Sixteenth Century (Middlehurst & Kennie 1997). In response to social and economic changes since that time, many new occupations have emerged, and many of these occupations have undergone the process of professionalisation (Middlehurst & Kennie 1997; Neal & Morgan 2000). Occupations gain recognition as professions through the process of professionalisation (Neal & Morgan 2000). Neal and Morgan (2000) point out that in Anglo-American societies, many occupations have used the multi-stage temporal model described by Wilensky in 1964 as the strategy to achieve professional status. The key features of this model are that the occupation becomes full-time, training schools are established and lead to the development of courses of study, academic degrees and research within the discipline to expand the knowledge base. Additionally, protection by law for the practice of the occupation concerned is gained, professional associations are formed and a code of ethics for membership of the profession is developed (Neal & Morgan 2000).

It should be noted that some occupations have both professional and non-professional members. This is particularly significant to this research where nursing is the profession of interest. Within the occupation known as nursing, there are nurses who are professionally prepared and for some time have been recognized as having the attributes of professionals (DEWR 2004; Lee, Carswell & Allen 2000; Meyer, Allen & Smith 1993). In Australia, these nurses are known as registered nurses. There are also enrolled nurses and nursing assistants who have not been professionally prepared and perform nursing tasks as delegated by

the registered nurse (Australian Nursing and Midwifery Council (ANMC) 2002). This research makes the distinction between nursing professionals (registered nurses) and non-professional nurses.

#### **2.3.4 Implications that the Differences between Professional and Non-Professional Employees have for Organisational Behaviour Research.**

The economic changes of the late twentieth century have brought about changes to the workplace which mean that members of professional occupations, who once were able to practise independently or in professional organisations, are increasingly becoming employees of private sector organisations (Hanlon 1997). Furthermore, public sector organisations, in which professional employees previously had greater autonomy and control over their work, are increasingly being required to adopt the principles of private sector management as a means to decrease public spending (Dent et al. 2004; Kitchener, Kirkpatrick & Whipp 2000). In addition, there are more professional employees in organisations as direct result of the professionalisation of a number of occupations (Neal & Morgan 2000). Therefore, the greater numbers of professional employees in the workplace means that organisational behaviour research and theory that is particular to professional employees needs to be developed.

The presence of professional employees in organisations fundamentally alters the organisation-employee relationship because the nature of professionalism itself means that professionals bring with them a different approach to work and employment from that of non-professional employees. There are three key points of difference between professional employees and employees of non-professional occupations that affect the organisation-employee relationship. The first of these is that professions are regulated by statutory controls (Neal & Morgan 2000; Pearson et al. 2002). For professions, control of professional education and admission to the profession, as well as control of professional practice and the discipline of professionals is delegated through legislation, to professional associations that are comprised of members of the profession (Neal & Morgan 2000). The professional association is then charged with the responsibility of ensuring that the safety of the public is maintained in their dealings with the profession (Pearson et al. 2002). A code of practice is established by the professional association to ensure that client's well-being and confidence in the profession is protected. In addition, the code of practice serves to protect the profession from practitioners and practices that would bring the profession into disrepute (Neal & Morgan 2000).

The organisation-non-professional employee relationship is often considered in terms of a 'psychological contract' (Rousseau 2001) where the employee accepts the rewards offered by the organisation with the understanding that they have a responsibility to fulfil the organisation's requirements. For the professional employee, however, in addition to the psychological contract, the organisation-professional employee relationship is also defined in terms of a 'social contract' that is made with the broader society through the relationship between the professional and their professional association (Pearson et al. 2002). The professional association acts by dint of its delegation to do so by the State. Here the professional accepts the rewards of professional membership with the knowledge that this involves a responsibility to uphold the standard of service to the public that is required by the profession (Pearson et al. 2002).

Thus, for professional employees, the 'psychological contract' of employment includes the understanding that the obligations associated with their employment include their obligations to the profession, as well as to the employing organisation. In effect, the 'psychological contract' for professional employees is not a two-party (employer-employee) (Tekleab & Taylor 2003) relationship, but a three-party (professional association-employer-employee) relationship. Importantly, the 'psychological contract' between the professional employee and the employer is metaphoric (Guest 2004) and has no legal status in real terms. However, the relationship between the professional and their professional association does have legal status. This is because a legal contract is created between the professional and the professional association when professionals initially apply to be registered as members of the profession and through the renewal of their licence to practise.

This sets professional employees apart from employees of non-professional occupations, whose obligations of employment are defined only within the terms of the employee-organisation relationship. Moreover, professional associations have the State delegated role of defining and maintaining professional practice standards for the protection of the safety of members of the public and the reputation of the profession. Through delegation from the State, professional associations are entrusted with development of standards and regulations relating to the practice and registration of members of the profession. The professional associations also have the power to investigate professional practise, initiate disciplinary hearings and to impose sanctions which may result in limitation of professional practise or deregistration (examples of such legislation may be viewed at Queensland Government 1992a; 1992b; 2002).

Thus for these professional employees, their right to work in that profession and to claim the status and remuneration associated with the profession is regulated by a professional association that is separate to their employing organisation. The professional is required to act in accordance with the standards and ethical codes laid out by the professional association in order to retain their membership within the profession (Pearson et al. 2002). Should the standard of work that the professional employee delivers fall below the standards required by the profession, the professional association has the State delegated right to withdraw the professional employee's licence to practise in that profession. In such a situation, the professional employee may be liable to not only lose their job, but to lose their livelihood.

Where the work that organisations require employees to perform is defined and controlled by legislation that relates to professionals, then the organisation is legally obliged to ensure that only licensed members of that profession are employed to perform that work. For the professional employee, the standard of work that they attain in the performance of their work obligations is not defined merely by an agreement that is made between the employee and the employing organisation. Moreover, the standard is not only related to any personal pride that they may happen to have in the performance of their work or the rewards that the employing organisation may offer them for their successful performance. The standard of work that is required of professional employees is also defined by the professional association. This means that in this situation the organisation-employee relationship is not defined simply by mutual negotiation between the organisation and the employee as it is in the organisation – non-professional relationship, but is also defined by the legal and professional obligations that surround the type of work that the professional is employed to perform.

It also means that while the terms and conditions of employment may be mutually negotiated, the work that the organisation requires the professional employee to perform can only be negotiated within the terms of the legislation and the requirements of the professional associations relating to that particular profession. Importantly, for professional employees the minimum standard to which that work is performed, as well as the work that is performed, cannot be negotiated at the personal or even by collective private agreement among the parties involved. If proper negotiations are to be made regarding the work and the minimum standard at which these professional employees may be asked to perform, then the negotiations must be made in the public arena. Such

negotiations will necessarily involve the same statutory processes that originally defined and have control over the work of the profession (Neal & Morgan 2000).

The second key difference between professional and non-professional employees is that the values and beliefs, which form an integral part of the professional's work-related identity and attitude to work, are formed prior to workplace entry. During the course of their professional education, they are socialised to the values of professionalism and the ethical code of the profession, and have developed their identification with the profession and its values prior to entry to the employing organisation (Friedson 2001; Lee, Carswell & Allen 2000). In contrast, employees of non-professional occupations usually experience organisational and occupational socialisation concurrently (Beck & Wilson 2001). Therefore, for members of non-professional occupations their identification with their organisation and their occupation are likely to be more strongly linked. Similarly, when there is no external regulatory body to which the non-professional employee may refer, the organisation has the opportunity in the socialisation process, to interpret the values of the non-professional occupation in terms of its own values.

Therefore, not only is the commitment of professional employees to the profession largely established prior to workplace entry, but during the process of organisational socialisation, the professional employee is aware that there is a regulatory body external to the organisation that governs their practice and the standards to which they are required to practise. The professional socialisation of employees may therefore influence the organisational socialisation of professional employees. While the organisation may seek to develop the professional employee's identification with the organisation, their primary identification may be with the profession. During the organisational socialisation process, the organisation may attempt to socialise professional employees to acceptance of work standards that are consistent with the organisation's values. However, because of their prior socialisation to the profession and awareness of their obligations to meet minimum professional standards in order to retain their licensure, professional employees' organisational socialisation may be constrained by the values and beliefs that they had internalised during the process of professional socialisation.

The third matter of key importance to understanding difference between the relationship of professional employees to the organisation, from the relationship of non-professionals to the organisation, is that professionals consider that their work is to provide a service that is offered through the exercise

of their professional knowledge for the benefit of the client (Friedson 2001). In the professional ideal, professionals consider that the provision of high quality service takes precedence over economic imperatives (Friedson 2001; Sullivan 2000). The professional employee, therefore, is more likely to consider that the primary obligation of their employment is to provide a service to the customer of the organisation, whom they may view as their client. Importantly, the professional employee is also likely to consider that provision of the service to the customer is made through the exercise of the professional employee's professional knowledge in relation to the client's particular problem, and that economic matters are considered to be secondary to the determination of the service and/or its quality.

This placement of economic matters as a secondary consideration in the provision of services may contrast with the view of the modern capitalist enterprises and/or public sector organisations in which professional employees may be employed (Flynn 1999). In private sector organisations profit maximisation for owners and/or shareholders is the primary consideration in service provision and in the public sector, cost minimisation is the primary consideration in service provision (Flynn 1999). There is a growing body of sociological research, (e.g. Dent 2005; Kitchener, Kirkpatrick & Whipp 2000; Maravelias 2003; Ogbor 2001) that considers the organisation-professional employee relationship in terms of a struggle for power between organisations and professionals over resource allocation, control of work and who has, or should ultimately have, controlling power in the relationship.

However, such analyses are not necessarily helpful to the development of appropriate organisational behaviour theory and research in regard to the organisational-professional employee relationship. Furthermore, analyses which consider the organisation-professional employee relationship in terms of a struggle for power, fail to recognise the significance of the meaning of the socio-legal contract with the broader society, which professionals enter into when they accept the benefits, responsibilities and obligations of professional membership. This is because such analyses include only the organisation and professionals as players in the relationship. Therefore, professionals' attempts to exercise their professional obligations to apply their professional knowledge, within the ethical framework of the profession and with an emphasis on the quality of service over economic considerations, are in these analyses interpreted as a struggle for power, and are not recognised or acknowledged as attempts to fulfil the socio-legal obligations of professional membership.



It may be argued that extant research and theory in relation to the management of the organisation-employee relationship has largely been developed, either in relation to non-professional employees or without due recognition of the key differences between professional employees and non-professional employees. Moreover, that for professional employees the 'psychological contract' in relation to their employment is not just metaphoric and between the professional employee and the employer, but also includes a legal contract between the professional and the professional association, which is the State appointed body to act as an intermediary between the professional and society.

This means that the organisation-professional employee relationship is different from the organisation-non-professional employee relationship at a very fundamental level. It means that such differences should be incorporated into all research that is conducted, and theory that is developed, in relation to professional employees.

## **2.4 Professional Commitment and Exposure to the Workplace**

Changes to the global economy in recent decades have meant that many more employees of organisations are professionals (Bunderson 2001; Hanlon 1997). Professionals are socialised to the values of their profession prior to entry to the workplace (Beck & Wilson 2001). They therefore enter the workplace with a level of commitment to the profession and its values that has been established during this period of socialisation (Friedson 2001). As an economic logic, professionalism stands in contrast to both the free market and the organisational control of production of goods and services (Friedson 2001). When professionals are employed in organisations, exposure to the workplace may bring their professional values into conflict with the values of the free market, or the values of organisational control of work. In this section, literature is reviewed in relation to values conflicts that may arise between professional employees and their employing organisations. The effect of the values conflicts in relation to other work-related outcomes is also considered.

### **2.4.1 Professional Employees and Organisational-Professional Conflict**

The phenomenon of professionalism emerged in the Middle Ages and as an economic paradigm stands in contrast to those of the free market and the organisational control of production of goods and services (Friedson 2001). Since the emergence of professionalism many occupations have become professionalised in response to wider socio-economic changes (Middlehurst & Kennie 1997; Neal & Morgan 2000). The political creation of the welfare state in the 1950's saw the rapid expansion of the health, education, social security and legal aid systems in the public sector, and professional employees were the key beneficiaries (Hanlon 1997). The term 'economic rationalism' is used by many as a general term to refer to the economic changes that have been introduced by the Australian, and a number of other Western governments since the 1980's (James 2003). While the actual meaning of the term is widely debated and unresolved, the economic reorganisation that it refers to may include policies such as competition policy, privatisation, outsourcing, the philosophy of 'small government' and globalisation (James 2003).

With its increased emphasis on competition policy, 'small government' and privatisation, 'economic rationalism' has brought about significant changes to the organisation of both the private and public sectors. This has had significant consequences for professionals and poses significant threats to the ideals of professionalism. In the public sector the implementation of the 'small government' and private sector principles by the application of competition policy through quasi-market principles, challenges the heretofore-held autonomy of professionals working in the public sector (Healy 2002). In the increasingly global private sector, the expertise of professionals has been sought to deal with the complexity of the large and unstable competitive environment (Hanlon 1997).

Kritzer (1999) notes that even the professions such as law and medicine, which have long been regarded as the archetypal professions have been affected by the economic changes that sprang from the late twentieth century. Increasingly, lawyers are working as employees of bureaucratic organisations corporations and government, rather than practising independently in private practice or in a professional organisation. In the United States of America, medical doctors have been brought into corporatised medicine and are frequently required to work in institutional structures that are in sharp contrast to the professional model that flourished in the twentieth century (Kritzer 1999). These considerable changes to the socio-economic organisation of capitalism within the Western world have significant consequences for professionals (Hanlon 1997).

Friedson (2001) points out that, in order to justify the privileged position of the professional occupation and to maintain the authority and status of its members, the ideology of professionalism must counter or at least neutralise the opposing ideologies of control of work by market forces, or bureaucratic organisations. Central to the values of professionalism are the notions of social service (Hanlon 1997), independence and autonomy in the exercise of discretionary judgment (Friedson 2001) and allegiance to an ethical framework (Middlehurst & Kennie 1997). Organisational-professional conflict is the term used to describe the inherent incompatibility between the values of market driven organisations and the professional values of their professional employees (Bamber & Iyer 2002). The conflict of values may be between the values of professionalism and the ideology of organisational control (Shafer, Park & Liao 2002) or when there is incompatibility between norms of the organisation and the ethical standards set by the profession (Brierley & Cowton 2000) or both.

Organisations, driven by the economic imperatives of cost containment or profit maximization, may pressure their professional employees to align their

practice with organisational aims in preference to professional aims (Shafer 2002). Many professionals, who previously have enjoyed the privilege of private practice or the protection of bureaucratic support to enable them to autonomously provide their professional service according to the ideals of professionalism and the values of their profession, are now under pressure to conform to the requirements of their employing organisation. This pressure to ignore professional standards and to conform to employer norms was spectacularly demonstrated in the infamous Enron-Arthur Anderson case (Gordon 2002), and other corporate accounting scandals of the late 1990's and early this century. While the failure of certain professionals to maintain the ethical standards of their profession in the face of employer pressure drew world attention, the daily efforts of professionals to maintain the ethical standards of their profession in the face of pressures placed upon them by their employing organisations draws little media and research attention.

The majority of the research that uses the term 'organisational-professional conflict' is so far found in the literature of the accounting profession. However, there is ample evidence in the literature of many professional disciplines that indicates that conflict between the ideals of professionalism and the values of organisations in which professionals are employed, is creating a growing unrest among professionals. Haines and Sutton (2003) highlight the pressures that public hospital engineers have to deal with when being required to satisfy the contradictory demands of being a cost conscious entrepreneurial risk-manager in addition to being a risk-averse maintainer of professional standards. Research by Lait and Wallace (2002) found that among Human Service Workers higher levels of job stress were associated with restricted ability to fulfil their professional expectations to work with autonomy and discretion and where conflict between their obligations to the employing organisation and their responsibilities to their clients was experienced. Sumner and Townsend-Rocchiccioli (2003) point out that motivation for most nurses to enter the profession of nursing is the professed need to help others. This desire to help others is positioned as a responsibility in the professional discourse of nursing and forms an integral aspect of professional enculturation. However the greater emphasis on marketisation, competition, cost-cutting and down-sizing in health care (Wong 2003), whether provided in the public or private sector, has been documented as challenging nurses' professional ethics (Doane 2002). Furthermore, nurses are confronted with moral dilemmas when they recognise that their ethics are challenged but they are unable to take appropriate actions

because of the structural obstacles located within their organization (Corley 2002).

Similarly, in the medical profession, long considered one of the bastions of professionalism, the phenomenon of corporatisation and the 'industrialisation of health care' (Rastegar 2004, p. 79) results in an 'ethos gap' between managers and clinicians and/or health care teams (Pendleton & King 2002, p. 1354). Increasingly, doctors who hold the core value of maintaining a high standard of caring for patients are being forced to work in ways that compromise their deeply held core personal values (Pendleton & King 2002). Erosion of professional autonomy by the corporatisation of health care has been demonstrated to have a highly negative effect on the career satisfaction of physicians in the USA (Stoddard et al. 2001) and a serious decrease in morale amongst general practitioners in the UK (Pendleton & King 2002). Moreover, Pendleton and King (2002) argue that when doctors and nurses are unable to act in accordance with their deeply held professional values, there will be serious effects on retention in and attraction to both professions.

The nature of professional work is such that many professionals may elect to work as independent practitioners, or in a professional service firm. That is, they may choose to work in an organisation that supports the practice of a single profession, such as an independent law or accounting firm or a medical practice (Pinnington & Morris 2003). However, some professional employees, such as nurses, teachers, and human service workers, are generally obligated to find work as employees of organisations in the public or private sector in order to practise their profession. They have limited opportunity to select work as independent or private practitioners or to work in professional organisations. These professional employees are thus likely to experience higher levels of organisational-professional conflict than professional employees who have the option to choose to self-select into independent or private practise or into a professional service firm. When professional employees who experience dissatisfying levels of organisational-professional conflict have no choice but to work in public or private sector organisations, they may find that their only option to continue working in their profession may be to choose among organisations, which may have similar values. They may thus experience higher levels of organisational-professional conflict than professional employees who have the option to choose to work independently or in professional service firms.

#### **2.4.2 The Research in Relation to Organisational-professional Conflict and Other Work-Related Outcomes**

Organisational-professional conflict has been shown to be significantly and negatively related to organisational commitment, job satisfaction and significantly and positively related to subsequent organisational turnover intentions (Bamber & Iyer 2002; Brierley & Cowton 2000; Shafer 2002; Shafer, Park & Liao 2002). However, the organisational-professional conflict research literature has not considered the relationship between organisational-professional conflict and professional turnover intention.

Furthermore, the research published to date in relation to organisational-professional conflict has suggested, but not successfully established, that there is a significantly positive relationship between either professionalism (Shafer, Park & Liao 2002), or professional identification (Bamber & Iyer 2002) and organisational-professional conflict when these are considered as antecedents of organisational-professional conflict. Although these concepts may be related to professional commitment they are conceptually distinct, and to the author's knowledge no studies relating professional commitment to organisational-professional conflict have yet been published.

Where there are problems with workforce shortages in professional occupations, an understanding of the relationship between organisational-professional conflict and the professional commitment of professional employees, is needed to better understand the factors which affect the retention of professionals within organisations, as well as retention within professions. Furthermore, if professional commitment is significantly and positively related to organisational-professional conflict, then increased knowledge regarding the relationship between professional commitment and organisational-professional conflict when professional commitment is as an antecedent to organisational-professional conflict is needed.

In addition, because professional commitment has not yet been longitudinally studied, there are no published studies of the relationship between professional commitment prior to workplace entry, organisational-professional conflict and professional commitment after a period of workplace exposure. That is, the role of organisational-professional conflict as an intervening variable in the relationship between professional commitment prior to workplace entry and professional commitment after a period of workplace exposure has not yet been studied.

## **2.5 The Research in Relation to Professional Commitment, Organisational Commitment, Organisational Turnover Intention and Professional Turnover Intention**

Sullivan (1999) has noted that research in relation to motivators for adults to change occupations is scarce. In the Australian context there is some information available regarding the movement of workers among certain trades, however, there is a '...significant information gap in our understanding of 'how many' and 'why' workers leave an occupation' (DEST 2002, p. 6). Importantly, many of the few published studies that relate specifically to professional turnover intention (Hackett, Lapierre & Hausdorf 2001; Hasselhorn, Muller & Tackenberg 2005; Krausz et al. 1995; Stordeur et al. 2003) have sampled populations of nurses, but have not distinguished between nursing professionals and non-professional nurses. Therefore, it may be argued that these studies cannot be considered to truly be studies of professional turnover intention. Furthermore, of the studies that sampled nurses, the only one that included professional commitment as a variable in the research was that of Stordeur et al. (2003).

Studies reported by Blau and various associates (Blau 2000; Blau & Lunz 1998; Blau, Tatum & Ward-Cook 2003) considered the relationship between professional commitment and professional withdrawal cognitions among medical technologists. The consistent findings of their research were of a relationship between professional commitment and professional withdrawal cognitions. Blau and his associates used the Blau (1985) Career Commitment measure in their research, which Blau (2000) notes, is a measure of affective commitment only.

The Blau, Tatum and Ward-Cook (2003) study had a repeated measures design, but the measures that were repeated were professional withdrawal cognitions and organisational withdrawal cognitions. It was therefore not a developmental study of professional commitment, in that it did not measure professional commitment prior to workplace entry. Furthermore, although the Blau, Tatum and Ward-Cook (2003) study modelled professional commitment as exogenous to professional withdrawal cognitions and organisational withdrawal cognitions, it did not include the relationship between organisational withdrawal cognitions and professional withdrawal cognitions in the model. The model therefore did not allow for any spurious aspects of the relationship to be accounted for, which might be present between organisational withdrawal

cognitions and professional withdrawal cognitions, because of the common exogenous variable.

Mueller and Lawler (1999) included the relationships between professional commitment and professional turnover intention in their research which included a sub-sample of teachers. They based their argument on Lawler's (1992) theory that when one target of commitment is nested within another, the employees' commitment to the target of commitment will be influenced by the conditions of work that are controlled by that commitment target. Mueller and Lawler (1999) argued that the results of their research showed that the place of employment has only a minimal effect on the professional commitment of a professional employee because the profession is not a formal unit of the organisation and therefore, is not a referent or target of commitment to the organisation among those trained for a particular occupation or profession.

Furthermore, they argued that the ability of professional employees to move amongst organisations in order to find an organisation that better matches the values and norms of the profession is the reason that professional commitment may remain unaffected by work conditions of the organisation. The design of their research, however, was cross-sectional and did not account for the possibility that exposure to the workplace may have already had an effect on the professional commitment of the employees in the organisations studied. It also did not account for the possibility of a relationship between organisational turnover intention and professional turnover intention. The need for research, which investigates the relationship between professional commitment and other factors which relate to professional turnover intention, is apparent.

Cross-sectional studies have indicated that commitment to an occupation, whether professional or non-professional, is related to several work-related outcomes such as occupational turnover intention and organisational turnover intention (Hackett, Lapierre & Hausdorf 2001; Lee, Carswell & Allen 2000). In addition, commitment to the occupation has been linked to organisational commitment and job satisfaction (Irving, Coleman & Cooper 1997; Meyer, Allen & Smith 1993) and organisational-professional conflict (Shafer, Park & Liao 2002).

In meta-analytic studies, job satisfaction and organisational commitment are considered to be the two consistent predictors of organisational turnover intention (Griffeth, Hom & Gaertner 2000; Tett & Meyer 1993). However, neither of the meta-analyses considered the role of occupational commitment in organisational turnover intention. Occupational commitment has been found to be



significantly correlated with organisational turnover, both intended and actual, even when the effects of job satisfaction and organisational commitment, are partialled out (Lee, Carswell & Allen 2000). Furthermore, Lee, Carswell and Allen (2000) noted that for professional employees there was a stronger association between occupational commitment and occupational turnover intention *as well as* organisational turnover intention than for non-professional employees. In addition, Hackett, Lapierre and Hausdorf (2001) have suggested that both organisational commitment and occupational commitment influence occupational withdrawal intentions and organisational withdrawal intentions via direct and indirect paths.

Development of professional commitment precedes the development of organisational commitment through the processes of anticipatory socialisation and the professional socialisation that occurs in the educational preparation of professionals (Beck & Wilson 2001; Friedson 2001; Shafer, Park & Liao 2002). This socialisation to the profession, therefore, occurs prior to employment in an organisation (Lee, Carswell and Allen 2000; Beck & Wilson 2001), thus professionals enter employment in organisations, with a level of commitment to their profession that is already established. Commitment to a professional occupation has been found to be correlated with organisational commitment (Lee, Carswell & Allen 2000). Vandenberg and Scarpello's (1994) longitudinal study of the relationship between professional commitment and organisational commitment indicated that professional commitment may be considered to be an antecedent of organisational commitment, but as they identified, no other intervening variables were included in the relationship in their study to enable identification of whether the relationship between professional commitment and organisational commitment is non-spurious or not. Furthermore, although Vandenberg and Scarpello's (1994) study was longitudinal in design, it did not consider the relationship between professional commitment and organisational commitment from a developmental perspective. Therefore, the relationship between professional commitment and organisational commitment has not been studied from a developmental perspective and the process by which the relationship between them develops is not yet known.

The status of job satisfaction as an antecedent of organisational commitment is long established in the organisational behaviour literature (Mathieu & Zajac 1990). Job satisfaction and affective commitment to the occupation have been shown to be positively related (Irving, Coleman & Cooper 1997; Meyer, Allen & Smith 1993) and job satisfaction has been shown to be

significantly and positively related to commitment to the occupation (Blau 2003). Job satisfaction therefore, has the potential to be related to commitment to both the profession and the organisation. However, to date, the relationships between job satisfaction, professional commitment and organisational commitment have been examined in cross-sectional research only (Blau 2003; Lee, Carswell & Allen 2000).

Furthermore, organisations generally employ certain types of professionals according to the nature of the business that they conduct. This means that leaving a profession to work in another profession or occupation usually necessitates departure from employment in the organisation. Thus, in practice, there is a link between professional turnover intention and organisational turnover. When comparing professional employees with non-professional employees, Lee, Carswell and Allen's (2000) meta-analysis demonstrated that identification with and attachment to their profession is particularly relevant to the professional employee's decision to leave the organisation. Lee, Carswell and Allen (2000) argue that occupational commitment is likely to have a greater role in the process of organisational turnover than previously thought, and that there is a need for clearer identification of the role of occupational commitment in organisational turnover.

Moreover, empirical evidence suggests that where the organisation provides a context in which the professional employee may express their professional behaviours and skill, and supports the professional employee in achievement of their professional goals both organisational commitment and professional commitment are increased (Bamber & Iyer 2002; Lee, Carswell and Allen 2000; Russo 1998). Furthermore, there is evidence that when the organisation does not support the professional employee's goals the correlation between organisational commitment and professional commitment decreases though it does remain positive and significant (Lee, Carswell & Allen 2000). In addition, Meyer, Allen and Topolnytsky (1998) argue that employees with higher levels of professional commitment are more likely to be at odds with their employing organisation in matters relating to professional ethics, procedures or practices.

In cross-sectional studies, Bamber and Iyer (2002) have previously proposed that identification with the profession was a positive predictor of organisational-professional conflict and Shafer, Park and Liao (2002) found that dedication to the profession was a positive predictor of organisational-professional conflict. However, the relationship between organisational-

professional conflict and professional commitment has not yet been empirically examined. Organisational-professional conflict has also been found to be significantly and negatively related to organisational commitment, job satisfaction and organisational turnover intention (Bamber & Iyer 2002; Shafer 2002; Shafer, Park & Liao 2002). However, the relationship between organisational-professional conflict and professional turnover intention has not been investigated.

Several gaps in the research literature are therefore identified in this review of literature.

These are in relation to:

1. The relationship between professional commitment and other workplace factors which may relate to professional turnover intention.
2. The process by which the relationship between professional commitment and organisational commitment develops.
3. Identification of the role of occupational/professional commitment in organisational turnover.
4. The relationship between organisational-professional conflict and professional turnover intention.

### **The Relationships to be Investigated in the Research**

As previously argued, there are key differences between members of professional occupations and members of non-professional occupations that relate to the nature of the relationship between the professional employee, the employing organisation and the professional association. These are that for professional employees the 'psychological contract' of employment is not just a metaphoric contract between the employee and the employer but includes a legal contract with the professional association. Also that for professional employees, socialisation to the professional occupation occurs prior to workplace entry and separately from the employing organisation and that professionals consider that their responsibility is to provide a high quality service that is offered through the exercise of their professional knowledge for the benefit of the client and that the provision of service takes precedence over economic imperatives.

To date, the majority of research that has been done in relation to professional turnover intention has not clearly distinguished between professional and non-professional occupations or has not made the distinction between professional and non-professional members of an occupational group. This problem will be addressed in this research by ensuring that only members of an

occupation that may be considered to be professionals will be included in the sample.

Furthermore, as previously identified, Beck and Wilson (2001) have argued that the development of professional employees' commitment to the employing organisation needs to be understood differently from the commitment of non-professional employees. This is because non-professional employees usually begin their socialisation to the organisation at the same time as they enter the workplace. In contrast, professional employees are socialised to the profession during the process of educational preparation at the tertiary level (Beck & Wilson 2001) and it is during this education that a level of commitment to the profession develops (Friedson 2001). Therefore, for professional employees, commitment to the profession may also be considered to be an antecedent of organisational commitment and other workplace outcomes such as, job satisfaction, organisational-professional conflict, organisational turnover intention and professional turnover intention.

Lee, Carswell and Allen (2000) have identified the need for a better understanding of the relationship between professional commitment and organisational commitment because of the relationship that has been found between professional commitment and organisational turnover intention. Organisational-professional conflict has been shown to be significantly and negatively related to organisational commitment and job satisfaction and significantly and positively related to organisational turnover intention (Shafer, Park & Liao 2002), however, its relationship to professionalism or identification with the profession is not yet established. Moreover, the relationship between organisational-professional conflict and professional turnover intention has not yet been studied.

This research will consider the pre-workplace entry level of professional commitment and its relationship to organisational-professional conflict, job satisfaction and organisational commitment after a period of workplace exposure. This is done to investigate the relationships between these variables when professional commitment is studied as their antecedent. It will also examine the ways in which organisational-professional conflict, job satisfaction, organisational commitment and professional commitment after a period of workplace exposure are related to organisational turnover intention and professional turnover intention. This will be achieved through the development of a model of the proposed relationships between the variables and evaluation of the model using path analysis. The model, and the explanation and justification for

the proposed relationships between the variables, is provided in detail in Chapter Four, Section 4.4.

## 2.6 Conclusion

This chapter has reviewed the current theoretical and research literature in relation to work-related commitment. The review of literature identified, that substantial changes to the economy of the market in recent decades have altered the traditional paradigm of mutual employee-organisation loyalty, with the result that many employees are thought to be shifting their prime loyalty from their employing organisation to their occupation. These changes in the relationships between employees and organisations have lead several authors to within the organisational behaviour literature to point to the need for shift in focus from organisational commitment as the prime target of work-related commitment to occupational or professional commitment. Furthermore, it was noted in the review of the literature that since occupational or professional commitment has not been considered as the prime target of work-related commitment, the relationship between professional commitment and organisational turnover intention is not well understood. Therefore, there is a need for research in this matter.

The review of literature examined the concept of work-related commitment. It discussed the distinction that is made in the contemporary work-related commitment literature between forms of commitment and components of commitment. Targets of commitment were identified in the review as the work-related entities, such as the organisation, occupation, supervisor, union or work-group to which individuals may become committed. Commitment to which, may have implications for various work-related outcomes such as turnover intention, organisational-citizen behaviours, in-role performance and job satisfaction, as well as implications for other targets of commitment. The components of commitment were identified in the literature review, as the reasons that underlie an individual's commitment to the various forms of commitment. Importantly, it was noted that differences in the components of one target of commitment may have implications for other commitment targets.

The review of literature has examined the history of work-related commitment and identified that traditionally, organisational behaviour research has given primacy to organisational commitment and have considered it as the work-related commitment to which all other commitment targets lead. The review of the literature in relation to professional commitment identified that unlike employees of non-professional occupations, development of commitment

to the occupation precedes development of commitment to the organisation. This is because of the sustained period of socialisation to the profession that professionals are exposed to through the process of their tertiary-level education preparation for work in the profession. Therefore, for professionals, professional commitment may be considered to be an antecedent to other forms of work-related commitment.

The review of literature also examined contemporary theory in relation to the nature of professionalism and has defined the parameters within which the term 'professional' is used in the research. By considering the ideals that inform the role of professionals in society, the review has identified the values and legal circumstances that create the distinction between professional and non-professional occupations. The review has also identified the process of professionalisation, which occupations may undertake as the means to attain societal acceptance as a profession.

The literature in relation to organisational-professional conflict was reviewed as it has been considered in the literature as either an antecedent to, or consequence of, professional commitment. Moreover, the relevance of organisational-professional conflict to organisational commitment, organisational turnover intention and professional turnover intention is considered worthy of study, in a work environment where professionals are increasingly employed in bureaucratic organisations, whose market-oriented values, may come into conflict with the service-oriented values of professions. The organisational-professional conflict literature *per se* was seen to be limited. However, evidence that for professional employees, conflict between the values of their employing organisations and their values as professionals is the cause of personal concern, as well as concern for the future of the role of professionals in society, was found and presented in the literature review.

Nevertheless, examination of the literature has identified that research that examines professional commitment prior to workplace entry and the relationship that professional commitment as an antecedent to and consequence of other work-related outcomes, such as organisational-professional conflict, job satisfaction, organisational commitment, is yet to be published. The review of the literature also identified that there is a significant knowledge gap in relation to the reasons that professional employees choose to leave their profession. This knowledge gap may be attributable in part, to the lack of research that is specific to professional commitment. In addition, the knowledge gap may be attributable to the lack of longitudinal research in relation to professional turnover intention.

Furthermore, the knowledge gap may be attributable to the lack of research in relation to the effect that exposure to workplaces where there may be conflict between the values of the profession and those of the organisation, may have on the commitment of professional employees working in bureaucratic organisations.

The research sample chosen to investigate the relationships between professional commitment and professional turnover intention among professional employees consisted of nursing professionals. The population of interest for the research project is that of nursing professionals who are entering the workplace for the first time after having gained their pre-registration qualifications through a three-year period of under-graduate tertiary education. A contributing reason to the sample choice is that the profession of nursing is experiencing a worldwide workforce shortage. The next chapter examines the extent of and reasons for the nursing workforce shortage with a particular focus on matters relating to organisational and professional turnover.



### **3. The Research Sample and Sample-related Issues**

#### **3.1 Introduction**

The research sample chosen to investigate the relationships between professional commitment and professional turnover intention among professional employees was comprised of nursing professionals. Nursing is an occupation that is comprised of both professional and non-professional members. This chapter begins by outlining the distinction between professional and non-professional members of the occupation of nursing. Nursing is an occupation that is experiencing workforce shortages on a global scale. The chapter therefore reviews literature which identifies the extent of the global nursing shortage. Workforce supply and demand imbalance is identified in the literature as the reasons for the global nursing shortage. The reasons for the supply and demand imbalance in developed countries are identified as being associated with decreased recruitment to the occupation, an ageing workforce and high rates of turnover, whether organisational, occupational or professional.

##### **3.1.1 Nursing and Nursing Professionals**

The definition of ‘nurse’ may vary according to the source (Buchan & Calman 2004). The World Health Organization definition of nurse cited by Buchan and Calman, (2004, p. 9) is:

A person who has completed a programme of basic nursing education and is qualified and authorized in his/her country to practise nursing in all settings for the promotion of health, prevention of illness, care of the sick and rehabilitation.

Within the occupation known as nursing, there are nurses who are professionally prepared at tertiary education institutions and who, for some time, have been recognized as having the attributes of professionals (DEWR 2004; Lee, Carswell & Allen 2000; Meyer, Allen & Smith 1993). In Australia, these nurses are known as Registered Nurses (ANMC 2002). There are also nurses who are part of the nursing workforce but are not nursing professionals. In Australia, these nurses may be known either as enrolled nurses, division-two nurses, assistants-in-nursing or personal care assistants, and perform nursing tasks as delegated by the Registered Nurse (ANMC 2002). In other countries, nurses may also be known as

registered nurses, but may have varying levels of educational preparation for the role that they will fulfil in the health care system of that nation (World Health Organization (WHO) 2006).

The definition of nursing provided by the International Council of Nursing (ICN) reflects the professional attributes of nursing. According to the ICN:

Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient health systems management, and education are also key nursing roles. (cited in Buchan & Calman 2004, p. 9)

Both nursing professionals and non-professional nurses are employed in health care systems throughout the world and the ratio of nursing professionals to non-professional nurses varies across countries (WHO 2006). In European Union countries the proportion of registered nurses in the nursing workforce varies across countries, however among these registered nurses there are also varying proportions of nursing professionals according to the minimum educational requirements for nurse registration and the legislation in relation to professional regulation in each country (Hasselhorn, Muller & Tackenberg 2005). Australia currently has the highest ratio of nursing professionals to non-professional nurses in the world, as it was the first country to require that nurses have a three-year university education as the minimum standard for entry into professional practise (Francis & Humphreys 1999).

To ensure that the population from which the sample is drawn is consistent with the population of interest for the study (Aldridge & Levine 2001), the sample in this research is comprised of nurses who were professionally prepared at tertiary education institutions. The professional preparation of these nurses, entry to and licensure to practise in the profession is regulated by a professional association whose regulatory role has been delegated by the State. This group of nurses may therefore be recognised as having the attributes of professionals. In this research, these nurses are referred to as nursing professionals to distinguish them from non-professional nurses. This is because in some countries, the term 'registered nurse' may also refer to non-professional nurses. Because this research relates to nursing professionals, where possible, the distinction between nursing professionals and non-professional nurses is made.

However, it is recognised that this distinction is not always made in the literature in relation to nursing. When literature is cited that does not distinguish between nursing professionals and non-professional nurses, the global term of nurse or nursing will be used.

### **3.2 The Nursing Shortage**

Nursing is experiencing a critical shortage in its workforce. The shortages in the nursing workforce are worldwide, with evidence of a supply/demand imbalance in almost all countries, whether developed or developing (Buchan & Calman 2005). Australia is therefore but one of the many countries in the world that is experiencing a shortage of nurses to fill the positions needed to maintain an adequate nursing workforce.

Various reasons are identified in the literature for the global shortage of nurses. These issues pertain to increasing demands for nursing services that are concurrent with an inadequate workforce supply of nurses to fill the required positions (Buchan & Calman 2005; Frijters, Shields & Wheatly Price 2003). In developed countries the demand for nursing services is driven by several factors. These factors include the increasing health demands of an ageing general population (Frijters, Shields & Wheatly Price 2003) and improved health care technology (Lynn & Redman 2005) which result in increased rates of hospital admission. These increased rates of admissions are concurrent with higher levels of patient acuity and increased rates of patient turnover (Armstrong 2004). In developing countries, where the supply of nurses has never been high, the demand for nursing services is frequently driven by the requirements of external agencies, such as donors and the International Monetary Fund, for the countries to address particular health problems within that country (Buchan & Calman 2005).

Hasselhorn, Tackenberg et al. (2005) indicate that within the European Union the problem of the supply of nurses takes two forms. In some European countries such as Eastern Europe, Germany and Spain, resources are not available to employ sufficient numbers of nurses to adequately care for patients. On the other hand, in other European countries, such as the UK, the Netherlands, Belgium and France, there are insufficient numbers of nurses to fill the positions available (Hasselhorn, Tackenberg et al. 2005). Buchan and Calman (2005) identify that there is a pattern of undersupply of qualified nurses in many developing countries throughout the world, while in many developed countries there is an abundance of qualified nurses, but a shortage of nurses who are available to the workforce.

The increased demand for nursing services, both in developed and developing nations, is accompanied by problems associated with the supply of

nurses. Certain reasons for the problems with supply are common to both developed and developing countries. Buchan and Calman (2005) identify these as the continued predominance of females in nursing with the concomitant downgrading of the value of nursing through its being considered to be 'women's work', as well as the common problem of violence against health workers of which nurses are frequently the target, because they are in the frontline of health care.

In developed countries the problems associated with the supply of nurses also include an increasingly ageing nursing population (Australian Institute of Health and Welfare (AIHW) 2003; Smith & Seccombe 1999; Sochalski 2002) decreasing numbers of new entrants to the profession (Buerhaus, Staiger & Auerbach 2000; Cowin 2002; Johnstone & Stewart 2003) and professional turnover, that is, nurses who leave nursing to work in other professions or occupations (Duffield, O'Brien Pallas & Aitken 2004; Hodges, Williams & Carman 2002). Several authors (e.g. Buchan & Calman 2005; Hasselhorn et al. 2005; Kalliath & Morris 2002; Stone et al. 2003) point to the concurrence of the present shortage of nurses with the health sector reforms and associated restructuring and cost containment measures that have taken place since the 1980's. In their assessment of the global nursing shortage, Buchan and Calman (2005) argue that lack of involvement of nurses in the process of the health system restructuring that took place in the 1990's has been counter-productive to the improvement of health services, as it has resulted in lowering of morale and motivation of nurses. Hasselhorn, Tackenberg et al. (2005) argue that new management structures and the emphasis on profitability in health care have dramatically altered the working conditions of nurses, with one author characterising them as 'underpaid, overworked and understaffed' (De Troyer 2000 cited in Hasselhorn, Tackenberg et al. 2005, p. 2).

### **3.2.1 The Extent of the Nursing Shortages**

According to the Australian Institute of Health and Welfare (AIHW), the nursing workforce is comprised of registered nurses (nursing professionals) and enrolled nurses (non-professional nurses). Registered nurses make up 81 percent of the nursing workforce and enrolled nurses make up the remaining 19 percent (AIHW, 2003). The Senate Community Affairs Committee Inquiry into Nursing (SCAC) in 2001 identified a critical shortage of nurses in all areas of health care service provision in Australia (Commonwealth of Australia 2002b). The National Review of Nursing Education (NRNE) conducted in 2001 estimated that over the

2001-06 period approximately 22,000 nurses would leave the workforce and that by 2006 the number of job openings for new entrants into nursing would be expected to be 31,000 (Commonwealth of Australia 2002a). While this figure represents nursing at all levels, the greater proportion is among nursing professionals (registered nurses), with some of the lowest net job opening rates being for enrolled nurses and personal care and nursing assistants (Commonwealth of Australia, 2002a). The report points out that 72 percent of the increase in job openings is attributable to net turnover and only 28 percent due to growth in the employment market.

The AIHW surveys the nursing workforce every two years. The AIHW (2003) indicated that in 2001 there was a small increase (1.4%) in the number of registered and enrolled nurses from 1999. The report noted that despite the overall increase in the number of employed nurses, there has been a decrease in the national supply of nurses from the 1993 figure of 1074 full-time equivalent (FTE) nurses per 100,000, to 1018 FTE in 1999. This overall decrease is attributable to an increase in the number of nurses working part-time, which is accompanied by a decrease in the average hours worked per week (AIHW 2003).

The Senate Community Affairs Committee (SCAC) inquiry into nursing in Australia, heard almost 1000 submissions from groups and individuals with an interest in nursing and held hearings in all states and territories (Commonwealth of Australia 2002b). The SCAC heard that there is a critical shortage of nurses in all areas of health care service provision, but noted that there are problems associated with establishing the numerical extent of the problem. The report pointed out that among the submissions it was identified that there is ‘...no clear, rigorous and nationally agreed methodology available...’ and ‘...that it is not possible to accurately determine and report on the actual number of nursing vacancies either locally or nationally’ (Commonwealth of Australia 2002b, p. 14).

In the United States (USA), the Department of Health and Human Services estimates from the Bureau of Health Professions showed a national shortfall of 110,700 registered nurse full-time equivalents in 2000 (Sochalski 2002). In the ten years 1998 to 2008, the Bureau of Labour Statistics (BLS) estimated that employers would need to replace an estimated 331,000 registered nurses in the USA (Sochalski 2002). In Canada, the nursing workforce shortfall is expected to reach 78,000 by 2011 (Stubblings & Scott 2004). Across the United Kingdom (UK) and Europe, there is a shortage of nursing staff in all of the member states of the European Union with the exception of Spain (Hasselhorn,

Tackenberg & Muller 2003). Hasselhorn, Muller et al. (2005) indicate that in some European countries there are insufficient numbers of individuals with nursing qualifications, while in others, there are sufficient numbers of qualified nurses but insufficient numbers that are actually working in nursing. In 2002, a large health care organisation in the USA had no difficulty in recruiting nursing staff, when they promised nurse to patient ratios of 1:4, which exceeded the 1:6 ratio that was about to be mandated by the Californian Government (Garretson 2004). This, Garretson (2004) suggested, may indicate that rather than there actually being a shortage of nurses, in developed countries at least, there is essentially a shortage of nurses who are willing to work in the environment that current health care systems demand.

### **3.3 Reasons for the Workforce Shortage**

In developed countries of the world, the nursing shortage is the result of both recruitment and retention issues (Cowin & Jacobsson 2003b). Moreover, the reasons underlying retention include the ageing of the nursing workforce, organisational turnover and professional turnover.

#### **3.3.1 Recruitment**

Recruitment of sufficient numbers of new nurses contributes to the supply of nurses in the workforce. According to Buerhaus, Staiger and Auerbach (2000), the major factor contributing to the ageing of the registered nurse workforce is the decline in the numbers of younger people choosing nursing as a career over the last 20 years. Women make up the majority of the nursing workforce worldwide (Buchan & Calman 2005). Women make up 91.6 percent of the nursing workforce in Australia (AIHW 2003) and 94.5 percent of the nursing workforce in the USA (Berliner & Ginzberg 2002). Nursing has traditionally drawn its ranks from what was once a steady supply of young women who had few other career alternatives (Duffield & O'Brien-Pallas 2002; Hallam 2002). However, the increase in the career alternatives that are now available to young women is considered to be a major factor in the decreased interest in entry to nursing (Hodges, Williams & Carman 2002). As opportunities for women to choose careers other than nursing have expanded, there has been a corresponding decrease in the numbers entering the nursing workforce (Buerhaus, Staiger & Auerbach 2000). Furthermore, the opportunity for women to engage in a wider variety of professional pursuits compounds the nursing shortage even when nursing qualifications have been gained (Buerhaus, Staiger & Auerbach 2000).

The most recent available information from the Australian Institute of Health and Welfare, (2003) indicates that there has been an increase in the average age of nurses in Australia from 39.3 years in 1995 to 42.2 years in 2001. In that same period the proportion of nursing professionals under the age of 35 years decreased from 32.4 percent in 1995 to 25.9 percent in 2001. In 2000, only 9.1 percent of the nursing workforce in the USA was under the age of 30 years, compared with 25.1 percent in this age group in 1980 (Berliner & Ginzberg 2002). Karmel and Li (2002) have indicated that in Australia, a 120 percent increase in the number of nursing students would be required to address the



shortfalls projected in the nursing workforce by 2010, placing an unworkable burden on the institutions involved in nurse education.

### **3.3.2 Retention**

Nursing professionals leave the nursing workforce for a variety of reasons. These reasons may include retirement, parenting, and injury/illness (Victorian Government Department of Human Services 2001). However, nursing professionals also leave the nursing workforce because they choose to work in other professions or occupations. For nursing professionals, leaving the workforce may be either temporary (such as while engaged in full-time parenting) or permanent. Some reasons for permanently leaving the nursing workforce are unavoidable (such as retirement due to age); but such reasons are outside the scope of this research.

A number of governments have sought to attract former nurses back into the workforce, but as Buchan (2002) points out, while this strategy may appear to provide a quick fix, it also needs to take into account the reasons that the former nurses originally left the health system, otherwise the efforts and costs spent in attracting and returning these nurses back into the workforce may be futile. Duffield and O'Brien-Pallas (2002) note that nursing workforce planning has historically been informed by the assumption that nursing was a career for young women who would leave to marry and have children and would be readily replaced. They argue that while the workplace recognises that this is an outdated concept, no changes that attempt to address the needs of nursing professionals who must accommodate the needs of their family into their working life, have been made to workforce planning. Nor has the workplace sought to accommodate the needs of older workers, of whom many cite the physical labour of nursing and decreased job satisfaction as reasons for leaving nursing before retirement age (Duffield & O'Brien-Pallas 2002).

Since 1993, all nursing professionals in Australia have been required to hold a Bachelor's degree in nursing in order to be eligible for registration to practise (Francis & Humphreys 1999). The effect of the move from apprentice-style nursing training to tertiary educational preparation of nursing professionals receives little research attention but is frequently blamed in the form of 'conventional wisdom' in health care circles, and by the public, as a contributor to high rates of loss of nursing professionals in the years immediately following their commencement of work in the health care system (Cowin & Jacobsson 2003a; Gilmore 2001).

Cowin and Jacobsson (2003), however, argue that the reality of the health care workplace is that all nurses are enormously challenged by the current working environment that they face. This is regardless of the type of educational preparation they have received, whether hospital-based apprenticeship-style or university-based. Furthermore, Cowin and Jacobsson (2003) point out the implausibility of blaming the tertiary education system for not preparing nursing professionals for a workplace that is frequently at odds with the basic philosophy of their own profession. More recently, Maben, Latter and Macleod Clark (2006) have documented the experiences of newly qualified nurses in the UK. They identified that the new nurses' attempts to practise according to the professional ideals and values that they had when they entered the workplace, were generally sabotaged by the pressures and constraints of the organisational forces to which they were subjected (Maben, Latter, & Macleod Clark 2006). Thus, although the term 'organisational-professional conflict' is not specifically used, these authors refer to conflict between the values of the profession and the values of organisations in which nurses work.

### **3.3.3 Ageing**

The anticipated exodus of nurses of retirement age in the near future emphasizes the need to address issues relating to retention of currently practising nurses. In 2002, it was forecast that 30 percent of the nursing workforce in Australia would be considering retirement over the next 10-15 years. In addition, nurses in the older age group were also expected to move to part-time work, further exacerbating the nursing shortage (Commonwealth of Australia, 2002b). In 1999, Smith and Seccombe (1999) forecast that by 2000 in the UK almost half of the registered nurse workforce would be 40 years or older. Moreover, Buchan (1999) noted that another one in ten nurses in the UK were within five years of the 55 year retirement age. Complicating the concerns regarding the ageing of the nursing workforce in the UK has been the decline in newly qualified nurses, with a fall of initial entries to the register from training by 36 percent from the period 1990/1991 to 1997/1998 and with 30 percent of the decline occurring in the later 12 months. This decline is in part accounted for by the cuts made in the number of training places in the mid 1990s and a decrease in the number of valid applications to nursing courses (Smith & Seccombe 1999).

Notably, Buchan (1999) has pointed out that in the period 1990-1999 had seen a significant age shift in the nurses and midwives on the United Kingdom Central Council for Nursing Midwifery and Health Visiting (UKCC) register with

the proportion in the less than 30 age group halving and a corresponding increase in those in the older age groups. Buchan (1999, p.819) suggested that this is partly due to an 'age-bulge' created by large intakes of young registered nurses that occurred in the 1970's and early 1980's, followed by reduced intakes of newly qualified practitioners in recent years. In addition, the trend to an increasing proportion of mature-age entrants into nursing creates a situation whereby the average age of practising registered nurses is increased. In the US, the average age of new graduates of nursing is 31 years (Bowles & Candela 2005). Buchan (1999) predicted that by 2010 one in four nurses would be 50 years or older. Sochalski (2002) notes that the US Bureau of Labour Statistics identified that nursing would be one of the top twenty occupations that would be affected by baby-boomer retirements and Aiken et al. (2001) reported that half of the USA's registered nurses will reach retirement age in the next fifteen years.

#### **3.3.4 Organisational Turnover**

Turnover between organisations intensifies the perception of the shortage of nurses because of the time taken to fill the positions vacated. Organisational turnover reduces effectiveness and productivity of the delivery of care, increases labour costs and has a negative effect on the cohesiveness of the remaining staff (Tai, Bame & Robinson 1998). Moreover, increased pressure on remaining staff may result in decreased morale and further turnover (Borda & Norman 1997). While frequent reference is made in the literature to high turnover rates in nursing, information in regard to actual rates is scarce. Furthermore, Jones (2005) notes that turnover rates are frequently calculated differently within and across organisations, with some reports including internal turnover, that is, changing positions within the organisation, in turnover figures. West, Barron and Reeves (2005) indicate that reported nurse turnover rates range from 11 to 38 percent in London, and Kleinman (2004) notes that in the USA the average turnover rates for registered nurses working in hospitals in 2002 was 21.3 percent.

Aiken et al. (2001) reported that rates of intention to leave the current job within the next year ranged from 16.6 percent to 38.9 percent in a large study involving nurses in England, Scotland, Canada, the USA and Germany. In the age group under 30 years, these rates of intention to leave the current job ranged from 26.5 percent to 53.7 percent (Aiken et al. 2001). The distinction between organisational turnover and professional turnover was not made in Aiken et al.'s (2001) research. In a survey of nurses in the first five years of their post graduate experience, Bowles and Candela (2005) identified that 30 percent of their sample

had left their first nursing position within the first year of their employment and after two years 57 percent had left their first job. Bowles and Candela (2005) did not provide any indication of the relationship of job turnover to professional turnover intention or professional turnover.

### **3.3.5 Professional Turnover**

Organisational turnover presents its own problems to employing organisations because it magnifies the apparent lack in the supply of nurses. It does not, however, deplete the numbers of nurses available to the nursing workforce. Professional turnover, on the other hand, contributes directly to the shortage of nurses. Moreover, professional turnover implies all of the costs incurred, in both human and economic resources, as organisational turnover, and more. Nurses who leave the profession to work in other fields have been educated at a cost, are highly skilled and through experience have developed clinical judgment abilities. These skills are not transferred to another health care organisation as occurs in the situation of organisational turnover, but are lost to the nursing workforce.

In Australia there is a significant number of qualified nurses who have left the profession to work in other occupations (Karmel & Li 2002). The 1996 Australian population census revealed that of Australian-born individuals aged between 15 and 64, for almost 20 percent the highest qualification that they possessed was in nursing but they had either temporarily or permanently left the nursing workforce (Duffield & O'Brien-Pallas 2002). Of non-Australian born nurses, 14.3 percent were not in the nursing workforce. Not accounted for in these figures would be the number of individuals who have nursing qualifications, but have undertaken further studies and have gained a higher, non-nursing qualification.

Johnson and Preston (2001) pointed out the dearth of information about those who were once qualified as nurses but who are no longer registered. In the period 1993 to 1997 it was estimated that between 12,500 and 19,123 individuals who had nursing qualifications were employed in non-nursing occupations (Duffield & O'Brien-Pallas 2002). Of these only about 4000 to 5000 were seeking to be employed in nursing. Shah and Burke (2001) noted that from February 1999 to February 2000, 65 percent of nursing professionals in Australia, who left nursing moved out of the labour force. However, 31 percent of nursing professionals who left nursing did so to work or to seek work in other occupations. Berliner and Ginzberg (2002) noted that in 2000, there were almost

500,000 qualified nurses in the USA who were not working in nursing.

According to Lynn and Redman (2005) the years between 1992 and 2000, saw a 28 percent increase in the number of registered nurses in the US, who were choosing to work in non-nursing work because of dissatisfaction with certain aspects of nursing.

In Australia, the loss of recent graduates is reported to be high, with 20 percent of nurses leaving after just one year of employment (Armstrong 2004). This loss is particularly found among the graduates in the 19 to 21 years age group (Commonwealth of Australia 2002a; Karmel & Li 2002). Adding to the shortage in the UK is the number of students and graduates of nursing courses who do not enter the nursing workforce. Finlayson et al. (2002) noted that in the UK, the number of undergraduate students in nursing and midwifery had almost doubled between 1995-1996 and 1999-2000. They pointed out, however, that this increase in enrolments does not immediately translate into increased entry of graduates into the workplace. They noted that there is a 20 percent attrition rate of student nurses from nursing courses and that overseas students, who are likely to return to their country of origin, fill a further four percent of student places. Furthermore, they estimated that approximately one-third of graduates eligible to register with the UKCC do not register to practise. In addition to this 'pre-registration attrition', Newman, Uvanney and Chansarkar (2001) identified that ten percent of newly qualified nurses leave the National Health Service (NHS) within twelve months of qualifying and that one third of nurses of working age are no longer working as nurses. According to Queensland Health (2005), high wastage rates in nursing are a major contributor to the shortage in the supply of nurses in Queensland. Although no supporting data has yet been collected, the report speculates that the wastage rate for nurses in the first two to three years after graduation could be as high as 40 percent.

### **3.4 Conclusion**

This chapter has identified that within the occupation of nursing there are members who are professionals and others who are non-professional. It was noted that the distinction between professional and non-professional nurses is not generally considered in professional commitment research literature in which samples of nurses are included, but that the distinction is made in this research. The chapter examined the extent of and the reasons for the global workforce shortage in the occupation of nursing. Reasons for the shortage in the developed world were seen to include problems with recruitment, as well as retention. It was also noted that workforce shortages are expected to be exacerbated in the next five to ten years by the increased rates of retirement associated with the 'baby-boomer' generation. The chapter identified that organisational turnover and professional turnover are contributing to the current workforce shortages. It was also noted that in many developed countries, including Australia, there are significant numbers of qualified nurses who choose to work in non-nursing jobs. Furthermore, turnover from the profession in Australia during the first year of exposure to the workplace is estimated to be 20 percent.

Chapters Two and Three have reviewed literature relevant to this research. Chapter Four will provide a discussion of the methodology that will be used in this research and a detailed discussion of the limitations that are associated with the methodology. It will also provide a detailed discussion of the theoretical model and measures used in the research, as well as the data collection methods.

## **4 Methodology, Methods and the Theoretical Model**

Chapters Two and Three have reviewed literature that is related to the issues addressed in the research. This chapter discusses the research paradigm that informs the use of the methodology, which in turn informs the methods used to design, conduct and analyse the research. The general limitations of the methodology are discussed. The possible threats to the validity of this research are outlined and the remedies made to address those threats are discussed. The limitations of the specific methods used are also considered. The measures used in the research are introduced, as well as the theoretical model of the relationships between the variables that are examined in the research and the associated hypotheses. The procedures in relation to data collection are also outlined.

### **4.1 Introduction**

The goal of this research is to contribute to knowledge about the relationship between professional commitment and professional turnover intention. In particular, the research examines the effect that workplace exposure has on professional commitment developed during the process of socialisation to the profession. Other workplace factors that may relate to professional commitment and professional turnover intention such as job satisfaction, organisational commitment, organisational-professional conflict and organisational turnover intention are also included in the research. This chapter provides a brief explanation of critical realism, which is the philosophical position that informs the use of the methodology and methods in the research, as well as the interpretation of the findings. The methodology of quantitative research has been used in this research. The limitations of the methodology are considered in this chapter with particular attention to the possible threats to the validity of the research and the means by which these threats to validity were addressed. The chapter also discusses the measures used and data collection procedures that were performed to implement the repeated measures survey research design.

Confirmatory factor analysis is used in the research to examine the relationship between the construct of commitment to the profession and its proposed components. The theoretical model of the relationships among the variables studied in the research was evaluated using path analysis. Confirmatory

factor analysis and path analysis are forms of the statistical method of structural equation modelling which is referred to as ‘causal modelling’ in much of the literature. This thesis does not use or endorse the use of the term ‘causal’ or other associated terms such as ‘causality’ and ‘causation’ to describe the relationships between the variables used in the models. The terminology of ‘theoretical model’ has been adopted rather than the common terminology of ‘causal model’ to avoid implying that certain variables may be the ‘cause’ of effects in certain other variables.



## 4.2 Justification for the Paradigm and Methodology

The research presented in this thesis is informed by the philosophical position of critical realism. Critical realism is considered by its proponents to be a philosophy *for* science rather than a philosophy *about* science and ‘... is uniquely consistent with the historical emergence, substantive content and practical presuppositions of the fundamental explanatory sciences as we know them today’ (Bhaskar 1991 p. 141). The philosophical position of critical realism addresses the epistemological problems that arise when the ontological reality of ideas is conflated with the epistemological issues that relate to their ‘truth’, instrumental or moral value (Bhaskar 1997). Bhaskar (1997) argues that epistemology is not separate from ontology but is contained within it. Therefore, ‘being’ and ‘reality’ cannot be reduced to what can be known, or how what can be known, may be known; rather, that reality exists separately from human knowledge and human knowledge is but one part of reality.

In the ontological landscape, critical realism is positioned between the extremes of the claims of scientific realism and social constructionism (Reed 2005). Critical realism is of the ontological position that structures and mechanisms generate phenomena (Dobson 2001). According to critical realism, these structures and mechanisms are real and exist independently of the awareness or any interpretations of the phenomena that may be made by either the researcher, or those who participate in the research (Edwards & Bagozzi 2000). However real these structures and mechanisms are considered to be, critical realism argues that they are not able to be directly accessed through the experience of the senses but are theoretically constructed (Reed 2005). Therefore, in attempting to explain structures and mechanisms that are considered to be real, scientific research must ‘trade’ in hypothetical constructs. It is the constructs that are not ‘real’ in the sense that they do not exist independently of the awareness or interpretations of those involved in the research (Edwards & Bagozzi 2000, p. 157).

Because of its ontological position, critical realism is also able to maintain a moderate position in the epistemological landscape. Critical realism holds that the real structures and mechanisms that shape observable events may be understood through scientific research and explanation. In the critical realist view, the empirical domain of observable events is distinguished from the real

domain (Tsang & Kwan 1999). Therefore, critical realism firmly rejects the claims of empiricism (Reed 2005), that all claims to knowledge must be grounded in data (Willig 2001). It also rejects post-modernist discursive reductionism that argues that reality cannot be known because it does not exist independently of human linguistic and rhetorical constructions (Reed 2005). Consequently, critical realism argues that it is possible to acquire scientific knowledge of reality by constructing and testing theories, with the recognition that this knowledge is fallible (Tsang & Kwan 1999).

In recognising that constructs represent and attempt to describe real phenomena, critical realism argues that constructs are a provisional attempt to describe the phenomena and are always subject to review and reformulation (Reed 2005). This is consistent with the view that constant awareness of the tentative nature of the construct is needed so that the researcher retains a willingness to revise their assumptions about the construct and its measurement, should there be a discrepancy between the expected predictions and the outcomes evident in the data (Kline 2005). Furthermore, critical realism argues that it is never possible to obtain a completely accurate understanding of the phenomena of interest to the research because of the limitations inherent to defining and measuring constructs (Edwards & Bagozzi 2000). The critical realist position is consistent with the belief that assignation of a particular label to a construct does not ensure or signify that a full understanding of the construct has been achieved or indeed that the label for the construct is even correct (Kline 2005). Likewise, the critical realist position is that the researcher should avoid reification of constructs by being ever mindful that a hypothetical construct is an attempt to describe a thing that is real, but the hypothetical construct is not in itself, a real thing (Kline 2005).

#### **4.2.1 Research Design**

Quantitative research is concerned with measuring social action (Sarantakos 1998), through testing the relationships among researcher-defined variables and the identification of relationships among the variables (Willig 2001). Lee, Carswell and Allen (2000) have argued that longitudinal research is required to examine the pre-employment professional commitment of graduating professionals and the changes in professional commitment that take place after exposure to the workplace in order to understand how professional commitment relates to professional and organisational turnover intention. Beck and Wilson (2001) have argued that organisational commitment needs to be studied from a

developmental point of view and that the relationship between commitment to the occupation and commitment to the organisation will develop differently for professional and non-professional occupations.

The purpose of the research is to examine the effect of workplace exposure on the professional commitment of a sample of professional employees and then the relationship between workplace exposure, organisational turnover intention and professional turnover intention. To do this, nursing professionals who were about to enter, or had only recently entered, the workplace for the first time as qualified and licensed members of their profession were sampled. At the first round of data collection, they were requested to complete the Blau (2003) occupational commitment measure. After a period of exposure to the workplace (approximately six months) they were again requested to complete the Blau (2003) occupational commitment measure, as well as measures relating to organisational-professional conflict, organisational commitment and job satisfaction, in addition to measures of organisational turnover intention and professional turnover intention.

The research has a repeated measures design (Creswell 1994). The research is based on a self-report survey completed at Time One by a sample of nursing professionals who were about to enter, or had only recently entered, the workplace for the first time as a qualified, licensed professionals and again at Time Two after a period of approximately six months exposure to the workplace. Workplace exposure constitutes a 'natural intervention' in the research design, therefore, the research may also be considered to have a quasi-experimental design (Creswell 1994).

#### **4.2.2 Limitations of the Methodology – Threats to validity**

Adoption of any methodology or method in research indicates that the researcher has an implied belief that it constitutes a credible means to contribute to the development of knowledge. Recognition of the limitations of either the methodology that informs the research methods used or the methods themselves is, however, essential to all research regardless of the methodology or methods used. The major limitations of quantitative research relate to matters that threaten the validity of the research. External validity, construct validity, internal validity, and statistical conclusion validity are the four types of validity that are usually considered when applied research is designed using a quantitative methodology (Bickman & Rog 1998). Consideration of matters relating to all four types of

validity is essential in applied research; however, the relative emphasis of each may vary with the type of question that is under study (Bickman & Rog 1998).

#### **4.2.2.1 External Validity**

Obtaining a valid sample that is representative of the population to whom the findings of the research may ultimately relate (external validity) is one of the major limitations of the methodology of quantitative research (Bickman & Rog 1998). To ensure optimum external validity the sample selection procedures were consistent with the overall research design of the project (Aldridge & Levine 2001) and the population from which the sample was drawn was consistent with the population of interest for the study (Bickman & Rog 1998). The purpose of the research design is to examine the effect of workplace exposure on the professional commitment of professional employees and the population of interest for this study is that of professionals entering the workplace in that role for the first time. Therefore, to obtain a sample that is representative of this group, all nursing professionals who obtained their pre-registration Bachelor degree in nursing at a university in the State of Queensland, Australia in the year of 2004 were invited to participate in the research. They were surveyed prior to or soon after they had entered the workplace for the first time in the role of a registered nurse and again after a period of exposure to the workplace. It is expected that the findings of this research will be able to be generalised to other nursing professionals in the initial period of exposure to the workplace, in Australia. However, the inclusion of only one professional occupation in the research sample means that the generalisability of the findings to other professional occupations may be limited.

#### **4.2.2.2 Construct Validity**

A limitation of any research is that obtaining a completely accurate understanding of the phenomena of interest to the research is never possible. In quantitative research this is due, in part, to the inherent limitations associated with defining and measuring constructs (Edwards & Bagozzi 2000). Therefore, the measures used to represent constructs are limited in their ability to accurately correspond to the constructs, which in themselves may be an inaccurate description of the phenomena under consideration (Kline 2005). To maximise construct validity, all measures used are those that have been used in previous research. These measures have therefore already been subjected to a degree of investigation of their ability to represent and to measure the associated construct.

However, the measures are used with the recognition that the constructs (and the measures) constitute a provisional attempt to describe the phenomena and are therefore always subject to review and reformulation (Reed 2005). Furthermore, the measures are used with awareness of the admonitions of Kline (2005) regarding reification of constructs and assumptions that assignment of a particular label to a construct does not ensure that the construct is fully or correctly described or understood. This awareness is maintained throughout the research.

#### **4.2.2.3 Internal Validity**

Research design, circumstances or events may threaten the internal validity of quantitative research (Polit & Beck 2004). Where the research is attempting to make inferences about the relationships between constructs, consideration needs to be given to the possibility that the relationships between the constructs may be due to a spurious effect of a third construct, that may or may not be included in the research (Kline 2005; Polit & Beck 2004). While it is impossible and impractical to include all of the constructs that may influence the outcome of interest to the research, a careful review of the existing research literature enables identification of other constructs, which may influence the relationship between the constructs of interest to the research (Kline 2005). The review of the literature conducted in relation to this research resulted in constructs such as job satisfaction, organisational commitment, organisational-professional conflict and organisational turnover intention being included in the research design. These constructs were included to reduce the likelihood that the relationship between professional commitment and professional turnover intention was being spuriously determined by constructs that were not included in the research design.

However, it is recognised that the possibility remains that there may be some other construct(s) yet unaccounted for in this or other research that may influence the relationship between the constructs of interest to the research. Inclusion of the additional items such as job satisfaction and organisational-professional conflict, however, increases the possibility that relationships between constructs may be spuriously determined by their relationship to one (or more) of the other constructs. A feature of the statistical method of path analysis, which is used in the research, is that it is able to deal with this problem (Kline 2005).

Internal validity of quantitative research may also be threatened by selection bias (LoBiondo-Wood & Haber 2006). While all efforts were made to

ensure that the sample was appropriately drawn from the relevant population to promote the external validity of the findings, non-response to the survey may contribute to a bias in participant selection (de Vaus 2002). Non-response or the failure to respond is, according to Aldridge and Levine (2001), a problem that is fundamental to survey research and affects most surveys to some extent. The problems that non-responders create for a study are that it is impossible to know whether the non-responders hold views that are similar to, or different from, the responders, and that low response rates tend to decrease the credibility of the study (Bickman & Rog 1998). Bickman and Rog (1998) point out that non-response error is the prime problem with mail surveys. Neuman (2003) observes that response rates for mail questionnaires are a matter of concern, with response rates commonly varying from 10 to 50 percent. High levels of non-response can also be a threat to the statistical validity of the survey findings (Bickman & Rog 1998).

Several remedies were used to address the problem of non-response. Reply-paid envelopes were included with the survey-questionnaires as suggested by Neuman (2003). Respondents' anonymity was assured, as this is considered to be a measure that may increase response to the survey (Neuman 2003). This was done by ensuring that no identifying information was requested on the survey itself, and by providing a second reply-paid envelope in the first round of data collection, in which the respondents could supply their consent forms for the research and their contact details for the second round of data collection. To increase the response rate to the first round of data collection, a second round of invitations was sent out to the same sample. A reminder letter was sent out to respondents to increase the response to the second round of data collection, as respondents had by then made their contact details available to the researcher.

Attrition of respondents from the study over time may result in an additional form of selection bias (Boys et al. 2003). Efforts were made to maintain correct contact details by providing a 'change of address' form to participants but since participation in the research was entirely voluntary and budgetary constraints precluded use of participation 'incentives' (Nardi 2003), only the goodwill and interest of the participants in the research could be relied on for their initial and continued involvement in the research.

To account for the possibility of the various forms of selection bias demographic information supplied by participants was compared with that of the broader population of nursing professionals at each data collection, to provide some comparison with the participant characteristics. Additionally, the second

data collection sample was compared with that of the first, as well as the broader population of nursing professionals, to provide an indication of whether, or how the sample characteristics might differ from one another.

#### **4.2.2.4 Statistical Conclusion Validity**

From a methodological point of view, threats to the statistical conclusion validity of the research findings are a unique concern of the quantitative research methodology. Matters discussed above, in relation to adequately sampling the appropriate population, decrease the threats to the statistical conclusion validity of quantitative research findings. Other matters that relate to the statistical conclusion validity of the research findings must also be addressed in relation to the particular quantitative method used. This research uses confirmatory factor analysis and path analysis as the main methods of data analysis. Confirmatory factor analysis and path analysis are multivariate data methods and are also part of the ‘family’ of structural equation modelling (Kline 2005). Therefore, they are both methods that require large sample sizes that meet the assumptions of multivariate data, in order to ensure the validity of the statistical conclusions (Kline 2005).

Schumacker and Lomax (1996) indicate that there are a number of studies that have indicated that the minimum sample size for structural equation modeling should be 100 to 150 participants. Other authors, according to Schumacker and Lomax (1996) have recommended that as many as 5,000 participants may be insufficient. Kline (2005) indicates that model complexity is an important consideration in relation to sample size. A ‘rule of thumb’ guideline is that there should be at least five to ten participants per model parameter (Ho 2000; Schumacker & Lomax 1996). A sample of less than 100 participants would be statistically indefensible unless the model was very simple (Kline 2005). Kline (2005) considers that a sample of 100 to 200 participants would be considered to be a moderate sample size and more than 200 a large sample, but again the complexity of the model must be taken into account.

#### **4.2.2.5 Common Method Variance**

The role of Common Method Variance (CMV) in the use of self-report measures is recognised as being problematic in organisational research (Kline, Sulsky & Rever-Moriyama 2000). It presents a threat to the statistical conclusion validity of the findings as it is thought that self-ratings produce inflation of correlations due to spurious covariance in the measures used (Organ & Ryan

1995). Podsakoff, MacKenzie, Lee et al. (2003) argue that there is no one method which best handles the problems of CMV as the problem itself will depend on the sources of method variance in the study and the practicability of using the remedies available. Furthermore, many of the 'remedies' have the potential to introduce other types of response bias (Podsakoff, MacKenzie, Lee et al. 2003).

This research has sought to reduce CMV in several ways. The research used recognised and thus well-tested questionnaires and also guaranteed response anonymity as recommended by Podsakoff, MacKenzie, Lee et al. (2003). Kline, Sulsky & Rever-Moriyama (2000), note that a recommended means to reducing CMV is to trim items from scales that have obvious overlap of supposedly separate measures. This was done in relation to the Organisational Commitment Questionnaire (OCQ) where Bozeman and Perrewé (2001) demonstrated that six of the items of the OCQ shared overlapping content with turnover cognition items. These items were trimmed from the OCQ and a separate scale was used to measure turnover intentions.

### **4.2.3 Justification for the Methods**

The two main methods used in data analysis in this research are confirmatory factor analysis and path analysis both of which are forms of structural equation modelling (Kline 2005). Structural equation modelling is considered by many to be a powerful form of statistical modelling that enables statistical examination of a set of relationships between one or more independent variables and one or more dependent variables (Tabachnick & Fidell 2001). The purpose of structural equation modelling is to test models that have been specified *a priori* based on the researchers hypotheses and is generally considered to be confirmatory in nature (Kline 2005). The technique also allows for exploration of the data for possible alternative (although necessarily theoretically plausible) models (Kline 2005).

Critical realism argues that knowledge is developed by the transformation of pre-existing knowledge (Patomaki & Wight 2000). Structural equation modelling provides a form of theory development and testing which may be seen to be consistent with the philosophical perspective of critical realism. From the perspective of critical realism, the mode of inference about relationships between constructs is not through deduction or induction, but retrodution (Patomaki & Wight 2000). Retrodution uses the process of model building to test and evaluate possible explanations for the patterns or regularities that are the manifestation of the underlying structures and mechanism that



generate the phenomena of interest to the research (Patomaki & Wight 2000; Reed 2005). Research using structural equation modelling requires that models be developed on the basis of existing theory (Ho 2000; Kline 2005). This approach is consistent with the realist ontological view.

Confirmatory factor analysis is appropriately used when the intention of the research is to confirm the existence of a factor structure that has already been established through exploratory research (Raykov & Marcoulides 2000). Confirmatory factor analysis is applied specifically in this research to the Blau (2003) occupational commitment measure.

Path analysis is a form of structural equation modelling that uses only one observed measure of each construct (Kline 2005). Structural equation modelling using latent variables is considered to be preferable for examining relationships, because it is considered to be better able to account for error in the measurement of the constructs (Kline 2005). However, inclusion of latent variables increases model complexity and therefore a very large sample size is demanded (Kline 2005). Due to sample size restrictions encountered in this research, path analysis has been used to analyse the models of the relationships among the data.

The importance of the score reliability of the measures is increased when using path analysis as it assumes that the exogenous variables are measured without error (Kline 2005). Importantly, a feature of the statistical method of path analysis is that it is able to examine both direct and indirect effects of variables in relation to other variables (Tabachnick & Fidell 2001). Furthermore, where applicable, variables may be specified as both predictor and criterion variables within the model (Kline 2005). In addition, path analysis enables identification of relationships between constructs that are spuriously determined by their relationship to one (or more) of the other constructs (Kline 2005).

#### **4.2.4 Limitations of the Methods**

Any limitations of the methods used to analyse the data will ultimately affect the validity of the statistical conclusions of the research findings. Two types of limitations of the methods used are discussed here. They are the limitations inherent in the statistical methods themselves, as well as the limitations that may be the result of inappropriate implementation of the methods.

Knowledge of the assumptions of the statistical methods used and awareness of the limitations of their explanatory power must necessarily be engaged to ensure the validity of the statistical conclusions of the research

findings. The usefulness of confirmatory factor analysis and path analysis in producing valid statistical conclusions may be limited if data do not meet the distributional assumptions of multivariate data (Kline 2005). To manage this limitation, careful examination and screening of the data preceded implementation of both confirmatory factor analysis and path analysis.

Inappropriate application of a statistical method may also constitute a researcher-imposed limitation on the validity of statistical conclusions that are derived from the method. Confirmatory factor analysis and path analysis are evaluated using goodness-of-fit indices (Kline 2005). The nature of the chi-square statistic and other goodness-of-fit indices is such that finding a non-significant chi-square or having good fit indices only indicates that the model does not contradict the data (Raykov & Marcoulides 2000) and it therefore cannot be concluded that a model is 'true' just because the 'null hypothesis' has not been rejected. Such a finding indicates only that the model cannot be disconfirmed as a plausible explanation of the relationships among the data (MacCallum & Austin 2000). MacCallum and Austin (2000) note the importance of considering the possibility that there may be other models of the relationships between the variables that fit the data equally or approximately because even a well-fitting prediction model may not constitute the only possible explanation for the interrelationships among the variables in the model (Raykov & Marcoulides 2000). Therefore, to avoid the common error of 'confirmation bias' MacCallum and Austin (2000) advise that alternative models should be specified *a priori* and estimated. Moreover, in the process of establishing that a particular model is the most plausible model, it is incumbent upon the researcher to consider the possibility that other models may be theoretically plausible in order to be able to claim that the model presented is the most plausible (Kline 2005).

#### **4.2.4.1 Theoretical Model versus 'Causal' Model**

Tabachnick and Fidell (2001) point out that use of the term 'causal modelling' with reference to structural equation modelling has contributed to the development of its bad reputation among some research circles. They argue that there is nothing inherent in structural equation modelling that allows causation to be inferred and point out that attribution of causation is a design issue rather than being a statistical issue (Tabachnick & Fidell 2001). The belief that the social world is governed by causal laws which can be known is not endorsed in this thesis. Rather, the view that is taken is that because social systems are open to constant change, the goal of research in the social sciences is to discover the

patterns of events that may provide the best possible explanation or interpretation of social events (Tsang & Kwan 1999). Therefore, this thesis does not use or endorse the use of the term 'causal' or other associated terms such as 'causality' and 'causation' to describe the relationships between the variables used in the models. The terminology of 'theoretical model' has been adopted rather than the common terminology of 'causal model' to avoid implying that certain variables may be the 'cause' of effects in certain other variables.

## 4.4 The Theoretical Model

The purpose of the utilisation of hypothetical constructs in research is to test the hypothesis that certain types of behaviours can be demonstrated to relate in a consistent manner to certain other types of behaviours (Kline 2005) with the purpose of uncovering the underlying structures and mechanisms that explain the phenomena of interest to the research (Reed 2005). Model development in structural equation modelling is always informed by theory (Ho 2000). In developing a theoretical model the specification of the hypothesised relationships between the constructs is guided by the research question, logic and theory that has been established in prior research (Kline 2005). The variables that may relate to intention to leave the profession that are being examined in this research are, professional commitment, organisational professional conflict, job satisfaction, organisational commitment and intention to leave the organisation. Where these constructs are placed in the theoretical model in relation to one another is guided both by logic, theory and the research question.

MacCallum and Austin (2000) note the importance of considering the possibility that there may be other models of the relationships between the variables that fit the data equally or approximately because even a well-fitting prediction model may not constitute the only possible explanation for the interrelationships among the variables in the model (Raykov & Marcoulides 2000). Kline (2005) notes in the process of establishing that a particular model is the most plausible model, it is incumbent upon the researcher to consider other theoretically plausible models in order to be able to claim that the model presented is the most plausible. To avoid the common error of ‘confirmation bias’ MacCallum and Austin (2000, p. 213) advise that alternative models should be specified *a priori* and estimated. Such considerations are particularly important when the model estimation is based entirely on cross-sectional data, because there may be other theoretically plausible arrangements of the relationships between the variables (Kline 2005). It does not mean, however, that theoretically implausible or theoretically irrelevant arrangements of the relationships between the variables in the model should be made simply to create alternative models for testing.

While the majority of the variables in this model are measured at the same time, the measurement of professional commitment prior to workplace entry means that there can be only one theoretically meaningful arrangement of

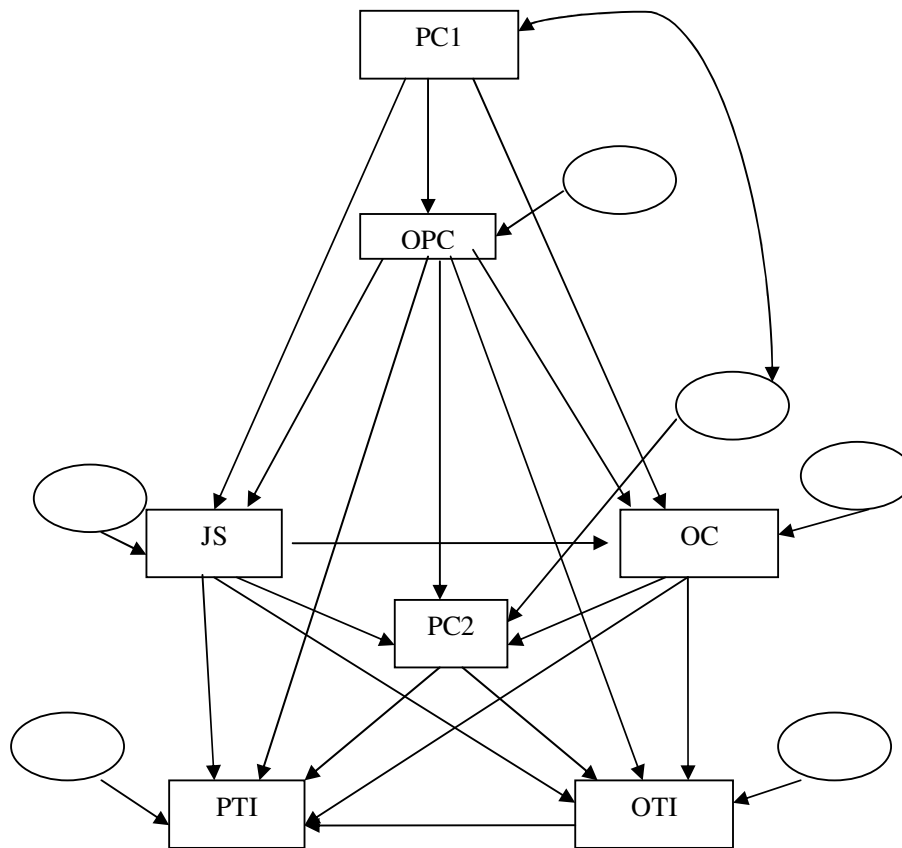
the relationships between professional commitment prior to workplace entry and the remaining variables. Additionally, when relevant, the specification of certain paths in the model is based on established theory. For this reason, the paths from job satisfaction to organisational commitment and from organisational commitment to organisational turnover intention were specified as this is consistent with established theory. Moreover, the paths from professional commitment prior to workplace entry to organisational-professional conflict and from organisational-professional conflict to job satisfaction and organisational commitment were specified on the basis of theory and findings of the available research in relation to organisational-professional conflict.

Furthermore, the specifications were made to address particular research questions. Therefore, when contemplating alternative arrangements of the relationships, consideration had to be given to whether different specifications of the relationships would not only be theoretically meaningful but if they would change the nature of the research question being investigated in the model. For example, specification of a path from professional turnover intention to organisational turnover intention would change the model from being a model of the relationship between professional commitment prior to workplace entry and professional turnover intention, to a model of professional commitment prior to workplace entry and organisational turnover intention<sup>1</sup>. Therefore, although only one model is evaluated, consideration has been given to whether other possible arrangements of the relationships among the variables are either, logical, theoretically plausible or theoretically relevant.

The theoretical model of all of the relationships so far discussed, which is based on the research question and previous research and logic, is specified *a priori* (Kline 2005). The model is presented in Figure 4.1 and is followed by its explanation.

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<sup>1</sup> This model and the results of its estimation are supplied to the interested reader in Appendix 6.



**Figure 4.1 Theoretical Model of the Relationship between Professional Commitment Prior to Workplace Entry and Professional Turnover Intention**

PC1 = Professional Commitment at Time One

OPC = Organisational-professional Conflict

OC = Organisational Commitment

PTI = Professional Turnover Intention

PC2 = Professional Commitment at Time Two.

JS = Job Satisfaction.

OTI = Organisational Turnover Intention.

Certain relationships in the model can be clearly defined because of obvious temporal precedence or because they are of specific interest to the research question (Kline 2005). Professional commitment prior to workplace entry is temporally precedent both in development and measurement to all other variables in the overall model. Therefore, professional commitment prior to or soon after workplace entry can be considered to be exogenous to all other variables in the model. However, the remaining variables were measured at the same time and therefore assumptions about the relationships between these variables and other variables on the basis of temporal precedence cannot be made. The relationships between the remaining variables are therefore defined according to established theory and the interests of the research (Kline 2005). Importantly, in relation to these variables, a path that is specified from one variable to another does not assume that the former variable influences the latter but only proposes that a change in the former variable is associated with a change in the latter.

In the model, a path is specified from professional commitment prior to workplace entry to organisational-professional conflict, job satisfaction and organisational commitment to enable the relationships between professional commitment prior to workplace entry and these variables to be estimated. The research also seeks to examine the relationship between professional commitment prior to workplace entry and organisational commitment when organisational-professional conflict and job satisfaction are modelled as intervening variables. Based on the relationships between organisational-professional conflict and job satisfaction and organisational commitment that have been established in previous research, organisational-professional conflict is placed first as an intervening variable in the relationship between professional commitment at Time One and job satisfaction and organisational commitment.

The relationship between job satisfaction and organisational commitment is well established in the research literature (Mathieu & Zajac 1990). Therefore, a path from job satisfaction to organisational commitment is specified. Specification of this path has the effect of controlling for the relationships between professional commitment prior to workplace entry and organisational-professional conflict, which in the model, are the common variables that are exogenous to job satisfaction and organisational commitment. The inclusion of this path allows any non-spurious part of the relationship to be identified (Kline 2005).

Because its measurement is repeated, professional commitment prior to workplace entry and the error term for professional commitment after a period of workplace exposure are specified as being correlated. This specification reflects the assumption that these two variables will covary because they represent two administrations of the same measure. Furthermore, it allows any non-spurious part of their relationship, that is, not due to their common relationship, to be identified (Kline 2005).

Because the theoretical model proposes that exposure to the workplace is related to professional commitment that was established prior to workplace entry, paths are specified from organisational-professional conflict, job satisfaction, and organisational commitment to professional commitment after workplace exposure, to enable any change in professional commitment after workplace exposure that is associated with a change in these variables to be identified. In addition, based on the research question and the results of previous research, the theoretical model proposes that organisational-professional conflict, job satisfaction, organisational commitment and professional commitment after workplace exposure are related to organisational turnover intention. Therefore, paths from these variables to organisational turnover intention were specified in the model. Similarly, the theoretical model proposes that organisational-professional conflict, job satisfaction, organisational commitment and professional commitment after workplace exposure, as well as organisational turnover intention, are related to professional turnover intention. Paths from these variables to professional turnover intention were therefore specified in the theoretical model.

The purpose of the research can be considered in terms of four fundamental research questions. These are:

1. What are the relationships between professional commitment organisational-professional conflict, job satisfaction and organisational commitment?
2. What is the relationship between exposure to the workplace (in terms of organisational-professional conflict, job satisfaction and organisational commitment) and professional commitment?
3. Which of these variables are related to organisational turnover intention?
4. Which of these variables are related to professional turnover intention?



## **Specific Hypotheses**

The specific hypotheses of the research are:

### **Research Question One: What are the relationships between professional commitment, job satisfaction and organisational-professional conflict and organisational commitment?**

Hypothesis 1a: Professional commitment at Time One is significantly and positively related to organisational commitment.

Hypothesis 1b: Professional commitment at Time One is significantly and positively related to job satisfaction.

Hypothesis 1c: Professional commitment at Time One is significantly and positively related to organisational-professional conflict.

Hypothesis 1d: Organisational-professional conflict is significantly and negatively related to job satisfaction.

Hypothesis 1e: Organisational-professional conflict is significantly and negatively related to organisational commitment.

Hypothesis 1f: Job satisfaction is significantly and positively related to organisational commitment.

### **Research Question Two: How does exposure to the workplace (in terms of organisational-professional conflict, job satisfaction and organisational commitment) affect professional commitment?**

Hypothesis 2a: Organisational commitment is significantly and positively related to professional commitment at Time Two.

Hypothesis 2b: Job satisfaction is significantly and positively related to professional commitment at Time Two.

Hypothesis 2c: Organisational-professional conflict is significantly and negatively related to professional commitment at Time Two.

**Research Question Three: Which are the factors that are related to organisational turnover intention?**

Hypothesis 3a: Professional commitment at Time Two is significantly and negatively related to organisational turnover intention.

Hypothesis 3b: Organisational commitment is significantly and negatively related to organisational turnover intention.

Hypothesis 3c: Job satisfaction is significantly and negatively related to organisational turnover intention.

Hypothesis 3d: Organisational-professional conflict is significantly and positively related to organisational turnover intention.

**Research Question Four: Which are the factors that are related to professional turnover intention?**

Hypothesis 4a: Professional commitment at Time Two is significantly and negatively related to professional turnover intention.

Hypothesis 4b: Organisational commitment is significantly and negatively related to professional turnover intention.

Hypothesis 4c: Job satisfaction is significantly and negatively related to professional turnover intention.

Hypothesis 4d: Organisational-professional conflict is significantly and positively related to professional turnover intention.

Hypothesis 4e: Organisational turnover intention is significantly and positively related to professional turnover intention.

## **4.5 Measures**

The purpose of hypothetical constructs in research is to test the hypothesis that certain types of behaviours can be demonstrated to relate in a consistent manner to certain other types of behaviours (Kline 2005). This requires careful specification of the operational definition of each construct and careful selection of the items that are considered to represent the constructs. The measures used in this study are published measures that have been subject to the scientific processes of development, testing and review. Their use does not, however, imply a belief that the constructs that they are considered to measure are necessarily a 'true' representation of the phenomena to which they refer. Nor does it imply that the measures are not, or should not be, subject to review and revision.

### **4.5.1 Occupational Commitment Scale**

The Blau (2003) Occupational Commitment Scale was used to measure professional commitment. This measure is based on the three-component measure of occupational commitment developed by Meyer, Allen and Smith (1993). It includes the components of affective and normative commitment and uses Carson, Carson and Bedeian's (1995) occupational entrenchment scale to expand the component of continuance commitment to accumulated costs commitment and limited alternatives commitment. The Carson, Carson and Bedeian (1995) occupational entrenchment scale, however, is a three-component scale comprised of investment costs commitment, emotional costs commitment and limited alternatives commitment. Based on the findings of confirmatory factor analysis Blau (2003) proposed a four-component rather than five-component conceptualisation of the occupational commitment measure arguing that the investment costs commitment, emotional costs commitment could be combined to form the accumulated costs component. However, Blau's (2003) conclusions in this regard were equivocal, because the fit indices of the four-component and five-component models were very similar. Table 4.1 provides comparative scale reliability results of reported studies.

**Table 4.1 Scale Reliabilities for Reported and Current Dimensions of Occupational Commitment Scales**

	Meyer, Allen and Smith (1993)	Irving, Coleman and Cooper (1997)	Blau (2003)
Affective	.82	.79	.91
Normative	.80	.83	.90
Continuance	.76	.83	*
Accumulated Costs	*	*	.88
Investment Costs	*	*	*
Emotional Costs	*	*	*
Limited Alternatives	*	*	.93

\* not applicable.

#### **4.5.2 Organisational Commitment Questionnaire**

The Organisational Commitment Questionnaire (OCQ) (from Mowday, Steers & Porter 1979, cited in Bozeman & Perrewe 2001) was used to measure organisational commitment. The OCQ is an established measure of organisational commitment and is recommended by Griffeth, Hom and Gaertner (2000) who argue that the predictive strength of the commitment-turnover relationship was best promoted using the OCQ. Bozemann and Perrewe (2001) demonstrated, however, that six of the items of the OCQ shared overlapping content with turnover cognition items. Since intention to turnover may be a consequence of organisational commitment, they recommended that the six items be removed from the scale when examining organisational commitment and employee turnover in the same study. This is to avoid the use of related items in both predictor and criterion constructs. Bozemann and Perrewe (2001) advise that when examining the relationship between organisational commitment, turnover intentions and actual turnover, as this research does, the better choice is to remove the six retention-related items from the OCQ and use a separate turnover scale. This recommendation was followed in the research. Bozemann and Perrewe (2001) indicated reliabilities of the revised OCQ to be .91 ( $n = 172$ ) in a sample of MBA alumni and .77 ( $n = 330$ ) in a sample of upper and middle level hospitality industry managers.

#### **4.5.3 Organisational-Professional Conflict Scale**

The Organisational-Professional Conflict Scale described by Shafer, Park and Liao (2002) was used to measure organisational-professional conflict. This three-item scale includes two questions developed by Aranya and Ferris (1984) and a third added by Shafer, Park and Liao (2002). According to Brierley and Cowton's (2000) results of a meta-analysis of the organisational-professional conflict literature, the two-item measure of organisational-professional conflict, when weighted by sample size, had an average reliability score of .81. Bamber and Iyer (2002) reported a composite reliability of .58 for the two item organisational-professional conflict scale in their study. Shafer, Park and Liao (2002) did not report a reliability score for the 3-item scale but Shafer (2002) reported a reliability of .77 when using the same 3-item measure in his study.

#### **4.5.4 Job Satisfaction Scale**

Griffeth and Hom (2001) point out that either overall measures of job satisfaction or surveys that examine particular facets of satisfaction with the job can be used when assessing job satisfaction. A general measure of job satisfaction was required for this study; therefore, the Job Satisfaction Scale (Price 2001) was used. This scale has a reported reliability of .77 (Kim et al. 1996).

#### **4.5.6 Organisational Turnover Intentions Scale**

The Organisational Turnover Intentions scale used is that recommended by Bozemann and Perrewé (2001). Bozeman and Perrewé (2001) point out that this scale is from or based on the turnover cognitions scales developed by Mowday, Koberg and MacArthur in 1984 and Mobley, Horner and Hollingsworth in 1978. The reliability estimate of .90 was reported for this scale in a sample of 330 upper and middle level hospitality industry managers and .94 in a separate sample of 172 MBA alumni (Bozeman & Perrewé 2001).

#### **4.5.7 Professional Turnover Intentions**

The organisational turnover scale (Bozemann & Perrewé 2001) was adapted to reflect intention to leave the profession. Reliability for this scale is within the acceptable range.

#### **Demographic Questions**

Demographic items relating to age, gender, education, type of organisation in which participants were employed and prior work as an enrolled nurse, were included in the questionnaire.

## **4.6 Data Collection Procedures**

### **4.6.2 Sample**

Nurses who fit the research definition of ‘professional’ were chosen to ensure that the sample was representative of the target population. To obtain a sample of nursing professionals who were entering the workplace for the first time, all nursing professionals who had been educated in the State of Queensland, Australia and who were entering the workforce in that role after completing their pre-registration education in 2004, were invited to participate in the research. This was made possible through the support and co-operation of all of the Schools of Nursing at the six universities in Queensland who had a class of graduating students of nursing in 2004.

Initially students in the final months of their pre-registration Bachelor level degrees in nursing were contacted via the universities. Packages containing an introductory letter and invitation to participate in the research and consent forms in addition to the questionnaire and reply-paid envelopes were sent to prospective respondents via the Schools of Nursing at the respective universities, during November and December of 2004. Of these a small portion were offered to students in class and the remainder were mailed to the prospective respondents by their School of Nursing. To improve the response rate, a second round of data collection of the same sample was conducted in April 2005. This second round of the first data collection was made possible through the assistance of the organisation responsible for the registration of nurses in Queensland, the Queensland Nursing Council (QNC). To account for the length of the interval between the data collection via the universities and via the QNC comparisons of the response data using *t*-tests for independent means were planned to identify whether the two groups represented the same or different populations.

The type of sample used in the study meant that the respondents would not be working in the one organisation. It was because of the issue of sample homogeneity that only universities in Queensland were approached to participate in the study. It was expected then that most respondents would be working in the public health system in Queensland; however, it was also recognised that some participants would be working in private health care organisations. The use of *t*-tests for independent means was planned to compare responses from participants who were working in Queensland and those who were working in other states if

there were sufficient numbers to make the comparisons possible. The same comparison between participants who were working in the public health care system and those in private health care was also planned to identify whether each group was representative of the same population.

Among the graduates of pre-registration nursing degrees are former enrolled nurses who have health care organisational experience and thus have undergone a period of organisational socialisation prior to formal professional socialisation. Comparison of the responses of former enrolled nurses with those who were not former enrolled nurses using *t*-tests for independent means was planned to identify whether they were representative of the same population or if they formed a population distinct from nurses whose professional socialisation had preceded organisational entry.

#### **4.6.2 Ethical Procedures and Considerations**

The research was conducted with approval from the Human Research Ethics Committee (HREC) at Central Queensland University. Any variations to the originally approved procedure were sought and obtained from the HREC prior to the variations being carried out. The initial letter of approval of the research project from the HREC is provided in Appendix 2.

To ensure participant privacy, the researcher supplied letters of invitation to participate, consent forms and research questionnaires in pre-paid envelopes to the Schools of Nursing, who then addressed the envelopes and forwarded them to the invitees. The same procedure was followed for the second round of invitations. That is, the filled envelopes were supplied to the nominated agent of the QNC, who then addressed the envelopes for postal distribution. To enable further contact in the research, respondents were given the option to provide the researcher with their contact details. Permission for same was made on the proviso that the contact details would be kept in a secure place in the university, used for the purposes of the research only and would not be supplied to any other person or group. If participants chose not to supply the researcher with their contact details, the other option available to participants was for the researcher to supply their names to the School of Nursing or University Alumni Association and further research packages could be mailed to them by this means.

The letter of invitation to participate outlined the nature of the research, assured participants that they were under no obligation to participate and that their academic or professional progress would not be affected by a decision to participate or not. Invitees were also offered the opportunity to register to have a

Plain English copy of the results of the research sent to them at its completion. The letter of information explained the procedure that would be followed to ensure the anonymity of their responses and assured invitees that any personal information supplied would be securely stored at the University and kept in confidence. Contact details for the HREC, researcher and the researcher's supervisor were provided to participants so that any concerns about the research or its conduct could be taken up with the appropriate persons. To ensure the anonymity of their responses invitees were supplied with two reply-paid envelopes to enable the questionnaires and consent forms and requests for a Plain English copy of the results to be returned separately. A copy of this letter is provided in Appendix 4.

When completing each questionnaire, respondents were asked to supply a unique code identifier. This was a four-item code generated from letters and numbers relating to family names and birthdates. Examples of the questions used to generate the unique code identifier are 'What is the second letter of your family name?' and 'What is the last number of your year of birth?' The unique code identifier was used to match Time One and Time Two responses while maintaining respondent anonymity. The questionnaire, in the form that it was sent at the Time Two round of data collection, is provided in Appendix 3.

Computer entry of the data after receipt of the responses was made using the SPSS 13 program. Original survey responses were stored in a secure place on the premises of Central Queensland University (Mackay Campus) as were the contact details for respondents and their requests for a Plain English copy of the results of the research.



## 4.7 Conclusion

The goal of this research is to contribute to knowledge about the relationship between professional commitment and professional turnover intention. In particular, the research examines the effect that workplace exposure has on professional commitment. Other workplace influences on professional commitment and professional turnover intention such as job satisfaction, organisational commitment, organisational-professional conflict and organisational turnover intention are also included in the research.

This chapter has outlined how critical realism provides the philosophical perspective that informs the use of the methodology and methods in the research, as well as the interpretation of the findings. The methodology of quantitative research has been used in this research. The limitations of the methodology were considered with particular attention to the possible threats to the validity of the research. Threats to the internal and external validity of the research and the means by which these threats to validity have been addressed in the research were also discussed. Also threats to the validity of the constructs used in the research and the means used to minimise these threats were discussed. Additionally, threats to the statistical validity of the findings due to inadequate sampling techniques or size were discussed and the effects of common method variance were considered. The means used in the research to address both of these matters were discussed. Also discussed were the threats to the statistical conclusions of the findings that may result when the methods used to analyse the data are inappropriately applied or interpreted.

The theoretical model and matters that relate to theory, logic and the research question that inform the specification of the paths in the model have been discussed. The chapter has also presented the specific hypotheses of the research. The chapter has discussed the measures used and presented the findings of indicators of the reliability of the measures from previous research and findings from the current research. The data collection procedures, including sampling and ethical considerations in the implementation of the repeated measures survey design of the research were discussed in the chapter.

Chapter Five is the first of two chapters which report the results of the research. The factor structure of the Blau (2003) occupational commitment measure is evaluated in Chapter Five. The Blau (2003) occupational commitment measure was used to measure the professional commitment of a sample of

nursing professionals prior to or soon after entry to the workplace and again after a period of exposure to the workplace. The chapter reports the Time One and Time Two results. It also reports the results of the repeated measures study.

## **5. Analysis of the Data – The Components of the Blau (2003) Occupational Commitment Measure**

In this chapter, the factor structure of the Blau (2003) occupational commitment measure is evaluated. The levels of the components of occupational commitment as defined by the Blau (2003) occupational commitment measure are also compared according to age, gender, previous status as an enrolled nurse and possession of prior non-nursing qualifications at each point of measurement, as well as being compared across the two time periods. The chapter also reports the results of the repeated measures study, in which the Blau (2003) occupational commitment measure was used to measure the professional commitment of a sample of nursing professionals prior to or soon after entry to the workplace and again after a period of exposure to the workplace.

### **5.1 Introduction**

The argument presented in this thesis is that a developmental approach to commitments in the workplace provides the most appropriate framework within which the relationships between work-related commitments may be understood. The assumption that therefore informs discussion in this thesis is that work-related commitments change over time and the changes in commitments are the result of the work-related experiences that may covary with the commitments during that time (Beck & Wilson 2001). The thesis thus argues that for professional employees, commitment to their occupation may be considered to be both an antecedent to and a consequence of other work-related experiences. Therefore, in order to develop a clearer understanding of the relationships between professional commitment and other work-related outcomes the level and nature of commitment to a professional occupation needs to be understood prior to entry to the workplace.

The Blau (2003) occupational commitment measure was used to examine the nature and level of commitment to their profession among nursing professionals at the time of completion of their professional education or early entry into the workplace (Time One), and again after a period of exposure to the workplace (Time Two). This research design involves measurement of occupational commitment before and after their exposure to the workplace in the role of a fully qualified nursing professional. Workplace exposure therefore constitutes a ‘natural intervention’ in the

research design. Thus the research may also be considered to have a quasi-experimental design (Creswell 1994).

There is some debate about whether the Blau (2003) occupational commitment measure should be considered to be a four-component or a five-component construct (Bedeian 2002; Blau 2003). This chapter provides an overview of the development of the Blau (2003) occupational commitment measure and the debate regarding its factor structure. Evaluation of the factor structure of the Blau (2003) occupational commitment measure was performed before comparisons of the overall, or component levels of occupational commitment were made. The results of this evaluation, using exploratory factor analysis and confirmatory factor analysis, are reported in this chapter.

This chapter provides the results of comparisons of the means of the overall measure of commitment to the profession and the means of the components of professional commitment at Time One and Time Two. Comparisons were also made according to the gender, age, previous status as an enrolled nurse and prior non-nursing qualifications of the respondents at both Time One and Time Two. A repeated measures comparison of the means of the overall measure of commitment to the profession and the means of the components of professional commitment from Time One to Time Two was also made.

## **5.2 The Measurement of Occupational Commitment**

This research has used the Blau (2003) occupational commitment measure to measure professional commitment prior to and after a period of workplace exposure in the research sample. Evaluation of the factor structure of the measure was performed prior to making the any comparisons involving the measure's components. This is because there is debate about whether it should be considered to be comprised of four components or five (Bedian 2002; Blau 2003).

### **5.2.1 The Three Dimensional Occupational Commitment Measure**

The three-dimension occupational commitment measure, based on the Meyer and Allen (1991) organisational commitment measure, was originally developed to test the proposition that the dimensions of commitment identified in the measure could be generalised to other targets of work-related commitment such as the occupation (Meyer, Allen & Smith 1993). Although the measure is named the occupational commitment measure, Meyer, Allen and Smith (1993) point out that such wording was deliberately used to be inclusive of both professions and occupations. This was because they considered that individuals working in both professional and non-professional occupations could be committed to their occupation (Meyer, Allen & Smith 1993). Therefore, the term 'occupational commitment' is used in this thesis when referring to the general measure of occupational commitment that may be applied to members of both professional and non-professional occupations. The term 'professional commitment' is used when referring specifically to the commitment that professional employees have to their professional occupation as measured by a measure of occupational commitment.

In attempting to develop a general theory of work-related commitment Meyer and Allen (1997) have argued that the general concept of commitment to various work-related targets can be explained by three components of commitment. These are, *affective commitment*, which refers to identification with and desire to be associated with the work-related target, *normative commitment*, which refers to a sense of obligation to maintain association with the target and *continuance commitment*, or the desire to continue the association with the target of commitment because of the investments that have been made in it and a belief that any benefit in discontinuing association with the target might be outweighed by the associated costs (Meyer & Allen 1997).

Thus a high level of affective commitment is considered to indicate that the individual remains in the profession because they want to; a high level of normative commitment indicates that an individual continues to work in the profession because they feel they ought to and an high level of continuance commitment indicates that the individual remains with the profession because they feel that they need to (Meyer, Allen & Smith 1993).

Meyer, Allen and Smith (1993) argued that when applied to organisational commitment these forms of commitment identify a variety of reasons that an individual may wish to continue their association with an organisation and that a better understanding of an individual's relationship with the organisation is obtained when the forms of commitment are considered together. In extending the organisational commitment measure to professional commitment Meyer, Allen and Smith (1993) argued that a similar understanding of an individual's relationship with their profession could be developed. Meyer, Allen and Smith (1993) established that organisational commitment and occupational commitment are distinct but related constructs with identifiable relationships to other work outcomes such as prediction of intent to leave the organisation and the profession, as well as various organisational citizenship behaviours. This was further supported by the work of Irving, Coleman and Cooper (1997) and Snape and Redman (2003).

### **5.2.2 The Four-Dimension Occupational Commitment Measure**

Building on the work of Meyer, Allen and Smith (1993) and Carson, Carson and Bedeian (1995), Blau (2003) hypothesised that commitment to an occupation or profession can be explained by four factors. These factors include those of affective and normative commitment as described and measured by Meyer, Allen and Smith (1993) and the measures of *accumulated occupational costs* and *limited occupational alternatives* which were derived from the concept of occupational entrenchment as described and measured by Carson, Carson and Bedeian (1995). Blau (2003) argued that the continuance commitment scale of the Meyer, Allen and Smith (1993) occupational commitment measure did not properly define occupational commitment because it did not distinguish between continuation in the occupation because of the costs involved in leaving, and continuation because of limited alternatives being available.

Carson, Carson and Bedeian (1995) identified three dimensions of occupational entrenchment and described them as *emotional costs*, *career investments costs* and *limitedness of career alternatives*. They argued that the concept of entrenchment in a career reflects less a sense of a psychological attachment to an

occupation and more a sense that individuals may remain in an occupation because of the investments that they have made in their occupation or because they feel that the occupational alternatives available to them are limited (Carson, Carson & Bedeian 1995). The occupational investments may be in terms of time and effort in addition to the emotional investment that they have in the occupation. Carson, Carson and Bedeian (1995) noted that when individuals become entrenched in their career, the sequelae for the organisation might be positive or negative. They argued that individuals who are satisfied with their occupational prospects may be happily reconciled to their situation and continue to develop both personally and professionally. Alternatively, the entrenched individual who is not satisfied with their situation may become a liability to the organisation (Carson, Carson & Bedeian 1995).

Thus the affective and normative aspects of occupational commitment may be seen to reflect a psychological attachment to an occupation whereas occupational entrenchment reflects more pragmatic reasons for remaining in an occupation. When originally proposing a multi-component measure of occupational commitment, Meyer, Allen and Smith (1993) argued that accounting for the several components of commitment would provide a more complete understanding of what it is that binds an individual to their occupation or organisation. In a similar vein, the contribution of the occupational entrenchment components is that they add to the explanation of why individuals remain in the profession. Such information may need to be taken into account when the relationships between organisational-professional conflict, professional commitment and intention to leave the profession and/or organisation are being considered.

### **5.2.3 The Factor Structure of the Occupational Commitment Measure**

Carson, Carson and Bedeian (1995) found support for the tri-dimensional nature of occupational entrenchment using both exploratory factor analysis and confirmatory factor analysis across different samples. However, Blau (2001) argued that there was weak correlational evidence for discriminant validity between the investments and emotional costs factors. In addition, he noted that the possibility that occupational entrenchment could be represented by two dimensions was not tested by Carson, Carson and Bedeian (1995). Blau (2001) argued that his research had found support for a two-dimensional model of occupational entrenchment. However, as he noted in the limitations of his study, only two items rather than the four items of each dimension of occupational entrenchment were used in the data collection. This, as Bedeian (2002) pointed out, cast doubt on the validity of Blau's (2001) results and

raised the possibility that the relationships found between the items and dimensions was the result of the use of an abbreviated measure rather than a true reflection of the dimensions of occupational entrenchment.

In his 2003 study, Blau reported on data collected from three samples which included both professional and non-professional employees and which included all 12 items of the occupational entrenchment measure, as well as the six items of the affective commitment and the six items of the normative commitment components of the Meyer, Allen and Smith (1993) professional commitment measure. Blau (2003) argued that his comparative confirmatory factor analyses provided support for the two-factor structure of occupational entrenchment rather than the three-factor structure. He therefore argued that replacing the continuance commitment measure of the Meyer, Allen and Smith (1993) occupational commitment measure with the occupational entrenchment measure from Carson, Carson and Bedeian (1995) produced a measure comprised of four dimensions.

Blau (2003) argued that this measure would provide an expanded understanding of occupational commitment because it accounts for commitment that may be due to the sense that there are limited opportunities to obtain work in another occupation, in addition to commitment that is due to the costs associated with leaving an occupation. However, the finding that inclusion of the occupational entrenchment measures produces a measure with a four-factor structure is equivocal. This is because the goodness-of-fit indices for the Blau (2003) occupational commitment measure when represented as a four-factor structure, with the investment costs and emotional costs commitments combined, were comparable with the goodness-of-fit indices when the measure was represented as having a five-factor structure, with the occupational entrenchment aspects of the measure being represented as three factors. Thus Blau's (2003) results could equally support an argument for a four-factor, or for a five factor structure. The results of the evaluation of the factor structure of the Blau (2003) occupational commitment measure are reported in this chapter.

The Blau (2003) occupational commitment measure was used to measure the occupational commitment of the sample, which entirely consisted of members of a professional occupation. Therefore, in this research the term 'professional commitment' is used instead of occupational commitment and the term 'full professional commitment measure' is used to refer to the combined components of the Blau (2003) occupational commitment measure.



## **5.3 Method**

### **5.3.1 Sample**

The sample was chosen to ensure that the sample included only employees who fit the definition of ‘professional’ used in this research. All nursing professionals who had completed their pre-registration education in 2004 at a university in Queensland, Australia and who were entering workplace for the first time in 2005 were included in the sample. This was made possible in the first round of the Time One data collection through the support and co-operation of all of the Schools of Nursing at the six universities in Queensland who had a class of graduating nurses in 2004. To improve the response rate to the Time One data collection, a second round of data collection from the same sample was conducted four months later through the assistance of the organisation responsible for the registration of nurses in Queensland, the Queensland Nursing Council (QNC). Details of the data collection procedures were provided in Section 4.6.

#### **5.3.1.1 Time One Data Collection**

The first of the two rounds of data collection that constituted the Time One data collection occurred during November and December of 2004. The second round of the Time One data collection took place in March and April of 2005. The first round of the Time One data collection made through the universities resulted in 172 responses. The second round of the Time One data collection, made with the assistance of the QNC, was performed to increase the initial sample size. A further 97 responses resulted from the second round of the Time One data collection and the final sample size at Time One of the data collection was 269.

The first round of data collection resulted in a response rate of 15.39 percent from a total of 1117 packages sent. (243 of these were offered to students in class and 156 were returned unopened). The response rate of the second round of data collection was 11.76 percent of a possible 825 (as advised by the Queensland Nursing Council). The discrepancy between the number of students identified by the universities and the number of registered nurses identified by the QNC cannot be entirely accounted for by students failing to graduate, because universities that opted to send the packages by mail, waited until the numbers of students eligible to graduate had been identified (76.8 percent of the total sample). The discrepancy is of interest to this research but any attempt to explain it would be based on speculation only. The final overall response rate was 24.1 percent of 1117 or 32.6 percent of 825

either of which is considered a reasonable response rate for mail surveys (Aldridge & Levine 2001).

There was a time difference of approximately five months between the commencement of the first and completion of the second round of the Time One data collection. Because it was necessary for these data sets to be merged for subsequent analysis, independent *t*-tests were conducted on the full professional commitment measure mean and the means of the measures for each proposed dimension to establish whether the two groups represented the same or different populations (Pallant 2001). The results of the Levene's Test of Equality of Error Variances were all greater than .05 indicating that the assumption of equal variances was met (Pallant 2001). The means for the overall measure and all component measures by the group in which the data were collected are provided in Table 5.1.

**Table 5.1 Descriptive Statistics for Overall Professional Commitment and Components by Time One Data Collection Group**

	group	N	Mean	Std. Deviation
Overall Professional Commitment	first data collection	172	3.71	.60
	second data collection	97	3.69	.59
Affective Commitment T1	first data collection	172	4.89	.72
	second data collection	97	4.79	.85
Normative Commitment T1	first data collection	172	3.17	.85
	second data collection	97	3.09	.87
Investment Costs Commitment T1	first data collection	172	3.89	1.02
	second data collection	97	3.98	.99
Emotional Costs Commitment T1	first data collection	172	3.30	.88
	second data collection	97	3.39	.81
Limited Alternatives Commitment T1	first data collection	172	2.96	.84
	second data collection	97	2.94	.93

**Table 5.2 Independent Samples t-Tests for Overall Professional Commitment and Components by Time One Data Collection Group**

	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Overall Professional Commitment	.26	267	.79
Affective Commitment T1	1.04	267	.30
Normative Commitment T1	.75	267	.45
Investment Costs	-.69	267	.49
Emotional Costs	-.81	267	.42
Limited Alternatives	.18	267	.86

The *t*-tests for independent samples (Table 5.2) confirmed that there were no significant differences between the two groups' overall measure of professional commitment or between the measures of each dimension of the professional commitment measure. Therefore, both of the groups in the Time One sample could be considered to be representative of the same population.

### **5.3.1.2 Time Two Data Collection**

Questionnaires for the second round of data collection could be sent to 260 of the 269 individuals who responded to the first data collection round. Of these, 251 could be sent directly to the participants, as they had provided their contact details to the researcher specifically for the purposes of the research. Twelve participants indicated that they wished to be contacted through their School of Nursing or Alumni Association and nine of these individuals were able to have questionnaires sent to them by this means. Ten envelopes were returned with a 'not at this address' notice. One hundred and fifty five responses were received to the second round of the data collection resulting in a response rate of 57.6 percent of the original group of 269 to the second round of data collection. Data from only one respondent was not able to be included because of a large amount of missing data, leaving a final sample of 154.

### **5.3.1.3 The Repeated Measures Sample**

Responses from the Time One and Time Two data collections were matched on the basis of the code identifier provided by respondents and supported by matching demographic information. In the few instances where there was not an exact match of code identifiers, the matching demographic information was further

supported by comparison of handwriting and envelope postmarks, when available. To ensure the integrity of the repeated measures study, no match was made when there was reasonable doubt that the response was not from the same participant. Ultimately, there were 21 second round responses that could not be unequivocally matched with a first round response, leaving 134 matched-pairs that were useable for the repeated measures study.

#### **5.3.1.4 Participant Characteristics Time One**

Two hundred and fifty-one respondents (93.3 %) indicated their gender as female and 17 (6.3 %) indicated male. One participant did not indicate their gender. This indicates a slightly smaller proportion of males when compared to the 8.6 percent indicated in the most recent available national figures for nursing professionals (AIHW 2003). However, comparison with the proportion of males and females in Queensland is not possible, as the AIHW does not provide proportions of nursing professionals by gender on a state-by-state basis.

Two thirds of the sample (66.2 %, n = 178) indicated that their age was in the 20-30 years range, 53 (19.7 %) were in the 30-40 years range and 38 (14.1 %) were in the 40-60 years range. These proportions are in contrast to the national proportions of registered nurses on the basis of age, that is provided by the AIHW (2003) which indicated that in 2001 25.9 percent of nurses were in the less than 35 years age group, 32.1 percent were aged between 35 and 45 and 42.0 percent were older than 45 years of age. The difference in the proportions in age groups is not surprising since the sample represents a group of newly prepared graduates, however, the remarkably larger proportion of younger nursing professionals entering the workforce, in comparison to the proportion of younger nursing professionals within the workforce, underlines the need for research into the reasons that professionals leave the profession in which they had initially chosen to work.

Twenty-four participants (8.9 %) indicated that they had previously worked as an enrolled nurse. Of these, 11 indicated that they had worked less than ten years as an enrolled nurse and 12 indicated that they had worked more than 10 years. Almost half of the group (47.6 % n = 128) indicated that they held other non-nursing qualifications.

#### **5.3.1.5 Participant Characteristics Time Two**

There were 143 (92.9 %) female respondents and 11 (7.1 %) male respondents to the second round of data collection. This ratio of male to female respondents is similar to the ratio that was evident in the first round of data collection

(251:17). As in the first round of data collection, the proportional representation of males to females in this sample is slightly smaller than the proportion of 8.6 percent of male nursing professionals, indicated in the most recent available national figures for nursing professionals (AIHW 2003). The age groups of respondents is set out in Table 5.3. The grouping of these age groups is slightly different from that of the first round and was changed in the survey questionnaire to be able to better capture the relationships in the data among the 20-25 years age group. However, comparison of the age distribution of the Time One and Time Two samples is possible when they are divided into two groups and compared according to age-less-than-30-years and age-more-than-30-years. In the Time One sample, 66.2 percent of the sample was in the 20-30 years age group and 33.8 percent was in the 30-60 years age group. The Time Two sample therefore, had a slightly lower representation from the 20-30 years age group (61.0 %), and a slightly higher representation from the 30-60 years age group (39.0 %).

**Table 5.3 Age at Time Two**

		Frequency	Percent
Valid	20-24	67	43.5
	25-30	27	17.5
	31-45	48	31.2
	45-60	12	7.8
	Total	154	100.0

The representation of enrolled nurses in the Time Two sample (10.4 % of the sample) was slightly higher than the representation of enrolled nurses in the Time One (8.9 % of the sample). There were 16 respondents to the Time Two sample who indicated that they had previously worked as an enrolled nurse. Seven of the former enrolled nurses had worked as an enrolled nurse for less than 10 years and nine had worked as an enrolled nurse for more than 10 years prior to becoming a registered nurse. There was a similar representation of individuals holding other non-nursing qualifications among the respondents to the second data collection (46.1 %, n= 71/154 vs. 46.5 %, n = 125/269).

At Time Two, additional demographic items included questions about the type of non-nursing qualifications held or if the respondents had commenced study to gain a non-nursing qualification. Respondents were asked if it was their intention to use this qualification to remain in or to leave nursing. Other demographic questions asked at Time Two included the Australian state in which they were working,

whether the organisation they were working in was a public or private institution and the length of time that they had been with their current organisation.

Fourteen of the respondents indicated that they had commenced study to gain a non-nursing qualification since they had completed their nursing degree. Three of these respondents indicated that they intended to use the qualification to remain in nursing and two indicated that they intended to use the qualification to take up work in another occupation. Seven were yet undecided as to how they would use the qualification and two did not respond to this item.

One hundred and forty-four respondents indicated that they were working in Queensland and nine indicated that they were working interstate. Most of the respondents (n = 93, 60.4 %) were working in a public health care organisation and the remainder were working in a private health care organisation (n = 55, 35.7 %) or another type of organisation (n = 5, 3.2 %).

The period of time that respondents had been working in their current organisation is indicated below in Table 5.4. The majority of respondents had been working with their current organisation for between three and eight months and less than ten percent had been working for less than three months. Eighteen respondents indicated that they had been with the organisation that they were currently working in for nine to twelve months. This period of time exceeds the amount of time that could have lapsed since completing their nursing degree in 2004 and the time of the survey. Eight of these were previously enrolled nurses who may have gained work as a nursing professional in the organisation in which they had previously worked as an enrolled nurse. Another possibility which would account for the number of responses to this category may be that students of nursing sometimes obtain work as an Assistant-In-Nursing (AIN) while they undertake their study and it is possible that they may then obtain work in the nursing professional role within the same organisation on completion of their study.

**Table 5.4 Time with Current Organisation**

		Frequency	Percent
Valid	0-2	14	9.1
	3-5	85	55.2
	6-8	36	23.4
	9-12	18	11.7
	Total	153	99.4
Missing	System	1	.6
Total		154	100.0

#### **5.3.1.6 Participant Characteristics of the Repeated Measures Sample**

The repeated measures sample ( $n = 134$ ) is a sub-set of both the Time One and Time Two sample groups. The possibility that bias may have been introduced into the sample, because of participants who did not respond to the Time Two data collection or who could not be included because an unequivocal match between their Time One and Time Two responses could not be made needed be considered. To investigate whether the repeated measures sample was representative of the both samples at Time One and Time Two, demographic comparisons were made between the three groups.

In addition, because exposure to the workplace constitutes the ‘intervention’ in this research, differences within the sample that might be attributed to the time at which the participants responded to the two rounds of the Time One data collection needed to be considered as a possible means of introduction of bias in the sample. The Time Two data collection was commenced in July 2005 and was completed by the end of August 2005. The Time Two data collection followed the first of the two rounds of data collection that constituted the Time One data collection. The first of these occurred during November and December of 2004 and the second took place in March and April of 2005. This meant that there was a minimum period of three months between the Time One and Time Two data collections and a maximum period of nine months. Investigations were therefore made to account for the possibility that differences in the means scores for the overall levels of professional commitment and the component means from Time One to Time Two might be the result of any major differences between the groups in which the data collection was made at Time One.

The sample was split according to the round of data collection at Time One and comparisons of frequencies were made according to the time that the respondent had been with their current organisation. In addition, *t*-tests for independent means were used to compare the means scores for the overall levels of professional commitment in addition to the component means from Time One and Time Two according the Time One round of data collection.

**Demographic Comparisons** - In the repeated measures group there were 125 females (93.3 %) and nine males (6.7 %). This representation of males and females is the same as that of the Time One group and is comparable with the gender representation of the Time Two group ( $F = 92.9 \%$ ,  $M = 7.1 \%$ ).

The age groups of respondents is set out in Table 5.5.

**Table 5.5 Age Grouping of Longitudinal Sample**

		Frequency	Percent
Valid	20-24	60	44.8
	25-30	21	15.7
	31-45	42	31.3
	45-60	11	8.2
	Total	134	100.0

When compared with the Time One (n = 269) and Time Two (n = 154) groups (Table 6.6) the proportionate representation of the repeated measures sample group (n = 134) by age can be seen to be more similar to the Time Two sample group.

**Table 5.6 Comparison of Time One, Time Two and Repeated Measures Sample by Age Group Proportions.**

Age	Time One (n = 269)	Time Two (n = 154)	Repeated measures (n = 134)
20-30 years	66.2 %	61.0 %	60.5 %
30-60 years	33.8 %	39.0 %	39.5 %

The representation of respondents who had previously worked as an enrolled nurse was comparable across the three groups. In the repeated measures group 9.0 percent of the respondents had previously worked as an enrolled nurse compared with 8.9 percent of the Time One group and 10.4 percent of the Time Two group. Similar comparisons could also be made in relation to respondents who held prior non-nursing qualifications. In the repeated measures sample 47.8 percent held prior non-nursing qualifications compared with 47.6 percent of the Time One group and 46.1 percent of the Time Two group.

**Period of Exposure to the Workplace** – The period of time that the respondents in the repeated measures sample had been with their current organisation is shown in Table 5.7. When compared with the results for the Time Two sample shown in Table 5.4 the percentages represented in each group can be seen to be comparable. Thus, further evidence that the repeated measures sample can be considered to be representative of the Time Two sample in this regard, is provided.



**Table 5.7 Time with Current Organisation**

		Frequency	Percent
Valid	0-2	9	6.7
	3-5	74	55.2
	6-8	34	25.4
	9-12	15	11.2
	Total	132	98.5
Missing	System	2	1.5
Total		134	100.0

A split sample analysis was done to compare the amount of time that respondents from the first round of Time One data collection had been in the workplace, with the amount of time that respondents from the second round of Time One data collection, had been in the workplace. The results are shown in Table 5.8. These results show that the period of exposure to the workplace for respondents from the two rounds of the Time One data collection is similar.

**Table 5.8 Split Sample Analysis of Time with Current Organisation by Round of Time One Data Collection**

Group		Frequency		Percent
First round data collection	Valid	0-2	6	6.5
		3-5	53	57.0
		6-8	22	23.7
		9-12	11	11.8
		Total	92	98.9
	Missing	System	1	1.1
	Total		93	100.0
Second round data collection	Valid	0-2	3	7.3
		3-5	21	51.2
		6-8	12	29.3
		9-12	4	9.8
		Total	40	97.6
	Missing	System	1	2.4
	Total		41	100.0

***t*-Tests for Independent Means** - *t*-tests for independent means were used to compare the means of the overall measure of professional commitment, as well as the component means at Time One and Time Two according the round of data collection at Time One. Table 5.9 provides the means and standard deviations for each measure. The results of the *t*-tests for independent means are provided in Table 5.10. The

results of the Levene's Test for Equal Variances indicated that equal variances could be assumed for both groups for all comparisons. The results indicated that there were no significant differences between the means of the measures according to the round of data collection at Time One or at Time Two. These results add further assurance that the repeated measures group can be considered to be representative of both the Time One and Time Two sample groups.

**Table 5.9 Means and Standard Deviations of Overall Commitment and Components by Time One Data Collection Group**

	Group	N	Mean	Std. Deviation
Overall Commitment T1	first data collection	93	3.71	.58
	second data collection	41	3.72	.55
Affective Commitment T1	first data collection	93	4.94	.73
	second data collection	41	4.78	.79
Normative Commitment T1	first data collection	93	3.12	.82
	second data collection	41	3.32	.85
Investment Costs Commitment T1	first data collection	93	3.87	.98
	second data collection	41	3.99	.80
Emotional Costs Commitment T1	first data collection	93	3.27	.90
	second data collection	41	3.35	.77
Limited Alternatives Commitment T1	first data collection	93	3.06	.80
	second data collection	41	2.84	1.05
Overall Commitment T2	first data collection	93	3.73	.65
	second data collection	41	3.80	.56
Affective Commitment T2	first data collection	93	4.74	.80
	second data collection	41	4.67	.77
Normative Commitment T2	first data collection	93	3.19	.84
	second data collection	41	3.35	.84
Investment Costs Commitment T2	first data collection	93	3.91	1.00
	second data collection	41	4.10	.95
Emotional Costs Commitment T2	first data collection	93	3.32	.94
	second data collection	41	3.59	.83
Limited Alternatives Commitment T2	first data collection	93	3.17	.80
	second data collection	41	3.07	.92

**Table 5.10 Independent Samples t-Tests for Overall Professional Commitment and Components by Time One Data Collection Group**

	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Overall Commitment T1	-.08	132	.94
Affective Commitment T1	1.12	132	.27
Normative Commitment T1	-1.29	132	.20
Investment Costs T1	-.70	132	.49
Emotional Costs T1	-.51	132	.61
Limited Alternatives	1.33	132	.18
Overall Commitment T2	-.57	132	.57
Affective Commitment T2	.44	132	.66
Normative Commitment T2	-.99	132	.33
Investment Costs T2	-1.02	132	.31
Emotional Costs T2	-1.54	132	.13
Limited Alternatives	.63	132	.53

### 5.3.2 The Measure of Professional Commitment

Professional commitment was measured using all 24 items of the Blau (2003) occupational commitment measure. The necessary minor changes to the wording of the measure were made to adapt it to use in a sample of nursing professionals. For example, in all items the words ‘medical technology’ were replaced with the word ‘nursing’. The third affective commitment item ‘I am proud to be in the field of medical technology’ was the only item where the wording departed any further from that given by Blau (2003). This item was worded ‘I am proud to be a nurse’. Respondents were asked to indicate their response to each of the occupational commitment items on a six point Likert scale. The points of the scale ranged from ‘very strongly agree’ (6), to ‘very strongly disagree’ (1). At Time Two, occupational commitment was again measured using all 24 items of the Blau (2003) occupational commitment measure. At Time Two the Blau (2003) occupational commitment measure appeared in exactly the same form as it had been presented in the Time One rounds of data collection when it was the only measure that was included.

The coefficient alphas for the various components reported in previous studies have ranged between .79 and .93. At Time One, in this study, the coefficient alpha for the overall measure was .91 and the coefficient alphas for the affective commitment, normative commitment, investment costs, emotional costs and limited alternatives commitment components were .91, .86, .87, .82 and .90 respectively (n =

269). At Time Two, the coefficient alpha for the overall measure was .91 and the coefficient alphas for the affective commitment, normative commitment, investment costs, emotional costs and limited alternatives commitment components were .91, .89, .89, .85 and .92 respectively ( $n = 154$ ). Other work-related measures were included in the data collection at Time Two. The results relating to these measures are reported in Chapter Six.

### **5.3.3 Preparation of the Data for Analysis**

The statistical software programs used to analyse the data reported in this chapter were SPSS 13 and AMOS 5. The data was inspected after data entry to ensure that the data entry was 'clean' that is, that all scores were within the scale response limits (i.e. 1-6). The scores for the professional commitment limited alternatives dimension were then reverse scored as indicated by Blau (2003). At Time One there were seven participants who omitted to indicate a response on one, or at the most two items, in their responses and four at Time Two. These missing observations were replaced with the sample mean for that item (Kline 2005). Only one participant's responses at each time of the repeated measures study could not be included in the sample because of a large amount of missing data.

#### **5.3.3.1 Univariate Screening**

The nature of the constructs being measured in the social sciences increases the chance that skewed distributions of scores will occur (Pallant 2001). Correlations between variables may be diminished when the assumptions of normality, homoscedasticity and linearity are not met in factor analysis (Hair et al. 1998). Exploration of the data for univariate outliers at Time One and Time Two revealed that for most items the difference between the mean and the five percent trimmed mean was minor, or that there was no difference indicating that any extreme scores were having very little impact on the mean (Pallant 2001). All tests for univariate normality were met. The univariate skewness values at Time One ranged from the lowest of .02 to the highest of .34 in the positive range and the lowest of -.03 to the highest of -.78 in the negative range. The univariate kurtosis statistics values at Time One ranged from the lowest of .12 to the highest of 1.15 in the positive range and the lowest of -.10 to the highest of -.76 in the negative range. At Time Two, the univariate skewness values ranged from the lowest of -.01 to the highest of -.88. The univariate kurtosis statistics values ranged from the lowest of -.04 to the highest of 1.36.

Hair et al. (1998) recommend that assessment of normality of distribution should not be made on the basis of the mathematical tests alone but that graphical plots, as well as statistical tests should be used to assess the normality of distribution of each variable. Accordingly, exploration of the data revealed that despite significance levels of less than .001 for the Kolmogorov-Smirnov and Shapiro-Wilk tests of normality, the normal probability plots lines representing the actual data distribution closely followed the diagonal and therefore a normal distribution could be assumed for each variable (Hair et al. 1998).

#### **5.3.3.1 Multivariate Screening**

One of the common assumptions of structural equation modeling is that there is multivariate normality of the data, however, this is usually difficult to assess because of the number of variables involved (Kline 2005). Kline (2005) indicates that dealing with univariate outliers decreases the likelihood of multivariate non-normality. In addition to dealing with univariate outliers, inspection of the squared multiple correlations to test for multicollinearity at the multivariate level indicated that no values exceeded .90 (Kline 2005). Multivariate outliers in the Time One sample, which was used to assess the factor structure of the Blau (2003) occupational commitment measure, were identified using Mahalanobis Distance. Mahalanobis Distances were calculated using SPSS. Fifteen participants were identified as having Mahalanobis Distances which exceeded the critical value of  $\chi^2$  which was 51.18 ( $df = 24, p < .001$ ). These were then excluded from the analysis. This meant that the sample size for the confirmatory factor analysis conducted on the data collected at Time One was 254.

Examination of the plots of the standardized residuals by the regression standardized predicted value for each item, when viewed as a dependent variable of all other items (Osborne & Waters 2002), indicated that the assumptions of linearity and homoscedasticity in this group of 254 respondents were met. The relative magnitudes of variances were also inspected as advised by Kline (2005). The ratio of the greatest variance to the least variance was 2.18, which is well under the conservative suggestion by Kline (2005) that rescaling of scores should be considered if the ratio of the largest to the smallest variance exceeds 10.

## **5.4 Results**

### **5.4.1 Results of the Time One Data Collection**

#### **5.4.1.1 The Factor Structure of the Occupational Commitment Measure**

Because there is some debate about the factor structure of the Blau (2003) occupational commitment measure (Bedeian 2002; Blau 2003) exploratory factor analysis of the data was undertaken prior to confirmatory factor analysis. Principal components factor analysis is a commonly used means of exploratory factor analysis; however, it assumes that the measures form the construct whereas the common factor or principal axis method assumes that the measures are reflective of the underlying construct (Podsakoff, MacKenzie, Podsakoff et al. 2003). The conceptual relationship between the components of the professional commitment measure and the items used to measure the components is that the items are a reflection of the constructs represented by the components. Therefore, the principal axis method was used in the exploratory factor analysis of the data because its assumptions provide a better match to the conceptual relationship of the measures with the constructs. Rotation of the factors was made using the oblique method, because it is assumed that the factors are correlated (Podsakoff et al. 2003).

The factor structure of the exploratory factor analysis using the principal axis method is displayed in Table 5.11. The suitability of the data for factor analysis was confirmed by the presence of a large number of correlations that exceeded .33 (Ho 2000). The Kaiser-Meyer-Olkin value of .89 exceeded the minimum value of .60, to indicate the adequacy of the sample (Pallant 2001). In addition, Bartlett's test of sphericity was statistically significant, indicating that the hypothesis that the variables are independent can be rejected (Ho 2000). Five components were identified as having an eigenvalue that exceeded 1. After rotation these components respectively explained 17.14 percent, 13.84, percent 11.64 percent, 11.25 percent and 8.35 percent of the variance. These results indicate that a five-factor structure of the professional commitment measure is supported in this sample. The Pattern Matrix for the exploratory factor analysis of the Blau (2003) occupational commitment measure is provided in Table 5.11.

**Table 5.11 Pattern Matrix for Professional Commitment Measure<sup>a</sup>**

	Factor				
	1	2	3	4	5
PCAffect1		.50			
PCAffect2		.89			
PCAffect3		.86			
PCAffect4		.90			
PCAffect5		.76			
PCAffect6		.82			
PCNorm1	.65				
PCNorm2	.95				
PCNorm3	.80				
PCNorm4	.54				
PCNorm5	.58				
PCNorm6	.48				
PCInvC1				-.67	
PCInvC2				-.64	
PCInvC3				-.94	
PCInvC4				-.66	
PCEmoC1					-.56
PCEmoC2					-.70
PCEmoC3					-.51
PCEmoC4					-.69
PCLimit1			.75		
PCLimit2			.86		
PCLimit3			.85		
PCLimit4			.81		

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Confirmatory factor analysis of the data was performed after the results of the exploratory factor analysis provided support for the proposition that the Blau (2003) occupational commitment measure has a five-factor structure. The confirmatory factor analyses were performed using AMOS 5 with estimates of the confirmatory factor analysis made using Maximum Likelihood (ML). To rule out the possibility that the observed variables are measuring just the one domain and therefore show no discriminant validity, a single factor model was tested (Kline 2005). In addition, as a further examination of the discriminant validity of the measures and following Blau (2003), a two-factor model (affective commitment /normative commitment and costs/alternatives commitment) and a three-factor model (affective commitment,

normative commitment costs/alternatives commitment), were tested. Overall fit indices for the measure by the number of factors are given in Table 5.12. The results indicate that in this sample, there is a significant decrease in the chi-square value from the four-factor model to the five-factor model. The incremental improvements in other goodness-of-fit indices also serve to indicate that the five-factor model of professional commitment demonstrates a better fit to the data than the four-factor model. The goodness-of-fit indices also indicate, however, that the measurement properties of the measure may be improved.

**Table 5. 12 Overall Fit Indices for Professional Commitment Measures by Number of Factors**

Model	$\chi^2$	df	p	CFI	RMSEA	PCFI	AIC
Null	4218.79	276	.000	—	—	—	—
1 Factor	2538.50	252*	.000	.42	.19	.38	2634.50
2 Factors	2034.79	251*	.000	.55	.17	.50	2132.79
3 Factors	1294.69	249*	.000	.74	.13	.66	1396.69
4 Factors	638.36	246*	.000	.90	.08	.80	746.36
5 Factors	465.48	242*	.000	.94	.06	.83	581.48

$\chi^2$  = chi square, df = degrees of freedom, CFI = Comparative Fit Index, RMSEA = Root Mean Square Error of Approximation, PCFI = Parsimony Adjusted Comparative Fit Index, AIC = Akaike Information Criteria.

\*significant decrease in chi-square  $p < .001$

The parameter estimates are displayed in Table 5.13. The factor loading for each item in the measure was significant. Inspection of the standardised regression weights, variances and error terms for each item indicate that most have a reasonably high commitment component. A high error term for the first affective commitment item is demonstrated in these results, as is a high error term for the first normative commitment item. High error terms for these items have also been consistently reported in the studies by Meyer, Allen and Smith (1993), Irving, Coleman and Cooper (1997), Snape and Redman (2003) and Blau (2003). These accumulated findings suggest that inclusion of these items in future measures of occupational commitment may need to be revised. The last of the normative commitment items also had a reasonably high error term in this sample. This was also found in the Meyer, Allen and Smith (1993) study, which was also a sample of nurses, but not in the studies by Irving, Coleman and Cooper (1997) or Blau (2003). Blau (2003) reported a high error term for the third limited alternatives commitment item but in this study all limited alternatives commitment items had low error terms.



**Table 5.13 Five-Factor Model Standardised Regression Weights and Squared Multiple Correlations**

Item	Factor	r	Variance (r <sup>2</sup> )	Error (1-r <sup>2</sup> )
PC1	Affective	.58	.33	.67
PC2	Affective	.88	.77	.23
PC3	Affective	.86	.74	.26
PC4	Affective	.93	.86	.14
PC5	Affective	.79	.62	.38
PC6	Affective	.84	.71	.29
PC7	Normative	.63	.40	.60
PC8	Normative	.87	.75	.25
PC9	Normative	.92	.84	.16
PC10	Normative	.65	.42	.58
PC11	Normative	.67	.44	.56
PC12	Normative	.64	.40	.60
PC13	Investment Cost	.79	.62	.38
PC14	Investment Cost	.74	.54	.46
PC15	Investment Cost	.87	.76	.24
PC16	Investment Cost	.82	.67	.33
PC17	Emotional Cost	.76	.57	.43
PC18	Emotional Cost	.77	.59	.41
PC19	Emotional Cost	.70	.50	.50
PC20	Emotional Cost	.77	.60	.40
PC21	Limited Alternatives	.78	.61	.39
PC22	Limited Alternatives	.88	.78	.22
PC23	Limited Alternatives	.88	.77	.23
PC24	Limited Alternatives	.87	.76	.24

The correlations between the components of the professional commitment measure found in this study are shown in Table 5.14. These results indicate, as did Blau's (2003) findings, a low level of correlation between the limited alternatives commitment component and all of the other components. The results also indicate that in contrast to the findings of the previous studies, the higher levels of correlation are not between the affective and the normative commitment components but between the normative commitment component and the investment costs and emotional costs commitments components.

**Table 5.14 Correlations among Latent Variables in Five-Factor Model**

	Affective	Normative	Investment Costs	Emotional Costs	Limited Alternatives
Affective	1				
Normative	.32***	1			
Investment Costs	.20**	.62***	1		
Emotional Costs	.39***	.59***	.66***	1	
Limited Alternatives	.11	.18*	.23**	.27***	1

\*\*\* Significant  $p < .001$ , \*\* Significant  $p < .01$ , \* Significant  $p < .05$ .

Because of the debate about whether it should be considered to be a four-component or a five-component construct (Bedeian 2002; Blau 2003), evaluation of factor structure of the Blau (2003) occupational commitment measure was performed prior to the comparisons of the overall or component levels of occupational commitment. The results of both exploratory factor analysis and confirmatory factor analysis in this sample provide support for the argument that the Blau (2003) occupational commitment measure may be considered to be a five-component construct. Therefore, five components rather than four were used for further analysis of the data in relation to the Blau (2003) occupational commitment measure. The goodness-of-fit indices also indicate, however, that further refinement of the measure is needed.

#### **5.4.1.2 Overall Level of Commitment and Comparison of Component Levels.**

The means for the full professional commitment measure and for each of the components of the measure at Time One were calculated and are provided in Table 5.15 below. The scores were collected using a six-point (therefore forced-choice) Likert scale where responses to the items of the measure could range from ‘very strongly agree’ (6) to ‘very strongly disagree’ (1). (The four items of the limited alternatives commitment component were reverse scored.) Therefore, higher scores indicate a higher level of commitment.

These results indicate that the overall level of commitment to the profession is fairly high. The results show that affective commitment to the profession has the highest mean of all of the dimensions, followed by investment and emotional costs commitment, normative commitment and limited alternatives commitment. These

results suggest that the main contributor to the commitment of nursing professionals to the profession at this stage of their career is the belief that they want to be involved in the profession. While the lower means for normative commitment and limited alternatives commitment decrease the mean of the full professional commitment measure, they indicate that the reason for being in the profession at this early stage, is driven more by affective commitment than it is by any sense of obligation to remain or a need to remain because there are few viable alternatives.

**Table 5.15 Descriptive Statistics for Overall Professional Commitment and Components at Time One**

	N	Minimum	Maximum	Mean	Std. Deviation
Overall Professional Commitment	269	1.58	5.58	3.70	.59
Affective Commitment	269	2.33	6.00	4.85	.77
Normative Commitment	269	1.00	6.00	3.14	.85
Investment Costs Commitment	269	1.00	6.00	3.93	1.01
Emotional Costs Commitment	269	1.00	6.00	3.34	.86
Limited Alternatives Commitment	269	1.00	6.00	2.95	.87

The means for each item and the standard deviations, maximum and minimum scores are provided in Table 5.16.

**Table 5.16 Means, Standard Deviations and Maximum and Minimum Scores for Professional Commitment Measure Items at Time One**

		Minimum	Maximum	Mean	Std. Deviation
PCAffect1	269	1	6	4.35	.99
PCAffect2	269	1	6	4.91	.93
PCAffect3	269	2	6	5.21	.91
PCAffect4	269	3	6	5.03	.86
PCAffect5	269	2	6	4.67	.95
PCAffect6	269	2	6	4.95	.93
PCNorm1	269	1	6	2.81	1.10
PCNorm2	269	1	6	2.97	1.00
PCNorm3	269	1	6	3.34	1.08
PCNorm4	269	1	6	3.55	1.35
PCNorm5	269	1	6	3.11	1.11
PCNorm6	269	1	6	3.08	1.05
PCInvC1	269	1	6	3.57	1.16
PCInvC2	269	1	6	3.83	1.13
PCInvC3	269	1	6	4.22	1.24
PCInvC4	269	1	6	4.09	1.21
PCEmoC1	269	1	6	3.40	1.10
PCEmoC2	269	1	6	3.54	1.07
PCEmoC3	269	1	6	3.06	1.02
PCEmoc4	269	1	6	3.35	1.08
PCLimit1	269	1	6	3.04	1.08
PCLimit2	269	1	6	3.02	1.00
PCLimit3	269	1	6	2.88	.97
PCLimit4	269	1	6	2.85	.95

#### **5.4.1.3 Comparisons by Gender, Age, Prior Non-Nursing Qualifications and Enrolled Nurse Status**

In previous studies of the occupational commitment measure, Meyer, Allen and Smith (1993) reported significant and positive correlations for all three forms of professional commitment with age and years of nursing experience, with the exception of age and continuance commitment. They did not examine the relationship of professional commitment to gender. Irving, Coleman and Cooper (1997) found no relationship between any of the dimensions of occupational commitment and age or any relationship with occupational commitment and gender except in relation to accumulated costs where males were more likely to have higher scores on this dimension than females. Neither Snape and Redman (2003) nor (Blau 2003) reported findings in relation to occupational commitment components as they relate to age or gender.

In this study the means of the professional commitment measure scores and the component mean scores were compared according to gender, age, prior experience as an enrolled nurse and prior non-nursing qualifications. These comparisons were made using *t*-tests for independent means or analysis of variance according to the number of groups in the analysis.

### Gender

Comparisons of the levels of overall commitment and the component levels between females and males were made using *t*-tests for independent means. The means and standard deviations for the full professional commitment measure and its components are provided in Table 5.15 and the results of the *t*-tests can be found in Table 5.16. Although the group sizes are very different, Levene's Test of Equality of Error Variances indicated that the assumption of equal variances was met in each group (Pallant 2001). Males were found to have lower means on the measure of overall professional commitment and all components of professional commitment. However, the indicators of statistical significance ( $p < .05$ ) for the lower means were only met in the full professional commitment measure, and the component means for affective commitment, normative commitment and emotional costs commitment. This finding must naturally be viewed with appropriate caution because of the large difference in the sizes of the two groups.

**Table 5.17 Means and Standard Deviations for Overall Professional Commitment and Components by Gender at Time One**

	gender	N	Mean	Std. Deviation
Overall Professional Commitment	Female	251	3.74	.57
	Male	17	3.21	.65
Affective Commitment	Female	251	4.89	.74
	Male	17	4.24	.95
Normative Commitment	Female	251	3.19	.83
	Male	17	2.62	.95
Investment Costs	Female	251	3.95	1.00
	Male	17	3.57	1.05
Emotional Costs	Female	251	3.37	.84
	Male	17	2.85	.98
Limited Alternatives	Female	251	2.98	.87
	Male	17	2.56	.76

**Table 5.18 Independent Samples t-Tests for Overall Professional Commitment and Components by Gender at Time One**

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Overall Professional Commitment	1.59	.21	3.63	266	.00
Affective Commitment	1.88	.17	3.47	266	.00
Normative Commitment	1.30	.26	2.71	266	.01
Investment Costs	.20	.65	1.51	266	.13
Emotional Costs	.97	.33	2.43	266	.02
Limited Alternatives	.07	.79	1.96	266	.05

### Age

To examine the effect of age on overall professional commitment and its components, the sample was categorised into three age groups, 20-30 years ( $n = 178$ ), 30-40 years ( $n = 53$ ) and 40-60 years ( $n = 38$ ). A one-way analysis of variance was conducted and revealed that there was a tendency for all means to increase with age, but that there were no significant differences in the means when compared on the basis of age. However, when analysed in two groups, defined as being in the 20 to 30 years age group and the 30 to 60 years age group, there was a significant difference found for the limited alternatives component of occupational commitment. Those in the 20 to 30 years age group had significantly lower overall limited alternatives commitment means ( $M = 3.63$ ,  $SD = .57$ ) than those in the 30 to 60 years age group ( $M = 2.87$ ,  $SD = .82$ ),  $t(267) = -2.01$ ,  $p < .05$ .

### Prior Non-nursing Qualifications

Respondents were asked to indicate if they held any non-nursing qualifications that they had gained prior to obtaining their degree in nursing. When compared on the basis of holding prior non-nursing qualifications, there was, as might be expected, a significant difference ( $p < .05$ ) between the two groups on the basis of limited alternatives commitment, where commitment to the profession was higher when no non-nursing qualifications were held. The means and standard deviations for the overall and component measures of professional commitment for this comparison are provided in Table 5.19 and the  $t$ -test for independent means

results are shown in Table 5.20. The results of the Levene's Test of Equality of Error Variance were all non-significant indicating that equal variances could be assumed for both groups.

**Table 5.19 Means and Standard Deviations for Overall Professional Commitment and Components by Prior Non-Nursing Qualifications at Time One**

	Prior non-nursing qualification	N	Mean	Std. Deviation
Overall Professional Commitment	yes	128	3.66	.61
	no	141	3.74	.58
Affective Commitment	yes	128	4.84	.77
	no	141	4.86	.78
Normative Commitment	yes	128	3.15	.84
	no	141	3.14	.87
Investment Costs Commitment	yes	128	3.88	1.04
	no	141	3.97	.98
Emotional Costs Commitment	yes	128	3.31	.86
	no	141	3.36	.86
Limited Alternatives Commitment	yes	128	2.80	.91
	no	141	3.09	.80

**Table 5.23 Descriptive Statistics for Overall Professional Commitment and Components at Time Two**

	N	Minimum	Maximum	Mean	Std. Deviation
Overall Professional Commitment	154	1.92	5.25	3.72	.61
Affective Commitment	154	2.83	6.00	4.71	.78
Normative Commitment	154	1.00	5.33	3.23	.86
Investment Costs Commitment	154	1.00	6.00	3.94	.99
Emotional Costs Commitment	154	1.00	6.00	3.36	.91
Limited Alternatives Commitment	154	1.00	6.00	3.09	.85

### **Enrolled Nurse Status**

Respondents were asked to indicate if they had previously worked as an enrolled nurse prior to gaining their degree in nursing. No significant differences were found in the mean of the full professional commitment measure and its component means between nursing professionals who had previously worked as

enrolled nurses and those who had not. These results are shown in Table 5.21 and Table 5.22.

**Table 5.21 Means and Standard Deviations for Overall Professional Commitment and Components by Previous Enrolled Nurse Status at Time One**

	Enrolled Nurse	N	Mean	Std. Deviation
Overall Professional Commitment	yes	24	3.75	.44
	no	245	3.70	.61
Affective Commitment	yes	24	4.92	.73
	no	245	4.84	.78
Normative Commitment	yes	24	3.13	.72
	no	245	3.14	.87
Investment Costs Commitment	yes	24	3.84	1.04
	no	245	3.93	1.01
Emotional Costs Commitment	yes	24	3.48	.78
	no	245	3.32	.87
Limited Alternatives Commitment	yes	24	3.11	.81
	no	245	2.93	.87

**Table 5.22 Independent Samples t-Tests for Overall Professional Commitment and Components by Previous Enrolled Nurse Status at Time One**

	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Overall Professional Commitment	.44	267	.66
	.58	32.514	.57
Affective Commitment	.48	267	.63
	.50	28.351	.62
Normative Commitment	-.11	267	.91
	-.13	29.921	.90
Investment Costs Commitment	-.42	267	.68
	-.40	27.359	.69
Emotional Costs Commitment	.86	267	.39
	.94	28.895	.36
Limited Alternatives Commitment	.97	267	.33
	1.03	28.545	.31



### **5.4.2 Results of the Time Two Data Collection**

The first of the two rounds of data collection that constituted the Time One data collection occurred during November and December of 2004. The second round of the Time One data collection took place in March and April of 2005. The Time Two data collection commenced in July 2005 and was completed by August 2005. Any changes in the observed levels of the Time One overall commitment to the profession and component levels as the result of exposure to the workplace were observed at Time Two.

#### **5.4.2.1 Overall Level of Commitment and Comparison of Component Levels.**

The means of the overall Blau (2003) occupational commitment measure and the component measures for the Time Two sample are provided below in Table 6.23. The means indicate that in this sample, the overall level of commitment of the participants to their profession is fairly high and that there is little difference in the overall means when compared with the sample collected at Time One ( $M = 3.70$ ,  $SD = .59$ ). The mean of the affective commitment component remains the highest of the means in this sample as it was in the Time One sample, although the mean of the affective commitment component is lower than that of the Time One sample ( $M = 4.85$ ,  $SD = .77$ ). The mean of the normative commitment component in this sample is slightly higher than that of the Time One sample ( $M = 3.14$ ,  $SD = .85$ ) but the means for the investment costs commitment component and the emotional costs commitment component are almost the same as the values found in the Time One sample ( $M = 3.93$ ,  $SD = 1.01$ ) and ( $M = 3.34$ ,  $SD = .86$ ) respectively. The mean for the limited alternatives commitment component in this sample is slightly higher than that measured at Time One ( $M = 2.95$ ,  $SD = .87$ ). Analysis of the 134 matched Time One and Time Two paired samples *t*-test (provided in Section 5.4.3.1) will provide evidence as to whether these findings are related to chance differences in the sample characteristics, or if they may be the result of changes in occupational commitment that have taken place during the time of exposure to the workplace.

**Table 5.23 Descriptive Statistics for Overall Professional Commitment and Components at Time Two**

	N	Minimum	Maximum	Mean	Std. Deviation
Overall Professional Commitment	154	1.92	5.25	3.72	.61
Affective Commitment	154	2.83	6.00	4.71	.78
Normative Commitment	154	1.00	5.33	3.23	.86
Investment Costs Commitment	154	1.00	6.00	3.94	.99
Emotional Costs Commitment	154	1.00	6.00	3.36	.91
Limited Alternatives Commitment	154	1.00	6.00	3.09	.85

The means and standard deviations for each of the items of the Blau (2003) occupational commitment measure for this sample of 154 are provided below in Table 5.24.

**Table 5.24 Descriptive Statistics for Professional Commitment Measure Items at Time Two**

	N	Minimum	Maximum	Mean	Std. Deviation
PCA1T2	154	1	6	4.26	.96
PCA2T2	154	2	6	4.79	.95
PCA3T2	154	1	6	4.99	.91
PCA4T2	154	2	6	4.86	.88
PCA5T2	154	3	6	4.60	.94
PCA6T2	154	2	6	4.75	.96
PCN1T2	154	1	6	2.96	.97
PCN2T2	154	1	6	3.17	1.05
PCN3T2	154	1	6	3.44	1.10
PCN4T2	154	1	6	3.59	1.25
PCN5T2	154	1	6	3.17	1.05
PCN6T2	154	1	6	3.05	1.01
PCI1T2	154	1	6	3.63	1.14
PCI2T2	154	1	6	4.00	1.17
PCI3T2	154	1	6	4.06	1.18
PCI4T2	154	1	6	4.05	1.08
PCE1T2	154	1	6	3.40	1.15
PCE2T2	154	1	6	3.60	1.14
PCE3T2	154	1	6	3.05	1.09
PCE4T2	154	1	6	3.38	1.00
PCLA1T2	154	1	6	3.15	.94
PCLA2T2	154	1	6	3.15	.91
PCLA3T2	154	1	6	3.01	.99
PCLA4T2	154	1	6	3.06	.93

#### **5.4.2.2 Comparisons by Gender, Age, Prior Non-nursing Qualifications and Enrolled Nurse Status**

##### **Gender**

Significant differences according to gender were found in the Time One sample, where the means of males were significantly lower than those of females, for the overall level of commitment to the profession, as well as the affective commitment, normative commitment and emotional costs commitment components. In this Time Two sample, there is no significant difference between the means of the affective commitment component of the Blau (2003) occupational commitment measure for males and females. However, there are significant differences in the overall commitment mean and the means of all other components, with means for males being lower than all of the means for females. As in the Time One analysis,

these results must be viewed with caution because of the large disparity in group size. The means and standard deviations for the comparisons by gender are provided in Table 5.25 and the results of the independent samples *t*-tests are provided in Table 5.26. The results of the Levene's Test of Equality of Error Variances were significant for the investment costs commitment component; therefore, they are included in the table.

**Table 5.25 Means and Standard Deviations for Overall Professional Commitment and Components by Gender at Time Two**

	Gender	N	Mean	Std. Deviation
Overall Professional Commitment	Female	143	3.76	.59
	Male	11	3.10	.51
Affective Commitment	Female	143	4.73	.79
	Male	11	4.38	.61
Normative Commitment	Female	143	3.29	.84
	Male	11	2.48	.81
Investment Costs Commitment	Female	143	4.00	.93
	Male	11	3.07	1.39
Emotional Costs Commitment	Female	143	3.41	.89
	Male	11	2.68	.98
Limited Alternatives Commitment	Female	143	3.13	.86
	Male	11	2.57	.51

**Table 5.26 Independent Samples t-Tests for Overall Professional Commitment and Components by Gender at Time Two**

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Overall Professional Commitment	Equal variances assumed	.01	.92	3.58	152	.00
	Equal variances not assumed			4.06	12.16	.00
Affective Commitment	Equal variances assumed	1.11	.29	1.46	152	.15
	Equal variances not assumed			1.82	12.74	.09
Normative Commitment	Equal variances assumed	.02	.89	3.05	152	.00
	Equal variances not assumed			3.17	11.74	.01
Investment Costs Commitment	Equal variances assumed	5.57	.02	3.09	152	.00
	Equal variances not assumed			2.19	10.70	.05
Emotional Costs Commitment	Equal variances assumed	.17	.68	2.59	152	.01
	Equal variances not assumed			2.40	11.32	.03
Limited Alternatives Commitment	Equal variances assumed	1.16	.28	2.15	152	.03
	Equal variances not assumed			3.31	14.72	.00

### Age

To compare the overall commitment and components levels on the basis of age, the group was divided into two groups, comprised of those in the 20-30 years age range and those in the 30-60 years age range. The means and standard deviations for these comparisons are provided in Table 5.27 and the results on the independent t-test are provided in Table 5.28. The results of the Levene's Test of Equality of Error Variances were all greater than .05 indicating that equal variances could be assumed for the two groups.

**Table 5.27 Means and Standard Deviations for Overall Professional Commitment and Components by Age at Time Two**

	Age in two groups	N	Mean	Std. Deviation
Overall Professional Commitment	20-30 years	101	3.63	.59
	30-60 years	53	3.88	.63
Affective Commitment	20-30 years	101	4.56	.78
	30-60 years	53	4.99	.71
Normative Commitment	20-30 years	101	3.23	.85
	30-60 years	53	3.23	.90
Investment Costs Commitment	20-30 years	101	3.88	.94
	30-60 years	53	4.05	1.08
Emotional Costs Commitment	20-30 years	101	3.24	.83
	30-60 years	53	3.58	1.03
Limited Alternatives Commitment	20-30 years	101	2.97	.82
	30-60 years	53	3.33	.87

**Table 5.28 Independent Samples t-Tests for Overall Professional Commitment and Components by Age at Time Two**

	t-test for Equality of Means		
	t	df	Sig. (2-tailed)
Overall Professional Commitment	-2.51	152	.01
Affective Commitment	-3.41	152	.00
Normative Commitment	-.02	152	.98
Investment Costs	-1.04	152	.30
Emotional Costs Commitment	-2.22	152	.03
Limited Alternatives	-2.56	152	.01

These results showed that the means of the respondents in the 20-30 years age range were significantly lower than those of the respondents in the 30-60 years age range, for overall commitment to their profession, and the affective commitment, emotional costs commitment and limited alternatives commitment components. No significant differences were apparent between the means of the remaining two components.

This finding is in contrast to the findings of the independent samples t-test conducted at Time One, when the sample was dichotomised in the same way. At Time One, the only significant difference found in relation to these variables on the basis of age was that of the mean for the limited alternatives component; where those in the 20 to 30 years age group had significantly lower overall limited alternatives commitment means ( $M = 3.63$ ,  $SD = .57$ ) compared to those in the 30 to 60 years age group ( $M = 2.87$ ,  $SD = .82$ ),  $t(267) = -2.01$ ,  $p < .05$ .

#### **Prior Non-nursing Qualifications**

As in the sample collected at Time One, there were no significant differences between the mean of the overall level of professional commitment and the means of the components for those who had prior non-nursing qualifications ( $n = 71$ ), and those who did not ( $n = 83$ ), except for the limited alternatives commitment component. As was found at Time One, the mean of the limited alternatives commitment component was significantly lower for those who had prior non-nursing qualifications ( $M = 2.90$ ,  $SD = .80$ ) than those who did not have prior non-nursing qualifications ( $M = 3.25$ ,  $SD = .86$ ),  $t(152) = -2.58$ ,  $p < .01$ .

#### **Enrolled Nurse Status**

The sample collected at Time One indicated that there were no significant differences in the overall commitment and component means between participants who had previously worked as an enrolled nurse ( $n = 24$ ) and those who had not ( $n = 245$ ). In this Time Two sample, participants who had previously worked as an enrolled nurse ( $n = 16$ ) had significantly higher levels of overall commitment ( $M = 4.00$ ,  $SD = .50$ ) than those who had not previously worked as an enrolled nurse ( $n = 138$ ), ( $M = 3.68$ ,  $SD = .62$ ),  $t(152) = 1.96$ ,  $p = .05$ , as well as, higher levels of affective commitment ( $M = 5.15$ ,  $SD = .69$ ) than those who had not previously worked as an enrolled nurse ( $M = 4.66$ ,  $SD = .77$ ),  $t(152) = 2.41$ ,  $p < .05$ . While none of the results of the Levene's Test of Equality of Error Variances were significant for this analysis, the disparity in group sizes again means that these results should be viewed with appropriate caution.

#### **5.4.2.3 Summary of the Results - Overall Professional Commitment and Component Levels at Time One and Time Two and Comparisons by Gender, Age, Prior Non-nursing Qualifications and Previous Enrolled Nurse Status**

The results indicated that the overall level of commitment to the profession at Time One and Time Two was fairly high. The results also showed that at both Time One and Time Two, affective commitment to the profession has the highest mean score of all of the dimensions, followed by investment and emotional costs commitment, normative commitment and limited alternatives commitment.

The results at Time Two indicated there was little change in the overall means score of the Blau (2003) occupational commitment measure when compared with the sample collected at Time One. However, the mean for the affective commitment component was lower than that of the Time One sample and the mean of the normative commitment component and the limited alternatives commitment component was slightly higher than that measured at Time One. The means for the investment costs commitment and the emotional costs commitment components were relatively unchanged from Time One to Time Two. The statistical significance of the differences in the component levels were examined using paired sample *t*-tests in the analysis of the repeated measures sample.

Comparisons between the Time One and Time Two results according to gender suggest that the males in the sample have significantly lower levels of overall commitment to the profession than the females, in addition to significantly lower overall levels of normative commitment, emotional costs commitment and limited alternatives commitment, both before and after entry to the workplace. The small size of the sample of males, however, necessitates that the results be considered as suggestive rather than strong evidence of gender differences.

Prior to workplace entry, the affective professional commitment of males was significantly lower than that of the females in the sample, but the level of investment costs commitment to the profession was similar. After a period of exposure to the workplace, the results indicate that there was a convergence of the levels of affective professional commitment between these two groups. The level of affective professional commitment among males increased and that of females decreased, so that at Time Two there was no significant difference in the means scores of affective professional commitment between males and females. On the other hand there was a divergence in the levels of investment costs commitment between the two groups. The level of investment costs commitment among females in the sample increased slightly and the level of investment costs commitment among the males decreased with the result that at Time Two there was a significant difference between the mean



scores of males and females in this component of the Blau (2003) occupational commitment measure. While these findings are of interest, further research with a larger proportion of males in the sample is necessary before clear conclusions about the veracity of gender differences in professional commitment may be drawn.

The results of the comparisons of the Time One and Time Two levels of overall commitment to the profession and the component levels according to the age of the respondents, suggest that the Time One levels of overall commitment to the profession and the components of commitment are similar for those who are younger than 30 years of age, and those who are older than 30 years of age. However, the younger group shows significantly lower scores in the limited alternatives commitment component at Time One. After a period of exposure to the workplace, however, those in the younger age group also have significantly lower means for the overall level of commitment to the profession, as well as the affective commitment, emotional costs commitment and limited alternatives commitment components. This relationship between age and professional commitment is examined further in the analysis of the repeated measures sample.

Comparisons made according to whether respondents held non-nursing qualifications prior to gaining their degree in nursing, indicated that the level of overall commitment and all of the components, except that of limited alternatives commitment, were similar at both Time One and Time Two. Moreover, at both Time One and Time Two, the respondents who held prior non-nursing qualifications had significantly lower means for the limited alternatives commitment component.

Among respondents in the sample who had previously worked as an enrolled nurse, at Time One there were no significant differences between the means of overall commitment to the profession and the components and those who had not been enrolled nurses prior to becoming a nursing professional. At Time Two, however, those who had previously worked as an enrolled nurse, showed significantly higher overall levels of commitment to the profession, as well as significantly higher levels of affective commitment to the profession. Nevertheless, these results must be viewed with caution as the sample sizes of those who had previously worked as an enrolled nurse were very small compared to those who had not previously worked as an enrolled nurse.

### **5.4.3 Repeated Measures Comparisons**

Exposure to the workplace constitutes the ‘intervention’ in this research. The assumption informing this research is that work-related commitments may change over time and changes in commitments may be the result of the work-related experiences that covary with the commitments during that time. Thus the argument is made that changes in commitment are not due to the passing of time *per se* but due to the work-related experiences that occur during that time (Beck & Wilson 2001). The levels of the overall commitment to the profession and component levels observed at Time One were again observed at Time Two and any changes in the levels are assumed to be the result of the work-related experiences that covary with commitment to the profession during that time.

The comparisons made in relation to the repeated measures sample group are made on the basis that the demographics of the Time One and Time Two groups are similar. Therefore, the repeated measures sample may be considered to be representative of both the Time One and Time Two sample groups on the basis of demographic characteristics. In addition, the repeated measures sample period of exposure to the workplace is comparable with that of the Time Two sample. Furthermore, comparisons made on the basis of the round of Time One data collection showed that the period of exposure to the workplace was similar at Time Two for both of the Time One data collection groups. Moreover, comparisons of levels of overall commitment and components levels using *t*-tests for independent means demonstrated that there were no significant differences in these levels according to the Time One round of data collection group. Therefore, the analysis of the paired samples *t*-tests was entered into with confidence that the possibility that bias had been introduced into the sample, through data collection or fragmentation of the sample, had been addressed.

#### **5.4.3.1 Results of the Paired Samples *t* -Tests**

The results of the paired samples *t*-test conducted in the repeated measures sample ( $n = 134$ ) and shown in Tables 5.29 and 5.30 indicated that there was a significant decrease in the mean for the affective commitment component from Time One to Time Two as well as a significant increase in the mean of the limited alternatives commitment component from Time One to Time Two. There were no significant differences in the mean score for overall commitment or the remaining components of the Blau (2003) occupational commitment measure. This pattern of

differences and similarities in the means was similar to that found for the overall professional commitment and component means when the Time Two data was analysed. The order of component means found in the repeated measures sample was also similar to those found in the Time One and Time Two studies.

**Table 5.29 Descriptive Statistics for the Paired Samples t-Test - Overall Professional Commitment and Components**

		Mean	N	Std. Deviation
Pair 1	Overall Commitment T1	3.71	134	.57
	Overall Commitment T2	3.75	134	.62
Pair 2	Affective Commitment T1	4.89	134	.75
	Affective Commitment T2	4.72	134	.79
Pair 3	Normative Commitment T1	3.18	134	.83
	Normative Commitment T2	3.24	134	.84
Pair 4	Emotional Costs Commitment T1	3.30	134	.86
	Emotional Costs Commitment T2	3.40	134	.91
Pair 5	Investment Costs Commitment T1	3.90	134	.93
	Investment Costs Commitment T2	3.97	134	.99
Pair 6	Limited Alternatives Commitment T1	2.99	134	.89
	Limited Alternatives Commitment T2	3.14	134	.84

**Table 5.30 Paired Samples *t*-Tests Overall Professional Commitment and Components**

		Paired Differences		t	df	Sig. (2-tailed)
		Mean	Std. Deviation			
Pair 1	Overall Commitment T1 - Overall Commitment T2	-.04	.43	-.99	133	.32
Pair 2	Affective Commitment T1 - Affective Commitment T2	.17	.63	3.10	133	.00
Pair 3	Normative Commitment T1 - Normative Commitment T2	-.06	.72	-.96	133	.34
Pair 4	Emotional Costs Commitment T1 - Emotional Costs Commitment T2	-.11	.75	-1.64	133	.10
Pair 5	Investment Costs Commitment T1 - Investment Costs Commitment T2	-.07	.93	-.86	133	.39
Pair 6	Limited Alternatives Commitment T1 - Limited Alternatives Commitment T2	-.15	.66	-2.69	133	.01

Because of the differences in the means found on the basis of age in the both the Time One sample and the Time Two sample of 154, the repeated measures sample of 134 was split into two groups (age 20-30 and age 30-60) and paired samples *t*-tests were performed. The paired samples *t*-tests indicated that there was a significant difference (decrease) between affective commitment at Time One for the 20 to 30 years age group ( $M = 4.80$ ,  $SD = .72$ ) to Time Two ( $M = 4.54$ ,  $SD = .79$ ),  $t(81) = 3.69$ ,  $p < .01$ , but no significant difference in affective commitment from Time One to Time Two for those in the 30 to 60 years age group. In addition, there was a significant difference in the mean of the limited alternatives commitment component for those in the 30 to 60 years age group from Time One ( $M = 3.11$ ,  $SD = 1.00$ ) to Time Two ( $M = 3.34$ ,  $SD = .88$ ),  $t(51) = -2.33$ ,  $p < .05$ , but no significant difference in the mean for the limited alternatives commitment component in the 20 to 30 years age group.

With the recognition that there is a difference in the sample size of the entire Time Two response sample and the repeated measures sample (although the age ratio is similar), the results of the split sample, paired samples *t*-tests would suggest that the decrease in the mean of the affective commitment component from Time One to Time Two in the entire repeated measures group might largely be accounted for by the respondents in the 20 to 30 years age group and the increase in the mean for the limited alternatives commitment component in the entire repeated measures group might largely be accounted for by the respondents in the 30 to 60 years age group.

#### **5.4.3.2 Summary of the Results of the Repeated Measures Study**

The results of this repeated measures study indicated that there was little change in the mean for overall level professional commitment from Time One to Time Two. The results also indicated that the order of the means of the components of occupational commitment remained unchanged from Time One to Time Two. This order was that affective commitment to the profession had the highest mean, followed by investment costs commitment, emotional costs commitment, normative commitment and limited alternatives commitment.

The results of the repeated measures study indicated that there was a statistically significant decrease in the mean of the affective commitment component of the professional commitment measure from Time One to Time Two. In addition, there was a statistically significant increase in the limited alternatives commitment component of the measure. The split group analysis of the repeated measures group suggests that these differences may be accounted for by the age of the respondents with those in the 20-30 years age group accounting for the decrease in means score of the affective commitment component and those in the 30-60 years age group accounting for the increase in the mean of the limited alternatives commitment component.

## **5.5 Discussion**

The factor structure of the Blau (2003) occupational commitment measure has been examined using confirmatory factor analysis. In addition, the means for professional commitment and its components have been compared according to gender, age, prior non-nursing qualifications and prior enrolled nurse status at the Time One and Time Two data collections. Finally, paired-samples *t*-tests have been used to compare the pre-workplace entry and the post workplace exposure mean for professional commitment, and its components. The results are presented in summary form in Table 5.31 and discussion of the results follows.

**Table 5.31 Summary of Findings**

<b>Time One</b>	<b>Result</b>	<b>Comment</b>
Factor Structure of the Blau (2003) Occupational Commitment Measure	Confirmatory factor analysis supported five-factor structure.	Blau (2003) argued for four-factor structure.
Order of Professional Commitment Component Means at Time One	Affective Investment Costs Emotional Costs Normative Costs Limited Alternatives	
Comparisons by Gender	Males showed significantly lower professional commitment as well as affective, emotional costs and normative commitment components	Results viewed with caution because of group size difference.
Comparisons by Age	20-30 yrs age group showed significantly lower limited alternatives commitment	
Comparisons by Prior non-nursing Qualifications	Limited alternatives commitment significantly lower when prior non-nursing qualifications held	
Comparisons by Previous Enrolled Nurse Status	No significant differences on basis of previous enrolled nurse status	Results viewed with caution because of group size difference.
<b>Time Two</b>		
Order of Professional Commitment Component Means at Time Two	Affective Investment Costs Emotional Costs Normative Costs Limited Alternatives	Same as at Time One
Comparisons by Gender	Males significantly lower on all but affective professional commitment	Results viewed with caution because of group size difference.
Comparisons by Age	20-30 yrs age group significantly lower than 30-60 yrs age group for professional commitment, as well as affective, emotional costs and limited alternatives commitment	

**Table 5.31 (Cont'd)**

Comparisons by Prior Non-nursing Qualifications	Limited alternatives commitment significantly lower when prior non-nursing qualifications held	Same as at Time One
Comparisons by Previous Enrolled Nurse Status	Professional commitment and affective commitment significantly higher among those with previous enrolled nurse status.	Results viewed with caution because of group size difference.
Comparisons by Prior Non-nursing Qualifications	Limited alternatives commitment significantly lower when prior non-nursing qualifications held	Same as at Time One
<b>Repeated Measures Comparisons</b>		
Repeated Measures Order of Professional Commitment Component Means	Affective Investment Costs Emotional Costs Normative Costs Limited Alternatives	Same as at Time One and Time Two
Paired <i>t</i> -tests Results.	<p>Significant decrease in affective professional commitment from Time One to Time Two.</p> <p>Significant increase in limited alternatives commitment from Time One to Time Two.</p> <p>No significant difference in professional commitment and other components from Time One to Time Two.</p>	
Split-sample Comparison by Age	<p>20-30 yr age group showed significant decrease in affective professional commitment but 30-60 yr age group showed no significant difference.</p> <p>30-60 yr age group showed significant increase in limited alternatives commitment but 20-30 yr age group showed no significant difference.</p>	



### **5.5.1 The Factor Structure of the Blau (2003) Occupational Commitment Measure**

The Blau (2003) occupational commitment measure is a hybrid version of the Meyer, Allen and Smith (1993) occupational commitment measure and the Carson, Carson and Bedian (1995) occupational entrenchment measure. Blau (2003) retained the original affective commitment and normative commitment measures of the Meyer, Allen and Smith (1993) occupational commitment measure but argued that the continuance commitment component of the Meyer, Allen and Smith (1993) measure did not account for the possibility that the reasons why individuals may remain with an occupation may be include the limited available occupational alternatives. Blau (2003) replaced the continuance commitment component of the Meyer, Allen and Smith (1993) measure with the Carson, Carson and Bedian (1995) three-component occupational entrenchment measure. He contended, however, that the occupational entrenchment measure was better understood as a two-component measure which identified accumulated costs commitment and limited alternatives commitment. Blau (2003) argued that because there was not a significant decrease in the chi-square result between the four and the five-factor model his research supported a four-component occupational commitment measure. However, Blau's (2003) results were equivocal and could have equally supported an argument for a four or a five factor structure for the measure.

The results of both exploratory factor analysis and confirmatory factor analysis performed in this study support a five-factor structure for the Blau (2003) occupational commitment measure. The confirmatory factor analysis indicated that the correlation between the investments costs component and the emotional costs component in this study is quite high. Nonetheless, the correlation is not sufficiently high to indicate collinearity, providing further support for a five-factor structure. The generalisability, however, must be viewed with appropriate caution, as the finding is based on one relatively small sample comprised of one professional group.

Notwithstanding the limitations of the sample, a five-factor structure of the Blau (2003) occupational commitment measure would suggest that there is a distinction between commitment to the occupation because of the investments in time and money that would be lost if an occupational change were to be made and commitment to the occupation because of the emotional costs that would be perceived to be associated with changing occupations. Furthermore, these components of commitment to an occupation may be distinguished from commitment

because of an identification with and desire to belong to the occupation (affective commitment), commitment due to a belief in an obligation to remain in the occupation (normative commitment) and commitment to the occupation because of a perception that there are limited occupational alternatives available to them (limited alternatives commitment). These various components of occupational commitment may then differentially contribute to the explanation of an individual's association with an occupation (Meyer, Allen & Smith 1993).

### **Item Validity of the Components of Professional Commitment**

Regardless of the number of factors that are identified as items of the Blau (2003) occupational commitment measure, the question of the validity of the components as contributors to the prediction of the overall construct of occupational commitment remains to be fully answered. The Blau (2003) occupational commitment measure, like the Meyer, Allen, & Smith (1993) occupational commitment measure on which it is based, is considered to be a multidimensional construct. However, to date, although occupational commitment has been theorised as a multidimensional construct it has been empirically evaluated as a set of related constructs. This means that the item validity of the components of the construct has not been properly evaluated. Because of the implications for its use in relation to other work-related outcomes, it is necessary to determine the relationship between a multidimensional construct and its indicators (Podsakoff, MacKenzie, Podsakoff et al. 2003). Moreover, the question of whether occupational commitment should be modelled as a multidimensional construct or whether it should be considered as a set of distinct but related constructs (Law, Wong & Mobley 1998) needs to be addressed. Furthermore, if it is modelled as a multidimensional construct then the question of whether it should be viewed as a superordinate construct or as an aggregate construct (Edwards 2001) needs to be considered. Examination of the item validity of the measure will provide some indications as to how these questions may ultimately be answered. However, such an examination is best achieved through the use of latent variables analysis (Edwards 2001) and is therefore beyond the scope of this research due to the limitations of the sample size.

### **5.5.2 The Effect of Exposure to the Workplace on Professional Commitment**

In this research, the Blau (2003) occupational commitment measure was used to measure the professional commitment of a sample of nursing professionals before (or soon after) commencing their first experience of employment in the role of a fully qualified nursing professional and again after a period of exposure to the workplace. Because of the four month interval between the first and second round of the Time One data collection, some participants had already experienced a period of exposure to the workplace when the Time One data was collected. Furthermore, there was also a difference in the period of time elapsed between the Time One and Time Two measurement for some participants. These time differences were accounted for in the analysis of the data. Comparisons based on the round of Time One data collection were able to demonstrate that the differences in the levels of overall commitment and the components of the Blau (2003) occupational commitment measure were not attributable to the round of Time One data collection in which the participants responded.

For most participants in the research, the minimum period of exposure to the workplace that they had experienced in the role of a fully qualified nursing professional was three months. For all participants in the research, the maximum period of exposure to the workplace that they had experienced in the role of a fully qualified nursing professional was less than eight months. Some respondents indicated that they had been with their current organisation for more than nine months. However, the sample was comprised of nursing professionals who had just completed their tertiary professional education and were newly registered with the QNC which is the professional body responsible for nurses in the State of Queensland, Australia. Therefore, while these respondents may have been with their employing organisation for some time, their role in the organisation prior to the period over which the research was conducted would have been in a capacity other than that of a fully qualified, licensed nursing professional.

Workplace exposure constitutes a ‘natural intervention’ in the research design and therefore the research may also be considered to have a quasi-experimental design (Creswell 1994). Entry to the workplace as a newly qualified professional requires the individual to not only become familiar with the context of the workplace in which they have been employed, but also to become familiar with their new role as a qualified professional. The Time Two data was collected in July/August as it was

considered that this period of time was sufficient to ensure that most of the participants had been exposed to the workplace for a period of approximately six months. This period of time was considered to constitute a sufficient period of time for participants to become familiar with the context of their workplace and to develop a level of familiarity with their new role as a nursing professional.

The order of the means of the components of the Blau (2003) occupational commitment measure at Time One (see Table 5.15) would indicate that the general trend in the sample of nursing professionals is that around the time of completion of their education or commencement of work in the profession, the main reason for their commitment to the profession is identification with and attachment to it (affective commitment). This is followed by commitment based on the belief that the investments in time money and education would be lost if they were to change occupations. Commitment based on the belief that the emotional costs of changing occupations at this time would exceed any benefits is then followed by a sense of obligation to remain in the profession. The lowest mean, which was for limited alternatives commitment, would indicate that at this stage the belief that they have few occupational options available to them is the least of their reasons for being committed to the profession. This pattern in the order of the means scores was found to be the same in the Time Two sample (see Table 5.23) and could also be seen in the repeated measures sample (see Table 5.29) despite the significant decrease in the level of affective professional commitment and the significant increase in the level of limited alternatives commitment from Time One to Time Two.

The order of the means of the commitment components in relation to the other component means that have been found in other studies has consistently been that affective commitment demonstrates the highest dimensional mean, followed by continuance commitment and then normative commitment (Irving, Coleman & Cooper 1997; Meyer, Allen & Smith; 1993; Snape & Redman 2003). When measured by Blau (2003) with four dimensions and averaged across the three samples that were reported, the pattern of means scores for each dimension was that of affective commitment having the highest mean, followed by accumulated costs commitment, then limited alternatives commitment with normative commitment having the lowest mean score. The finding in this study that affective commitment had the highest level compared to the other components of the measure was therefore not unexpected. Because affective commitment is based on attachment to and identification with the profession (Meyer, Allen & Smith 1993), it is expected to have a stronger involvement with commitment than the other dimensions (Snape & Redman 2003).

The finding of the present study that the two costs commitment dimensions follow the affective commitment dimension in magnitude of the mean score is also consistent with the findings of the other studies, despite this construct and its measure being slightly different in the three-dimension studies. The higher level of investment costs commitment at this stage may well be reflective of the participant's cognisance that they have recently completed a course of study that has cost them dearly in terms of both time and money.

The level of limited alternatives commitment had the lowest mean score in this study, where individuals were just entering or had been in a workplace for a shorter period of time. This is in contrast to Blau's (2003) study of employees who had been employed for a longer period of time. This finding may be indicative that a change in the nature in commitment can be anticipated to take place over time, or it may simply be due to chance differences between the samples. An early indication that the order of these commitments may change over time is that there is a narrowing of the differences in the means of these commitments in the 40 to 60 years age group. This narrowing is also seen when the analysis is made on the basis of enrolled nurse status but may be reflective of the higher age level of the participants who were enrolled nurses prior to becoming nursing professionals. Both males and females in this sample demonstrated a similar ordering of the dimensional commitment means.

In this sample, when compared on the basis of age with the groups defined as respondents in the 20 to 30 years age group and respondents in the 30 to 60 years age group, significant differences between the two groups were found only in the limited alternatives commitment component Time One. At Time Two there were significant differences between these two groups on the overall measure of professional commitment, as well as the affective commitment, emotional costs and limited alternatives commitment components of the measure. Paired samples t-tests with the group split according to age group suggested that the significant decrease in the affective commitment component found in the repeated measures study might be largely accounted for by the respondents in the 20 to 30 years age group and the significant increase in the limited alternatives commitment component might be largely accounted for by the respondents in the 20 to 30 years age group.

The finding of differences in component measures according to age is in contrast with Irving, Coleman and Cooper's (1997) findings, but is consistent with Meyer, Allen and Smith's (1993) finding that among registered nurses there were significant correlations between age and affective commitment and normative commitment but not continuance commitment. Neither Snape and Redman (2003) nor Blau (2003) reported findings in relation to age and occupational commitment

components. Irving, Coleman and Cooper (1997) speculated that the age may be a factor that relates to commitment within certain occupations but because their sample included various occupations, any differences in commitment according to age within a particular occupation might have been masked by the stronger differences across occupations.

In Australia, the loss of recent graduates from the nursing profession is reported to be high, with 20 percent of nurses leaving after just one year of employment (Armstrong, 2004). This loss is particularly found among the graduates in the 19 to 21 years age group (Commonwealth of Australia, 2002a; Karmel & Li, 2002). The finding of lower overall commitment to the profession and the three component measures in the younger age group at Time Two combined with the significant decrease in the affective commitment component in this age group in the repeated measures sample may have implications that relate to explanation of the loss of graduates from the profession, if professional commitment is found to be related to professional turnover intention.

The present study was based on the one occupation, but the difference between the findings of this study and those of Meyer, Allen and Smith (1993) may reflect the relationship between age and longevity in the occupation. That is, because the Meyer, Allen and Smith (1993) study was cross-sectional with varying periods of association with the occupation, the relationship between higher levels of affective and normative commitment and age may simply be an indication that those who are older have stayed in the occupation longer. The Meyer, Allen and Smith (1993) sample was comprised of registered nurses who were currently working in their chosen profession. The reason that they were still working may have been because they had greater identification with and desire to belong to the profession of nursing. Alternatively, they may have had greater sense of obligation to remain in the profession, in contrast to others with lower levels of these commitments who may have left the profession at some earlier point in time and were therefore not included in the sample. Furthermore, as Meyer, Allen and Smith (1993) noted there was a significant negative correlation between continuance commitment and intention to continue in the profession. Therefore, continuance commitment would not be expected to be correlated with age, as individuals with higher levels of continuance commitment would be less likely to have any longevity of association with the profession.

The present study also found significant differences between males and females in the levels of overall commitment to the profession, as well as the affective, normative and emotional costs commitment components, with males demonstrating

lower levels of these components of commitment. However, this finding must be viewed with appropriate caution because of the small number of males compared to the predominantly female representation in the sample. Irving, Coleman and Cooper (1997) found higher levels of continuance commitment among males in their predominantly male sample. They attributed this to the males in their sample having occupations that attracted higher status, pay and required more specific skill sets that were not able to be readily transported to other occupations than the females in their sample. They argued that because the females in their sample were in less skilled occupations than the males that they may have had more options for occupational change open to them and not feel the need to remain with the occupation as strongly as the males in the sample. In the present study, where the sample is occupationally homogenous, any differences in the levels of commitment components between males and females cannot be explained on the basis of occupational difference. Future studies of occupations with similar representation of males and females are needed to establish if there are differences in occupational commitment based on gender.

This section of the study has examined the changes that take place in professional commitment after exposure to the workplace. The results of this section of the study provide an indication of the nature of professional commitment amongst nursing professionals, as measured by the Blau (2003) occupational commitment measure at the time of completion of professional education or early workplace entry, and again after a period of exposure to the workplace.

The specific contributions of this portion of research are that the research:

1. Contributes to the literature in relation to the factor structure of the Blau (2003) occupational commitment measure.
2. Constitutes a study of the effect of workplace exposure on the professional commitment of members of a professional occupation in their initial period of workplace exposure.

## 5.6 Conclusion

This chapter has reported findings of research that has examined the factor structure of the Blau (2003) occupational commitment measure. In addition the chapter has reported the findings of the study that examined the effect of workplace exposure on the professional commitment of a sample of nursing professionals. The Blau (2003) occupational commitment measure was used to examine the nature and level of commitment to their profession among nursing professionals at the time of completion of their professional education or early entry into the workplace, and again after a period of exposure to the workplace.

The findings of this study support evidence for a five-factor structure of the Blau (2003) occupational commitment measure. This evidence is based on the results of both exploratory factor analysis and confirmatory factor analysis that were performed using the Time One sample of the study. The finding of a five-factor structure supports the argument that the investment costs component and the emotional costs component of the Blau (2003) occupational commitment measure are distinguishable components of this measure of commitment to an occupation.

The Blau (2003) occupational commitment measure is considered to be a multidimensional construct. However, in research done to date, the components of the Meyer, Allen and Smith (1993) and the Blau (2003) occupational commitment measure have been modelled as a set of related constructs rather than as a multidimensional construct. This means that the research hypotheses and conclusions have been formed at the construct level but the analyses have been conducted at the component level (Law, Wong & Mobley 1998). Therefore, regardless of the number of components identified as comprising the construct, the validity of each in contributing to the overall construct which may then be used to consider its relationship to other work-related outcomes has not yet been tested.

In addition to examining the factor structure of the Blau (2003) occupational commitment measure, the chapter reported the results of the comparisons of the overall level of professional commitment and the levels of the components of professional commitment identified by the measure that were made according to the gender, age, previous status as an enrolled nurse and prior non-nursing qualifications of the respondents at both Time One and Time Two. The findings indicated that at Time One the means scores for male respondents were significantly lower than those of the female respondents for the level of overall commitment, affective commitment, normative commitment and limited alternatives commitment. At Time Two the



means scores for male respondents was significantly lower than those of females for the level of overall commitment, as well as all of the commitment components except affective commitment. Because there is a large discrepancy in the group sizes between males and females these results should, however, be viewed conservatively.

At Time One, the respondents in the 20 to 30 years age range had a mean that was significantly different from those in the 30 to 60 years age range on the limited alternatives commitment component of the Blau (2003) occupational commitment measure only. At Time Two, this group's mean for the overall commitment level, as well as the components of affective commitment, emotional costs and limited alternatives commitment were significantly lower than those in the older age range.

Respondents who had prior non-nursing qualifications showed significantly lower levels of limited alternatives commitment at both Time One and Time Two than those who did not but did not differ significantly from those who did not have prior non-nursing qualifications in any other of the components or overall levels of commitment. At Time One respondents who had previously worked as an enrolled nurse prior to becoming a registered nurse showed no significant differences in the overall level of professional commitment or the component levels from those who had not. At Time Two, the respondents who had previously been enrolled nurses had levels of overall commitment and affective commitment to the profession that were significantly higher than respondents who had not previously worked as an enrolled nurse. These results should, however, be viewed with appropriate caution because there is a large discrepancy in the group sizes between those who had prior enrolled nurse status and those who had not.

The chapter has also reported the findings of the repeated measures study that used the Blau (2003) occupational commitment measure to measure the professional commitment of a sample of nursing professionals prior to or soon after their entry into the workplace and their professional commitment after a period of exposure to the workplace. The repeated measures findings indicated that although the overall level of commitment to the profession is not significantly different from the pre-entry or early-entry level of commitment to the profession there is a significant decrease in the level of affective commitment and a significant increase in the level of limited alternatives commitment.

This thesis argues that a developmental approach to commitments in the workplace provides the most appropriate framework from which the relationships between work-related commitments may be understood. Informing discussion in this thesis is the assumption that work-related commitments change over time and the changes in commitments are the result of the work-related experiences that covary

with the commitments during that time. The thesis maintains that for professional employees, commitment to their occupation is both an antecedent to and a consequence of other work-related experiences. The findings presented in this chapter, however, relate only to professional commitment. There are other work-related experiences that may covary with professional commitment after exposure to the workplace. Some of these, specifically, organisational-professional conflict, job satisfaction and organisational commitment are studied in relation to professional commitment in Chapter Six. Chapter Six, presents the results of an evaluation of the theoretical model in which professional commitment was considered as both an antecedent and consequence of these constructs and their relationships with organisational turnover intention and professional turnover intention, using path analysis.

## **6. Analysis of the Data – Evaluation of the Theoretical Model using Path Analysis**

In Chapter Five of this thesis, the factor structure of the Blau (2003) occupational commitment measure was examined. In addition, the pre-and-post workplace entry levels of professional commitment among a sample of nursing professionals were compared using the Blau (2003) occupational commitment measure. This chapter reports the findings of the present study, which had a repeated measures survey design and used path analysis to evaluate the theoretical model of the effect of workplace exposure on professional commitment. The model includes professional commitment as an antecedent to, and a consequence of, organisational-professional conflict, job satisfaction and organisational commitment. In the theoretical model each of the aforementioned variables is also included as an antecedent to organisational turnover intention and professional turnover intention.

### **6.1 Introduction**

Professional employees are members of a profession as well as organisational employees. Therefore, in relation to their work, they have two main work-related targets to which they may be committed. Early research in relation to work-related commitments positioned organisational commitment as the target of commitment that had the most importance to the organisational behaviour of employees (Gallagher & Parks 2001). However, the economic changes of the late twentieth century saw a shift in the traditional paradigm of mutual employee-organisation loyalty (Meyer, Allen & Topolnytsky 1998) and there are suggestions in the literature that as patterns of employment change, the focus of employee commitment is shifting from the organisation to the occupation (Lee, Carswell & Allen 2000; Mir, Mir & Mosca 2002). In relation to work-related behaviour, Meyer and Herscovitch (2001) argue that behaviour may be more accurately predicted when the study of commitment takes into account the target of work-related commitment in addition to the bases of commitment to the target. Research and theory in relation to work-related commitment has identified that organisational employees have multiple work-related commitments that have the potential to complement or conflict with each other; however, the relationships between the various targets of work-related commitment are poorly understood (Meyer, Becker & Vandenberghe 2004).

To date, little research has been conducted which examines the relationship between professional commitment and organisational commitment as targets of commitment, and none of this research has included the pre-workplace entry levels of commitment to the profession

(Lee, Carswell & Allen 2000). Importantly, the relationship between professional turnover intention and organisational turnover intention is not well understood (Lee, Carswell & Allen 2000), and a model of professional turnover intention that includes the pre-workplace entry level of professional commitment has yet been considered.

In meta-analytic studies organisational commitment has been shown to be the best predictor of organisational turnover intention and actual turnover (Griffeth, Hom & Gaertner 2000). However, this research did not consider the role of occupational commitment, nor did it distinguish between professional and non-professional occupations. Organisational commitment begins to develop on entry to the organisation (Beck & Wilson 2001). When the organisation provides satisfying organisational experiences that are consistent with the employee's personal goals and expectations, organisational commitment is expected to increase (Meyer & Allen 1997). The initial exposure to the workplace for members of non-professional occupations coincides with organisational entry; therefore, commitment to the organisation and commitment to the occupation develop concurrently (Beck & Wilson 2001). However, unlike employees in non-professional occupations, professional employees enter the work place with a measure of commitment to their occupation that has been developed during the period of their professional education (Beck & Wilson 2001). Professional commitment therefore precedes organisational commitment and may be considered to be an antecedent of organisational commitment. Although research published to date indicates that for professional employees, commitment to the organisation and commitment to the profession are correlated, the process through which this relationship develops in professional employees has not yet been studied, and is therefore not clearly understood (Lee, Carswell & Allen 2000).

Furthermore, when entering the workplace for the first time after gaining the initial qualification that enables them to practise their profession, professional employees will be exposed to work-related factors that have the potential to increase their commitment to both their profession and the organisation. Additionally, they will be exposed to work-related factors that have the potential to either decrease their commitment to their profession or to the employing organisation, or both. The status of job satisfaction as an antecedent of organisational commitment is long established in the organisational behaviour literature (Mathieu & Zajac 1990). Job satisfaction and affective commitment to the occupation have been shown to be positively related (Irving, Coleman & Cooper 1997; Meyer, Allen & Smith 1993) and job satisfaction has been shown to be significantly and positively related to commitment to the occupation (Blau 2003). Job satisfaction therefore, has the potential to be related to commitment to both the profession and the organisation. However, to date, the relationships between job satisfaction, professional commitment and organisational

commitment have been examined in cross-sectional research only (Blau 2003; Lee, Carswell & Allen 2000).

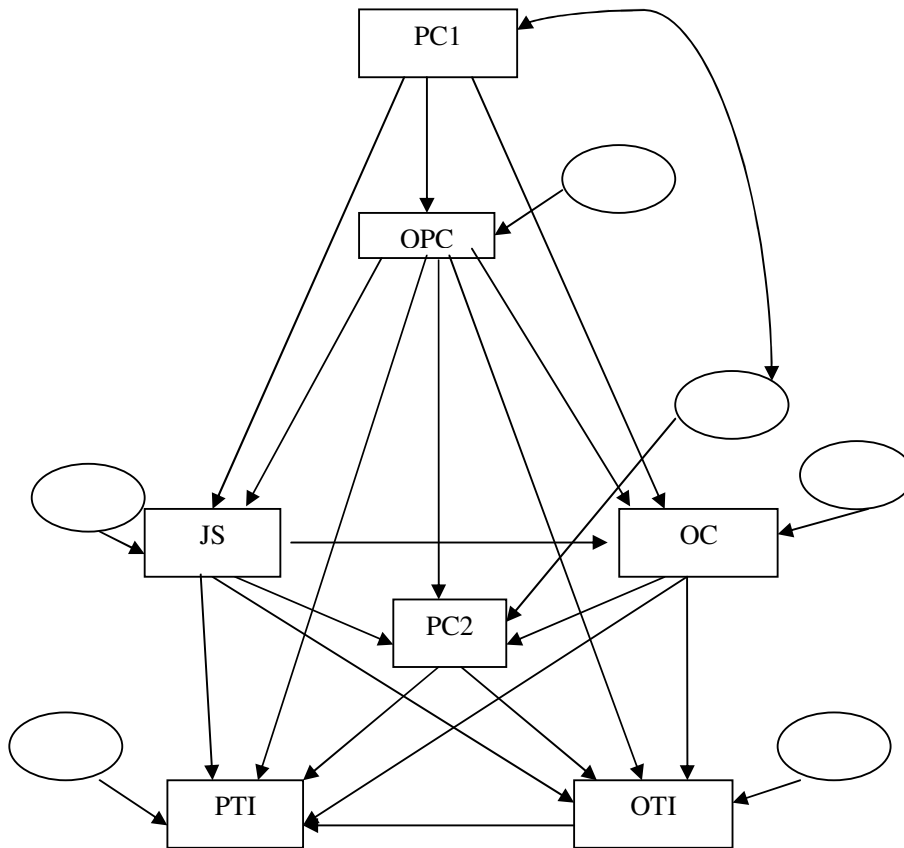
Organisational-professional conflict has been found to be significantly and negatively related to organisational commitment and job satisfaction but its relationship to professional commitment is not yet clearly established (Brierley & Cowton 2000; Shafer 2002; Shafer, Park & Liao 2002). To date, the relationship between professional commitment and organisational-professional conflict has been studied in cross-sectional research only, as have the relationships between professional commitment, organisational-professional conflict, job satisfaction and organisational commitment.

Organisational commitment and job satisfaction are also considered to be the two best predictors of organisational turnover intention (Griffeth, Hom & Gaertner 2000). Similarly, commitment to the occupation has been shown to be highly correlated with professional turnover intention (Lee, Carswell & Allen 2000; Meyer, Allen & Smith 1993). Therefore Lee, Carswell and Allen (2000) argue that in relation to professional employees, professional commitment should be included in models of organisational turnover intention. Importantly, in relation to professional turnover intention, the organisational experience may influence professional turnover intention. Therefore, a model of professional turnover intention should include both organisational commitment and organisational turnover intention to enable the effects of professional commitment and organisational commitment in relation to professional turnover intention and organisational turnover intention to be studied together.

The study reported in this chapter is therefore an examination of:

- A. The relationships between professional commitment prior to workplace entry, organisational-professional conflict, job satisfaction and organisational commitment.
- B. The relationships between the aforementioned variables and professional commitment after a period of workplace exposure.
- C. The relationships between organisational-professional conflict, job satisfaction, organisational commitment and professional commitment after workplace exposure and organisational turnover intention.
- D. The relationships between organisational-professional conflict, job satisfaction, organisational commitment and professional commitment after workplace exposure and professional turnover intention.

The full path model of the relationships under investigation in the research and the related explanation were presented in Chapter Four (Section 4.4) and the model is presented again in this chapter as Figure 6.1.



**Figure 6.1 The Theoretical Model**

PC1 = Professional Commitment at Time One  
 OPC = Organisational-professional Conflict  
 OC = Organisational Commitment  
 PTI = Professional Turnover Intention

PC2= Professional Commitment at Time Two.  
 JS = Job Satisfaction  
 OTI = Organisational Turnover Intention

## **6.2 Method**

The sample that was used to conduct the path analysis to consider the theoretical model of the relationship between professional commitment and professional turnover intention was the same sample that constituted the repeated measures sample described in Chapter Five. The data collection and response matching procedure has also been described in Chapter Five.

### **6.2.1 Measures**

At Time Two of the data collection occupational commitment was again measured using all 24 items of the Blau (2003) occupational commitment measure. This measure appeared in exactly the same form that it had been presented in the previous round of data collection when it was the only measure that was included. It was presented first, and then followed by the three organisational-professional conflict items (Shafer, Park & Liao 2002) and then the nine items of the revised organisational commitment measure (Bozeman & Perrewé 2001). Respondents were then asked to complete the job satisfaction measure (Price 2001), organisational turnover intention (Bozeman & Perrewé 2001) and professional turnover intention measures respectively. The remaining questions were demographic.

Respondents were asked to indicate their response to all but the demographic items on a six point Likert scale ranging from 'very strongly agree' (6) to 'very strongly disagree' (1). The coefficient alphas for the various components of the occupational commitment measure reported in previous studies have ranged between .79 and .93. In the first round of data collection of this study the coefficient alpha for the overall measure was .91 and the coefficient alphas for the affective commitment, normative commitment, investment costs, emotional costs and limited alternatives commitment components were .91, .86, .87, .82 and .90 respectively. The coefficient alphas for the Blau (2003) occupational commitment measure in this study were .92 for the overall measure, and for the affective commitment, normative commitment, investment costs, emotional costs and limited alternatives commitment the coefficient alphas were .91, .89, .89, .85 and .92 respectively.

The measure of internal consistency for the organisational-professional conflict measure reported by Shafer (2002) who used the three-item scale was .77. The Cronbach's alpha value for the scale in this study was .76. Bozemann and Perrewé (2001) indicated reliabilities of the revised Organisational Commitment Questionnaire (OCQ) to be .91 ( $n = 172$ ) in a sample of MBA alumni and .77 ( $n = 330$ ) in a sample of upper and middle level hospitality industry managers. The Cronbach's alpha value for the scale in this study was .88. The six-item measure of general job satisfaction used in this study has a reported reliability of

.77 (Kim, Price, Mueller, & Watson 1996). In the current study the Cronbach alpha coefficient for the scale was .84.

The organisational turnover intentions scale used is that recommended by Bozemann and Perrewé (2001). Bozeman and Perrewé (2001) indicate a reliability estimate of .90 for this scale in a sample of 330 upper and middle level hospitality industry managers and .94 in a separate sample of 172 MBA alumni. In the current study the Cronbach alpha coefficient for this scale was .90. The organisational turnover scale (Bozemann & Perrewé 2001) was adapted to reflect intention to leave the profession. The Cronbach alpha coefficient for the professional turnover intentions scale in this study was .86. Therefore, all of the scales used in the study had measures of internal consistency that exceeded the recommended level of .70 (Pallant 2001).

## **6.2.2 Preparation of the Data for Analysis**

The statistical software programs used to analyse the data were SPSS 13 and AMOS 5. The data was inspected after data entry to ensure that the data entry was 'clean' that is, that all scores were within the 6-point range of each item (Tabachnick & Fidell 2001). There were only four participants who omitted to indicate a response on one, or at the most two, items in their responses. These missing observations were replaced with the sample mean for that item (Kline 2005). Only one participant's responses could not be included in the sample because of a large amount of missing data. In preparation for data analysis reverse scoring of the items that were to be reverse-scored was performed. These items included all four of the scores for the professional commitment limited alternatives dimension as indicated by Blau (2003); the first organisational professional conflict scale item (Shafer, Park & Liao 2002); the third and eighth item on the revised organisational commitment scale (Bozeman & Perrewé 2001) and the fourth, fifth and sixth item of the job satisfaction scale (Price 2001). The third, fourth and fifth items of the organisational turnover intent and professional turnover intent scales were also reverse scored (Bozeman & Perrewé 2001).

### **6.2.2.1 Choice of Items to be used in the Path Analysis - Reliability Analysis of Scale Items**

The choice of observed measures of a construct is critically important in path analysis because only one measure is used (Kline 2005). The choice of scale items used to calculate the scale means that would form the observed variables used in the path analysis was made on the basis of the reliability statistics for the scale items. Because scale reliability is also increased by the number of scale items (Kline 2005) the benefits of removing items from the scale, needed to be balanced against the amount of measurement error that including an item with low reliability may introduce. The decision about which items would be retained and which would be excluded was made on the basis of inspection of the item-total statistics



generated using reliability analysis in SPSS. If the Cronbach's alpha if the scale item was deleted increased the reliability of the scale, then the item was deleted from the scale.

The result was that one item each was removed from the organisational-professional conflict scale and the job satisfaction scale. Two items were removed from the organisational commitment scale and no items were removed from the Blau (2003) occupational commitment measure, the professional turnover intentions or organisational turnover intentions measures. The scale reliabilities for each measure before and after the particular items were removed are provided in Table 6.1.

The items removed were:

*Organisational-professional Conflict Scale*

- “My current employment situation gives me the opportunity to express myself fully as a professional.” (Reverse Scored)

*Job Satisfaction Scale*

- “I like working here better than most other people I know who work for this employer.”

*Revised Organisational Commitment Scale*

- “I am willing to put in a great deal of effort beyond that normally expected in order to help this organisation be successful”
- “I feel very little loyalty to this organisation.” (Reverse Scored)

**Table 6.1 Scale Reliabilities for all Measures used in Path Analysis**

Scale	Reliability (Cronbach's $\alpha$ ) with all Items	Reliability (Cronbach's $\alpha$ ) with removed items
	N = 131	N = 131
Professional Commitment (Time 1)	.89	.89*
Professional Commitment (Time 2)	.92	.92*
Organisational-Professional Conflict	.77	.93
Job Satisfaction	.85	.91
Organisational Commitment	.88	.91
Professional Turnover Intention	.87	.87*
Organisational Turnover Intention	.89	.89*

\*No items were removed.

### 6.2.2.2 Data Screening

One of the common assumptions of structural equation modeling is that there is multivariate normality of the data, however, this is usually difficult to assess because of the number of variables involved (Kline 2005). Kline (2005) indicates that dealing with univariate outliers decreases the likelihood of multivariate non-normality. In addition to

dealing with univariate outliers, other methods to deal with multivariate normality are identification of multivariate outliers (Tabachnick & Fidell 2001), inspection of the squared multiple correlations to test for multicollinearity at the multivariate level (Kline 2005) and examination of the plots of the standardized residuals by the regression standardized predicted value for each item when viewed as a dependent variable of all other items (Osborne & Waters 2002).

The starting sample size for multivariate screening of the sample for the repeated measures analysis was the 134 matched Time One and Time Two responses. Exploration of the data for univariate outliers within the measures to be used in the path analysis revealed that for most items the difference between the mean and the 5 percent trimmed mean was minor or that there was no difference indicating that any extreme scores were having very little impact on the mean (Pallant 2001). Inspection of the normal probability plots indicated univariate normality. The univariate skewness values ranged from a low of -.01 to a high of -.88. The univariate kurtosis statistics values ranged from -.04 to 1.36.

Multivariate screening was performed on the measures to be used in the path analysis. Multivariate outliers were identified using Mahalanobis Distance (Tabachnick & Fidell 2001). Mahalanobis Distances were calculated using SPSS. Three Mahalanobis Distances that exceeded the critical  $\chi^2$  value of 24.32 ( $df = 7$ ,  $p < .001$ ) were found and were eliminated from the sample leaving a sample size of 131. Furthermore, examination of the plots of the standardized residuals by the regression standardized predicted value for each item when viewed as a dependent variable of all other items (Osborne & Waters 2002) indicated that the assumptions of linearity and homoscedasticity were met.

Inspection of the multicollinearity diagnostics for each regression, which demonstrated that all tolerance statistics exceeded .30, provided evidence that there was no multicollinearity among the variables (Kline 2005; Pallant 2001). The relative magnitudes of variances were also inspected as advised by Kline (2005). The ratio of the greatest variance to the least variance was 3.15, which is well under Kline's (2005) suggestion that rescaling of scores should be considered if the ratio of the largest to the smallest variance exceeds 10.

### **Model Estimation**

All estimations relating to the theoretical model were made in AMOS 5.0 using Maximum Likelihood. The total, direct and indirect effects were requested in the output. In addition, confidence intervals and tests of statistical significance of the effects were estimated, using the bias-corrected bootstrap, as recommended by MacKinnon, Lockwood and Williams (2004) and were based on 1000 bootstrap samples.

## 6.3 Results

The results of the theoretical model are reported here in two sections. The first section considers the entire theoretical model when the full measure of professional commitment is used in its estimation. It also considers the entire theoretical model when all of the individual components of professional commitment are used in separate estimations of the model. In the second results section, the results of the theoretical model are examined in detail and the four research questions and the associated hypotheses that relate to the theoretical model are examined. This is enabled by consideration of models that are nested within the theoretical model.

The Blau (2003) occupational commitment measure is considered to provide a better definition of professional commitment than a measure that is comprised of affective commitment alone, or the Meyer, Allen and Smith (1993) three-component measure. This is because it is thought to provide a more complete account of the reasons why an individual may be committed to a profession (Blau 2003). Although Blau (2003) considered that his professional commitment measure was comprised of four components, confirmatory factor analysis performed in this research and reported in Chapter Five, identified five components and therefore five components of the measure were considered.

Understanding the combined and individual relationships among the components of professional commitment is considered to provide a more complete understanding of the relationship between professional commitment and other work-related outcomes (Blau 2003; Meyer, Allen & Smith 1993). As noted in Section 5.5.1, the Meyer, Allen and Smith (1993) occupational commitment measure and the Blau (2003) occupational commitment measure are theoretically considered to be multidimensional constructs, however, to date they have been evaluated only as a set of related constructs. Therefore, the validity of each component as a contributor to the measurement of the overall construct of professional commitment has not yet been evaluated. As also noted in Section 5.4.1, such an evaluation is beyond the scope of this research because of the sample size limitations.

Ideally, the model would be estimated with the means of the five components included separately and simultaneously in the estimation of the model. However, such a complex model would demand a very large sample size. The restrictions associated with sample size in this aspect of the research therefore made it impractical to separately and simultaneously include the five components of the Blau (2003) occupational commitment measure in the model. Therefore, the theoretical model was first estimated using the mean of the entire professional commitment measure. The mean of each component of professional commitment was then used in separate estimations of the model, to enable the relationships

between the individual components of the measure and the other variables in the model to be examined and considered.

There are two sets of models results provided for the full professional commitment measure estimation of the model, and for each estimation of the components of professional commitment. The first of each of the models results sets indicates all significant paths, both direct and indirect and the second indicates only the significant direct paths. To minimise the risk of accepting statistically significant effects when they are not truly significant (Type I error) the alpha level was conservatively set to less than .01. The results for the full professional commitment measure estimation are provided in Figures 6.2 and 6.3. The individual component models' results are provided in Figures 6.4 to 6.13. Goodness-of-fit indices for each of the models are provided in Table 6.2. These indices show that each estimation of the model shows very good fit to the data.

**Table 6.2 Goodness-of-Fit Indices for the Full Professional Commitment Measure and Professional Commitment Components Estimations of the Theoretical Model**

<b>Model Estimation</b>	<b>Chi-Square</b>	<b><i>df</i></b>	<b><i>p</i></b>	<b>CFI</b>	<b>RMSEA</b>
Full Professional Commitment	.05	2	.98	1.0	.00
Affective Commitment	.71	2	.70	1.0	.00
Normative Commitment	.54	2	.76	1.0	.00
Investment Costs	.93	2	.63	1.0	.00
Emotional Commitment	1.06	2	.59	1.0	.00
Limited Alternatives Commitment	2.65	2	.27	1.0	.05

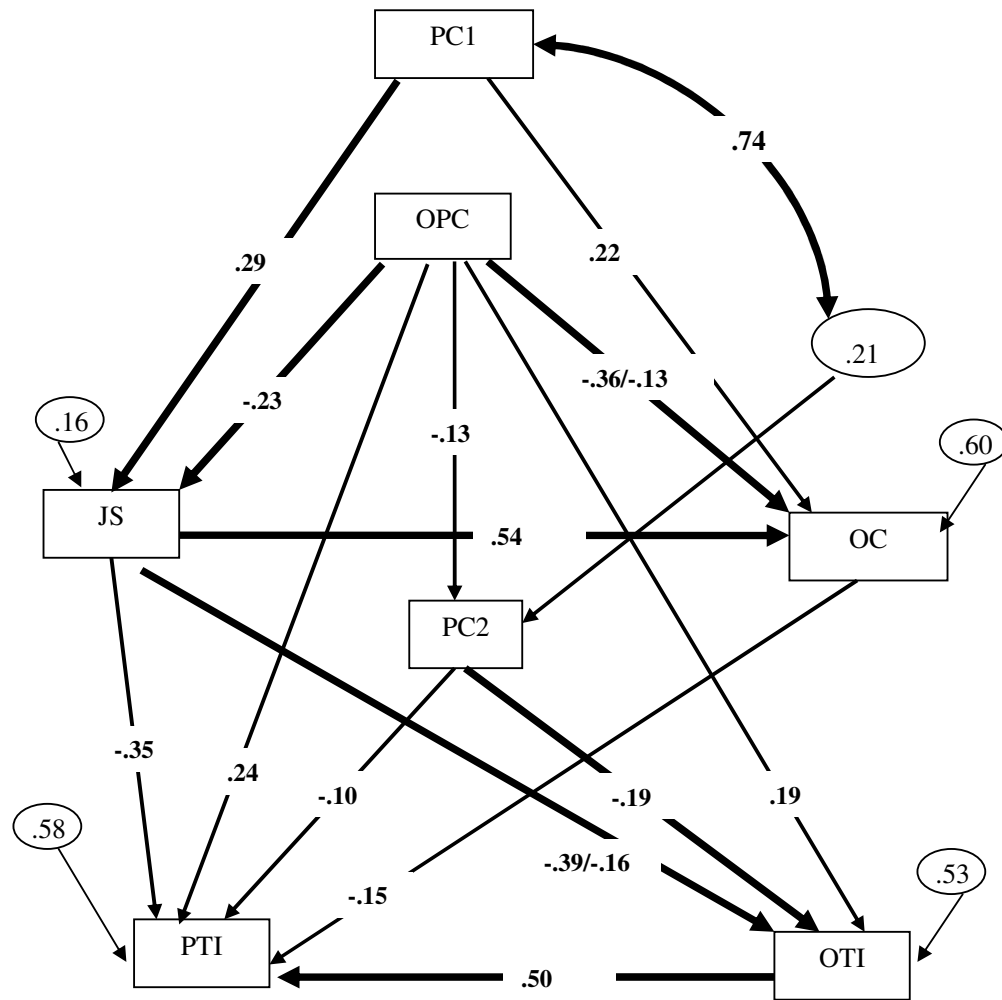
**Table 6.3 Descriptive Statistics for all Variables in the Theoretical Model**

	Minimum	Maximum	Mean	Std. Deviation
Professional Commitment T1	2.13	5.04	3.73	.55
Affective Commitment T1	3.00	6.00	4.90	.74
Normative Commitment T1	1.00	5.50	3.19	.83
Investment Costs Commitment T1	1.00	6.00	3.91	.93
Emotional Costs Commitment T1	1.00	5.25	3.32	.84
Limited Alternatives Commitment T1	1.00	6.00	2.99	.87
Professional Commitment T 2	1.92	5.33	3.75	.63
Affective Commitment T2	2.83	6.00	4.72	.80
Normative Commitment T2	1.00	5.33	3.24	.84
Investment Costs Commitment T2	1.00	6.00	3.96	.99
Emotional Costs Commitment T2	1.00	6.00	3.40	.92
Limited Alternatives Commitment T2	1.00	6.00	3.14	.83
Organisational Professional Conflict	1.00	6.00	3.40	.98
Job Satisfaction	1.40	6.00	4.28	.85
Organisational Commitment	1.43	6.00	4.01	.80
Organisational Turnover Intention	1.00	6.00	2.87	.98
Professional Turnover Intention	1.00	6.00	2.57	.97

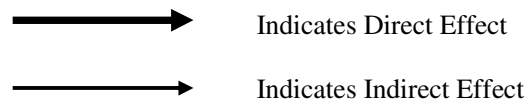
Table 6.3 provides the descriptive statistics for all of the variables included in the theoretical model ( $n = 131$ ). Table 6.4 provides the results of the paired samples  $t$ -tests for the overall measure of professional commitment and the components in the sample used in the evaluation of the model. The results of the zero-order correlations between the overall measure of professional commitment prior to workplace entry and the other variables in the theoretical model are provided in Table 6.5 (See Section 6.3.2). In addition, the results of the zero-order correlations between the affective commitment component of professional commitment prior to workplace entry and the other variables in the theoretical model are provided in Table 6.6 (See Section 6.3.2).

**Table 6.4 Paired Samples t-Tests for Full Professional Commitment Measure and Components for Path Analysis Sample**

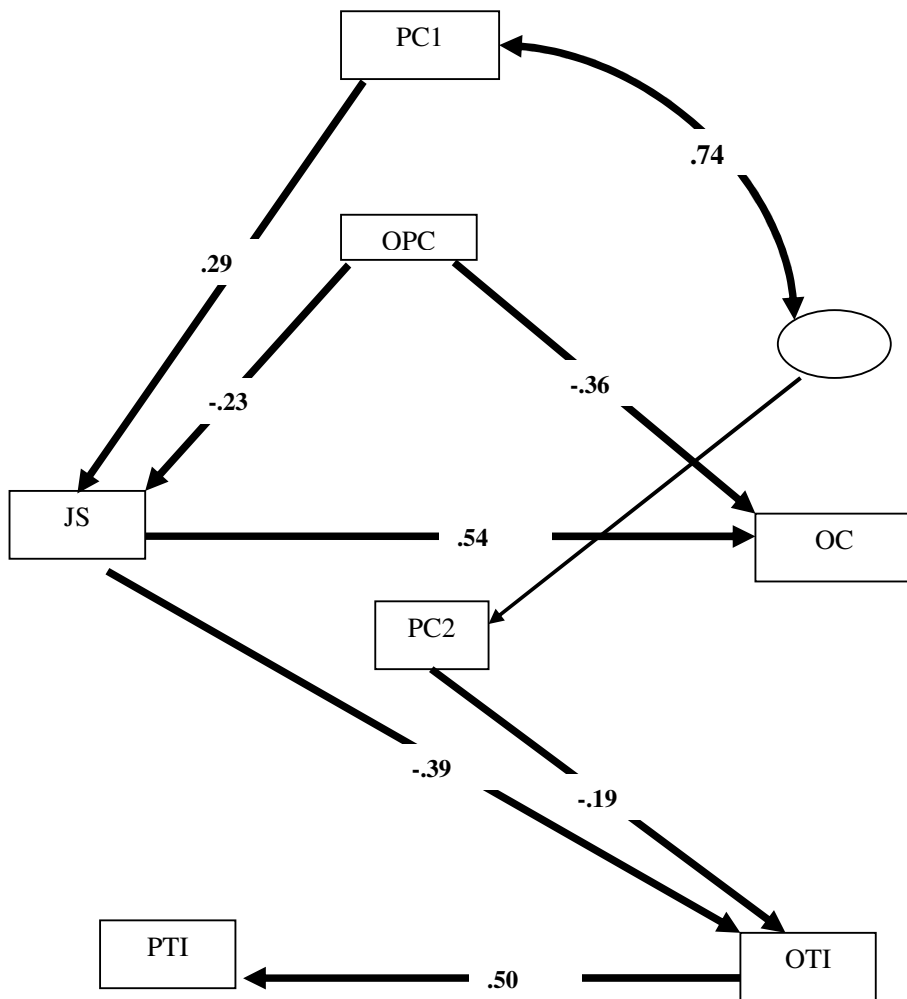
		Mean	t	df	Sig. (2-tailed)
Pair 1	Professional Commitment T1 - Professional Commitment T2	-.02	-.63	130	.53
Pair 2	Affective Commitment T1 - Affective Commitment T2	.18	3.39	130	.00
Pair 3	Normative Commitment T1 - Normative Commitment T2	-.05	-.77	130	.44
Pair 4	Investment Costs Commitment T1 - Investment Costs Commitment T2	-.05	-.63	130	.53
Pair 5	Emotional Costs Commitment T1 - Emotional Costs Commitment T2	-.08	-1.23	130	.22
Pair 6	Limited Alternatives Commitment T1 - Limited Alternatives Commitment T2	-.15	-2.61	130	.01



**Figure 6.2 Full Professional Commitment Measure Estimation of the Theoretical Model with All Significant Paths ( $p < .01$ )**







**Figure 6.3 Full Professional Commitment Measure Estimation of the Theoretical Model with Direct Significant Paths Only ( $p < .01$ )**

### **6.3.1 Overall Results of the Models**

The theoretical model provides a means to examine the relationships between professional commitment, job satisfaction, organisational-professional conflict and organisational commitment, as well as a means to examine the relationships between professional commitment prior to workplace entry, job satisfaction organisational-professional conflict, organisational commitment and professional commitment after a period of workplace exposure. In particular, the model provides a means to identify the relative importance of organisational commitment and professional commitment to both organisational turnover intention and professional turnover intention.

#### **The Full Professional Commitment Measure Results**

The results of the model when the full measure of professional commitment is used in the estimation (Figures 6.2 and 6.3) indicate that in the early period of exposure to the workplace, there is no direct relationship between professional commitment prior to workplace entry and organisational commitment. The results indicate that rather than being a direct relationship, the relationship between professional commitment prior to workplace entry and organisational commitment is mediated by job satisfaction. That is, the relationship between professional commitment prior to workplace entry and organisational commitment is largely explained by the relationship between professional commitment prior to workplace entry and job satisfaction (Cole & Maxwell 2003). Furthermore, the results indicate that although there is no significant relationship between professional commitment prior to workplace entry and organisational-professional conflict, organisational-professional conflict is significantly related to both job satisfaction and organisational commitment. Organisational-professional conflict also has a significant indirect relationship with organisational commitment that is mediated by job satisfaction.

In the model, the relationships between the variables that are exogenous to professional commitment after a period of workplace exposure are held constant. This allows the non-spurious parts of the relationships to be identified (Kline 2005). The results suggest that when the full professional commitment measure is used in the estimation of the model, in the initial period of exposure to the workplace, the only variable in the model that has a significant direct relationship with professional commitment is the pre-workplace entry level of professional commitment. However, the model indicates that organisational-professional conflict has a small indirect relationship with professional commitment after a period of workplace exposure.

The model's results also indicate that job satisfaction and professional commitment after a period of workplace exposure, are the factors that are directly related to organisational

turnover intention among professional employees. In the model, the relationships between the variables that are exogenous to organisational turnover intention are held constant. The relationship between organisational commitment and organisational turnover intention may then be seen to be spurious. Furthermore, only organisational turnover intention has a direct relationship with professional turnover intention, with the relationships between professional commitment after a period of workplace exposure, organisational-professional conflict, job satisfaction, organisational commitment and professional turnover intention all being mediated by organisational turnover intention.

There are several important findings that are suggested in the results of the model. The finding that commitment to the organisation is strongly related to work-related factors such as job satisfaction and organisational-professional conflict is consistent with previous research in regard to the relationships between these variables and organisational commitment. Organisational commitment has long been considered to develop in relation to the quality of the organisational experiences that are provided to employees and in relation to experiences that are consistent with the employees' goals and expectations (Meyer & Allen 1997). However, until recently, the relationship between commitment to the profession and the development of commitment to the organisation has received little research attention. Until recently, the tendency of the research literature in relation to work-related commitment has been to consider employees' commitment to the organisation as their primary target of commitment with the implication that organisational commitment is the commitment to which all other work-related commitments ultimately relate (Gallagher & Parks 2001). Moreover, in relation to occupational commitment, whether to a professional or non-professional occupation, the work-related commitment research literature has considered it in terms of a correlate of, but not as an antecedent to, organisational commitment (Swales 2002).

The results of this model suggest that organisational commitment is not directly related to commitment to the profession but is contingent on the quality of the organisational experiences provided to the professional employee, and is influenced by the ability of the professional employee to act in accordance with their professional goals and expectations. Furthermore, the results suggest that professional commitment is very stable, in the early period of workplace exposure, and that organisational turnover intention is related to job satisfaction and professional commitment after a period of workplace exposure and not to organisational commitment. Additionally, of all of the variables in the model only organisational turnover intention has a direct relationship with professional turnover intention.

The findings do not suggest that professional employees do not develop commitment to their employing organisation. The descriptive statistics provided in Table 6.3, indicate that the mean of organisational commitment in the sample is actually greater than that of the mean of the full professional commitment measure. Rather, the findings suggest that for

professional employees, in the initial period of exposure to the workplace, commitment to the profession has a stronger relationship with turnover intention behaviours than commitment to the organisation.

The findings therefore suggest that for professional employees, commitment to the profession is the target of commitment that has more importance to the behaviour of professional employees, with commitment to the organisation having secondary importance. Thus, when the organisation provides experiences that are professionally satisfying and consistent with the professional employee's professional goals and expectations, organisational turnover intention is lower, and lower organisational turnover intention is associated with lower professional turnover intention. On the other hand, when the organisation provides experiences that are not professionally satisfying and not consistent with the professional employee's professional goals and expectations, organisational turnover intention is likely to be higher and increased professional turnover intention may also result.

The finding that the organisational experience has little effect on professional commitment and that commitment to the profession is preserved in favour of commitment to the organisation is consistent with the argument put forward by Mueller and Lawler (1999) that commitment to the profession is a target of commitment that is distinct from the commitment to the organisation. Mueller and Lawler (1999) argued that professional employees have the ability to move between organisations in an attempt to find employment in an organisation that better suits their professional goals and expectations. The significant direct negative relationship between professional commitment after a period of workplace exposure and organisational turnover intention supports this argument.

However, in the model there is an even stronger relationship between job satisfaction and organisational turnover intention. Moreover, the strength and signs of the mediated relationships between job satisfaction, organisational-professional conflict, professional commitment after a period of workplace exposure, organisational commitment and professional turnover intention, all suggest that their relationship with professional turnover intention is largely explained by their relationship with organisational turnover intention. Therefore, while professional commitment after a period of workplace exposure may be directly related to organisational turnover intention, it is only indirectly and weakly related to professional turnover intention in the initial period of workplace exposure.

However, the model results indicate that in the initial period of workplace exposure, job satisfaction and organisational-professional conflict are the variables that by their association with organisational turnover intention are those that have the stronger, though indirect relationship with professional turnover intention. Therefore, while professional employees may plan to move between organisations as the means to find employment where there is a better match between their personal and professional goals and expectations, their

intention to leave the profession may also be influenced by the strength of the match between their personal and professional goals and expectations in the organisations in which they are employed. This suggests that for professional employees, the organisational experience may have only a small effect on professional commitment in the initial period of workplace exposure. However, in this same period of time the organisational experience has a much stronger effect on organisational turnover intention, as well as having important implications for professional turnover intention.

#### **6.3.1.1 The Results for the Individual Components of Professional Commitment**

The components of professional commitment characterise the psychological state of commitment (Stinglhamber, Bentein & Vandenberghe 2002) and explain why individuals persist in a chosen professional path and thus remain committed to the profession. The affective professional commitment component relates to reasons why individuals *want to* be a member of that particular profession (Meyer, Allen & Smith 1993) and therefore remain committed to the profession. In contrast, the other four components of professional commitment (normative commitment, investment costs commitment, emotional costs commitment and limited alternatives commitment) relate to varying reasons why individuals believe that they *should, ought or have to* continue to be a member of the profession (Blau 2003).

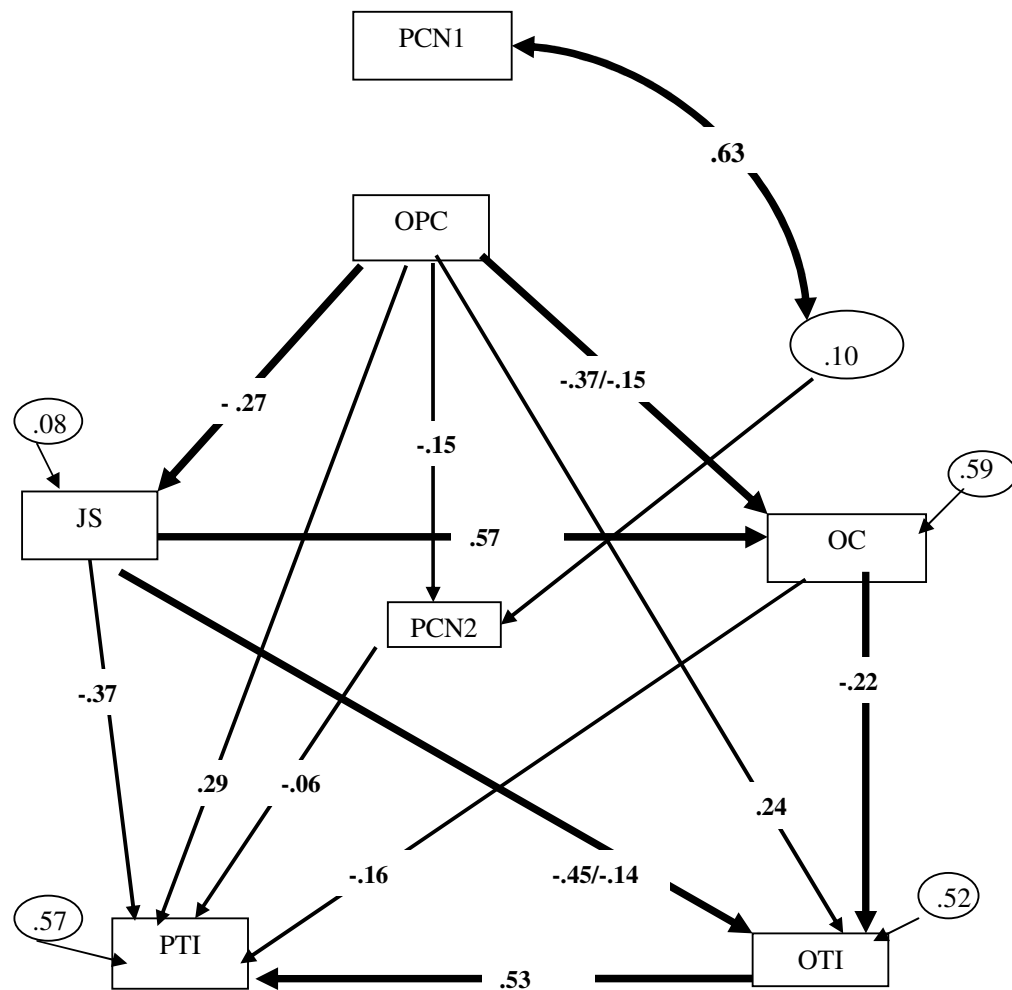
When the components of professional commitment are considered in terms of their individual model estimations, slightly different patterns of relationships from the pattern found in the full professional commitment measure are evident. The ‘non-affective’ professional commitment component estimations of the models all have similar results and are considered together, whereas the affective professional commitment component estimation results are discussed separately.

For the normative commitment (Figures 6.4 and 6.5), investment costs commitment (Figures 6.6 and 6.7), emotional costs commitment (Figures 6.8 and 6.9) and limited alternatives commitment components (Figures 6.10 and 6.11) the results of the estimations of the model indicate that the normative commitment and investment costs commitment components of professional commitment have no direct relationship with either job satisfaction or organisational commitment, and that the emotional costs commitment and limited alternatives commitment components are directly related only to job satisfaction. In these non-affective commitment estimations of the model, the relationships between organisational-professional conflict and job satisfaction, organisational-professional conflict and organisational commitment, and job satisfaction and organisational commitment are similar to those found in the full professional commitment measure estimation of the model. Furthermore, the results suggest that in the initial period of exposure to the workplace, the

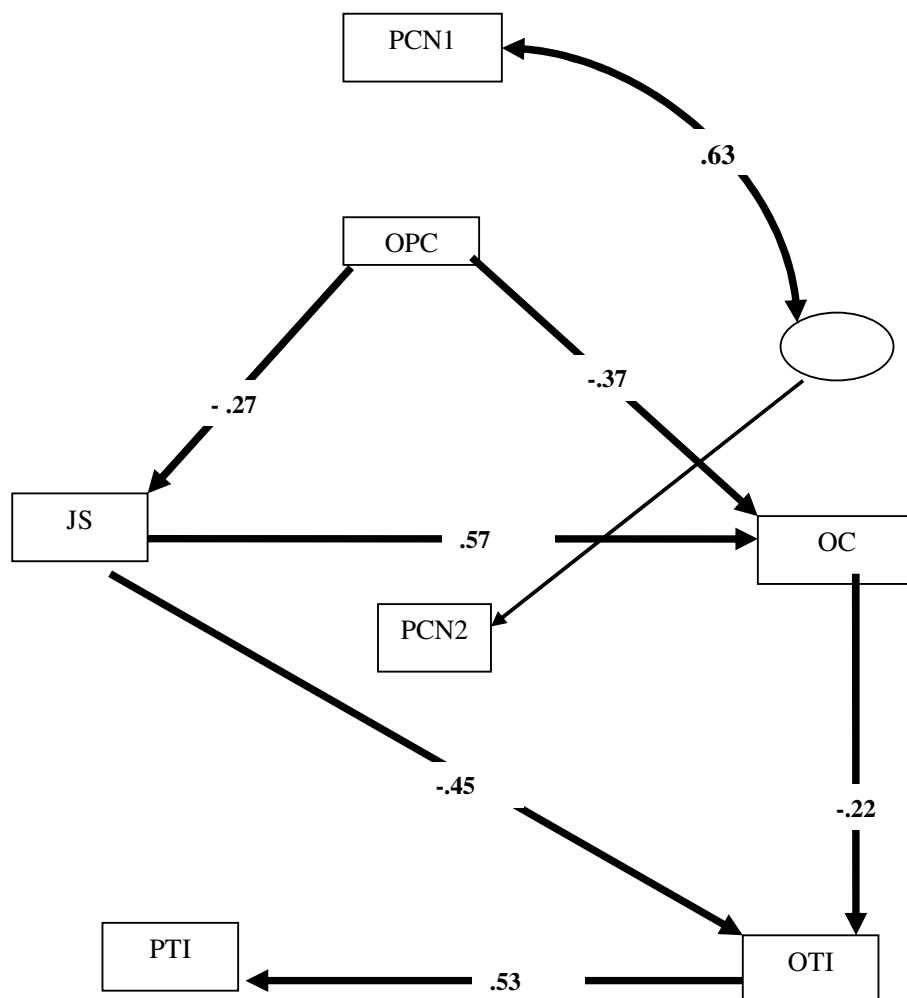
only significant relationship that each of the individual components of professional commitment after exposure to the workplace has to any of the common exogenous variables in the model, is the pre-workplace entry level of that component of commitment.

In all of these estimations of the model, job satisfaction and organisational commitment are directly related to organisational turnover intention, rather than job satisfaction and professional commitment after a period of workplace exposure, as indicated in the full professional commitment measure model estimation. Furthermore, except for the emotional costs commitment component, the only variable in any of the non-affective commitment component models that has a direct relationship with professional turnover intention is organisational turnover intention.

These results therefore indicate that in the initial period of exposure to the workplace, the individual components of commitment that relate to the *should*, *ought* or *have to* continue to be a member of the profession reasons for commitment to the profession, are largely unaffected by workplace experiences and have very little influence on work-related outcomes.

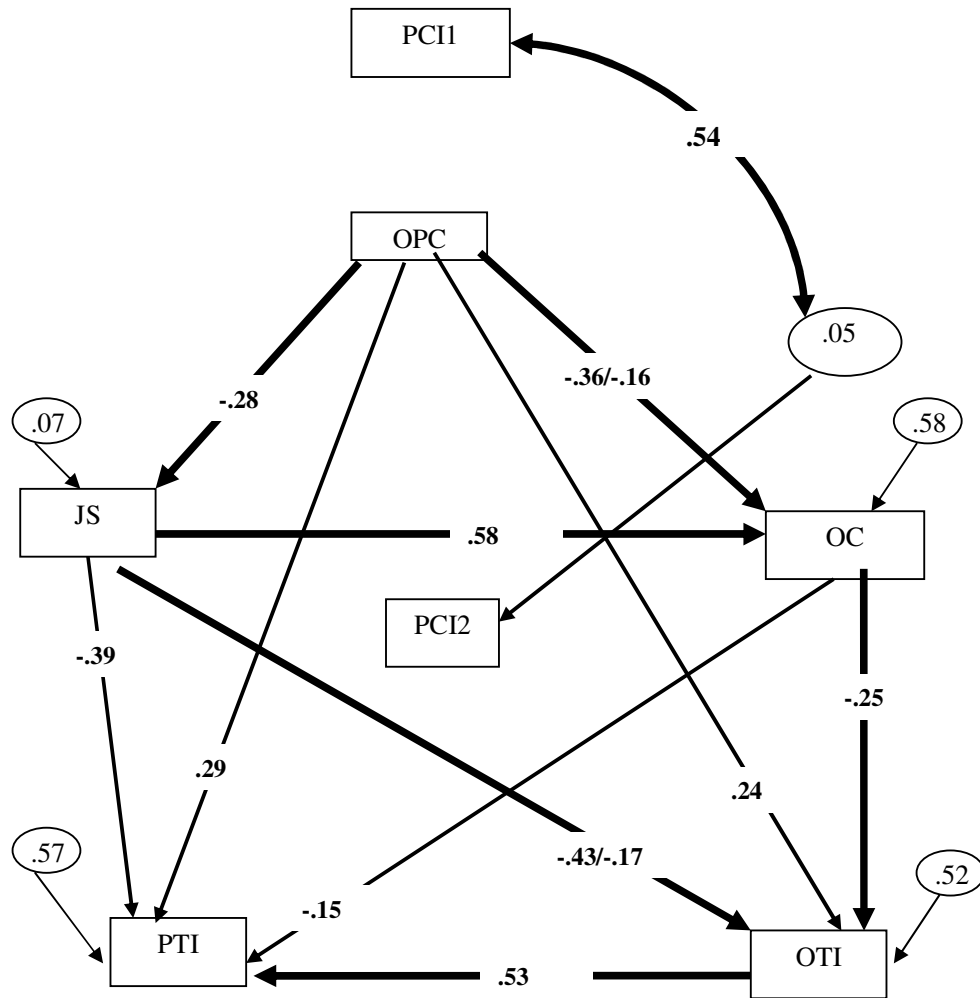


**Figure 6.4 Normative Commitment Component Estimation of the Theoretical Model with All Significant Paths ( $p < .01$ )**

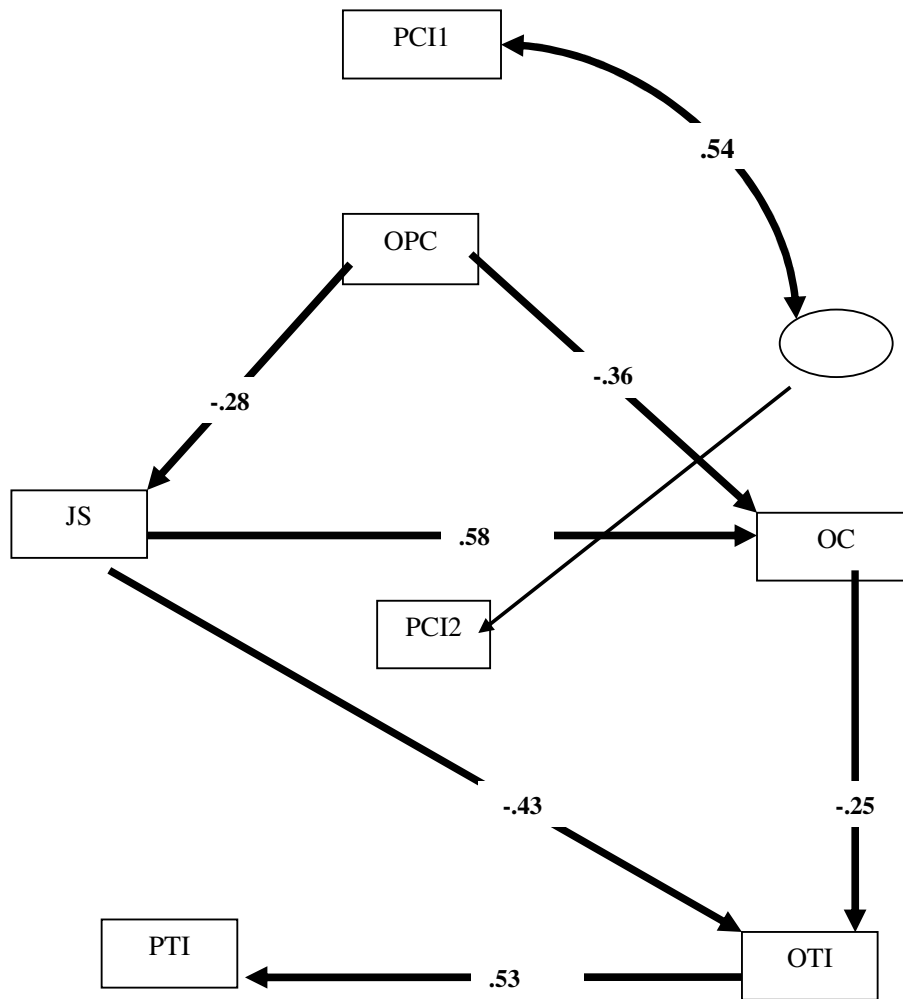


**Figure 6.5 Normative Commitment Component Estimation of the Theoretical Model with Significant Direct Paths Only ( $p < .01$ )**

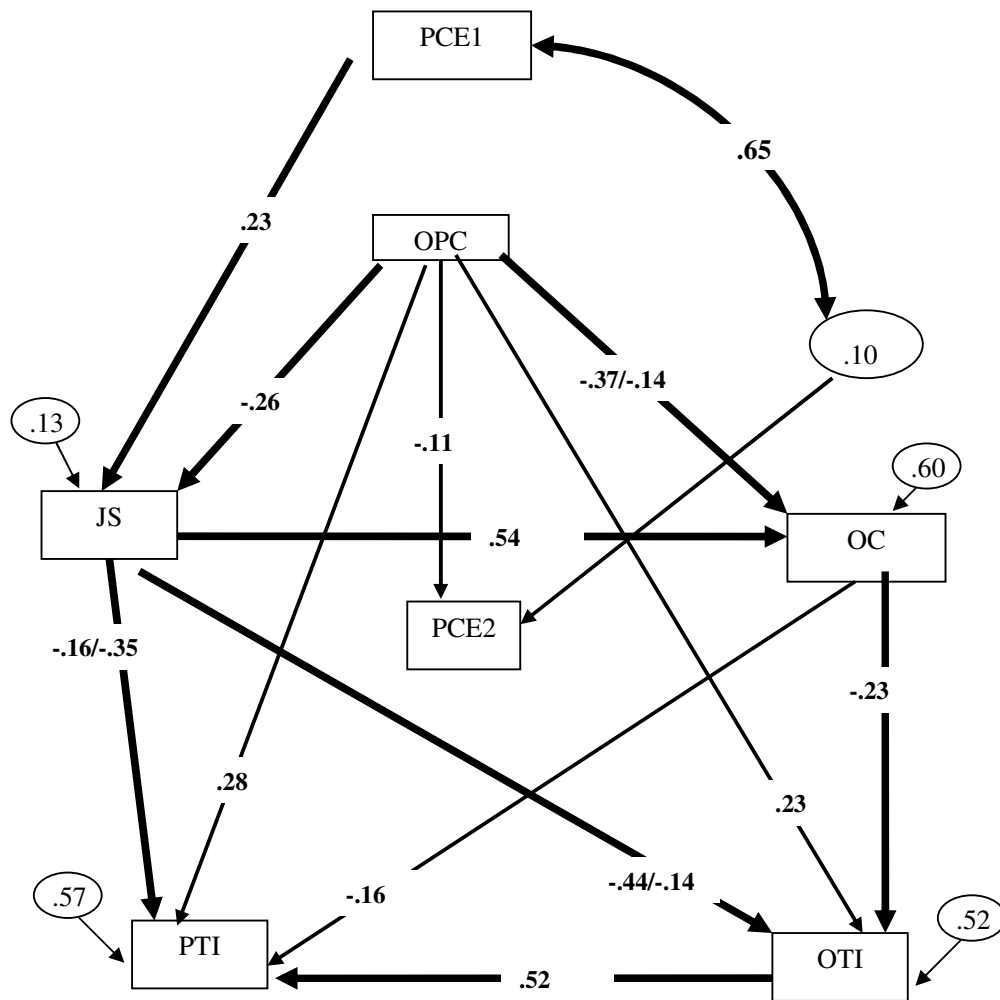




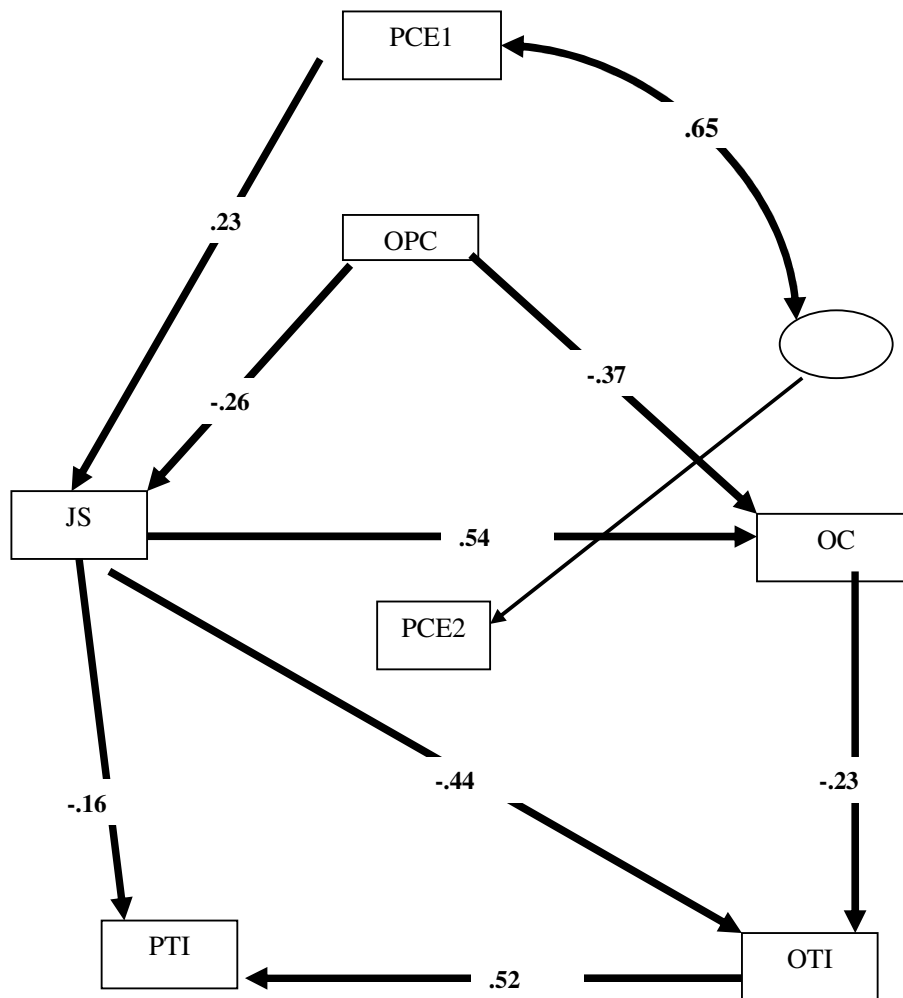
**Figure 6.6 Investment Costs Commitment Component Estimation of the Theoretical model with All Significant Paths ( $p < .01$ )**



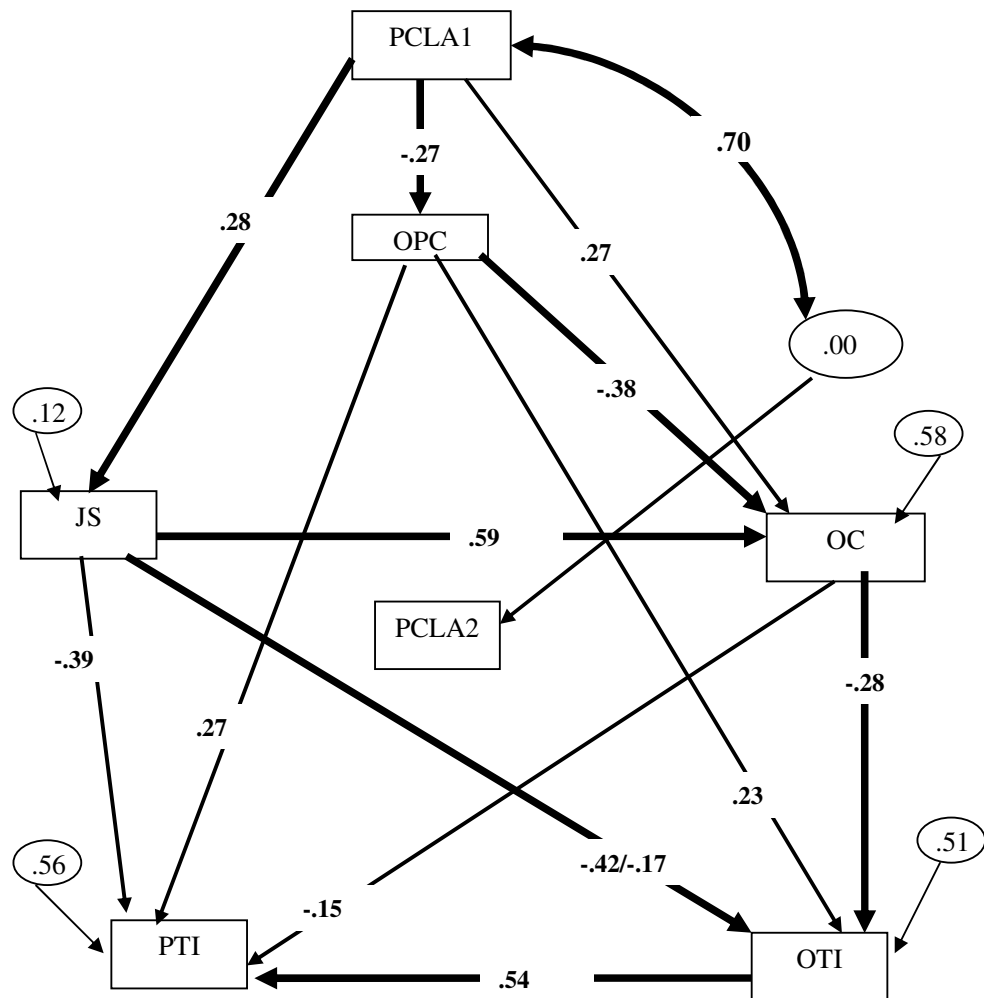
**Figure 6.7 Investment Costs Commitment Component Estimation of the Theoretical Model with Significant Direct Paths Only ( $p < .01$ )**



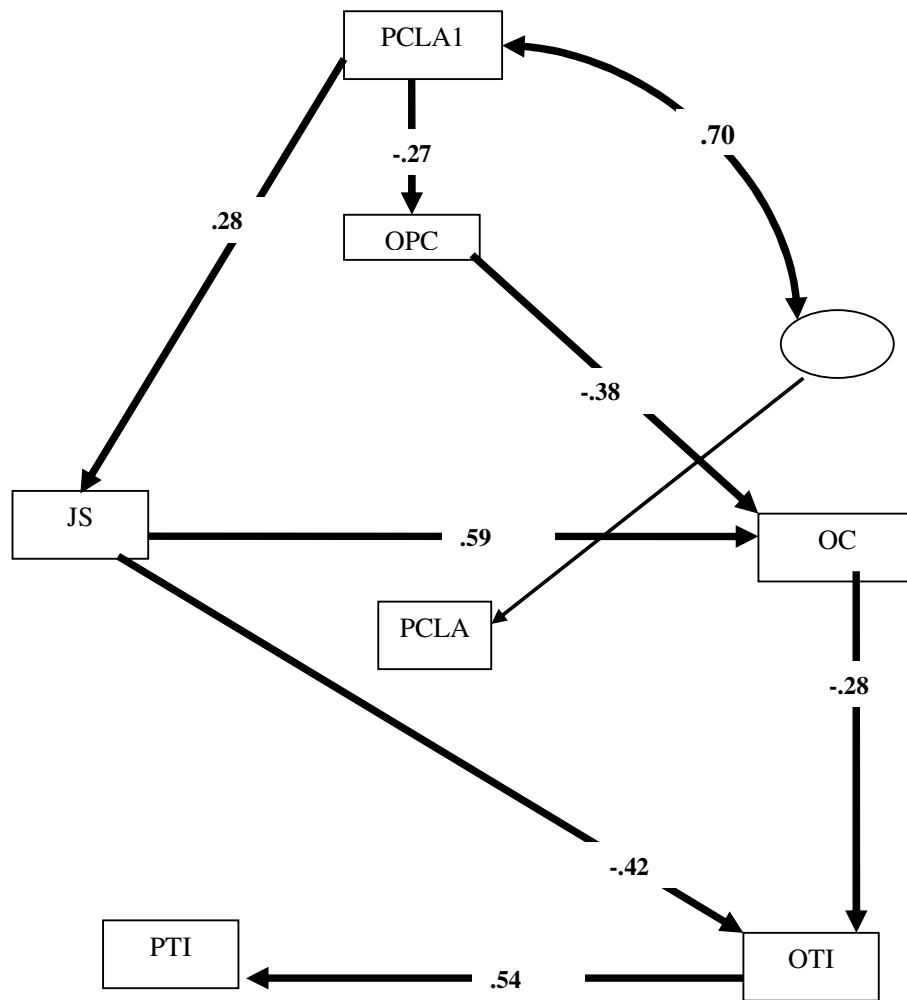
**Figure 6.8 Emotional Costs Commitment Component Estimation of the Theoretical Model with All Significant Paths ( $p < .01$ )**



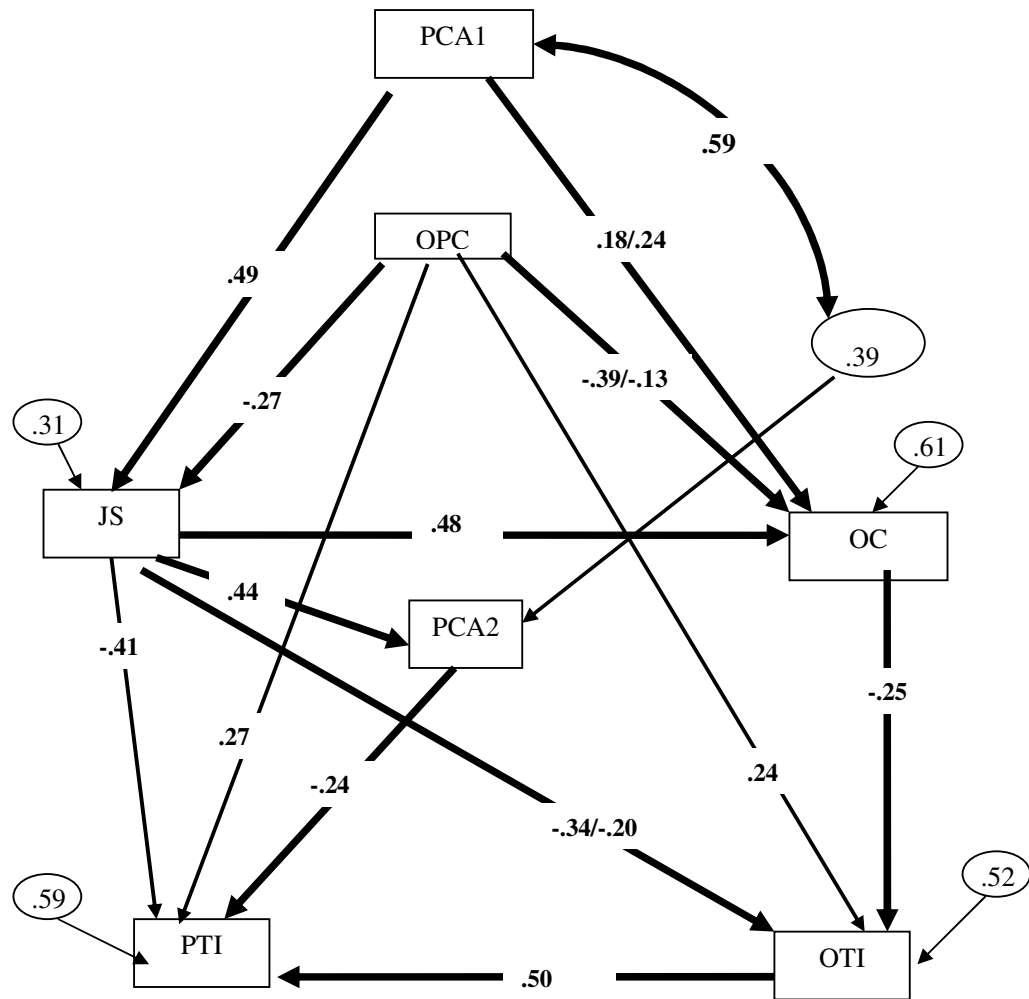
**Figure 6.9 Investment Costs Commitment Component Estimation of the Theoretical Model with Significant Direct Paths Only ( $p < .01$ )**



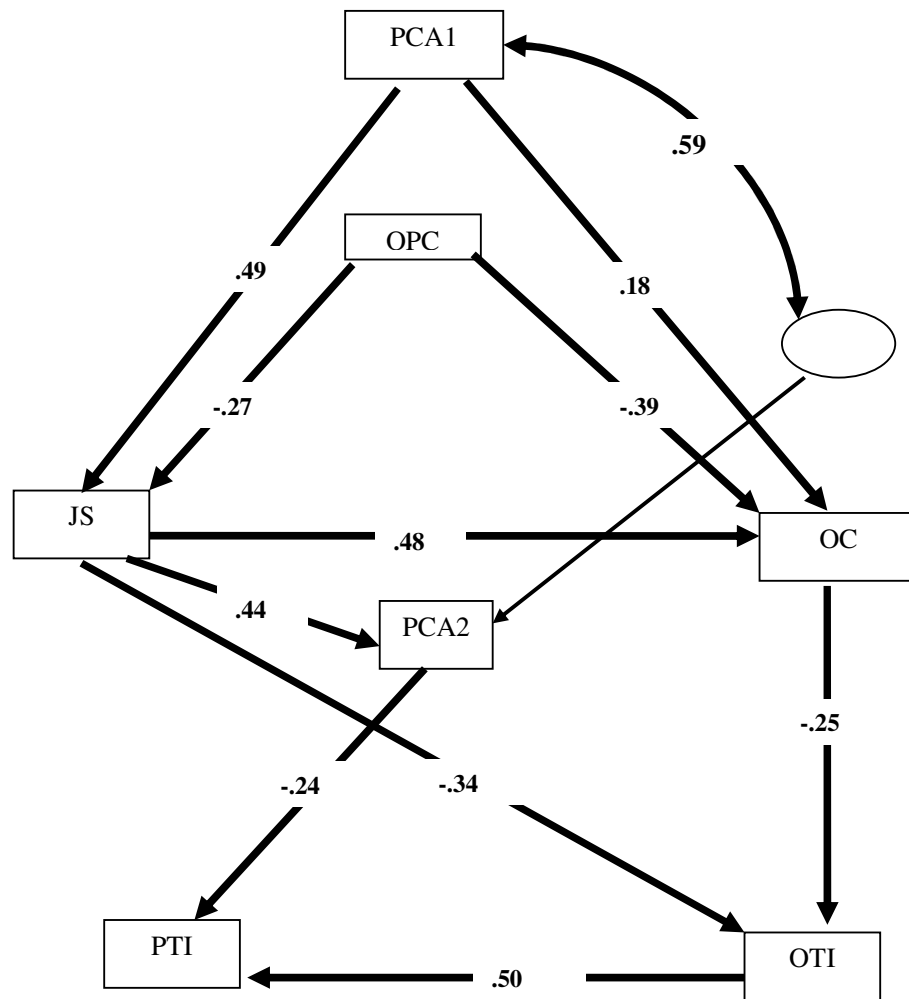
**Figure 6.10 Limited Alternatives Commitment Component Estimation of the Theoretical Model with All Significant Paths ( $p < .01$ )**



**Figure 6.11 Limited Alternatives Commitment Component Estimation of the Theoretical Model with Significant Direct Paths Only ( $p < .01$ )**



**Figure 6.12 Affective Professional Commitment Component Estimation of the Theoretical Model with All Significant Paths ( $p < .01$ )**



**Figure 6.13 Affective Professional Commitment Component Estimation of the Theoretical Model with Significant Direct Paths Only ( $p < .01$ )**

### 6.3.1.2 Affective Professional Commitment Estimation of the Model Results

The results of the estimation of the model in which affective professional commitment component is used (Figures 6.12 and 6.13) provide a somewhat different picture from either the full measure estimation of the model or the other non-affective components estimations of the model. This is the only estimation of the model in which a direct relationship between professional commitment prior to workplace entry and organisational commitment is demonstrated. Moreover, in this estimation of the model, the strength of the relationship between affective professional commitment prior to workplace entry and job



satisfaction is much greater than when either the full measure of professional commitment or any of the components are individually used in the estimation of the model.

The relationships between organisational-professional conflict, job satisfaction and organisational commitment are similar to those found in all other estimations of the model. Job satisfaction and organisational commitment are directly related to organisational turnover intention, with job satisfaction having the stronger relationship, in this estimation of the model. This is similar to the patterns found in the non-affective components estimations of the model. Furthermore, as in all other estimations of the model, organisational turnover intention has a significant direct relationship with professional turnover intention. However, in the affective professional commitment component estimation of the model, job satisfaction also has a significant direct relationship with affective professional commitment after a period of workplace exposure, which then has a significant direct relationship with professional turnover intention.

The results of this estimation of the path model suggest that the *want to* remain with the profession, which is the affective component of professional commitment, not only has the greater influence prior to workplace entry on both job satisfaction and organisational commitment than any other of the components of professional commitment, but is also the only component of professional commitment that is affected by any of the work-related experiences in the initial period of exposure to the workplace. The affective professional commitment component estimation of the model also suggests that affective professional commitment after a period of workplace exposure influences professional turnover intention.

Therefore, when only the individual components of professional commitment are considered, the value of including professional commitment in a model of organisational turnover intention for professional employees might be questioned, because the model provides no additional information to that found in the established organisational turnover intention literature where the effect of professional commitment is not considered. This is because inclusion of professional commitment when measured by one or other of the components of commitment suggests that professional commitment has no significant effect on the relationship between organisational commitment and organisational turnover intention. However, when the combined effects of the components are examined, the full professional commitment measure estimation of the model suggests that in this early stage of professional employees' exposure to the workplace, the *want to* remain with the profession, aspect of affective professional commitment is balanced by the *should, ought* or believe that they *have to* remain with the profession, aspects of professional commitment.

In the next results section, the results of the theoretical model are considered in detail and the four research questions and the associated hypotheses that relate to the theoretical

model are examined. Only the full professional commitment measure estimation and the affective professional commitment component estimation of the model are considered.

### **6.3.2 The Results in Terms of the Research Questions**

In this section, the theoretical model will be considered in terms of models that are nested within the full model. To do this only the results of the full professional commitment measure estimation and the affective professional commitment component estimation of the model will be considered in this section. This is because the results of the non-affective professional commitment components model estimations are very similar to each other and indicate that individually, these components of professional commitment are not significantly affected by the other work-related variables in the model. A summary of the research questions and the findings in terms of the hypotheses is presented in Table 6. 4.

**Table 6.4 Summary of the Research Questions and the Findings in Terms of the Hypotheses**

Research Question	Hypothesis	Supported		Comments
		Full Professional Commitment Measure	Affective Professional Commitment Component	
<b>Research Question One:</b> What are the relationships between professional commitment, job satisfaction and organisational-professional conflict and organisational commitment?	<b>Hypothesis 1a:</b> Professional commitment at Time One is significantly and positively related to organisational commitment.	Yes <sup>1</sup>	Yes <sup>2</sup>	<sup>1</sup> Fully mediated by job satisfaction <sup>2</sup> Includes partial mediation by job satisfaction
	<b>Hypothesis 1b:</b> Professional commitment at Time One is significantly and positively related to job satisfaction.	Yes	Yes	
	<b>Hypothesis 1c:</b> Professional commitment at Time One is significantly and positively related to organisational-professional conflict.	No	No	
	<b>Hypothesis 1d:</b> Organisational-professional conflict is significantly and negatively related to job satisfaction.	Yes	Yes	
	<b>Hypothesis 1e:</b> Organisational-professional conflict is significantly and negatively related to organisational commitment.	Yes <sup>3</sup>	Yes <sup>3</sup>	<sup>3</sup> Includes partial mediation by job satisfaction
	<b>Hypothesis 1f:</b> Job satisfaction is significantly and positively related to organisational commitment.	Yes	Yes	

Table 6.4 (cont'd) Summary of the research questions and the findings in terms of the hypotheses

Research Question	Hypothesis	Supported		Comments
		Full Professional Commitment Measure	Affective Professional Commitment Component	
<b>Research Question Two:</b> What is the relationship between exposure to the workplace (in terms of organisational-professional conflict, job satisfaction and organisational commitment) and professional commitment?	<b>Hypothesis 2a:</b> Organisational commitment is significantly and positively related to professional commitment at Time Two.	No	No	
	<b>Hypothesis 2b:</b> Job satisfaction is significantly and positively related to professional commitment at Time Two.	No <sup>1</sup>	Yes	<sup>1</sup> Relationship is spurious when relationships with all common exogenous variables are held constant
	<b>Hypothesis 2c:</b> Organisational-professional conflict is significantly and negatively related to professional commitment at Time Two.	Yes <sup>2</sup>	No	<sup>2</sup> Suppression situation present, because of correlation with organisational commitment

Table 6.4 (cont'd) Summary of the research questions and the findings in terms of the hypotheses

Research Question	Hypothesis	Supported		
<b>Research Question Three:</b> Which of these variables are related to organisational turnover intention?	<b>Hypothesis 3a:</b> Professional commitment at Time Two is significantly and negatively related to organisational turnover intention.	Yes	No <sup>3</sup>	<sup>3</sup> Relationship is spurious when relationship with job satisfaction is held constant
	<b>Hypothesis 3b:</b> Organisational commitment is significantly and negatively related to organisational turnover intention.	No <sup>4</sup>	Yes	<sup>4</sup> Relationship is spurious when relationship with job satisfaction is held constant
	<b>Hypothesis 3c:</b> Job satisfaction is significantly and negatively related to organisational turnover intention.	Yes <sup>5</sup>	Yes <sup>5</sup>	<sup>5</sup> Includes partial mediation by organisational commitment
	<b>Hypothesis 3d:</b> Organisational-professional conflict is significantly and positively related to organisational turnover intention.	Yes <sup>6</sup>	Yes <sup>7</sup>	<sup>6</sup> Mediated by all three intervening variables <sup>7</sup> Mediated by job satisfaction and/or organisational commitment

Table 6.4 (cont'd) Summary of the research questions and the findings in terms of the hypotheses

Research Question	Hypothesis	Supported		Comments
		Full Professional Commitment Measure	Affective Professional Commitment Component	
<b>Research Question Four:</b> Which of these variables are related to professional turnover intention?	<b>Hypothesis 4a:</b> Professional commitment at Time Two is significantly and negatively related to professional turnover intention.	Yes <sup>1</sup>	Yes	<sup>1</sup> Relationship is fully mediated by organisational turnover intention
	<b>Hypothesis 4b:</b> Organisational commitment is significantly and negatively related to professional turnover intention.	Yes <sup>1</sup>	No	<sup>1</sup> Relationship is fully mediated by professional commitment after a period of workplace exposure and organisational turnover intention
	<b>Hypothesis 4c:</b> Job satisfaction is significantly and negatively related to professional turnover intention.	Yes <sup>1</sup>	Yes <sup>1</sup>	<sup>1</sup> Relationship is fully mediated by organisational turnover intention
	<b>Hypothesis 4d:</b> Organisational-professional conflict is significantly and positively related to professional turnover intention.	Yes <sup>1</sup>	Yes <sup>1</sup>	<sup>1</sup> Relationship is fully mediated by all intervening variables
	<b>Hypothesis 4e:</b> Organisational turnover intention is significantly and positively related to professional turnover intention.	Yes	Yes	

In either the full professional commitment measure estimation of the model or the affective professional commitment component estimation of the model, no significant relationship is evident between certain variables in the model. For example, the results indicate that there is no significant relationship between organisational commitment and professional commitment after a period of workplace exposure in the affective professional commitment component estimation of the model. Similarly, there is no significant relationship between organisational commitment and organisational turnover intention in the full professional commitment measure estimation of the model.

To enable the relationships between the variables in the model estimations to be better understood, the zero-order correlations among the variables were estimated. These correlations are provided in Tables 6.5- 6.6. These correlations show the relationships between the endogenous variables in the model, when relationships between the exogenous variables which are common to the endogenous variable, are not held constant. In the theoretical model, however, the relationships between professional commitment prior to workplace entry, organisational-professional conflict, job satisfaction and organisational commitment as common exogenous variables, are simultaneously held constant in the estimation of their respective relationships with professional commitment after workplace exposure, organisational turnover intention and professional turnover intention. This enables the non-spurious aspects of the relationships among the variables to be identified (Kline 2005).

In addition to estimating the zero-order correlations, four nested models were estimated, each of which excluded (i.e. constrained to zero) professional commitment prior to workplace entry, organisational-professional conflict, job satisfaction and organisational commitment. These models do not represent alternative explanations of the relationships among the variables, but are hypothesis-guided, theoretical re-specifications of the model to test models that are nested within it (Kline 2005). Because more than one exogenous variable was controlled for in the theoretical model, estimation of the nested models enabled the individual relationship between the exogenous variables and the variable of interest to be identified.

The results of the estimations of the nested model in which professional commitment prior to workplace entry has been excluded are presented in Figures 6.14 and 6.15. The results of the estimations of the models in which job satisfaction was excluded are provided in Figures 6.16 to 6.17. The models



estimations results in which organisational commitment was excluded are provided in Figures 6.18 to 6.19 and the results for the models in which organisational-professional conflict was excluded are provided in Figures 6.20 to 6.21

**Table 6.5 Zero-Order Correlations between Overall Professional Commitment at Time One and Remaining Variables**

		Professional Commitment T1	Organisational Professional Conflict	Job Satisfaction	Organisational Commitment	Professional Commitment T 2	Organisational Turnover Intention	Professional Turnover Intention
Overall Professional Commitment T1	Pearson Correlation	1						
Organisational Professional Conflict	Pearson Correlation	-.12	1					
	Sig. (2-tailed)	.16						
Job Satisfaction	Pearson Correlation	.32	-.27	1				
	Sig. (2-tailed)	.00	.00					
Organisational Commitment	Pearson Correlation	.34	-.52	.67	1			
	Sig. (2-tailed)	.00	.00	.00				
Overall Professional Commitment T2	Pearson Correlation	.75	-.11	.46	.46	1		
	Sig. (2-tailed)	.00	.21	.00	.00			
Organisational Turnover Intention	Pearson Correlation	-.36	.38	-.66	-.63	-.48	1	
	Sig. (2-tailed)	.00	.00	.00	.00	.00		
Professional Turnover Intention	Pearson Correlation	-.37	.34	-.59	-.58	-.49	.73	1
	Sig. (2-tailed)	.00	.00	.00	.00	.00	.00	

**Table 6.6 Zero-Order Correlations between Affective Professional Commitment at Time One and Remaining Variables**

		Affective Commitment T1	Organisational Professional Conflict	Job Satisfaction	Organisational Commitment	Affective Commitment T2	Organisational Turnover Intention	Professional Turnover Intention
Affective Commitment T1	Pearson Correlation	1						
Organisational Professional Conflict	Pearson Correlation	-.01	1					
	Sig. (2-tailed)	.91						
Job Satisfaction	Pearson Correlation	.49	-.27	1				
	Sig. (2-tailed)	.00	.00					
Organisational Commitment	Pearson Correlation	.42	-.52	.67	1			
	Sig. (2-tailed)	.00	.00	.00				
Affective Commitment T2	Pearson Correlation	.68	-.11	.66	.48	1		
	Sig. (2-tailed)	.00	.22	.00	.00			
Organisational Turnover Intention	Pearson Correlation	-.38	.38	-.66	-.63	-.53	1	
	Sig. (2-tailed)	.00	.00	.00	.00	.00		
Professional Turnover Intention	Pearson Correlation	-.44	.34	-.59	-.58	-.57	.73	1
	Sig. (2-tailed)	.00	.00	.00	.00	.00	.00	

### **6.3.2.1 Research Question One: What are the relationships between professional commitment, job satisfaction and organisational-professional conflict and organisational commitment?**

#### **Hypothesis 1a: Professional commitment at Time One is significantly and positively related to organisational commitment.**

The results of the full professional commitment measure estimation of the model (see Figure 6.2) indicate that the relationship between professional commitment prior to workplace entry and organisational commitment is not direct, but is entirely mediated by job satisfaction. Therefore, qualified support for Hypothesis 1a is provided in relation to the full professional commitment measure. For the affective professional commitment component estimation of the model (see Figure 6.12), the presence of the small significant direct relationship between affective professional commitment and organisational commitment, as well as its indirect relationship, indicates that the mediation is partial rather than complete (Shrout & Bolger 2002). These findings indicate that only in relation to the component of affective professional commitment is there unqualified support for Hypothesis 1a.

#### **Hypothesis 1b: Professional commitment at Time One is significantly and positively related to job satisfaction.**

In both the full professional commitment measure (see Figure 6.2) and the affective professional commitment component estimations of the theoretical model, there is a significant direct relationship between professional commitment prior to workplace entry and job satisfaction. The relationship is moderate in the full professional commitment measure estimation of the model, but quite strong in the affective professional commitment component estimation of the model. Hypothesis 1b is therefore supported in both estimations of the model.

#### **Hypothesis 1c: Professional commitment at Time One is significantly and positively related to organisational-professional conflict.**

The full professional commitment measure estimation of the model (see Figure 6.2) also shows that there is no significant direct relationship between professional commitment prior to workplace entry and organisational-professional conflict. There is also no significant relationship between affective professional commitment and organisational-professional conflict in the affective professional commitment component estimation of the model. Therefore, Hypothesis 1c is not supported.

**Hypothesis 1d: Organisational-professional conflict is significantly and negatively related to job satisfaction.**

The significant direct path from organisational-professional conflict to job satisfaction in both the full professional commitment measure and the affective professional commitment component estimations of the model indicate that Hypothesis 1d is supported. Both estimations of the model also show that there is a direct relationship between organisational-professional conflict and organisational commitment and that this relationship is also partially mediated by job satisfaction.

**Hypothesis 1e: Organisational-professional conflict is significantly and negatively related to organisational commitment.**

In the full professional commitment measure estimation of the model and the affective professional commitment estimation of the model, organisational-professional conflict is significantly and negatively related to organisational commitment by both direct and indirect paths. Hypothesis 1e is thus supported in both estimations of the model.

**Hypothesis 1f: Job satisfaction is significantly and positively related to organisational commitment.**

Both estimations of the model indicate that job satisfaction is significantly and positively related to organisational commitment, indicating that Hypothesis 1f is supported. The path's significance indicates that the relationship between the job satisfaction and organisational commitment is over and above that which is explained by their common exogenous variables (Kline 2005), and its effect size indicates that the relationship between job satisfaction and organisational commitment is quite strong.

**6.3.2.2 Research Question Two: What are the relationships between exposure to the workplace (in terms of organisational-professional conflict, job satisfaction and organisational commitment) and professional commitment?**

**Hypothesis 2a: Organisational commitment is significantly and positively related to professional commitment at Time Two.**

Both of the model estimations indicate that there is no significant relationship between organisational commitment and professional commitment after a period of workplace exposure. Therefore, Hypothesis 2a is not supported. Inspection of the correlation results (see Tables 6.5 and 6.6) indicates that for both the full professional commitment measure and the affective professional commitment component there is a significant and large zero-order correlation

between organisational commitment and professional commitment after workplace exposure. However, professional commitment after a period of workplace exposure and organisational commitment share three common exogenous variables. Moreover, specification of the path from organisational commitment to professional commitment after a period of workplace exposure allows any non-spurious aspect of the relationship between these two variables to be identified.

Inspection of the nested models for the full professional commitment measure estimation of the model indicates that a significant relationship between organisational commitment and professional commitment after workplace exposure is present in the nested models where either professional commitment prior to workplace entry or job satisfaction is excluded (see Figures 6.14, and 6.15), but not in the nested model in which organisational-professional conflict is excluded (see Figure 6.17). This then indicates that the zero-order correlation found between organisational commitment and professional commitment after a period of workplace exposure is explained by the correlation of each with professional commitment prior to workplace entry and job satisfaction. Thus, when professional commitment prior to workplace entry, and job satisfaction, are both held constant, the relationship between organisational commitment and professional commitment after workplace exposure is spurious.

In the affective professional commitment component estimation of the model, there is no significant relationship between organisational commitment and affective professional commitment after a period of workplace exposure. This is also the case in all of the affective professional commitment component estimations of the nested models (see Figures 6.18, 6.19 and 6.21). Thus this relationship may be seen to be spurious, regardless of which of the relationships between the three common exogenous variables of organisational commitment and affective professional commitment after a period of workplace exposure is held constant.

**Hypothesis 2b: Job satisfaction is significantly and positively related to professional commitment at Time Two.**

The full professional commitment measure estimation of the model indicates that there is no significant relationship between job satisfaction and professional commitment after a period of workplace exposure. However, the affective professional commitment component estimation of the model indicates that job satisfaction has a relationship with affective professional commitment after a period of workplace exposure that is over and above that of the other

common exogenous variables. Hypothesis 2b is supported only in relation to affective professional commitment.

Job satisfaction and professional commitment after workplace exposure have two common exogenous variables in the model. These are professional commitment prior to workplace entry, and organisational-professional conflict. The estimation of the nested model in which professional commitment prior to workplace entry is excluded (see Figure 6.14) shows that when the relationship between professional commitment prior to workplace entry and professional commitment after a period of workplace exposure is not controlled for, there is a small positive indirect relationship between job satisfaction and professional commitment after a period of workplace exposure. In this nested model, the relationship between job satisfaction and professional commitment after a period of workplace exposure is mediated by organisational commitment.

However, in the nested model where organisational-professional conflict is excluded but professional commitment prior to workplace entry is not excluded (see Figure 6.17), the relationship between job satisfaction and professional commitment after a period of workplace exposure is non-significant. Thus it may be seen that the relationship between job satisfaction and professional commitment after a period of workplace exposure is spurious when professional commitment prior to workplace entry is held constant.

With regard to the affective professional commitment component, the strength of the zero-order correlation between job satisfaction and affective professional commitment (see Table 6.12) provides an indication as to why a non-spurious component of this relationship is evident even when the relationships between affective professional commitment prior to workplace entry and organisational-professional conflict are held constant (see Figures 6.12 and 6.21).

**Hypothesis 2c: Organisational-professional conflict is significantly and negatively related to professional commitment at Time Two.**

There is no significant direct relationship between organisational-professional conflict and affective professional commitment after workplace exposure in the affective professional commitment estimation of the model (see Figure 6.12). Therefore, Hypothesis 2c is not supported in the affective professional commitment estimation of the model. However, there is a significant, although small, indirect relationship between organisational-professional conflict and professional commitment after workplace exposure in

the full professional commitment measure estimation of the model (see Figure 6.2).

The zero-order correlations (see Table 6.5) indicate that organisational-professional conflict is not significantly correlated with either professional commitment prior to workplace entry or professional commitment after workplace exposure. However, the presence of the significant indirect relationship between organisational-professional conflict and professional commitment after workplace exposure in the model indicates that a suppression situation is present (MacKinnon, Krull & Lockwood 2000; Tzelgov & Henik 1991). Suppression is the result of correlation between exogenous variables, with the effect that criterion-related variance is removed and the predictive validity of the variable is increased (MacKinnon, Krull & Lockwood 2000; Tzelgov & Henik 1991).

The strength of the indirect relationship between organisational-professional conflict and professional commitment after workplace exposure is slightly increased in the nested model estimation where job satisfaction is not included (see Figure 6.15). The strength of this relationship is doubled in the estimation of the nested model when professional commitment prior to workplace entry is not included (see Figure 6.14), and very small, though significant, in the estimation of the nested model when organisational commitment is not included (see Figure 6.16). The suppression can thus be seen to be largely the result of the correlation between organisational-professional conflict and organisational commitment as exogenous variables of professional commitment after workplace exposure.

However, the strength of the mediated relationship between organisational-professional conflict and professional commitment after a period of workplace exposure, in the estimation of the nested model when professional commitment prior to workplace entry is excluded (see Figure 6.14) indicates that the strength of the suppression relationship is decreased by professional commitment prior to workplace entry. Such a finding provides an indication of the importance of professional commitment prior to workplace entry in understanding this relationship. Qualified support for Hypothesis 2c is therefore provided in the full professional commitment measure estimation of the model.



### **6.3.2.3 Research Question Three: Which of these variables are related to organisational turnover intention?**

#### **Hypothesis 3a: Professional commitment at Time Two is significantly and negatively related to organisational turnover intention.**

There is a significant direct relationship between professional commitment and organisational turnover intention in the full measure of professional commitment estimation of the model. However, the affective professional commitment component estimation of the model indicates that there is no significant direct or indirect effect of the affective component of professional commitment on organisational turnover intention. Therefore, Hypothesis 3a is supported for the full measure of professional commitment but not in the affective professional commitment component model.

In the affective professional commitment measure estimation of the model, affective professional commitment after a period of workplace exposure and organisational turnover intention share a number of common exogenous variables. Inspection of the nested models in which one of the shared exogenous variables is individually excluded from the estimation of the model (see Figures 6.18, 6.19, 6.20 and 6.21), indicates that there is a significant direct negative relationship between affective professional commitment after a period of workplace exposure and organisational turnover intention in only the nested model estimation where job satisfaction is excluded from the estimation (see Figure 6.19). Therefore, job satisfaction is the common exogenous variable that, when held constant, indicates that the relationship with affective professional commitment after a period of workplace exposure and organisational turnover intention is spurious.

#### **Hypothesis 3b: Organisational commitment is significantly and negatively related to organisational turnover intention.**

The relationship between organisational commitment and organisational turnover intention is not significant in the full professional commitment measure model (see Figure 6.2). However, the results of the affective professional commitment component estimation of the model indicate that there is a significant direct relationship between organisational commitment and organisational turnover intention (see Figure 6.12). Therefore, Hypothesis 3b is

supported in the affective professional commitment component estimation of the model but not in the full professional commitment measure model estimation.

In the full professional commitment measure estimation of the model, the relationship between organisational commitment and organisational turnover intention is non-significant. Organisational commitment and organisational turnover intention share job satisfaction and organisational-professional conflict as their common exogenous variables. The relationship between organisational commitment and organisational turnover intention is significant and negative in the nested model estimation when either job satisfaction or organisational-professional conflict is excluded (see Figure 6.15 and 6.17). When organisational-professional conflict is excluded the effect size is moderate and when job satisfaction is excluded the relationship is quite strong. This indicates that when the relationship between both job satisfaction and organisational-professional conflict as common exogenous variables to organisational commitment and organisational turnover intention are held constant, the relationship between organisational commitment and organisational turnover intention is spurious.

In the model from which professional commitment prior to workplace entry has been excluded (see Figure 6.14), the relationship between organisational commitment and organisational turnover intention can be seen to be fully mediated by professional commitment after a period of workplace exposure. This indicates that professional commitment prior to workplace entry also has a role in reducing the strength of the relationship between organisational commitment and organisational turnover intention.

**Hypothesis 3c: Job satisfaction is significantly and negatively related to organisational turnover intention.**

The results of both the full professional commitment measure and the affective professional commitment component model estimations indicate that job satisfaction has a significant direct relationship with organisational turnover intention. Therefore Hypothesis 3c is supported.

Both estimations of the model indicate that there is no significant direct relationship between organisational-professional conflict and organisational turnover intention. However, when job satisfaction is excluded from either the full professional commitment measure or the affective professional commitment component estimation of the model (see Figure 6.15 and 6.19), the relationship between organisational-professional conflict and organisational turnover intention is mediated by organisational commitment.

**Hypothesis 3d: Organisational-professional conflict is significantly and positively related to organisational turnover intention.**

The results of both of the full professional commitment measure and the affective professional commitment component model estimations indicate that the relationship between organisational-professional conflict and organisational turnover intention is significant but indirect. Therefore, qualified support for Hypothesis 3d is provided.

There are three intervening variables in the relationship between organisational-professional conflict and organisational turnover intention. These are job satisfaction, organisational commitment and professional commitment after a period of workplace exposure. In all of the full professional commitment measure nested models estimations (see Figures 6.14, 6.15, 6.16), there are significant direct paths between organisational-professional conflict and the intervening variables and organisational turnover intention. Thus the relationship between organisational-professional conflict and organisational turnover intention can be seen to be mediated by all three intervening variables.

However, in the affective professional commitment component estimations of the nested models (see Figures 6.18, 6.19, 6.20), organisational-professional conflict and organisational turnover intention are linked only by significant direct paths to job satisfaction and organisational commitment. Therefore, in the affective professional commitment component estimation of the model, only job satisfaction and organisational commitment mediate the relationship between organisational-professional conflict and professional turnover intention.

**6.3.2.4 Research Question Four: Which of these variables are related to professional turnover intention?**

**Hypothesis 4a: Professional commitment at Time Two is significantly and negatively related to professional turnover intention.**

The results of the affective professional commitment component estimation of the model indicate that there is a significant and negative direct relationship between affective professional commitment and professional turnover intention. Therefore, Hypothesis 4a is supported in relation to the affective professional commitment component estimation of the model.

In the full professional commitment measure estimation of the model there is a significant negative but indirect relationship between professional commitment after workplace exposure and professional turnover intention.

Therefore, there is qualified support for Hypothesis 4a in the full professional commitment measure estimation of the model.

Organisational turnover intention is modelled as an intervening variable in the relationship between professional commitment after a period of workplace exposure and professional turnover intention. There is a significant direct path from professional commitment after a period of workplace exposure to organisational turnover intention and from organisational turnover intention to professional turnover intention. This, according to the classic Baron and Kenny (1986) method, indicates that the relationship between professional commitment after a period of workplace exposure and professional turnover intention is mediated by organisational turnover intention in the full professional commitment measure estimation of the model (see Figure 6.2).

**Hypothesis 4b: Organisational commitment is significantly and negatively related to professional turnover intention.**

The results of the full professional commitment measure estimation of the model indicate that there is a significant and negative relationship between organisational commitment and professional turnover intention, but that this relationship is indirect. Therefore, there is qualified support for Hypothesis 4b in relation to the full professional commitment measure estimation of the model.

The results of the affective professional commitment estimation of the model indicate that there is no relationship between organisational commitment and professional turnover intention. Therefore Hypothesis 4b is not supported when the model is estimated with the affective component of professional commitment.

There are two intervening variables in the relationship between organisational commitment and professional turnover intention in the theoretical model. These are professional commitment after a period of workplace exposure and organisational turnover intention. However, there is no significant path from organisational commitment to organisational turnover intention; therefore, the mediation relationship is not immediately apparent according to the classic Baron and Kenny (1986) method.

In the estimations of the model, the relationships between certain variables may be obscured by the relationships that they also have with other variables in the model. Inspection of the nested models (see Figures 6.15 and 6.17) reveals that when either job satisfaction or organisational-professional conflict is not included in the model, there is a significant direct relationship between organisational commitment and organisational turnover intention. In the

nested model where job satisfaction is excluded, the paths from organisational commitment to professional commitment after a period of workplace exposure and then to professional turnover intention are also significant and direct. Furthermore, in the nested model where professional commitment prior to workplace entry is not included, there are significant direct paths from organisational commitment to professional commitment after a period of workplace exposure and then to organisational turnover intention and professional turnover intention.

This indicates that organisational turnover intention and professional commitment after a period of workplace exposure both have a role in the mediation of the relationship between organisational commitment and professional turnover intention in the full professional commitment measure estimation of the model. However, as previously discussed in relation to Hypothesis 3b in the estimation of the theoretical model where all variables are included, there is no non-spurious aspect of the relationship between organisational commitment and organisational turnover intention.

The affective professional commitment estimation of the model shows no significant relationship between organisational commitment and professional turnover intention. Inspection of the nested models for this estimation of the model (see Figures 6.18, 6.19, 6.20 and 6.21), indicate that there is no significant path between organisational commitment and professional commitment after a period of workplace exposure in any of the nested models. Thus the relationship between organisational commitment and professional turnover intention is mediated by organisational turnover intention in all of the nested models. However, when the estimation theoretical model is made using the affective professional commitment component, there is no non-spurious aspect of the relationship between organisational turnover intention and professional turnover intention.

**Hypothesis 4c: Job satisfaction is significantly and negatively related to professional turnover intention.**

In both estimations of the model, the relationship between job satisfaction and professional turnover intention is significant and negative but indirect. Therefore, there is qualified support for Hypothesis 4c in both estimations of the model. There are three intervening variables in the relationship between job satisfaction and professional turnover intention. These are organisational commitment professional commitment after a period of workplace exposure and organisational turnover intention. The significant direct paths from job

satisfaction to organisational turnover intention and from organisational turnover intention to professional turnover intention indicate that the relationship is mediated by organisational turnover intention.

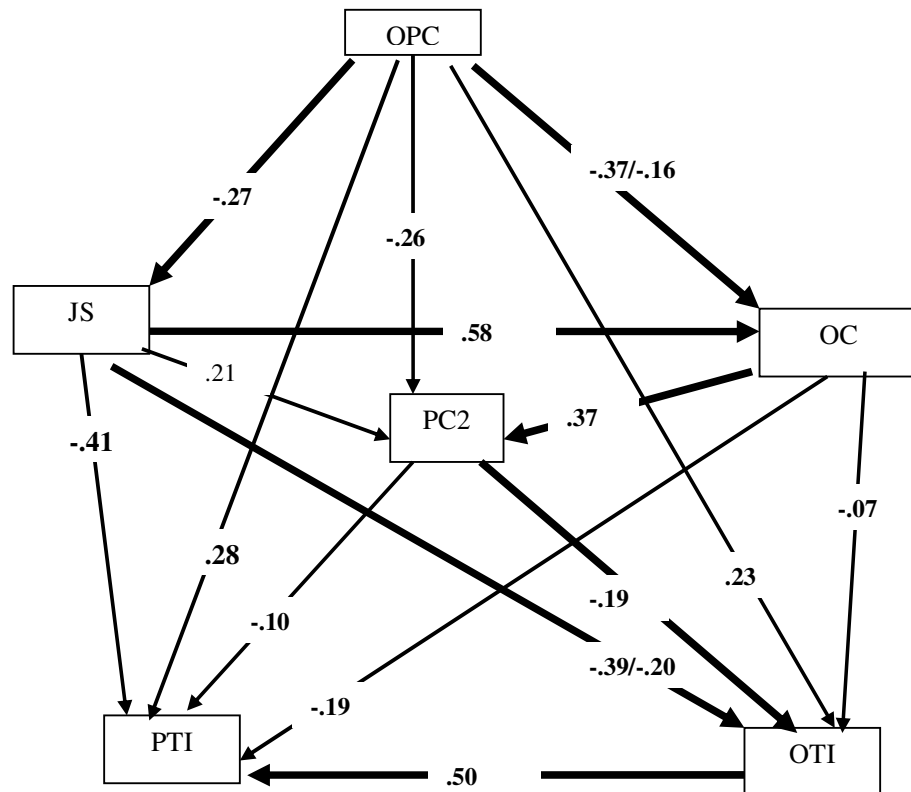
**Hypothesis 4d: Organisational-professional conflict is significantly and positively related to professional turnover intention.**

In both estimations of the model, the relationship between organisational-professional conflict and professional turnover intention is significant and positive but indirect. Therefore, there is qualified support for Hypothesis 4d in both estimations of the model.

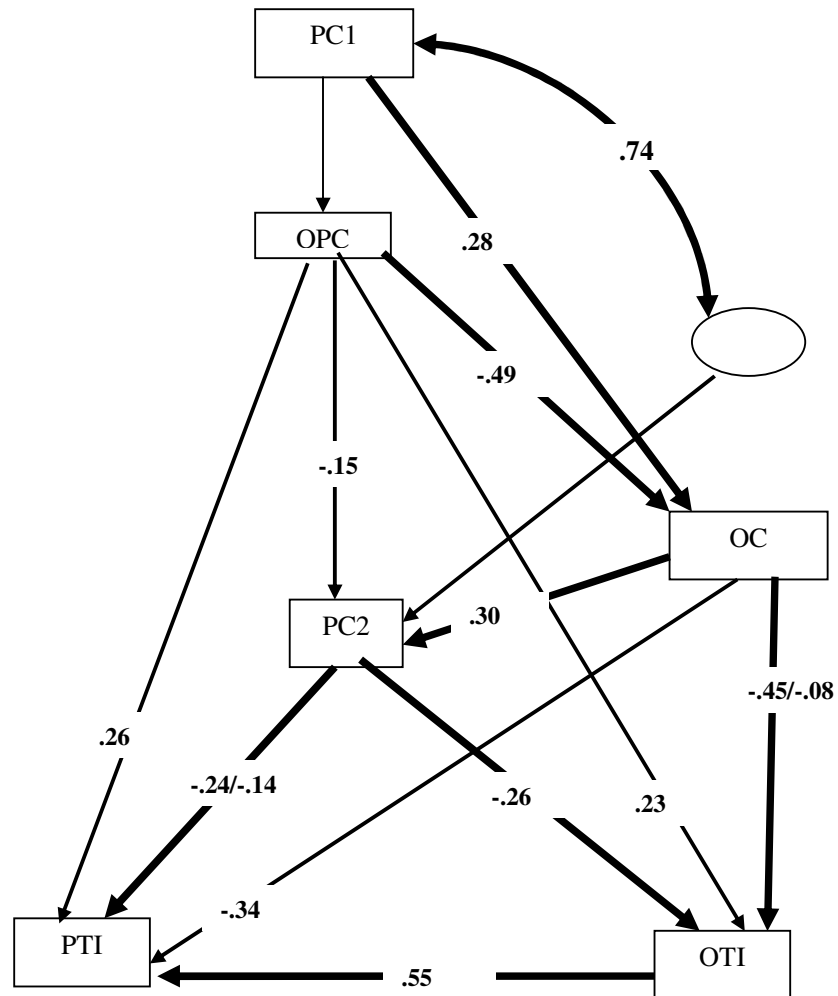
There are four intervening variables in the relationship between organisational-professional conflict and professional turnover intention. Inspection of the nested models, in which professional commitment prior to workplace entry, job satisfaction or organisational commitment are excluded from the estimations, indicates that there are significant direct paths between the intervening variables between organisational-professional conflict and professional turnover intention. Thus each of the intervening variables has a role in the mediation of the relationship between organisational-professional conflict and professional turnover intention in both estimations of the model.

**Hypothesis 4e: Organisational turnover intention is significantly and positively related to professional turnover intention.**

The path from organisational turnover intention to professional turnover intention is significant and positive in both the full professional commitment measure and the affective professional commitment component estimation of the model. This indicates that Hypothesis 4e is supported in both estimations of the model.



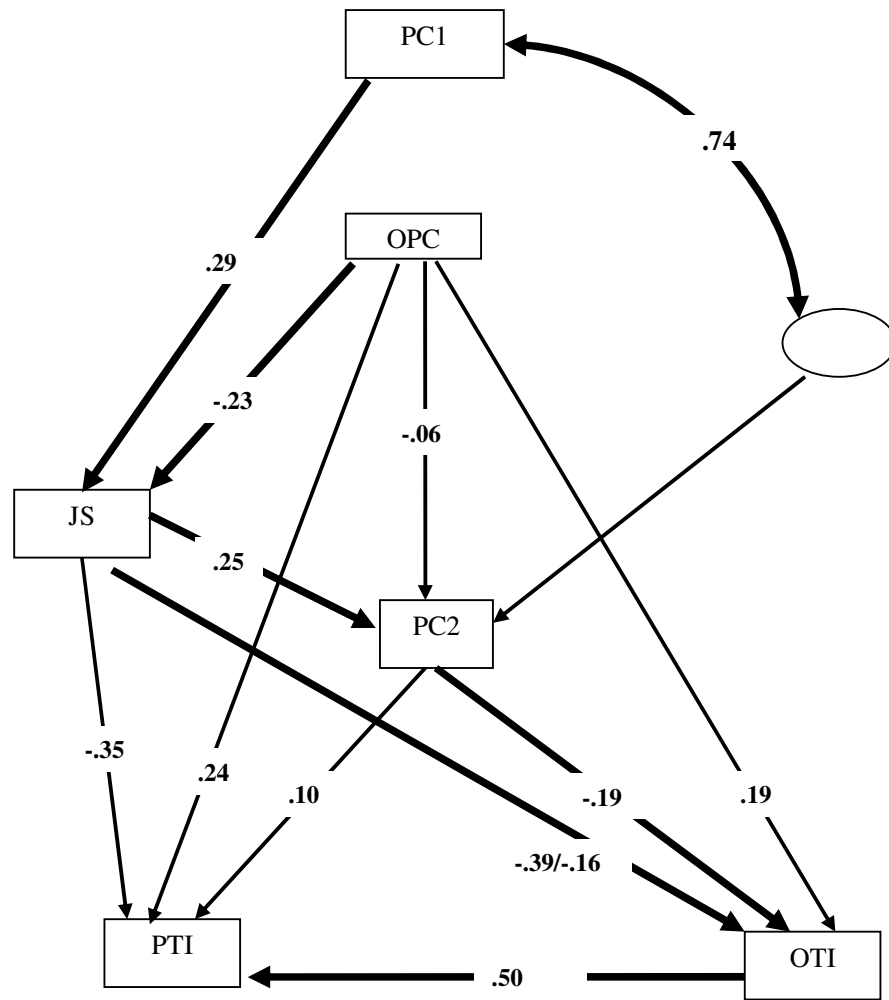
**Figure 6.14 Full Professional Commitment Measure Model with Professional Commitment Prior To Workplace Entry Excluded ( $p < .01$ )**  
 Goodness-of-fit indices  $\chi^2 = 181.77$ ,  $df = 7$ ,  $p = .00$ , CFI = .62, RMSEA = .44



**Figure 6.15 Full Professional Commitment Measure Model with Job Satisfaction Excluded ( $p < .01$ )**

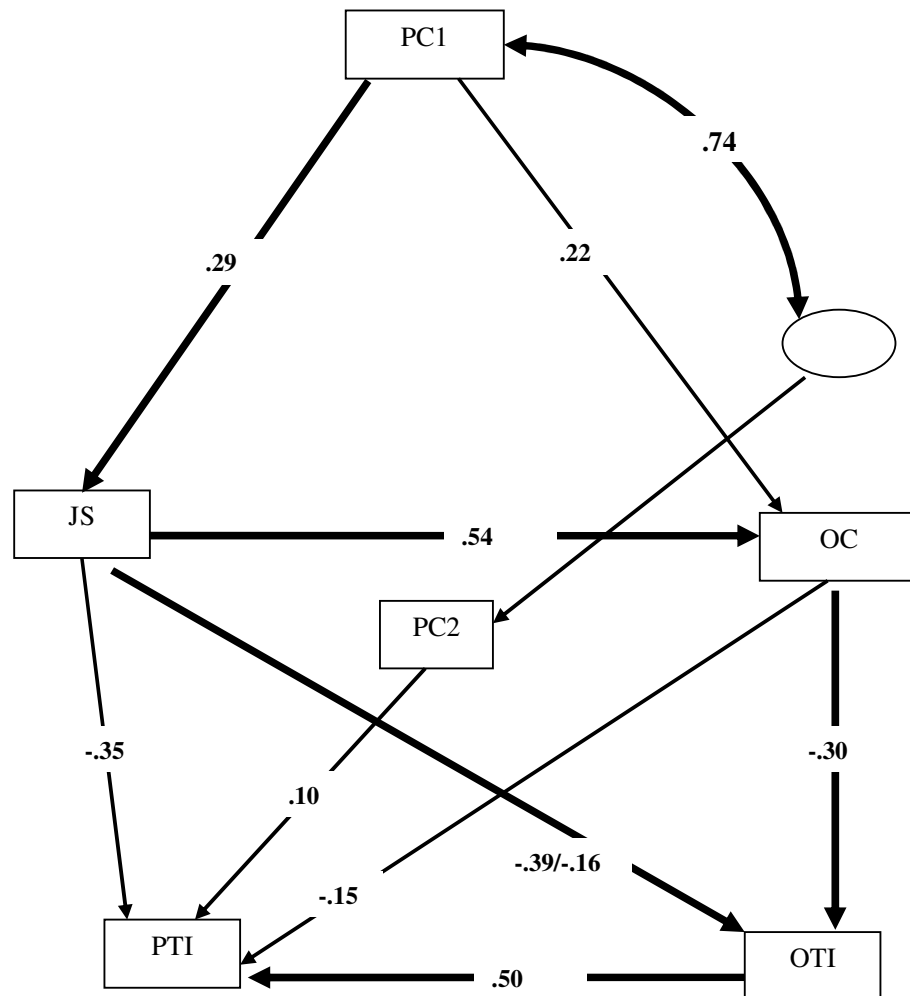
Goodness-of-fit indices  $\chi^2 = 109.92$ ,  $df = 8$ ,  $p = .00$ , CFI = .62, RMSEA = .44



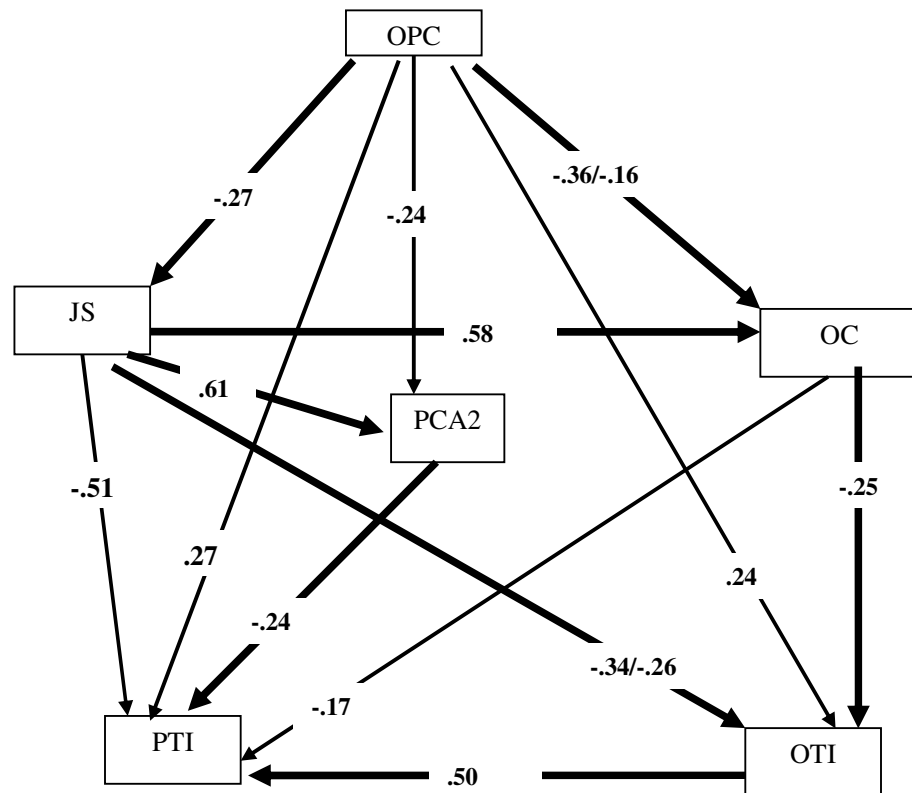


**Figure 6.16 Full Professional Commitment Measure with Organisational Commitment Excluded ( $p < .01$ )**

Goodness-of-fit indices  $\chi^2 = 127.96$ ,  $df = 8$ ,  $p = .00$ , CFI = .74, RMSEA = .34

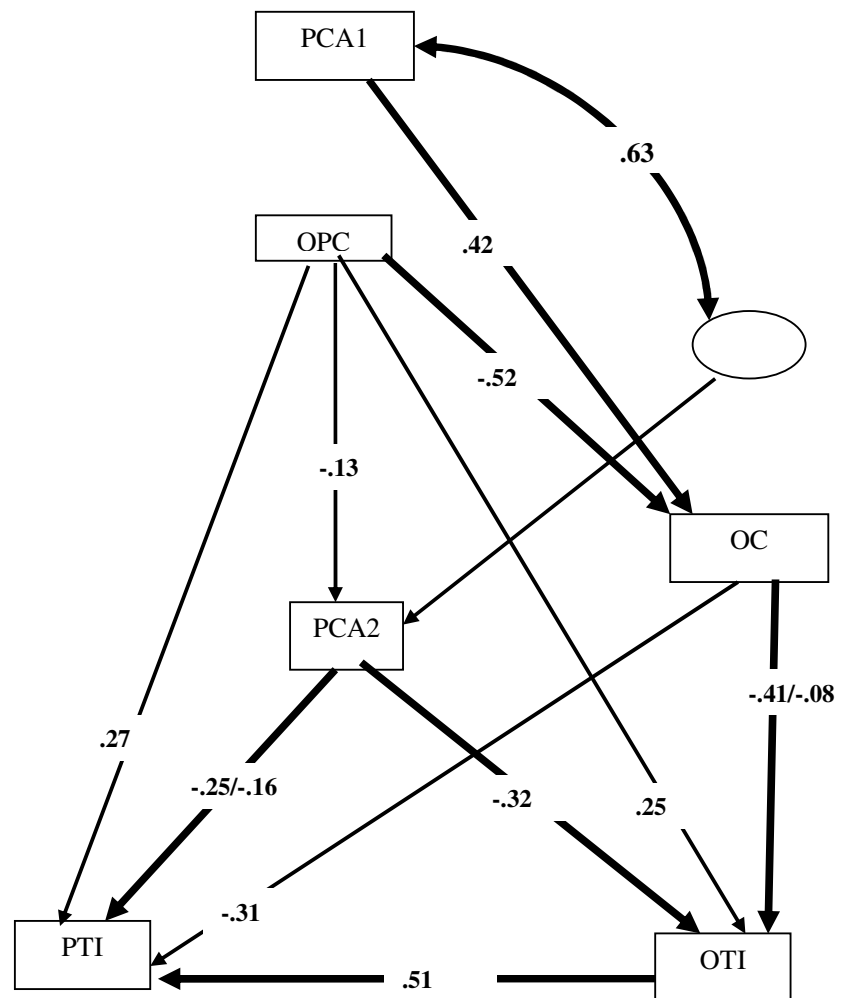


**Figure 6.17 Full Professional Commitment Measure with Organisational-Professional Conflict Excluded ( $p < .01$ )**  
 Goodness-of-fit indices  $\chi^2 = 52.72$ ,  $df = 8$ ,  $p = .00$ , CFI = .90, RMSEA = .21



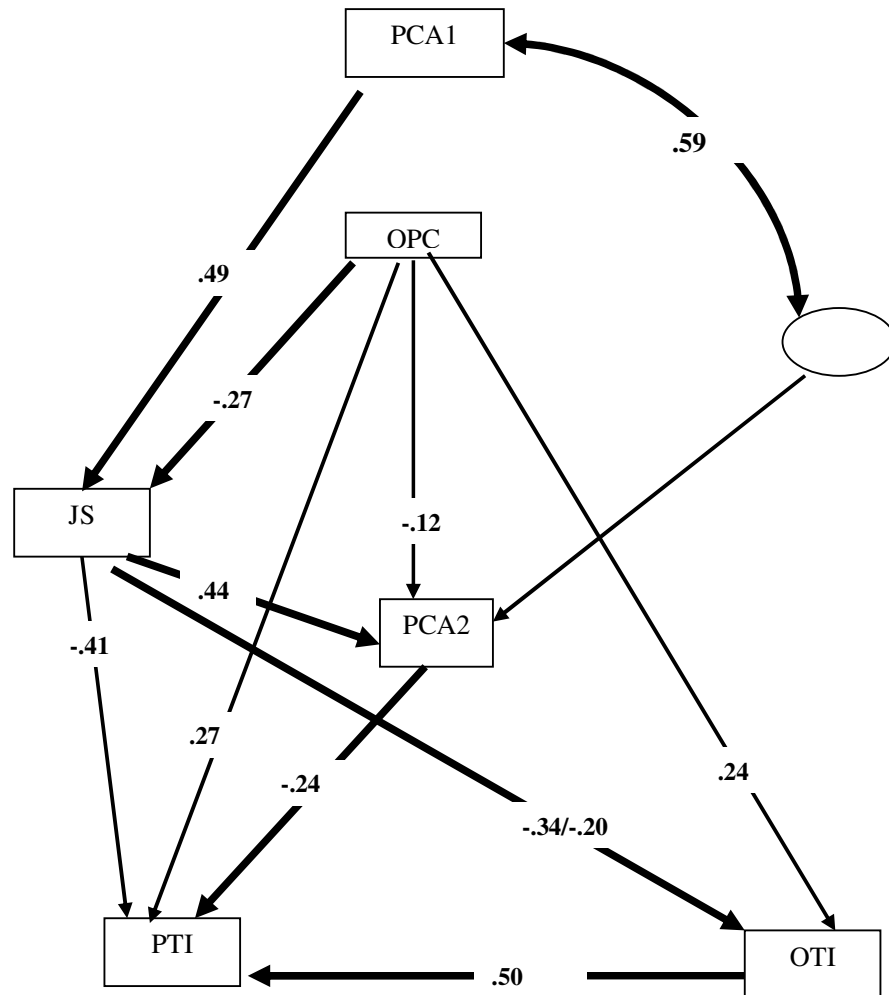
**Figure 6.18 Affective Professional Commitment Component Model with Professional Commitment Prior To Workplace Entry Excluded ( $p < .01$ )**

Goodness-of-fit indices  $\chi^2 = 160.84$ ,  $df = 7$ ,  $p = .00$ , CFI = .68, RMSEA = .41

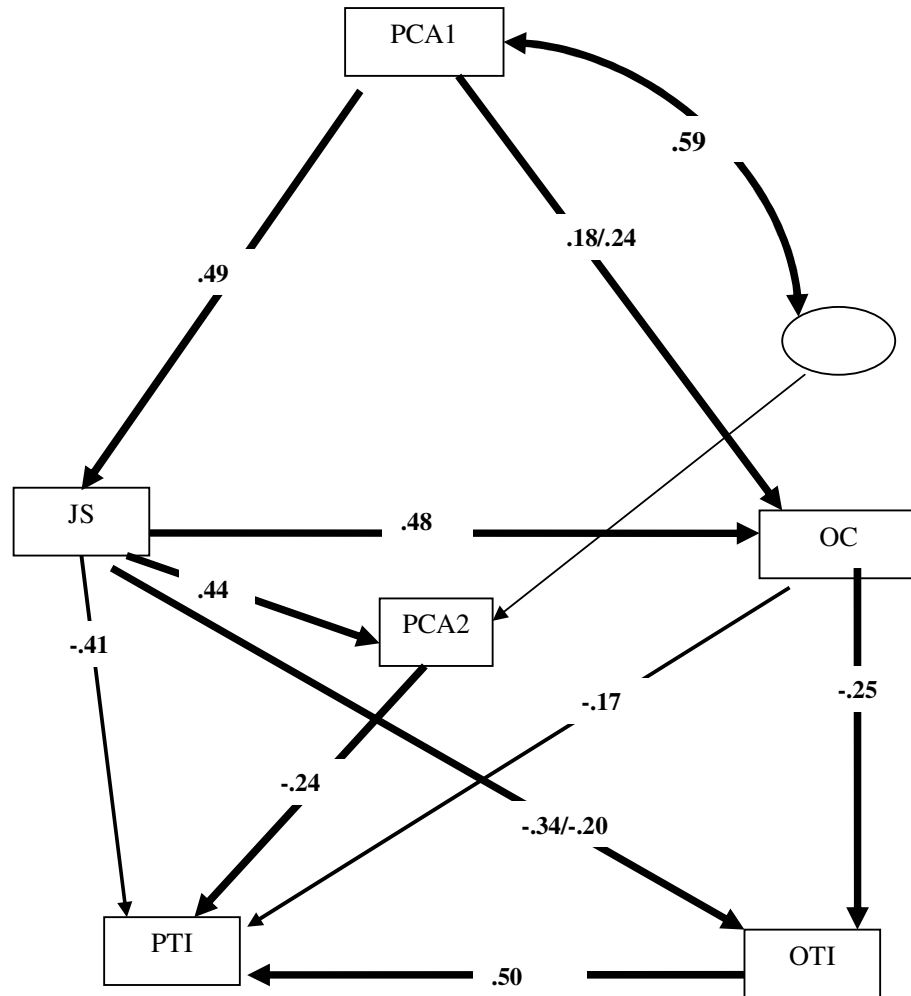


**Figure 6.19 Affective Professional Commitment Component Model with Job Satisfaction Excluded**

Goodness-of-fit indices  $\chi^2 = 133.44$ ,  $df = 8$ ,  $p = .00$ , CFI = .74, RMSEA = .35



**Figure 6.20 Affective Professional Commitment Component Measure Model with Organisational Commitment Excluded ( $p < .01$ )**  
 Goodness-of-fit indices  $\chi^2 = 129.25$ ,  $df = 8$ ,  $p = .00$ , CFI = .74, RMSEA = .34



**Figure 6.21 Affective Professional Commitment Model with Organisational-Professional Conflict Excluded**

Goodness-of-fit indices  $\chi^2 = 57.59$ ,  $df = 8$ ,  $p = .00$ , CFI = .90, RMSEA = .22

## 6.4 Discussion

The key findings of the results of the path analysis are listed here and discussed in detail below. They are that:

1. For professional employees, provision of experiences that are not only personally satisfying and meet employees' personal expectations, but also experiences that are professionally satisfying and meet employees' professional expectations are likely to strengthen the relationship between professional commitment and organisational commitment.
2. Professional commitment is quite stable in the initial period of workplace exposure. The affective component of professional commitment is less stable in the initial period of workplace exposure.
3. Professional employees are more likely to remain with the organisation if the organisation provides them with a satisfying work environment that enables them to practise in a manner that is consistent with the norms and ethics of their profession.
4. If the employing organisation provides them with a satisfying work environment that enables them to practise in a manner that is consistent with the norms and ethics of their profession, professional employees are more likely to remain with the profession.
5. Professional commitment is probably not an antecedent of organisational-professional conflict and it is recommended that professional commitment be modelled as endogenous to organisational-professional conflict in cross-sectional models.
6. Affective professional commitment is sensitive to workplace experiences, but a longer period of workplace exposure may be needed for significant relationships between the individual non-affective components of the Blau (2003) occupational commitment measure and other workplace variables to be apparent.
7. The individual non-affective professional commitment components show few significant relationships with the other workplace variables in the model. However, the full professional commitment measure estimation of the model suggests that the relationships between the affective commitment component, which is the *want to* remain with the profession aspect of professional commitment, and the other variables in the model, are balanced by the *should, ought* or believe that they *have to* remain with the profession.

#### **6.4.1 Relationships between Professional Commitment, Organisational-Professional Conflict, Job Satisfaction and Organisational Commitment**

In research where the relationship between professional commitment and organisational turnover intention is not considered, organisational commitment has been found to have the strongest relationship to organisational turnover intention (Griffeth, Hom & Gaertner 2000). In other research, professional commitment and organisational commitment have been found to be related (Cooper-Hakim & Viswesvaran 2005; Lee, Carswell & Allen 2000) and occupational commitment has also been found to be positively related to organisational turnover intention (Lee, Carswell & Allen 2000). However, Lee, Carswell and Allen (2000) have noted that professional commitment and occupational commitment develop differently. This is because professional commitment may be considered to be an antecedent to organisational commitment, whereas occupational commitment and organisational commitment are more likely to develop concurrently (Beck & Wilson 2001). Vandenberg and Scarpello's (1994) longitudinal study of the relationship between professional commitment and organisational commitment indicated that professional commitment may be considered to be an antecedent to organisational commitment, but, as they identified, no other intervening variables were included in the relationship in their study. Therefore, the process by which this relationship develops is not known, because of the dearth of longitudinal and/or developmental studies of the relationship between professional commitment and organisational commitment.

The results of the theoretical model presented in this research, when estimated using the full measure of professional commitment, indicated that in this sample of professional employees, in the initial period of exposure to the workplace, there is no direct relationship between professional commitment prior to workplace entry and organisational commitment, but that the relationship is fully mediated by job satisfaction. The results also showed that although there is no significant relationship between professional commitment prior to workplace entry and organisational-professional conflict, organisational-professional conflict has a direct significant and negative relationship with organisational commitment, as well as an indirect relationship through its relationship with job satisfaction. Thus organisational-professional conflict, as part of the



organisational experience, has a significant relationship with organisational commitment.

The results therefore suggest that commitment to the organisation is not a direct result of commitment to the profession but is contingent on the work-related experiences that the organisation provides. Importantly, the results indicate that the match between professional and organisational values is an important aspect of the organisational experience. The finding that organisational commitment is contingent on the work-related experiences provided by the organisation is consistent with organisational commitment research which has identified that commitment to the organisation is increased when the organisation provides experiences that are satisfying and are consistent with the employee's personal goals and expectations (Meyer & Allen 1997).

The findings of this research point to the importance of commitment to the profession in the development of organisational commitment for professional employees. The finding that the relationship between professional commitment prior to workplace entry and organisational commitment is entirely mediated by job satisfaction indicates that organisational commitment is not directly related to professional commitment but is contingent on the nature of the experiences provided in the workplace. The finding that organisational-professional conflict has a significant direct relationship with organisational commitment, as well as the significant indirect relationship through job satisfaction, indicates that regardless of the degree of professional commitment prior to workplace entry, a match between the values of the organisation and the profession is important to the job satisfaction, as well as to the organisational commitment, of professional employees. Thus, provision of experiences that are not only personally satisfying and meet employees' personal expectations, but also experiences that are professionally satisfying and meet employees' professional expectations, are likely to strengthen the relationship between professional commitment and organisational commitment.

The affective professional commitment component estimation of the model indicates that there is a small, direct, positive relationship between affective professional commitment prior to workplace entry and organisational commitment, which is also partially mediated by job satisfaction. In this estimation of the model, there is a much stronger positive relationship between affective professional commitment prior to workplace entry and job satisfaction than that found in the full professional commitment measure estimation of the model. There are marginal increases in the strength of the relationships between

organisational-professional conflict, job satisfaction and organisational commitment in this model, as well as a marginal decrease in the strength of the relationship between job satisfaction and organisational commitment. The presence of the partially mediated relationships between affective professional commitment prior to workplace entry and organisational commitment and organisational-professional conflict and organisational commitment, may indicate that these relationships are the result of a moderated mediation situation, where for a portion of the sample, the mediating effect of the intervening variable is related to its level (Shrout & Bolger 2002). The implications of partially mediated relationships are discussed in greater detail in Section 7.6.6 along with recommendations for future research.

The findings of the affective professional commitment component estimation of the model are similar to those of the full professional commitment measure estimation of the model. That is, that the relationship between affective professional commitment prior to workplace entry and organisational commitment is contingent on the workplace experiences provided within the organisation and that these experiences may relate to personal, as well as their professional expectations of the workplace. Importantly, the results of the affective professional commitment component estimation of the model suggest that provision of personally and professionally satisfying experiences are likely to increase the strength of the relationship between affective professional commitment prior to workplace entry and organisational commitment.

#### **6.4.2 Effect of Workplace Exposure on Professional Commitment**

The findings of both the full professional commitment measure and the affective professional commitment component estimations of the theoretical model indicate that in the initial period of workplace exposure, the variable that has the strongest relationship with professional commitment after a period of workplace exposure is professional commitment that was established prior to workplace entry. However, the findings of the full professional commitment measure model estimation provide a somewhat different picture of the relationships among the variables from that provided by the affective professional commitment component model estimation.

In both the full professional commitment measure and the affective professional commitment component estimations of the model, professional commitment after a period of workplace exposure has four common exogenous variables. The relationships between the remaining common exogenous variables

are held constant when the relationship between either of these exogenous variables and professional commitment after a period of workplace exposure is estimated. In the full professional commitment measure estimation of the model, the only relationship that remains significant under these circumstances is an indirect relationship between organisational-professional conflict and professional commitment after a period of workplace exposure.

The results of the full professional commitment measure estimation of the model suggest that professional commitment is quite stable, in the initial period of exposure to the workplace at least. The small, though significant, relationship between organisational-professional conflict and professional commitment after a period of workplace exposure is made so by a suppression situation. According to MacKinnon, Krull and Lockwood (2000), a suppression situation results when the direct relationship between an exogenous variable and an endogenous variable has the opposite sign to the relationship between the intervening variable and the endogenous variable.

When all of the estimations of the model of the full professional commitment measure are examined (that is, the theoretical model estimation, as well as the estimations where one of the variables has been excluded), it may be seen that the relationships between professional commitment, whether prior to workplace entry or after a period of workplace exposure and job satisfaction are positive. The relationships between professional commitment, prior to workplace entry and after a period of workplace exposure and organisational commitment are also positive. On the other hand, the relationships between organisational-professional conflict, job satisfaction and organisational commitment are negative. Thus, when organisational-professional conflict, job satisfaction and organisational commitment are placed as intervening variables in the relationship between professional commitment prior to workplace entry and professional commitment after a period of workplace exposure, the outcome is one of a suppression situation.

In a suppression situation, the correlation between the exogenous variable and the intervening variable has the effect of removing criterion-irrelevant variance and thus the strength of the relationship between the intervening variable and the endogenous variable is increased (Tzelgov & Henik 1991). Therefore, in the model, the suppression situation is explained by the correlation between organisational-professional conflict and one or more of the other variables that are also exogenous to professional commitment after a period of workplace exposure. This correlation has the effect of removing criterion-irrelevant variance

from the relationship between organisational-professional conflict and professional commitment after a period of workplace exposure, and thus the strength size of the path coefficient of this relationship is increased.

Because the strength size of this path remains significant, but varies in size in the all of the nested models, it may be assumed that each of the exogenous variables is making a contribution to the suppression situation. With job satisfaction and organisational commitment both contributing to the suppression situation, the evidence from the model is that lower organisational-professional conflict is associated with higher job satisfaction, as well as higher organisational commitment. In combination, these variables are then related to higher professional commitment after a period of workplace exposure, or the converse. Therefore, although organisational-professional conflict appears to have the only significant relationship with professional commitment after a period of workplace exposure, it is evident, because of the suppression situation, that job satisfaction and organisational commitment are indirectly related to professional commitment after a period of workplace exposure.

On the other hand, the affective professional commitment component estimation of the model indicates that the strength of the relationship between job satisfaction and affective professional commitment after a period of workplace exposure is such that this relationship remains significant when the relationships between the common exogenous variables are held constant. That is, there is an aspect of the relationship between job satisfaction and professional commitment after a period of workplace exposure that is not accounted for by the relationship between job satisfaction and any of the other exogenous variables in the model.

In contrast to the results of the full professional commitment measure estimation of the model, the results of the affective professional commitment component estimation of the model indicate that affective professional commitment after a period of exposure to the workplace is not as stable as the full professional commitment measure and is strongly related to job satisfaction in the initial period of exposure to the workplace. Furthermore, in contrast to the findings of the full professional commitment measure estimation of the model, there is no significant relationship between organisational-professional conflict and affective professional commitment after a period of workplace exposure. Therefore, the indication of this estimation of the model is that only job satisfaction is directly related to affective professional commitment after a period of workplace exposure and organisational-professional conflict and organisational commitment are not.

#### **6.4.3 Factors that are related to Organisational Turnover Intention**

The full professional commitment measure estimation of the model indicates that for professional employees in the initial period of workplace exposure, job satisfaction and professional commitment are the factors that relate to organisational turnover intention, with job satisfaction having the stronger relationship to organisational turnover intention of these two factors. Moreover, this estimation of the theoretical model indicates that organisational commitment does not have any significant relationship with organisational turnover intention.

These findings therefore suggest that in the early period of the workplace exposure, the priority of professional employees' commitment is to the profession rather than to the organisation. If the organisation provides them with a satisfying work environment that enables them to practise in a professional manner that is consistent with the norms and ethics of their profession, they are more likely to remain with the organisation. On the other hand, if the organisation does not provide a satisfying work environment and does not enable them to practise as professionals in a manner that is consistent with the norms and ethics of their profession, then they are more likely to leave the organisation.

Such a finding again emphasises the importance of provision of an organisational environment that is consistent with the expectations that professional employees have with regard to their professional role, as well as the expectations that they have in relation to being able to practise their profession in a manner that is consistent with the ethics and norms of their profession. Where there are workforce shortages of particular professional groups this finding has particular importance to the retention of professional employees in organisations and has implications for their retention in the profession. Although organisational turnover does not directly contribute to workforce shortages, the turnover of professionals from one organisation to another may intensify the perception that there is a workforce shortage if there are difficulties in replacing professional employees. Furthermore, there are organisational costs associated with turnover of employees. More detailed discussion of the costs of organisational turnover to organisations in relation to nursing professionals is provided in Appendix 1.

The affective professional commitment estimation of the model indicated that job satisfaction and organisational commitment are related to organisational turnover intention, but that professional commitment is not. This estimation of the model also indicated a strong relationship between affective professional commitment prior to workplace entry and job satisfaction. It also indicated that

job satisfaction was directly related to affective professional commitment after a period of workplace exposure. The findings of the affective professional commitment component estimation of the model in relation to organisational turnover intention therefore suggest that affective professional commitment or the *want to* component of professional commitment is more sensitive to workplace experiences than the other components of professional commitment. This is consistent with other research findings in relation to affective professional commitment and may be a reflection of the broader definition of affective professional commitment in comparison with the other components (Meyer & Herscovitch 2001). Suggested refinements to the measurement of professional commitment by improvements to the operationalisation of the affective professional commitment component are discussed in Chapter Seven, Section 7.6.1.

In both the full professional commitment measure and the affective professional commitment component estimations of the model, the relationship between job satisfaction and organisational turnover intention is partially mediated. This may indicate that this relationship is the result of a moderated mediation situation, where, for a portion of the sample, the mediating effect of the intervening variable is related to its level (Shrout & Bolger 2002). The implications of partially mediated relationships are discussed in greater detail in Section. 7.6.6 together with recommendations for future research.

#### **6.4.4 Factors that are Related to Professional Turnover Intention**

The full professional commitment measure estimation of the theoretical model indicates that in this early period of exposure to the workplace, the only direct relationship between professional turnover intention and any its exogenous variables, is the relationship with organisational turnover intention. Therefore, for the full professional commitment measure estimation of the model, organisational turnover intention fully mediates the relationships between organisational-professional conflict, job satisfaction, organisational commitment, professional commitment after a period of workplace exposure and professional turnover intention. This finding emphasises the finding that provision of a workplace environment that is both personally and professionally satisfying to the professional employee is likely to increase their retention in the organisation. In addition, it indicates that this is likely to also increase retention within the profession.

In the affective professional commitment estimation of the model, affective professional commitment has a direct relationship with professional turnover intention rather than with organisational turnover intention. Importantly, the model indicates that there is a direct relationship between job satisfaction and affective professional commitment after a period of workplace exposure. This model therefore indicates that when only the affective component of professional commitment is considered, the organisational environment not only directly relates to the intention of professional employees to remain in the organisation, but also directly relates to their intention to remain in the profession.

#### **6.4.5 Relationship between Professional Commitment, Organisational-Professional Conflict, Organisational Turnover Intention and Professional Turnover Intention**

The significant negative relationship between professional commitment after a period of workplace exposure and organisational turnover intention, indicates that the relationship between organisational-professional conflict and professional commitment after a period of workplace exposure that is the result of the suppression situation, then becomes directly associated with intention to leave the organisation. Organisational turnover intention is also directly related to intention to leave the profession. Thus it may be seen that although organisational-professional conflict does not relate directly to either organisational or professional turnover intention, it has the effect of bringing the relationships between professional commitment, job satisfaction and organisational commitment into sharper focus.

In their cross-sectional samples Bamber and Iyer (2002) found no significant relationship between professional identification and organisational-professional conflict. Furthermore, Shafer, Park and Liao (2002) found a small significant positive relationship between dedication to the profession, as well as the extent to which professional employees felt free to make decisions about their work, and organisational-professional conflict. Furthermore, Meyer, Allen and Topolnysky (1998) suggested that employees with higher levels of commitment to their profession would be more likely to be at odds with their employing organisation in relation to professional ethics, procedures or practices.

The results of the theoretical model have indicated that for this sample, there is no significant relationship between professional commitment prior to workplace entry and organisational-professional conflict. However, the relationships between organisational-professional conflict, job satisfaction and

organisational commitment indicate that organisational-professional conflict is of importance to professional employees. Furthermore, the small, though significant, relationship between organisational-professional conflict and professional commitment after a period of workplace exposure that is the result of a suppression situation involving organisational commitment, suggests that professional commitment may be indirectly related to organisational-professional conflict, job satisfaction and organisational commitment.

The results suggest (assuming these findings were to be replicated in future research involving samples of other professional groups) that it would be reasonable to argue that professional commitment, when used in cross-sectional studies, should be considered to be an endogenous variable in relation to organisational-professional conflict, rather than an exogenous variable.

#### **6.4.6 Findings in Relation to the Components of Commitment**

While the Meyer and Allen (1997) three-component model of commitment has been widely applied to several targets of work-related commitment, which include commitment to professional and non-professional occupations (e.g. Snape & Redman 2003; Stinglhamber, Bentein & Vandenberghe 2002; Swailes 2002; Vandenberghe et al. 2001), the Blau (2003) occupational commitment measure has not yet been widely tested. In addition, in relation to occupational commitment, all of the research involving either the three-component or five-component conceptualisations of the nature of commitment to professional and non-professional occupations has been cross-sectional in nature. This is regardless of whether the occupational commitment is in relation to professional or non-professional occupations. Therefore, the findings of such research, which is about the relationship between occupational commitment and organisational commitment, may differ from the results of this research because of matters that relate to research design. However, there are some findings of this research in relation to the components of commitment that make a contribution to theory in relation to the components of commitment, particularly in relation to professional commitment.

The findings of this research indicate that in the early period of exposure to the workplace, when considered individually, the normative and investment costs commitment components of professional commitment have no significant direct relationship with the other work-related outcomes included in the model. Furthermore, the findings indicate that the emotional costs commitment and limited alternatives commitment components prior to workplace entry have



significant direct relationships with job satisfaction, but not with any of the other variables in the model. In contrast, the affective commitment component prior to workplace entry has significant direct relationships with job satisfaction and organisational commitment. Moreover, there is a significant and direct relationship between job satisfaction and affective professional commitment after a period of workplace exposure, as well as between affective professional commitment after a period of workplace exposure and professional turnover intention.

In relation to the investment costs commitment, emotional costs commitment and limited alternatives commitment components, such findings may be expected in the early period of workplace exposure, as these are components of commitment that are related to the costs of discontinuing association with the profession, many of the antecedents of which are assumed to accumulate over time (Meyer & Allen 1997). Despite the period of at least three years of exposure to the profession that has preceded organisational entry, it is possible that a longer period of time is required for these components of commitment to be significantly related to other work-related outcomes.

In contrast, normative commitment is considered to be related to an individual's primary socialisation (Meyer & Allen 1997) and it might therefore be expected that the normative component of commitment would be significantly related to other work-related outcomes in the model. On the other hand, the lack of relationship between the normative commitment component of professional commitment and other work-related outcomes may be a reflection of attitude shift of generational groups (Hart 2006) that do not have such a strong belief in behaviour based on an attitude of *ought to*. Longer term longitudinal research is needed to confirm or refute the significance of the relationships between these components of professional commitment and other work-related outcomes.

The results of the affective professional commitment component estimation of the model show that affective professional commitment is significantly related to a number of the work-related outcomes in the model. This is consistent with previous research findings in relation to affective commitment, whether the target of commitment is to the organisation or to the profession (Blau 2003; Meyer, Allen & Smith 1993; Meyer & Herscovitch 2001).

In relation to affective commitment Meyer and Herscovitch (2001) identify that:

...any personal or situational variable that contributes to the likelihood that an individual will (a) become involved (intrinsically motivated, absorbed) in a course of action, (b) recognise the value-relevance of association with an entity or pursuit of a course of action, and/or (c) derive his or her identity from association with an entity, or from working towards an objective, will contribute to the development of affective commitment. (Meyer & Herscovitch 2001, p. 316)

Meyer and Herscovitch (2001) consider that affective commitment is not as narrowly defined or operationalised as the non-affective commitment components and for this reason may be related to a wider range of work-related outcomes. They also note, however, that in contrast to expectations, affective commitment is more strongly related to turnover intention and turnover than other components of commitment. Meyer and Herscovitch (2001) reason that if continued employment is the focal behaviour of the target of commitment, then the normative commitment and continuance commitment components should be more strongly related to turnover intention and turnover than the affective commitment component.

However, when the operationalisation of the component is considered, the affective commitment component may be considered to be poorly operationalised in relation to its definition. It may be argued that the items used in the measurement of the affective professional commitment component reflect a greater emphasis on matters relating to derivation of identity by association with the entity in the operationalisation of the component and little emphasis on the aspects of the definition of affective professional commitment that relate to involvement through intrinsic motivation or recognition of the value-relevance of association with the entity. The items of the affective commitment component for the Blau (2003) occupational commitment measure and the Meyer, Allen and Smith (1993) occupational commitment measure are virtually identical. The items used to measure the affective professional commitment component were adapted from Blau (2003) and are listed below.

**The Measurement Items of the Affective Professional Commitment Component**

1. Nursing\* is important to my self-image.
2. I am happy that I have entered the nursing\* profession.
3. I am proud to be a nurse\*.
4. I like being a nurse\*.
5. I strongly identify with the profession of nursing\*.
6. I am enthusiastic about nursing\*.

\* or profession of interest to the research

The operationalisation of the affective professional commitment component may be more consistent with the earlier definition in relation to the affective commitment component of organisational commitment given by Meyer and Allen (1997). According to Meyer and Allen (1997, p. 11), affective commitment is 'the employee's emotional attachment to, identification with, and involvement in the organisation', which was shown by Meyer, Allen and Smith (1993) to be able to be adapted to the measurement of professional commitment. However, Meyer and Herscovitch (2001) have progressed the conceptual development of the construct since 1993/1997 and a new operationalisation of the construct may be necessary to reflect that conceptual development.

While the definition of the affective commitment component includes involvement at a level of intrinsic motivation, as well as the value relevance of association with the target, the operationalisation of the component relates largely to identification with the commitment target. In contrast to the narrower definitions of the non-affective components of commitment, the affective component of commitment has a broader definition and the current operationalisation of affective professional commitment does not fully reflect all of the aspects of its definition. It is therefore argued that improvements to the operationalisation of the affective commitment component are needed. This is discussed further in the section relating to future research (see Section 7.6).

**6.4.7 Relationships between the Components of Professional Commitment and Model Variables**

The multi-component modelling of professional commitment argues that commitment to a work-related target is a psychological state that is characterised by several factors rather than just one (Meyer & Allen 1997). Moreover,

understanding the combined, as well as the individual effects of the components of professional commitment, is considered to provide a more comprehensive understanding of the relationship between professional commitment and other work-related outcomes (Blau 2003; Meyer, Allen & Smith 1993). When measured by any one of the individual non-affective components of commitment, professional commitment had no direct significant relationship with either organisational commitment or organisational turnover intention. Furthermore, only the emotional costs commitment and the limited alternatives commitment components show any relationship with any of the other variables in the model.

The non-affective components of professional commitment, when individually considered, appeared to have no relationship or limited relationships with variables in the model. However, the results of the full professional commitment measure estimation of the model suggested that in this early stage of professional employees' exposure to the workplace, the relationships between the *want to* remain with the profession component of professional commitment, is balanced by the *should, ought* or believe that they *have to* remain with the profession components of professional commitment. That is, the initial period of exposure to the workplace may have a significant effect on the affective commitment of professional employees, which may then have implications for professional turnover intention. However, the combined effect of the affective commitment and the non-affective components of professional commitment is that professional commitment is related to intention to leave the organisation, not organisational commitment. Intention to leave the organisation is then strongly related to intention to leave the profession. The importance of the combined components of professional commitment in the modelling of the organisational, as well as the professional turnover intentions among professional employees, thus becomes evident.

How the balance between affective and non-affective professional commitment components is changed by further exposure to the workplace, and the implications that any changes in this balance may have for organisational turnover intention and professional turnover intention, should be the subject of future longitudinal research. The early indication given by the means of the professional commitment components (see Section 5.4.3) was that the mean of the affective professional commitment component had decreased and the means of all other components had increased. Paired-samples *t*-tests indicated that at this early stage, the only significant differences between the Time One and Time Two measurements were for the affective professional commitment component and the

limited alternatives commitment component. Whether the balance between the components continues to alter over time or stabilises, and how the balance between the components then affects organisational commitment, organisational turnover intention and professional turnover intention, should be an important focus of future research in this area.

## 6.5 Conclusion

In this research, a theoretical model has been evaluated. This theoretical model specified proposed relationships between professional commitment that is developed prior to workplace entry and organisational-professional conflict, job satisfaction and organisational commitment. It also specified the subsequent relationships of these variables to professional commitment after a period of workplace exposure, organisational turnover intention and professional turnover intention. The sample with which the model was evaluated was comprised of 131 nursing professionals who had entered the workplace for the first time as graduates from their professional preparation. The professional commitment of the participants was measured prior to or very soon after they had entered the workplace and again after a period of exposure to the workplace. The period of workplace exposure was measured in terms of the time that they had been with their current employing organisation. For most participants the minimum period of time that they had been with their current employing organisation was three months. For all participants, the maximum period of time that they had been with their current employing organisation in their role as a fully qualified nursing professional was less than eight months. At the same time as the professional commitment of participants after a period of exposure to the workplace was measured, organisational-professional conflict, job satisfaction and organisational commitment, as well as organisational turnover intention and professional turnover intention were measured.

Four major research questions were considered in relation to the theoretical model. These were:

1. What are the relationships between professional commitment, job satisfaction and organisational-professional conflict and organisational commitment?
2. How does exposure to the workplace (in terms of organisational-professional conflict, job satisfaction and organisational commitment) affect professional commitment?
3. Which are the factors that influence organisational turnover intention?
4. Which are the factors that influence professional turnover intention?

The model was estimated using the full professional commitment measure, as well as the individual components of professional commitment. The goodness-of-fit indices of the proposed model showed that in all of its estimations it had close fit to the observed covariance matrix (Ho 2000), with the best fit evident in the full professional commitment measure estimation. The results of all estimations of the model were considered, but only the results of the full professional commitment measure and the affective professional commitment component estimations of the model were considered in detail, because these provided the most useful information at this point in time.

The findings of the full professional commitment measure estimation of the model indicate that professional commitment prior to workplace entry is quite stable in the initial period of workplace exposure. Furthermore, the findings indicate that professional commitment prior to workplace entry is not directly related to organisational commitment, but that this relationship is contingent on job satisfaction and the match between professional and organisational values.

The findings of the full professional commitment measure estimation of the model also indicate that the workplace variables of job satisfaction and organisational commitment have no significant direct relationship with professional commitment after a period of workplace exposure. However, the small relationship between organisational-professional conflict and professional commitment after a period of workplace exposure is made significant by a suppression situation. That is, its correlation between professional commitment prior to workplace entry, job satisfaction and organisational commitment and organisational-professional conflict removes criterion-related variance and thus increases the strength of the indirect effect of organisational-professional conflict. Moreover, when the combined components of professional commitment are considered in the full professional commitment measure, it is job satisfaction and professional commitment that relate to intention to leave the organisation, but not organisational commitment. Furthermore, the findings of this estimation of the model indicate that the only variable that has a direct relationship with professional turnover intention is organisational turnover intention.

The affective professional commitment component estimation of the model shows somewhat different relationships between the variables from that of the full professional commitment measure estimation of the model. As well as the partially mediated relationship between organisational-professional conflict and organisational commitment that was evident in the full professional commitment measure estimation of the model, this estimation of the model indicates that

affective professional commitment prior to workplace entry has a direct, as well as indirect (mediated by job satisfaction) relationship with organisational commitment. Furthermore, the affective professional commitment component estimation of the model indicates that job satisfaction and organisational commitment are related to organisational turnover intention. It also shows that affective professional commitment after a period of workplace exposure and organisational turnover intention are significantly related to professional turnover intention.

The evidence provided in this research is that in relation to this sample, intention to leave or stay in the profession is less related to the professional commitment that graduates had when entering the workplace, and more to the quality of the organisational experience itself. Therefore, in order to ensure that professionals are retained in the profession, as well as in employing organisations, it is essential that the organisations provide work-related experiences that are both personally and professionally satisfying.

The findings of the research indicated that there is no direct relationship between professional commitment prior to workplace entry and organisational-professional conflict, but that organisational-professional conflict is directly related to job satisfaction and organisational commitment, as well as indirectly related to professional commitment after a period of workplace exposure. Therefore, it is argued that professional commitment may not be an antecedent to organisational-professional conflict but that the organisational-professional conflict may have a bearing on professional commitment. On the basis of the findings of this research, it is recommended that professional commitment be considered to be an endogenous variable in relation to organisational-professional conflict in cross-sectional studies.

The findings of the research indicated that when considered individually, the non-affective components of professional commitment had limited relationships with the other variables in the model. Longitudinal research is recommended in order to discover if and/or how the relationships between these components of professional commitment and the other variables in the model develop over time. Moreover, the differences found between the full professional commitment measure estimation of the model and the affective professional commitment component estimation of the model suggest that in combination, the non-affective components of professional commitment create a balance between the *want to* remain with the profession aspect of professional commitment and the *should, ought or have to* remain with the profession aspects of professional



commitment. Longitudinal research that is conducted over a longer period of time is needed in order to discover whether the balance between the components of professional commitment changes over time.

This chapter has reported and discussed the results of the evaluation of the theoretical model. Chapter Seven discusses the overall findings of the research. It also discusses the implications for theory, as well as policy and practice and makes recommendations for future research.

## **7 Discussion, Implications and Conclusions**

Chapters Five and Six of this thesis provided the results of the statistical analyses of the research together with the findings of each type of analysis. Chapter Five reported the results of the examination of the factor structure of the Blau (2003) occupational commitment measure using confirmatory factor analysis. It also reported the results of the pre-and-post workplace entry levels of professional commitment and its components in the repeated measures sample. Chapter Six provided the results of the evaluation of the theoretical model using path analysis. The findings of each type of analysis were discussed in each chapter. Chapter Seven identifies the contributions of this thesis to the literature and discusses the implications of the research for theory, policy and practice, as well as recommendations for future research.

### **7.1 Introduction**

There are workforce shortages within a number of professions in Australia (DEWR 2004). The reasons for the shortages are many, but contributing to the shortages is the movement of qualified workers from one skilled occupation to another occupation (DEST 2002). Little is known of the reasons that surround intention to leave one professional occupation to work in another. It is a topic that has received limited research attention (Blau & Lunz 1998; Blau, Tatum & Ward-Cook 2003; Sullivan 1999).

A review of the recent research relating to professions and professional turnover intention indicates that occupational commitment has been consistently identified as having the strongest relationship with intent to change occupations (Blau 2000; Cohen 1998; Lee, Carswell & Allen 2000). The literature in relation to the professions indicates that there are at least three key differences between professional and non-professional occupations and that these differences may affect the relationship that professionals have to their professional occupation. These key differences relate to the legal implications surrounding professional membership, the socialisation to the profession that occurs prior to workplace entry and the service orientation of professionals. However, the occupational commitment literature does not always make a clear distinction between professional and non-professional occupations. It therefore does not account for the differences between the relationship that members of professional occupations

have to their occupation and the relationship that members of non-professional occupations have to their occupation.

The legal implications that surround membership of a profession introduce the professional association as a third party in the 'psychological contract' of employment (Rousseau 2001) for professional employees. The 'psychological contract' for non-professional employees is metaphoric (Guest 2004). It has no legal implications. For professional employees the legal implications of the relationship with the professional association are very real. This is because the relevant professional association has the State delegated responsibility to define many critical features of the work that a professional employee may be required to perform in the organisation, as well as defining the code of ethical practice, overall practice standards and monitoring the performance of professional employees in relation to their practice and ethical standards (Neal & Morgan 2000).

The socialisation of professional employees to the profession that occurs prior to workplace entry means that the process of the development of commitment to the organisation occurs differently for professional employees and non-professional employees (Beck & Wilson 2001). Commitment to the occupation has been shown to be related to several work-related outcomes, which include organisational commitment and job satisfaction (Irving, Coleman & Cooper 1997; Meyer, Allen & Smith 1993), as well as organisational turnover intention and occupational turnover intention (Lee, Carswell & Allen 2000). In addition, the associations between occupational commitment and occupational turnover intention, as well as occupational commitment and organisational turnover intention are stronger for professional employees than for non-professional employees (Lee, Carswell & Allen 2000).

In today's economy, the operation of the organisations in which professionals are employed is also likely to be based on market or quasi-market principles. This is attributable to changes that have been made to the operating principles of public sector organisations that have traditionally been the employers of professionals (Bunderson 2001; Exworthy & Halford 1999a; Hanlon 1997), the corporatisation of professional services (Kritzer 1999), and the increasing tendency for private sector organisations to include professionals among their employees (Hanlon 1997).

The profit-based focus held by the many organisations in which professionals may be employed is different from the service orientation of professionals (Friedson 2001). Organisations, driven by the economic imperatives

of profit-maximisation or cost containment, may, in pursuit of these organisational goals, pressure professional employees to constrain their work standards and practice in order to best achieve organisational goals (Shafer 2002). This may place professional employees in the position where there is conflict between organisational and professional values, such that they have difficulty in meeting the requirements of their employing organisation, as well as meeting the standards of work and ethical practice that are an inherent requirement of their professional membership. As discussed in Section 2.5, research into 'organisational-professional conflict' indicates that it has a negative association with job satisfaction and organisational commitment and is positively associated with organisational turnover intention (Bamber & Iyer 2002; Shafer, Park & Liao 2002).

A review of the literature relating to the extant theory and practice in relation to organisational behaviour indicates that such research tends to position commitment to the organisation as the primary work-related commitment to which all other work-related commitments are directed (Brooks & Wallace 2006; Gallagher & Parks 2001). However, this may no longer be the case. For example, mutual employee-organisation loyalty, which is central to the concept of organisational commitment, has over recent years been transformed by restructuring and 'down-sizing' of organisations, and more recently, by outsourcing of work (Meyer, Allen & Topolnytsky 1998). In response to these changes, a number of authors have argued that the focus of employee loyalty may be shifting from the organisation to the occupation (e.g. Lee, Carswell & Allen 2000; Meyer, Allen & Topolnytsky 1998; Mir, Mir & Mosca 2002).

If the focus of employee loyalty is shifting from the organisation to the occupation, then there is a need to re-theorise the organisation-employee relationship and to develop research and theory to inform appropriate practice within organisations. Moreover, since members of professional occupations are increasingly working as employees of organisations that are non-professional, (See Section 2.4.1) there is a need for new research, from which theory may be developed to inform practice, as to how professional employees may be appropriately managed to promote their retention within non-professional organisations, as well as within the profession.

Several gaps in the knowledge relating to the movement of professionals from their professional occupation to another occupation were identified in the review of the literature. These gaps in the knowledge were identified as being attributable to

- The limited amount of recent research in relation to professional turnover intention
- Inadequate clarity in the distinction between professional and non-professional occupations in the extant research
- The dearth of longitudinal or developmental research in relation to professional commitment
- The lack of research in relation to the effect that exposure to the workplace, where there may be conflict between the values of the profession and the organisation, may have on the commitment of professional employees

This research has developed and evaluated a theoretical model of the relationships between professional commitment prior to workplace entry, organisational-professional conflict, job satisfaction, organisational commitment and professional commitment after a period of workplace exposure. The model also includes the relationships between these variables and organisational, as well as professional turnover intention.

Because of the differences between professional occupations and non-professional occupations that were identified in the literature review, sample selection procedures were followed to ensure that only members of a professional occupation were included. This was to ensure that professional commitment, as distinct from occupational commitment, was studied in the research. Nursing professionals were chosen as the profession of interest for the study not only because there is a worldwide workforce shortage of nurses, but because many of the factors relating to professional commitment and professional turnover intention that were identified in the literature review are particularly relevant to the profession of nursing.

The research had a repeated measures survey design. The pre-workplace entry and post-workplace exposure levels of professional commitment of the sample were measured using the Blau (2003) occupational commitment measure. The research examined the relationship between professional commitment and organisational commitment from a developmental perspective. Organisational turnover intention was included in the model because of the connection between organisational turnover intention and intention to leave the profession. Organisational-professional conflict, job satisfaction and organisational commitment, as well as organisational turnover intention and professional turnover intention were measured at the same time that the level of professional commitment after a period of workplace exposure was measured.

The period of workplace exposure represents a time of critical professional transition for the participants. A maximum exposure period of six to nine months was considered to be a reasonable period of time to enable the participant in the research to have adjusted to their new role as a qualified professional, as well as to adapt to their organisational circumstances. This period of time was also considered to be appropriate because of the estimated professional turnover rate of 20 percent in the first year of workplace exposure in the profession of nursing in Australia (Armstrong 2004).

One portion of the research was devoted to examining the factor structure of the Blau (2003) occupational commitment measure using confirmatory factor analysis, and comparing the mean scores of overall professional commitment before and after workplace exposure in the sample, as well as comparing the means of the components of the Blau (2003) occupational commitment measure before and after workplace exposure. The results and discussion of the findings of this portion of the study were reported in Chapter Five. The other portion of the research was devoted to evaluating a theoretical model of the proposed relationships between the variables relevant to the study, using path analysis. The results, as well as discussion of the findings of this portion of the study were reported in Chapter Six.

## **7.2 The Key Results and Conclusions of the Research**

This research developed and evaluated a model of the relationship between professional commitment and professional turnover intention. Included as intervening variables in the model were: professional commitment prior to workplace entry, organisational-professional conflict, job satisfaction, organisational commitment, professional commitment after a period of workplace exposure, and organisational turnover intention (See Figure 6.2).

The research examined the factor structure of the Blau (2003) occupational commitment measure, which was used to measure professional commitment. This measure is a hybrid of the Meyer, Allen and Smith (1993) occupational commitment measure and the Carson, Carson and Bedeian (1995) career entrenchment measure. It includes the affective commitment and normative commitment components of occupational commitment identified by Meyer, Allen and Smith (1993) and replaces the continuance commitment component with the three components of the career entrenchment measure (Carson, Carson & Bedeian 1995). Blau (2003) argued that the measure had a four-factor structure. Five factors were identified in this research, which used both exploratory and confirmatory factor analysis to examine the factor structure of the measure.

At Time One, the within sample comparisons indicated that males had significantly lower levels of overall professional commitment, as well as significantly lower levels of affective, emotional costs and normative commitment. At Time Two, the within sample comparisons indicated that males had significantly lower levels of overall professional commitment and all other components except affective professional commitment. These comparisons, however, should be viewed with caution because of small number of males in the sample.

At Time One, the within sample comparisons indicated that those in the 20-30 years age group had a significantly lower level of limited alternatives commitment than those in the 30-60 years age group. At Time Two, significantly lower levels of overall professional commitment, as well as the affective, emotional costs commitment and limited alternatives commitment components were found in the 20-30 years age group when compared to those in the 30-60 years age group.

Within sample comparisons at Time One and Time Two indicated that participants who had prior non-nursing qualifications had significantly lower levels of limited alternatives commitment than those who did not. Furthermore, at Time One, the within sample comparisons indicated that there were no significant differences between the overall level of professional commitment, or the components for participants who had previously worked as enrolled nurses and those who had not previously worked as enrolled nurses. However, at Time Two, participants with previous enrolled nurse status has significantly higher levels of overall professional commitment, as well as significantly higher levels of affective commitment than those who had not previously been enrolled nurses. The small number of enrolled nurses in the sample, however, means that these comparisons should be viewed with caution

Using paired-samples *t*-tests, the research compared the means of overall professional commitment and the components of professional commitment prior to and after a period of exposure to the workplace. Affective professional commitment had the highest mean of all of the components of professional commitment, both prior to and after a period of workplace exposure. This was in spite of a significant decrease in the mean of this component from the Time One to Time Two measurement. The limited alternatives commitment component had the lowest mean score of all of the components at both Time One and Time Two, but showed a significant increase during the period of workplace exposure. After the affective professional commitment component, the order of the component means was investment costs commitment, emotional costs commitment and normative commitment. The means of these components showed no significant change during the period of workplace exposure. There was also no significant change in the mean of overall professional commitment during this time.

The goodness-of-fit indices relating to the theoretical model showed that, regardless of whether the full professional commitment measure or the individual components of the Blau (2003) occupational commitment measure were used to estimate the model, it fitted the data well and offered a plausible explanation of the relationships between the variables. However, only the full professional commitment measure and affective professional commitment component estimations of the model were further analysed, because the non-affective components of professional commitment showed few relationships to other variables in the model in the initial period of workplace exposure.

The estimations of the model using either the full professional commitment measure or the affective professional commitment component



indicated that overall professional commitment is quite stable in the initial period of workplace exposure. The results showed that overall professional commitment has a small indirect relationship with organisational-professional conflict, which is the result of a suppression situation. This suppression situation occurs because of the correlation between organisational-professional conflict job satisfaction and organisational commitment as common exogenous variables of professional commitment after a period of workplace exposure.

When considered on its own affective professional commitment is still quite stable in the initial period of workplace exposure, but has a moderately strong direct relationship with job satisfaction. The relationship between job satisfaction and professional commitment after a period of workplace exposure is the non-spurious aspect of the relationship, when the relationships between job satisfaction and the other exogenous variables common to professional commitment after a period of workplace exposure are held constant.

The full professional commitment measure estimation of the model indicated that the relationship between professional commitment prior to workplace entry and organisational commitment is not direct but is mediated by job satisfaction. Furthermore, the results of the model estimation showed that there is no significant relationship between overall professional commitment prior to workplace entry and organisational-professional conflict, but that the relationship between organisational-professional conflict and organisational commitment is partially mediated by job satisfaction.

The affective professional commitment component estimation of the model indicated that the relationship between affective professional commitment prior to workplace entry and organisational commitment is partially mediated by job satisfaction. In the affective professional commitment component estimation of the model there is also no significant relationship between affective professional commitment prior to workplace entry and organisational-professional conflict. The relationship between organisational-professional conflict and organisational commitment was also partially mediated by job satisfaction in the affective professional commitment component estimation of the model.

The full professional commitment measure estimation of the model showed that there is no direct relationship between professional commitment after a period of workplace exposure and professional turnover intention. The model indicated significant direct paths from job satisfaction and professional commitment to organisational turnover intention and then from organisational

turnover intention to professional turnover intention. The model thus indicated that when the relationships between the common exogenous variables were held constant, the relationships between job satisfaction, organisational-professional conflict, organisational commitment, professional commitment after a period of workplace exposure and professional turnover intention, were all mediated by organisational turnover intention.

The affective professional commitment component estimation of the model indicated that there is a direct relationship between affective professional commitment and professional turnover intention. This estimation of the model indicated that when the relationships between the common exogenous variables were held constant, the relationships between job satisfaction and organisational-professional conflict were mediated by organisational turnover intention, but there was no significant relationship between organisational commitment and organisational turnover intention.

### **7.2.1 Conclusions of the Research**

The major conclusion of this research is that professional commitment that is developed during the period of professional preparation is quite stable in the initial period of workplace exposure. The research also concludes that experiences associated with workplace exposure affect the commitment that professional employees develop to the employing organisation. Furthermore, professional commitment and the experiences associated with workplace exposure affect professional employees' intention to remain employed in the organisation. When the employing organisation provides experiences that are both personally satisfying and consistent with the professional goals and values of the profession, then the professional employee is more likely to remain with the organisation and with the profession. On the other hand, when the employing organisation does not provide experiences that are personally satisfying or consistent with the professional goals and values of the profession, then the professional employee is less likely to remain with the organisation and their intention to leave the profession is also increased. These findings therefore emphasise the importance of the organisational experience to the retention of professional employees in the profession.

The research concludes that in the initial period of workplace exposure, commitment to the profession that was developed prior to workplace entry tends to be preserved. However, in the presence of conflict between the values of the profession and the organisation, the preservation of professional commitment

may be made at the expense of commitment to the organisation. When the relationships among the common variables that are exogenous to organisational turnover intention were held constant, commitment to the profession rather than commitment to the organisation was found to be related to organisational turnover intention. Therefore, this research concludes that for professional employees, commitment to the profession takes precedence over commitment to the organisation. This contrasts with current work-related commitments theory that considers commitment to the organisation to be the target of employee commitment to which all other work-related commitments relate.

These findings are consistent with the argument put forward by Mueller and Lawler (1999), which is that professional employees consider their relationship with the profession to be distinct from their relationship with the organisation. In the workplace their commitment to the profession is thus preserved and they are more likely to move amongst organisations in order to find an organisation which provides a better match to their professional values. However, the findings of the current research indicate that there is also a strong relationship between organisational turnover intention and professional turnover intention. This suggests that the workplace experiences that occur within organisations that employ professionals are not only important to the retention of professional employees within organisations, but also to the retention of professionals within the profession.

In relation to the Blau (2003) occupational commitment measure, the research concludes that the measure is best explained by five factors rather than the four identified by Blau (2003). The affective commitment component of professional commitment had the highest means score of all of the components, both before and after workplace exposure. This was despite a significant decrease in the level of affective professional commitment and a significant increase in the mean score of the limited alternatives commitment component in the initial period of workplace exposure. In the initial period of workplace exposure, affective professional commitment was the most sensitive of the five components to workplace experiences. The affective professional commitment component showed a strong relationship with job satisfaction and professional turnover intention and may therefore be important to the retention of professional employees within the profession.

The research also concludes that there are significant consequences for the organisation-professional employee relationship that are derived from the differences between professional and non-professional occupations. These

consequences for the organisation-professional employee relationship may have implications for retention of professional employees within organisations and within their professions. The research, therefore, highlights the need to further develop organisational behaviour research, theory and practice to better accommodate the organisation-employee relationship.

## **7.3 Implications for Theory**

This research has developed and evaluated a model of professional turnover intention which may form the foundation for further development of theory in relation to professional turnover intention among professional employees. In addition the findings of the research have implications for theory in relation to the development of organisational commitment among professional employees and the relationships between professional commitment, organisational commitment and organisational turnover intention. The findings of the research also have implications for theory in relation to the relationships between professional commitment, organisational-professional conflict, organisational commitment and organisational turnover intention.

### **7.3.1 Implications for Theory in Relation to Professional Turnover Intention**

Cross-sectional studies have indicated that there is a correlation between commitment to an occupation, whether professional or non-professional, and occupational turnover intention (Hackett, Lapierre & Hausdorf 2001; Lee, Carswell & Allen 2000). In addition, Blau and various associates (Blau 2000; Blau & Lunz 1998; Blau, Tatum & Ward-Cook 2003) have suggested that professional commitment and professional withdrawal cognitions are related. This research, however, provides evidence that professional commitment and professional turnover intention are not related, when the relationship between organisational turnover intention and professional turnover intention is accounted for. Therefore, in relation to the professional turnover intention of professional employees in the initial period of workplace exposure, the theoretical implications of this research are that professional turnover intention is best explained by its relationship to organisational turnover intention, rather than by its relationship to commitment to the profession.

Mueller and Lawler (1999) argued that because the profession is an entity that is separate from the organisation, it is therefore not a target of work-related commitment that is affected by the conditions of the employing organisation. They pointed out that when the norms and values of the profession are not realised within a particular organisation, the professional employee has the option to move to another organisation where there may be a better alignment between the values and norms of the profession and those of the organisation. However,

Mueller and Lawler (1999) did not account for a possible relationship between organisational turnover intention and professional turnover intention. The evidence of the current research indicates a strong relationship between organisational turnover intention and professional turnover intention. This would suggest that professional employees may ultimately leave their profession, if they conclude that from the organisations from which they are able to choose, they are unable to find an organisation in which the working conditions are satisfying and whose values and norms have a better fit with the values and norms of their profession.

### **7.3.2 Implications for Theory about the Development of Organisational Commitment among Professional Employees and the Relative Importance of Professional Commitment and Organisational Commitment**

This research contributes to theory about the relationship between professional commitment and organisational commitment from a developmental perspective. Lee, Carswell and Allen (2000) have noted the need for research in this matter. They have noted that occupational commitment and organisational commitment have been found to be similarly correlated among members of professional and non-professional occupations. Furthermore, Vandenberg and Scarpello (1994) argued that professional commitment may be considered to be an antecedent of organisational commitment. Their study did not, however, consider professional commitment prior to workplace entry or any other intervening variables in the relationship. This research has provided evidence that for professional employees, the relationship between professional commitment prior to workplace entry and organisational commitment is not direct, but that commitment to the organisation is contingent on the workplace experiences provided by the organisation.

This finding is consistent with organisational commitment theory in that job satisfaction is well established as an antecedent to organisational commitment (Mathieu & Zajac 1990). Professional employees, unlike non-professional employees, enter the workplace after having undergone a sustained period of professional socialisation. Here they have developed an appreciation of the importance of maintaining professional standards of work and ethical practice for the benefit of their clients and as an assurance that they will be able to maintain the privilege of professional membership. They have developed commitment to the profession prior to entering the workplace. The findings of the research

demonstrate the relationship between professional commitment developed prior to workplace entry and job satisfaction, and thus the relationship between professional commitment prior to workplace entry and organisational commitment.

The findings emphasise the importance of professional commitment to the development of organisational commitment. As well as this, the findings point to the importance of satisfaction of professional, as well as personal needs and expectations, in order for organisational commitment to develop. The findings of the research suggest that although organisational-professional conflict is not related to professional commitment, it has an effect on organisational commitment that is both direct and indirect through job satisfaction. The implication for organisational behaviour theory in relation to professional employees is that the commitment of professionals to their profession takes precedence over their commitment to the organisation. Moreover, that the experiences that the organisation provide in relation to the profession has consequences for the development of organisational commitment.

### **7.3.3 Implications for Theory about the Relationship between Commitment to the Profession, Organisational Commitment and Organisational Turnover Intention**

The findings of this research in regard to the relationship between commitment to the profession, organisational commitment and organisational turnover intention contribute to the redevelopment of theory in relation to work-related commitment. The research has provided evidence that when the relationships among the common variables that are exogenous to organisational turnover intention are held constant, professional employees' commitment to the profession and organisational turnover intention are related, but their organisational commitment and organisational turnover intention are not. Based on this evidence, it is argued that commitment to the profession has the greater relative importance to professional employees, than their commitment to the organisation. The findings of the research therefore lend support to the suggestions from authors such as Lee, Carswell and Allen (2000) and Mir, Mir and Mosca (2002), that the primary target of employees' commitment has shifted from commitment to the organisation to commitment to the occupation in recent decades. The findings also support the argument made in this research that professional employees' commitment to their profession takes precedence over their commitment to the employing organisation.

The findings of the research therefore have implications for work-related commitment theory. This theory is currently based on the assumption that there will be an ongoing or continuing relationship between the organisation and the employee. This is an assumption that may be unrealistic, as well as outdated, in the current economic environment (Gallagher & Parks 2001). Furthermore, while current work-related commitment theory recognises that employees may have multiple targets of work-related commitment, the focus of the work-related commitment research and theory tends to be on how these targets contribute to commitment to the organisation (Brooks & Wallace 2006). The result of such theory is that commitment to the occupation, whether professional or non-professional is positioned as secondary to commitment to the organisation. This may result in the importance of commitment to the occupation being overlooked or underestimated in organisational behaviour theory, when the relationships between work-related commitments and other work-related outcomes are considered. This may have particularly significant consequences for theory in relation to professional employees' for whom the relationship with their occupation has legal, not just personal implications.

This is because organisational theory that considers organisational commitment to be the work-related commitment to which all other work-related commitments relate, focuses research attention on matters that promote organisational commitment in order to increase organisational retention. If, however, for the contemporary employee, commitment to the occupation, whether professional or non-professional, takes precedence over commitment to the organisation, then it is apparent that research that focuses on promoting organisational retention should consider the role of occupational commitment to organisational retention. The findings of the research also suggest that theory which recognises the importance of the relationship between professional commitment and organisational turnover intention will result in research that focuses on matters that promote organisational retention as a means to increase retention in professions.

The theoretical implication of this research also relates to Reichers' (1985) theory regarding the conflict that may be present between the various targets of work-related commitment. That is, where there is conflict between the two work-related commitment targets of the organisation and the profession, professional employees resolve this conflict by maintaining their commitment to the profession at the expense of their commitment to the organisation. That is,



rather than compromise their commitment to the profession, they intend to leave the organisation to seek work in another.

#### **7.3.4 Implications for Theory about the Relationship between Professional Commitment, Organisational-Professional Conflict, Job Satisfaction, Organisational Commitment and Organisational Turnover Intention**

The findings of the research have implications for theory in relation to organisational-professional conflict. The findings support current organisational-professional conflict theory, which is that organisational-professional conflict is related to job satisfaction and organisational commitment (Shafer 2002; Shafer, Park & Liao 2002). However, they do not support the theoretical relationship between organisational-professional conflict and organisational turnover intention (Shafer 2002; Shafer, Park & Liao 2002). Rather, the findings suggest that this relationship is indirect, when the relationship between job satisfaction and organisational commitment is held constant.

After modelling professional commitment as an antecedent to and consequence of organisational-professional conflict, the findings of this research suggest that professional commitment is not an antecedent of organisational-professional conflict. Although, this particular relationship has not previously been evaluated, Shafer, Park and Liao (2002) suggested, but did not establish that professionalism might be an antecedent to organisational-professional conflict. Similarly, Bamber and Iyer (2002) found no significant relationship when professional identification was modelled as an antecedent to organisational-professional conflict. The findings of this research suggest that in cross-sectional research organisational-professional conflict should not be modelled as exogenous to professional commitment but would be more appropriately modelled as an endogenous variable in relation to professional commitment.

#### **7.3.5 Implications for Theory in Relation to Organisational-Professional Conflict**

This research has found that there is no relationship between professional commitment prior to workplace entry and organisational-professional conflict. The theoretical implication of this finding is that professional commitment prior to workplace entry should not be considered as an antecedent to organisational-professional conflict. On the other hand it may be reasonably considered to be an antecedent to professional commitment after a period of workplace exposure.

An important finding of this research is that in the initial period of workplace exposure the relationship between organisational-professional conflict and professional commitment is weak and commitment to the profession is largely unaffected by organisational-professional conflict. However, organisational-professional conflict, job satisfaction and organisational commitment are more strongly related. The implication for organisational behavioural theory is that the role of organisational-professional conflict needs to be taken into account when considering the process by which the organisational commitment of professional employees develops.

### **7.3.6 Implications that the Key Differences between Professional and Non-Professional Occupations have for Organisational Behaviour Theory**

The economic changes of the late twentieth century have brought about changes to the workplace which mean that members of professional occupations, who once were able to practise independently or in professional organisations, are increasingly becoming employees of private sector organisations (Hanlon 1997). Furthermore, public sector organisations, in which professional employees previously had greater autonomy and control over their work, are increasingly being required to adopt the principles of private sector management as a means to decrease public spending (Dent et al. 2004; Kitchener, Kirkpatrick & Whipp 2000). In addition, there are more professional employees in organisations as direct result of the professionalisation of a number of occupations (Neal & Morgan 2000). Therefore, greater numbers of professional employees in the workplace means that work-related commitment theory that is particular to professional employees, also needs to be developed.

The presence of professional employees in organisations fundamentally alters the organisation-employee relationship because the nature of professionalism itself means that professionals bring with them a different approach to work and employment from that of non-professional employees. Three key points of difference between professional employees and employees of non-professional occupations that affect the organisation-employee relationship were identified in Section 2.3.4. The first of these is that professions are regulated by statutory controls (Neal & Morgan 2000; Pearson et al. 2002). Licensure to practise in the profession is controlled by the professional association, which in its delegated role is acting on behalf of the State (Pearson et al. 2002). In addition, the professional is required to act in accordance with the standards and

ethical codes laid out by the professional association in order to retain their membership of the profession (Pearson et al. 2002).

Thus for professional employees, their right to work in the profession and to claim the status and remuneration associated with the profession is regulated by a professional association that is separate to their employing organisation. In addition, the organisation is legally obliged to ensure that only licensed members of that profession are employed to perform work that is defined and controlled by legislation that relates to professionals. Moreover, the work and minimum standard to which that work is performed, which the organisation requires the professional employee to perform can only be negotiated within the terms of the legislation and requirements of the professional associations relating to that particular profession.

Thus the 'psychological contract' of employment that professional employees have is not just a metaphor. Nor is it a relationship that is only between the employee and employing organisation, as is the case for non-professional employees. For the professional employee the 'contract of employment' also involves a legal contract between the professional employee and their registering professional association – within a wider framework of the relationship between the professional association and the employer.

The second key difference between professional employees and non-professional employees is that the values and beliefs, which form an integral part of the professional's work-related identity and attitude to work, are formed prior to workplace entry. Commitment of professional employees to the profession is largely established prior to workplace entry. In addition, on entry to the employing organisation, the professional employee is aware that there is a regulatory body external to the organisation that governs their practice and the standards to which they are required to practise. The socialisation of professional employees to the organisation is thus constrained and shaped by such knowledge.

The third key difference between professional employees and non-professional employees is that professionals consider that their work is to provide a service that is offered through the exercise of their professional knowledge for the benefit of the client and that the provision of high quality service takes precedence over economic imperatives (Friedson 2001; Sullivan 2000). Internalisation of beliefs about their professional role in the provision of services to the customers of the organisation, through the professional socialisation that has occurred prior to workplace entry, combined with the understanding that the professional association that is external to their employing organisation has the

ultimate responsibility in the regulation of their work standards, is likely to mean that the professional employees' relationship to their profession may result in work-related outcomes that are qualitatively different from those of non-professional employees.

Organisational-professional conflict describes the inherent incompatibility that exists between the values of organisations, which are economically driven, and the values of their professional employees, which are based in the ideals of professionalism (Bamber & Iyer 2002). The conflict may be in relation to the professional employees' values, which are based on their belief that they have the right to practise autonomously, making decisions that are based on professional knowledge, and the values of the organisation, which are based on the belief that organisations have the right to control the work of their employees (Shafer, Park & Liao 2002). Or it may occur when there is incompatibility between organisational norms and standards in relation to work obligations, and the profession's norms and standards in relation to work obligations, which are based on the profession's ethical code of practice (Brierley & Cowton 2000).

The struggles that may occur between organisations and their professional employees over resource allocation, control of work and ultimately who has or should have controlling power are the subject of ongoing sociological research, (e.g. Dent 2005; Kitchener, Kirkpatrick & Whipp 2000; Maravelias 2003; Ogbor 2001). How these differences between organisations' and professional employees' expectations of the organisation-employee relationship affect individuals in the workplace, their attitudes to their organisation, their job and their profession, has received limited attention in the recent organisational behaviour research.

The key differences between professional employees and non-professional employees mean that being able to practise the work of the profession in congruence with professional ideals and ethics is important to professionals from both a personal and legal perspective. That is, through their socialisation to the profession and internalisation of the values of the profession, professional employees expect that they will be able to perform their work obligations with judgement and discretion based on their professional knowledge. In addition, they also expect that they will be able to perform their work obligations to at least the minimum standard required by the profession in order to ensure that they are able to maintain their professional licensure.

However, the belief that professional employees hold that they not only have the legal responsibility, but the right, to make client-related decisions that are based on their professional knowledge, frequently puts them at odds with organisations that employ professionals (Dent 2003). This is because it challenges the ability of the organisation to control resources and their allocation, as well as challenging the assumption held by organisations that they have the control over the work of their employees through their management structures (Flynn 1999).

Organisations may knowingly apply pressure to professional employees to comply with organisational norms and expectations that are contrary to those of their profession. Some examples of this have come to the attention of the public in the cases of the Arthur Anderson and Enron auditing/accounting scandals of the late 1990's (Gordon 2002). More frequently, however, the application of pressure for auditors to comply with the bidding of their employing organisation, in a manner that is contrary to the ethical standards of their profession, goes unnoticed by the public (Liyanarachchi 2005).

On the other hand, organisations may unwittingly apply pressure to professional employees to comply with organisational norms and expectations, because of their need for profit maximisation or cost containment. This is particularly evident in the health care industry, where health care organisations are increasingly being privatised, or where publicly funded health care organisations are increasingly seeking to minimise costs (Exworthy & Halford 1999b). In these circumstances, the pressure placed on professional employees to comply with organisational norms and expectations may be to require professional employees to carry unrealistic workloads (Wong 2003) and/or to place economic considerations ahead of client considerations (Haines & Sutton 2003; Pendleton & King 2002).

This organisational pressure may impinge on the ability of professional employees to fulfil their work obligations in a way that meets the requirement of both the organisation and the profession. That is, if they attempt to fulfil their work obligations in a manner that is consistent with their professional expectations and minimum standards, they may be unable to meet their employing organisation's work demands. Alternatively, attempts to carry an unrealistic workload or pressure to place economic considerations above client concerns may put them in a position that means they are unable to meet their professional obligations. This pressure from employing organisations puts professional employees in the position of constantly having to juggle the demands of the organisation and the profession in order to meet client needs. Where the

needs of the client are immediate, urgent or even life threatening, as is the case in health care, the daily efforts to juggle organisational and professional demands are likely to rapidly take their toll on professional employees.

From the professional employees' perspective, organisational pressures to meet organisational goals may challenge the professional employee's ability to meet the standard of work that they believe is required by their profession. This may result in their internalised professional values being challenged, as well as the sense that their livelihood may be challenged if the work is not performed at a standard required by the profession. The professional is required to meet certain minimum standards of professional practice and conduct in order to retain membership in the profession, and thus the right to practise in the profession and claim the associated rewards and status.

For some professional employees, incompatibility between organisational and professional norms and standards in relation to work obligations may result in a decreased sense of professional accomplishment. This may be disappointing for the professional who is highly committed to their profession, but may not of necessity pose a threat to their standing in relation to membership of the profession. However, where the employee's work obligations relate to matters that may have legal implications of significant consequence, incompatibility between organisational and professional norms and standards may have serious consequences for the ability of the professional employee to maintain membership in the profession, should they choose to comply with the organisational pressures.

The three key differences between professional employees and non-professional employees mean that a different approach to the organisation-professional employee relationship needs to be adopted. The socio-political setting in which organisational behaviour theory has developed is that of the capitalist model of enterprise (Flynn 1999). An underpinning assumption of this model is that employees are considered as subordinate and expected to comply with the demands of their superordinates (Flynn 1999). However, when the employees are professionals, their work and the minimum standards required for its performance are set by a professional association that is external to both the organisation and the professional employee.

For professional employees, knowledge of the role of the professional association as the third party in the organisation-employee relationship is likely to mean that after years of pre-workplace-entry socialisation to the profession, professional employees are acutely aware of the relevance of the professional

association to their practice, as well as their right to continued practise. They are also likely to be aware that their employment future has a stronger link with meeting the requirements of the professional association than it has with meeting the requirements of their employing organisation.

Where organisations provide work environments that enable professional employees to fulfil their obligations to both the profession and the organisation, then, as the results of this research indicate, they are more likely to be satisfied with their job, committed to the organisation, and less likely to intend to leave the organisation or the profession. If, however, organisations continue to ignore or discount the obligations that professional employees have to their profession, and create work demands or expectations that place the professional employee in a situation where their obligations to the profession and the organisation are in conflict, then the indications are that they are less likely to be satisfied with their job, less committed to the organisation and more likely to intend to leave the organisation and perhaps the profession.

Therefore, in relation to professional employees in organisations, an important shift in thinking needs to be made in relation to organisational theory and research. This is that organisational theory and research needs to recognise that members of professional occupations have a different relationship to their occupation from members of non-professional occupations. This is because of the key differences between professional and non-professional occupations. These key differences are likely to have implications for the importance of commitment to the profession for professional employees. The key differences are also likely to have implications for the development of professional employees' organisational commitment, as well as implications for organisational turnover intention. In addition, the relationship between occupational commitment and occupational turnover intention may differ from the relationship between professional commitment and professional turnover intention because of the key differences between professional and non-professional occupations.

## **7.4 Implications for Policy and Practice**

### **7.4.1 A Partnership Model of the Organisation-Employee Relationship Is Recommended When Employees Are Professionals**

The findings of this research suggest that when the employing organisation provides experiences that are both personally satisfying and consistent with professional goals, then professional employees are more likely to remain with the organisation and with the profession. On the other hand, when the employing organisation does not provide such experiences, then professional employees are less likely to remain with the organisation. In addition, there is a strong link between intention to leave the organisation and intention to leave the profession. These findings emphasise the importance of the organisational experience to the retention of professional employees within the organisation, as well as within their profession.

In accordance with the interests of the discipline, sociological analyses of the relationship between organisations and professions are frequently understood in terms of a contest for power. In these analyses, organisations are portrayed as seeing professional interests to be in opposition to the interests of the organisation. Thus the organisation-professional employee relationship is depicted as confrontational and characterised by a battle over power and allocation of resources (Exworthy & Halford 1999b). However, an interest of organisational behaviour research is to understand the relationship between organisations and professional employees in terms of employee satisfaction, commitment and turnover. Therefore, rather than focusing on the tensions that arise between organisations and their professional employees, the interest of organisational behaviour research is to understand the basis of those tensions, and to develop effective strategies to resolve the conflicts to enable organisations and their professional employees to work together for mutual satisfaction.

As discussed in Section 2.5, the extant research in relation to the organisation-employee relationship generally does not distinguish between professional and non-professional employees. Moreover, where efforts to make such distinctions are attempted, 'professional' is either loosely defined or non-professional members of an occupation are included in the sample. Therefore, the current assumptions within the organisational behaviour literature, on which the organisation-employee relationship are based, tend to relate to the organisation-non-professional employee relationship. When incorrectly applied to professional



employees, these assumptions may be inadequate and tensions may develop between the mutual expectations of organisations and professional employees.

Flynn (1999) has pointed out that the organisation's goals in relation to customer service are based on efficiency and profit maximisation (or cost minimisation in the case of public sector organisations). These goals stand in contrast to the goals of professional employees in relation to client service, which are oriented to effectiveness and technical competence. The differences between the goals of organisations and professional employees mean that organisations, through their management structures, tend to view customers' interests in the short term and predominantly in economic terms, whereas professional employees have a longer term view that may or may not include economic considerations (Flynn 1999).

However, regardless of the form of organisations' or the professional employees' goals, they are both directed toward the customer/client. Moreover, the success of the organisation depends on its ability to satisfy its customers and maximise profits (or minimise costs). Therefore, rather than considering the customer or client as the focus of a battle in which either organisations or professional employees may strive to prevail, the client may be seen as the focus to which the efforts of the organisation and the professional employee may be cooperatively directed.

The recommendation of this research is that basing the organisation-professional employee relationship on a partnership model will best serve the interests of the organisation and the professional employee. This is because a partnership model is likely to provide better outcomes for both professionals and their employing organisations. A partnership model of the organisation-professional employee relationship would also recognise difference between the non-professional employee who has been engaged to provide a service to the organisation, and the professional employee who is engaged by the organisation to provide a service to the organisation's customers.

Rather than the professional employees' interests and the organisation's interests being seen as polar opposites and the workplace as a site where the organisation seeks to have its will prevail over that of the professional employee, a partnership model would reconstruct the organisation-professional employee relationship to enable mutual recognition of the interests and expertise of the organisation and the interests and expertise of professional employees. Under the terms of a partnership model, the professional employees' need to make client-related decisions on the basis of their professional knowledge would be

recognised and accommodated and thus their commitment to their profession would be supported. Support of professional employees' commitment to the profession would then be likely to increase their retention within the organisation, as well as within the profession. Retention of professional employees within the organisation is likely to result in reduced costs to the organisation. In addition, retention of professionals within the profession is likely to result in reduced costs to the wider society.

While the means of achieving organisational success may differ according to whether the organisation is a for-profit organisation, a not-for-profit organisation or a public sector organisation, the underlying basis of organisational success is the provision of cost-effective customer service. Conflict resolution principles would need to inform a partnership model, because the basis of the partnership between the organisation and its professional employees would need to be one of mutual respect and recognition of the legitimacy of the interests of each party. Rather than the organisation-professional employee relationship being considered to be one that is based on a contest for power, a partnership model of the organisation-professional employee could enable the interests of both organisations and professional employees to be served, based on the recognition that the organisation-professional employee relationship can be built around a cooperative effort to provide quality customer service. Importantly, it is the customer's/client's interests that provide the adjudication of the effectiveness of the balance reached. A partnership model thus has the potential to enable both parties to recognise that the organisation's interests are intimately linked to the success of customer/client outcomes and that the success of customer/client outcomes is intimately linked to professional employees' interests.

A partnership model requires a significant change to the assumptions on which the organisation-professional employee relationship is based. The management or leadership style that an organisation adopts and implements in relation to its employees will necessarily reflect an underlying assumption about the nature of the organisation-employee relationship. Frequently, the assumptions that inform the organisation-employee relationship are that the organisation has hierarchical authority over the employee (Davis 2001; Flynn 1999). The style of leadership that arises from such an assumption is one that may be variously described as autocratic (Willing et al. 2005), or directive controlling (Davis 2001). Liu et al. (2003) have identified the importance of matching leadership styles employed within organisations to the mode of employment of the employees within the organisation. They also identify that strategic human

resource practices are aimed at matching leadership behaviours and styles with the characteristics of employment groups within the organisation. When the mode of employment is related to the particular knowledge that the employees possess, as is the case for professional employees, the style of leadership that matches the mode of employment may be characterised as empowering (Liu et al. 2003). The autocratic or directive controlling style of leadership is inappropriate when dealing with professional employees because it does not recognise or value the unique contributions that professional employees bring to the employment relationship (Liu et al. 2003). An empowering style of leadership is more suited to professional employees because it also recognises and values the unique characteristics that they bring with them to the workplace.

There is a great deal of energy, both research and practical, put into developing ways to enhance the 'customer orientation' of customer-contact employees (Rafiq & Ahmed 2000) among non-professional employees. Professional employees, however, enter the organisation with an orientation to the organisation's customers, which has already been developed through the process of professional socialisation. Therefore, rather than requiring a leadership style that is aimed at externally motivating employees to be customer oriented, professional employees require a leadership style that facilitates the internal motivation that they already possess. An empowering leadership style facilitates the internal motivation of employees through, emphasising employee participation in decision-making, as well as satisfying the employees' desire for autonomy, encouraging initiative, responsibility taking and continuous personal improvement (Liu et al. 2003). By these means, it is considered that organisational commitment is increased (Liu et al. 2003).

As this research has demonstrated, for professional employees, professional commitment and job satisfaction are significantly related, and both are significantly related to organisational turnover intention, which is in turn significantly related to professional turnover intention. Therefore, adoption of a partnership model of the organisation-professional employee relationship where an empowerment leadership style is implemented is likely to have positive implications for the job satisfaction, organisational commitment and retention of professional employees within organisations, as well as within the profession.

Thus, rather than considering that organisational-professional conflict is the necessary result of the differences between the values of organisations and the values of professions, a more productive understanding of organisational-professional conflict may be that it is the result of incorrect assumptions about the

organisation-professional employee relationship. As a result of such incorrect assumptions, there may be a mismatch between the leadership style of the organisation and the leadership style that is appropriate for professional employees. Therefore, it may be the mismatch between the leadership style of the organisation and the leadership style that is required for professional employees that may result in organisational-professional conflict, which may then affect job satisfaction, organisational commitment and turnover.

The recommendation of this research, therefore, is that for organisations that employ professionals, the model of the organisation-professional employee relationship that is likely to promote the retention of professional employees within the organisation and within the profession, is a partnership model. This model would be informed by conflict resolution principles and adopt an empowering organisational leadership style.

## **7.5 Limitations**

The limitations of the methodology, method and threats to the validity of this research have been discussed in detail in Chapter Four of this thesis. Although the sample selection procedures were consistent with the design of the overall research project and the population from which the sample was drawn was consistent with the population of interest to the study, the external validity and therefore the generalisability of the findings are limited, because only one professional group was included in the study. While the findings of this study are readily able to be generalised to Australian nursing professionals in the initial period of exposure to the workplace, further research which includes other professional groups is needed to enable generalisability of the findings to other professions. Moreover, the model has been tested in the initial period of workplace exposure, therefore longer-term studies are also needed to enable the generalisability of the model to be confirmed or disconfirmed.

Construct validity was maximised in this research through the use of established measures. However, the measures were used with the recognition that they constitute a provisional attempt to describe the phenomena under investigation and are thus always subject to review and reformulation. The review and reformulation of the measures used in the research are provided in the recommendations for future research in Section 7.6.

While attempts were made to maximise internal validity by minimising selection-bias through non-response and attrition from the research, it is recognised that this is frequently a limiting factor of repeated measures survey research designs. Furthermore, non-response and attrition affect sample size, which then relate to statistical conclusion validity. The limitations of the sample size were considered in the choice of the statistical analysis method. Thus, while the Time One sample size was considered to be sufficient for confirmatory factor analysis of the Blau (2003) occupational commitment measure, and the sample size was considered to be sufficient for the statistical analyses relating to comparisons of means between the Time One and Time Two data collections, the size of the sample was considered to be insufficient to enable analysis of the relationships between the variables in the model by structural equation modelling using latent variables. Therefore path analysis was chosen as an alternative means of model analysis. In addition, the alpha level was conservatively set to less than .01 in the path analysis to minimise the risk of accepting statistically significant

effects when they were not truly significant (Type I error). These matters aside, the sample size is a limiting factor of the research and is recognised as such.

The research used self-report measures as the only form of data collection, which then implies the problems associated with Common Method Variance (CMV). Although certain remedies to address the problems associated with CMV were employed such as using well tested measures, guaranteeing participant anonymity (Podsakoff, MacKenzie, Lee et al. 2003) and trimming items from scales that have obvious overlap with conceptually distinct measures (Kline, Sulsky & Rever-Moriyama 2000), the presence of the problems associated with CMV remain and must be considered as a limitation of the research.

A recognised limitation of confirmatory factor analysis and path analysis is that the results are evaluated using goodness-of-fit indices. Because of the nature of the chi-square statistic and other goodness-of-fit indices, a finding that there is no contradiction between the model and the data is no guarantee that the model is 'true' (Kline 2005; MacCallum & Austin 2000). The theoretical model that was tested using path analysis was developed on the basis of theory, logic and the research question. While MacCallum and Austin (2000) advise that alternative models should be specified *a priori* to avoid 'confirmation bias', only one model of the relationships among the data was tested in this research, because the repeated measures design of the research and the nature of the research question meant that only one arrangement of the relationships between the variables would be meaningful in terms of the research question. Therefore, a recognised limitation of this research is that the model is not necessarily 'true' but that it is not contradicted by the data.

A further limitation of the research may be related to the period of time that the participants were exposed to the workplace. When a repeated measures research design is used, the period of time that elapses between data collections has to be balanced against the likelihood of attrition from the sample during that time. Furthermore, the period of time has to be considered in terms of the time available in the life of the research project. The time period was chosen because it was considered to be sufficient time for the nursing professionals to develop some familiarity with their organisation, as well as with their new role as a practising nursing professional. Most of the sample (55 %) had been employed in the current organisation for between three and five months and 36.7 percent had been employed in the current organisation for six months or more. The period of time allowed between the Time One and Time Two data collections was such that

data was collected from the participants over a critical transition time in relation to their professional employment. The evidence from the results is that this period of exposure was sufficient for relationships between affective professional commitment and the other variables in the study to become evident. However, the possibility that this period of time was not sufficient for any significant relationships between some of the components of professional commitment and the other variables to become evident needs to be considered as a possible limitation of the research. The means to address this limitation of the research in future research designs is considered in the recommendations for future longitudinal research design in the next section.

## **7.6 Further Research**

The findings of this research have demonstrated that for professional employees the relationships between the variables included in the research have been examined using established measures. Although most of the expected relationships were found, when the differences between professional employees and non-professional employees are considered it is evident that the definitions and operationalisation of constructs such as professional commitment, organisational-professional conflict and job satisfaction need to be revisited and refined.

### **7.6.1 Reasons Why the Definition and Operationalisation of Affective Professional Commitment Needs to be Reconsidered**

Meyer and Herscovitch (2001, p. 303) define work-related commitment as a ‘...psychological state that compels an individual toward a course of action’ and have argued that regardless of the work-related target of commitment, the theory in relation to the components of commitment may be applied. Theory in relation to the components of work-related commitment has been modelled on the theory regarding the components of commitment to the organisation (Meyer & Allen 1997). According to this theory, commitment may be understood in terms of three components identified as affective, normative and continuance commitment (Meyer & Allen 1997). These components have been shown to be able to be applied to other targets of work-related commitment, including commitment to the occupation (Meyer, Allen & Smith 1993; Stinglhamber, Bentein & Vandenberghe 2002). In developing the Blau (2003) occupational commitment measure, Blau has expanded the conceptualisation and operationalisation of commitment to the occupation by arguing that the continuance commitment component of the Meyer, Allen and Smith (1993) measure should be expanded to include measures of occupational entrenchment (Blau 2003). Regardless of the number of components of commitment, the items included in the operationalisation of the affective occupational commitment component are virtually identical in both the Meyer, Allen and Smith (1993) and the Blau (2003) measures.

In the previous chapter (Section 6.4.6), it was noted that the affective commitment component may be considered to be poorly operationalised in relation to its definition. Therefore, it is argued that refinement of the affective



commitment component is needed to improve its measurement capabilities. Meyer and Herscovitch (2001) consider that affective commitment is not as narrowly defined or operationalised as the non-affective commitment components, which may explain why it is related to a wider range of work-related outcomes. They also note, however, that in contrast to expectations, affective commitment is the component that has the strongest relationship with turnover intention and turnover.

The definition of the affective component of commitment includes involvement with the target of commitment, as well as the value relevance of association with the target. However, the operationalisation of the component relates largely to identification with the commitment target. Thus it is argued that improvements to the operationalisation of the affective commitment component are needed to enable it to properly capture the elements contained in its definition. Just as separate sub-scales have been developed to measure the non-affective components of commitment, and are more narrowly related to other work-related outcomes, it may be necessary to develop separate subscales in order to more effectively operationalise affective commitment. The definition of the affective commitment component includes involvement through intrinsic motivation (Meyer & Herscovitch 2001). Therefore, it might be reasonable to include a subscale that relates to involvement with the target of commitment through intrinsic versus extrinsic motivation, as an indicator of affective commitment to the target.

With regard to the relationship between commitment and motivation, Meyer, Becker and Vandenberghe (2004) have argued for an integrative model of commitment that positions commitment as part of a more general model of motivation. Meyer, Becker and Vandenberghe (2004) consider that the distinguishing feature of commitment in relation to a commitment target is the degree to which the individual is internally or externally motivated to maintain commitment to that target. They argued that Deci and Ryan's (2000) Self-Determination Theory and Higgins' (1998) Regulatory Focus theory can be combined to form a concept that they termed *goal regulation*. This they described as '... a motivational mindset reflecting the reasons for, and purpose of, a course of action being contemplated or in progress' (Meyer, Becker & Vandenberghe 2004, p. 998).

In their discussion of the relationship between motivation and commitment, however, Meyer, Becker and Vandenberghe (2004) assume that commitment is an antecedent to goal directed behaviour. While this assumption

as such is yet untested, evidence that might suggest that this may not be the case is provided by Gagne and Deci (2005), who, using Deci and Ryan's (2000) Self-Determination Theory, reported that autonomous motivation was demonstrated to facilitate commitment to the organisation, but commitment to the organisation did not facilitate autonomous motivation. Clearly, further research is needed to establish the relationship between motivation and commitment.

Importantly, motivation is generally considered in relation to behaviours (Gagne & Deci 2005). While work-related commitment is defined as a mind-set (Meyer & Herscovitch 2001) rather than an attitude, operationalisation of an *involvement through intrinsic motivation* sub-scale of affective commitment would need to ensure that there is congruence between the definition of the construct and what is actually being measured.

Moreover, if the sub-scale of *involvement through intrinsic motivation* is able to be generically applied to the various possible targets of work-related commitment, the operationalisation of the construct may need to focus less on the characteristics of the target and more on the characteristics of the individual. Therefore, when considering whether the reason for an individual's involvement with a target of commitment is derived from internal or external regulation, a measure of the individual's locus of control may provide a better indication of this than a measure of motivation.

### **7.6.2 The Need to Distinguish Professional Commitment from Occupational Commitment**

Meyer, Allen and Smith (1993) argued that the occupational commitment measure could be applied equally to both professional and non-professional occupations. However, in contrast to the literature in relation to occupational commitment, this research has argued that there are key differences between professional and non-professional employees. These key differences may have implications for the work-related attitudes and behaviours of professional employees, that may not be applicable to the work-related attitudes and behaviours of non-professional employees. It is therefore argued, that when conducting research in relation to occupational commitment, organisational commitment and/or organisational turnover intention, a clear distinction needs to be made in relation to the professional status of the occupation. Importantly, reference should be made to the distinguishing characteristic of professions to ensure that the occupational group meets the appropriate criteria.

Affective professional commitment relates to the desire to be associated with a particular profession (Meyer, Allen & Smith 1993). As noted earlier, the operationalisation of the affective commitment component focuses strongly on identification with the target of commitment. Identification with a particular line of work is an aspect of occupational commitment that members of both professional and non-professional occupations may have in common. This reasoning formed the basis of Meyer, Allen and Smith's (1993) argument that the occupational commitment measure could be applied equally to both professional and non-professional occupations; that is, that their commitment to their occupation is based on their identification with a particular line of work, whether that line of work is a professional or non-professional occupation.

However, one of the findings of this research is that organisational-professional conflict is negatively related to the job satisfaction and the organisational commitment of professional employees. This would suggest that being able to practise their profession in accordance with the values of professionalism is important to professional employees. Therefore, it may be argued that the commitment of an individual to a profession, may not only be based on their commitment to a particular line of work that happens to be a profession, but an important aspect of their commitment may be based on their desire to work in a professional role, as opposed to working in a non-professional role.

Furthermore, the full measure of professional commitment used in the research did not show a direct relationship with organisational-professional conflict. Moreover, the affective professional commitment component, which relates most strongly with identification to the line of work, showed no significant relationship with organisational-professional conflict. This would suggest that such an aspect of commitment to the professional occupation is not captured in the current measures of occupational commitment, which do not distinguish between professional and non-professional occupations. Therefore, the definition of commitment to an occupation may not be adequate when applied to commitment to a profession. It is therefore suggested that when applied to professionals, the definition of occupational commitment needs to be broadened because professional commitment may be based on something more than just commitment to a line of work.

A key difference between professional and non-professional occupations is that members of professional occupations are socialised to the values of the profession during the period of their professional preparation. This professional

preparation occurs in a place that is separate from the workplace and is overseen by the professional association that will be ultimately responsible for their initial entry into and continued membership of the profession. During this period of initial socialisation to the profession, individuals may, to varying degrees, internalise the values of professionalism, as well as the values of the particular profession that they have entered. Thus, professional commitment is informed by identification with the values of professionalism, as well as by identification with the values of the particular profession.

The values of professionalism are those that are generic to all professions. These have been previously discussed in detail and include the belief that the wider social benefit takes precedence over individual gain (Friedson 2001; Lampe & Garcia 2003), as well as the commitment to the autonomous provision of high quality service that is based in sound ethical practice, founded on professional knowledge (Friedson 2001; Neal & Morgan 2000). The values of the particular profession result from the application of the values of professionalism to the specific activities of the particular profession. Thus, while all professions emphasise the provision of high quality service that is based in sound ethical practice and founded on professional knowledge, the expression of these ideals will vary according to the specific activities of the profession. Examples of profession-specific values include objectivity in the provision of client service in the auditing profession (Umar & Anandarajan 2004), provision of holistic client-centred care in the profession of nursing (Crisp & Taylor 2005), and in the teaching profession, the provision of a safe and supportive learning environment (Mayer et al. 2005).

It is possible, therefore, that the degree of commitment to the values of professionalism or the values of the particular profession that professional employees have when they enter the workplace may have implications for the work-related behaviours of professional employees. Professional employees who have a higher level of commitment to the values of professionalism may place greater importance on their ability to autonomously provide high quality professional services. These professional employees may experience lower levels of job satisfaction if the employing organisation does not support their efforts in this regard. Such a professional employee may demonstrate high-level organisational citizenship behaviours and may be considered to be a highly valuable asset to the organisation. However, if their commitment to the profession is more strongly based in their identification with the values of professionalism than it is with their identification with the line of work, or their identification with

values that are specific to that profession, they may, if dissatisfied with the workplace environment, more readily choose to find another profession in which to work.

On the other hand, an individual whose commitment to the profession has a stronger basis in their identification with the line of work than it has with their identification with the values of professionalism or with the values of the profession, may be inclined to remain in the profession and/or the organisation regardless of the workplace environment. Conceivably, this professional employee may be seen as loyal to the organisation, or the profession, or both. However, the relative strength of their identification with the values of professionalism or the values of the profession may have implications for their citizenship behaviours within the organisation, or their professional role behaviours, as well as their organisational and/or professional turnover intentions.

Therefore, measurement of the relative strength of identification with the values of professionalism and the values of the profession, as well as identification with the line of work, may provide valuable information in understanding the behaviours of professional employees in relation to matters such as organisational citizenship behaviours and professional and/or organisational turnover intention. Therefore, it is suggested that development of a measure of professional commitment that is distinct from occupational commitment and includes identification with the line of work as well as identification with the values of professionalism and the particular profession may be an important area of future research.

### **7.6.3 Commitment to the Customer/Client**

A matter of key importance to understanding differences between the relationship of professional employees to the employing organisation, from the relationship of non-professionals to the employing organisation, is that professionals consider that their work is to provide a service that is offered through the exercise of their professional knowledge for the benefit of the client (Friedson 2001). Therefore, identification of the commitment of professional employees to the customer may be useful in understanding the work-related behaviour of professional employees.

Stinglhamber, Bentein and Vandenberghe (2002) found that in a nurse sample which formed a sub-sample in their research, commitment to customers contributed to intent to quit organisation when organisational commitment was controlled for. This was in contrast to their findings in relation to an

occupationally heterogeneous sample of university alumni. In fact, affective customer commitment had a suppression effect in their sample in relation to organisational quit intentions. Stinglhamber, Bentein and Vandenberghe (2002) explained this as occurring because nurses who have a high level of commitment to the customer may engage in behaviours which prioritise customer needs over organisational requirements, putting nurses at odds with the goals of the organisation. As Stinglhamber, Bentein and Vandenberghe (2002) note, the effect found in the nurse sample may be a reflection of the level of personal involvement that is required of them in their professional practice. Therefore, the finding of the relationship between commitment to the customer and intention to quit may be specific to professionals involved in human service work. Thus, in future research, when the commitment of professional employees to the customer is considered, the nature and the degree of customer contact should also be identified.

#### **7.6.4 The Relationship between Professional Employees' Job Satisfaction and Organisational Turnover Intention**

A finding of this research is that higher levels of organisational-professional conflict are associated with lower job satisfaction and to a greater extent, with lower organisational commitment among professional employees. Furthermore, the research indicates that job satisfaction has a strong positive relationship with organisational commitment and a strong negative relationship with organisational turnover intention. While this is not an unexpected finding, the key differences between professional employees and non-professional employees may also have implications for the way that they relate to their work and the meaning that job satisfaction has to them.

Job satisfaction is operationalised and measured in various ways. This may be either by measures of particular facets of job satisfaction, for example, Quinn and Staines 1979 (cited in Cook et al. 1981) or by global measures of overall job satisfaction. Global measures of overall job satisfaction may be measured by a single item measure (Wanous, Reichers & Hudy 1997), or by a multi-item measure (Price 2001), such as the one used in this research.

The global measure was chosen for this research, because at the time it was deemed sufficient to serve the purposes of the research. However, the significant relationship between organisational-professional conflict and job satisfaction found in the research suggests that future research in relation to this

relationship should use a measure of job satisfaction that includes facets or dimensions of job satisfaction, rather than a global measure.

Selection of a measure of job satisfaction for future research in relation to professional employees would necessarily be based on the characteristics of the research sample. Van Saane et al. (2003) identify that many measures of job satisfaction are available. Some of these have been developed and applied to specific occupational populations, whereas others are considered to be applicable to all employees. If the sample were to include more than one professional occupation, the facets/dimensions of job satisfaction measure would need to be generic in nature. On the other hand, if the sample were of only one professional occupational group, a measure of job satisfaction developed for that particular professional occupation may be appropriate. Importantly, regardless of the measure chosen, it would be helpful to include a sub-scale that relates to satisfaction gained through achievement of professional goals and ideals, as well as satisfaction that relates to the conditions of work within the organisation.

#### **7.6.5 Organisational-professional Conflict**

The measure of organisational-professional conflict used in this research is that described by Shafer, Park and Liao (2002). This three-item scale includes two questions developed by Aranya and Ferris (1984) and a third added by Shafer Park and Liao (2002). As it currently stands, the measure is a global measure of organisational-professional conflict and does not allow distinctions to be made in relation to the particular aspects of organisational-professional conflict that the professional employee may experience. Again, depending on the interests of the research, a global measure may suffice. However, if the interest of the research is to determine the particular aspects of organisational-professional conflict that are of concern to professional employees, then a measure that captures certain aspects of organisational-professional conflict may be more appropriate. For example, items that relate more specifically to organisational pressures that may affect the professional employees' ability to adhere to the ethics of the profession, or items that relate to organisational pressures to reduce professional autonomy may be included in a measure of organisational-professional conflict.

#### **7.6.6 Multi-Group Analysis and Partial Mediation**

A feature of the AMOS structural equation modelling software program is that it enables multiple group models to be tested (Tabachnick & Fidell 2001). This allows the researcher to discover whether the dynamics of the path model

vary according to an identified group in the research (Ho 2000). However, because large sample sizes are required to ensure that the group sizes are statistically adequate (Ho 2000), multi-group analysis was not performed with this sample. A consideration for future research, where the sample size is larger, may be to conduct multi-group analyses based on either the demographic characteristics of the sample – for example, gender or age – or multi-group analyses based on aspects of the variables in the model. The finding reported in Section 5.4.3, that the decrease in the mean of the affective commitment component from Time One to Time Two in the entire repeated measures group might largely be accounted for by the respondents in the 20 to 30 years age group and the increase in the mean of the limited alternatives commitment component in the entire repeated measures group might largely be accounted for by the respondents in the 30 to 60 years age group. This suggests that a multi-group analysis according to age should be considered in future research.

The results of the model estimations suggest that multi-group analysis is indicated in relation to the level of job satisfaction and the level of professional commitment after a period of workplace exposure. This is because both the full professional commitment measure and the affective professional commitment component estimations of the model show relationships between certain variables that are partially mediated. In the affective professional commitment component estimation of the model, job satisfaction partially mediates the relationship between affective professional commitment prior to workplace entry and organisational commitment. In both estimations of the model, job satisfaction partially mediates the relationship between organisational-professional conflict and organisational commitment. The relationship between job satisfaction and organisational turnover intention is also partially mediated in both estimations of the model.

While partial mediation may indicate that the exogenous variable has a specific and direct relationship with the endogenous variable, as well as an indirect relationship that occurs via the intervening variable, it may also be an indication of a moderated mediation effect (Shrout & Bolger 2002). That is, it may indicate that there is a sub-group within the sample for whom the relationship between the exogenous variable and endogenous variables is mediated by the intervening variable, and another group for which the relationship is not mediated. In moderated mediation, there is a moderation process taking place in the mediator (intervening) variable, where within the sample, the level of the intervening variable determines whether the relationship



between the exogenous variable and the endogenous variable is mediated or not (Baron & Kenny, 1986).

Thus, the partial mediation may indicate that there is a sub-group within the sample for whom the relationship between affective professional commitment prior to workplace entry and organisational commitment is mediated by job satisfaction and another group for whom the relationship is not mediated. Importantly, in this situation it is not the level of affective professional commitment prior to workplace entry that determines the moderated mediation; it is the level of job satisfaction, as the intervening variable in the relationship (Shrout & Bolger 2002).

Similarly, the presence of the partial mediation of the relationship between organisational-professional conflict and organisational commitment in both estimations of the model may indicate that there is a sub-group within the sample for whom the relationship between organisational-professional conflict and organisational commitment is mediated by job satisfaction, and another group for whom the relationship is not mediated by job satisfaction. Furthermore, in both estimations of the model the relationship between job satisfaction and organisational turnover intention is partially mediated, and may indicate that there is a moderated mediation effect present. That is, for a portion of the sample, the mediation of the intervening variable in the relationship between job satisfaction and organisational turnover intention (professional commitment after a period of workplace exposure) is related to the level of the intervening variable.

Shrout and Bolger (2002) argue that technically, in the case of moderated mediation, the model is misspecified because it has not accounted for an unanticipated interaction between the mediation process and the group. Shrout and Bolger (2002) argue that if this is the situation, division of the sample into groups according to the level of the mediator variable should reveal the presence of the mediated and non-mediated relationships according to the group. However, the caveat on this statement is that in the case of an unanticipated interaction between the mediation process and the group, division of the sample is not as straightforward as it might be when a moderation situation is anticipated or planned.

Moderation differs from mediation in that it represents an interaction in the data (Frazier, Tix & Barron 2004). Here the focus is on how the level of a particular intervening variable may be related to the strength or direction of the relationship between the exogenous variable and the endogenous variables in the entire sample (Muller, Judd & Yzerbyt 2005). In moderated mediation, however,

there is no overall moderation; rather than acting as a moderator variable for the entire sample, the intervening variable moderates the relationship between the exogenous variable and endogenous variable for only a part of the sample (Shrout & Bolger 2002). Muller, Judd and Yzerbyt (2005) point out that when there is more than one intervening variable in the relationship, the differences produced by the level of a particular intervening variable in one group may differ from the differences produced by one or more of the other intervening variables. Therefore, determining the process of moderated mediation when there is more than one intervening variable is made more complex.

#### **7.6.7 Future Longitudinal Research Design**

Further investigation of the relationships among the variables in the theoretical model over the longer term is needed to identify whether professional commitment prior to workplace entry continues to have a significant relationship with job satisfaction, organisational commitment and professional commitment after a period of workplace exposure, in the longer term. Such research, however, is not only complicated by the usual problems of attrition from longitudinal research, but is further complicated by the selective attrition that may occur due to the nature of the research itself (Beck & Wilson 2001). That is, attrition from the research may not be random, but may in fact be due to one or more of the factors being studied in the research. This would make it even more difficult to discern whether any change in the relationships among the variables, or among the components of professional commitment, is the result of the changes in the variables, or of changes in the components themselves, or if the changes in the relationships are due to skewed distributions because of the selective attrition that has occurred. Beck and Wilson (2001) outline a cross-sequential research design based on recommendations made in 1975 by Schaie and Baltes, which includes elements of longitudinal and cross-sectional research and may address some of the problems associated with studying work-related commitment from a developmental perspective.

To add to the complexity of long-term longitudinal research into the commitment of professional employees, consideration would need to be given to the gender and age of the professional employees. Whether the research cohort is dominated by females, as this cohort is, or not, the prospect that the sample may include females in their child-bearing years, who may therefore temporarily leave the organisation, if not the profession, would need to be accommodated in the research design.

#### **7.6.8 Larger Samples and Variety of Professions for Further Model Testing**

As noted earlier, a limitation of this research is its sample size and its inclusion of only one professional group in the sample. In future research, a larger initial sample size would allow for attrition from the sample, and would also assist in the ability of the study to be conducted over a longer period of time. This is because the sample would be more likely to continue to be of sufficient size to enable meaningful statistical analysis. In addition, as previously discussed, a larger sample would also allow some multi-group analysis to be performed. Moreover, a larger sample size would also enable use of latent variables rather than path analysis, which has the ability to better account for measurement error when examining relationships among variables (Kline 2005), as well as better assessment of item validity of the components of the Blau (2003) occupational commitment measure.

## 7.7 Conclusion

This research has developed and evaluated a theoretical model of professional turnover intention. The theoretical model included the relationships between professional commitment prior to workplace entry and other work-related outcomes such as organisational-professional conflict, job satisfaction, organisational commitment and professional commitment after a period of workplace exposure. Also included in the theoretical model were the relationships between these variables and organisational turnover intention and professional turnover intention. The design of the research was that of a repeated measures survey and the sample was entirely comprised of professional employees. Because the research included a pre-and-post workplace exposure measurement of professional commitment, with exposure forming a natural intervention, the research may also be considered to have a quasi-experimental design.

The study identified that a dominant assumption in organisational behaviour theory, which is that all work-related commitments ultimately relate to organisational commitment, may not be adequate to explain work-related commitments and work-related outcomes in the contemporary workplace. This is because global economic changes have transformed the organisation-employee relationship and employees may be shifting the focus of their commitment from the organisation to their occupation. In addition, these economic changes have contributed to the increased employment of professionals in non-professional organisations in the private sector. At the same time the public sector organisations in which many professionals have been traditionally employed are increasingly being operated according to quasi-market principles. Organisational behaviour theory in relation to work-related commitments may, therefore, need to be reconsidered in the light of such changes to the contemporary workplace.

This research identified that there are key differences between professional and non-professional occupations. These key differences relate to the legal implications that surround professional membership, the socialisation of professionals that occurs prior to workplace entry, and the service orientation of professionals. These key differences may mean that the workplace attitudes and behaviours of professional employees differ from the workplace attitudes and behaviours of non-professional employees. These key differences between professional and non-professional occupations may mean that policies and practices relating to the organisation-employee relationship that are based on the

organisation-non-professional employee relationship are inappropriate and may result in conflict between the values of organisations and the values of their professional employees. Therefore, there is a need for new research and theory relating to the employment of professionals in private sector non-professional organisations and public sector organisations which employ professionals.

This research studied the relationship between professional commitment and professional turnover intention. The research took a developmental approach and studied the relationship between professional commitment prior to workplace entry, organisational-professional conflict, job satisfaction, organisational commitment and professional commitment after a period of workplace exposure. The relationships between these variables and organisational, as well as professional turnover intention, were also studied.

The findings of this research have implications for organisational behaviour theory. These implications are as follows:

- In the initial period of workplace exposure, professional turnover intention is explained by the relationship between organisational turnover intention and professional turnover intention, rather than by a relationship with professional commitment.
- For professional employees, commitment to the organisation is not directly related to professional commitment, but commitment to the organisation is contingent on the workplace experiences provided by the organisation.
- Professional employees give precedence to their commitment to the profession and conflict between professional commitment and organisational commitment is likely to be resolved by organisational turnover intention.
- Professional commitment prior to workplace entry is not an antecedent of organisational-professional conflict.
- The role of organisational-professional conflict needs to be taken into account in the development of organisational commitment among professional employees.
- The key differences between professional and non-professional occupations means that work-related commitment theory that is particular to professional employees needs to be developed.

The practice and policy implications of the research are that when dealing with professional employees, organisations, through their management structures, should recognise the significance of the profession to the professional employees' attitude to the organisation-employee relationship. That is, for professional employees, commitment to the profession has relevance to their intention to leave

the organisation, whereas commitment to the organisation does not. The indications of the research are that in order to increase organisational, as well as professional retention, organisations, through their management structures, need to focus on matters that support professional employees' commitment to their profession, in addition to focusing on matters that support their commitment to the organisation.

This research recommends that for organisations that employ professionals, the model of the organisation-professional employee relationship that is likely to promote the retention of professional employees, both within the organisation and within the profession, is a partnership model. Conflict resolution principles are recommended to inform the partnership model of the organisation-professional employee relationship. In addition, the empowering leadership style is recommended for organisations that employ professionals, because it is better matched to the employment mode and characteristics of professional employees.

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## **Appendices**

## **Appendix 1: The Costs Associated with a Non-partnership Model of the Organisation – Professional Employee Relationship**

## **The Costs Associated with a Non-partnership Model of the Organisation – Professional Employee Relationship: An Example from the Profession of Nursing**

Based on the assumption that they have hierarchical authority over their employees, organisations may adopt an autocratic or a directive controlling leadership style. This leadership style does not recognise or value the unique characteristics of the professional employee and the knowledge and expertise that they bring to the organisation. By determining the numbers of patients that nurses are required to care for, organisations, through their management structures, managers are able to exert a measure of control over nurses' work (Bolton 2004). In many instances, attempts to reduce organisational costs are made through reduction in numbers of nursing staff (Bolton 2004). In this situation, if professional employees are not seen as partners with the organisation in the delivery of quality service to the organisation's customers, they are excluded from the decision-making and are not able to have their legitimate professional concerns heard. For professional employees, such a situation may put them in a position where there is conflict between the demands of the organisation and the requirements of their profession.

From extensive interviews with 164 nurses in four European countries Kirpal (2004) identified the struggle that nurses in each of the countries had, to deal with the conflicting demands of their desire to provide high levels of quality patient care, that was driven by their own sense of commitment to the ideals of their profession, and their inability to provide this care under the pressure of time, when daily workloads were constantly heavy. In addition, higher patient-to-nurse ratios have been found to be strongly and significantly associated with emotional exhaustion and job dissatisfaction and with increased intention to leave the current job (Aiken et al. 2002). The increased workloads that many nursing professionals are being expected to deal with as the result of the increasing demands placed on them results in higher rates of withdrawal from the profession, which in turn places heavier workload burdens on those who continue to working in the nursing role in the health care system and those who are entering it (Duffield & O'Brien-Pallas 2003). As noted by Jones (2004, p. 566) 'turnover begets turnover'.

An important role of nursing professionals is patient surveillance, that is, to provide early detection of health complications and to initiate actions that result in the minimisation of negative patient outcomes (Aiken et al. 2003). Nursing professionals are aware that this is an important aspect of their professional role but unless nursing professionals are included as partners in the decision-making process regarding



workloads, their professional concerns may not be heard. The importance of having sufficient numbers of nursing professionals within health care organisations was demonstrated by Aiken et al. (2003), whose research indicated that not only was patient mortality significantly decreased, but post-operative complications, as well as incidents of failure-to-rescue were significantly decreased when sufficient numbers of nursing professionals with realistic workloads were employed. Thus when the concerns of nursing professionals are not considered and higher nursing workloads are introduced with the intention of reducing organisational costs, increased costs to the organisation may be the unwanted result because of increased rates of complications, incidents of failure-to-rescue and increased mortality.

According to Aiken et al. (2003) the greatest threat to patient safety in US hospitals was considered to be nurse understaffing, by both physicians and the public. The likelihood of patient falls increases when high workloads prevent nurses from providing a timely response to patient-calls (West, Barron & Reeves, 2005). Increased consumption of time and organisational resources is then the result of increased patient falls. In developed countries such as the USA and Australia, delays in elective surgery and in some instances, required surgery, may be the result of insufficient numbers of nurses to staff the various units involved (Hodges, Williams & Carman 2002). Insufficient numbers of nursing professionals in organisations is also associated with increases in the rates of hospital-acquired infections (Stone et al. 2003), which, as a minimal effect may prolong patients' stays in hospitals, or may delay healing, and at worst cause death. Lower ratios of care provided by nursing professionals, to care provided by non-professional nurses were found to be associated with longer length of hospital stay, higher rates of certain infections, higher rates of shock and/or cardiac arrest and higher rates of failure-to-rescue, which was defined as death from certain medical or post-operative complications (Needleman et al. 2002). These costs to patients also have implications for organisational costs and the false economy that may result when an organisation adopts an autocratic leadership style and excludes its professional employees from the decision-making process is illustrated.

Turnover, whether organisational or professional, results in higher costs to organisations that employ nursing professionals. These costs may stem from the disruption to organisational function, reduced team efficiency and loss of institutional knowledge that ultimately threaten the quality of care provided in the organisation (Jones 2004, World Health Organization 2006). Jones (2004) identifies the loss of future returns based on past investments made in nurses, short-term productivity losses associated with workforce instability, as well as costs associated with

orientation and training of new hires and reduced productivity until the newly hired nurse is fully productive, as costs to the organisation that are incurred by nurse turnover. Costs to organisations due to nurse turnover also include the financial costs to the organisation that are associated with the need for temporary staff to be employed or permanent staff to work over-time to fill the gap until the staff member is replaced or if the bed must be closed or patient treatment is deferred until the nurse is replaced (Jones 2004). The estimated monetary cost of replacing a registered nurse within an organisation in Australia is estimated to be \$A44, 000 (Armstrong 2004). Atencio, Cohen and Gorenberg (2003) estimated the cost of turnover among organisations of a registered nurse in the US to be approximately twice their yearly salary, a range from \$US92, 440 to \$US145, 000, depending on the level of nursing specialty. Garretson (2004) estimates that in the US the cost of recruiting a nurse to an organisation is approximately \$US 10,000, and argues for the cost-effectiveness of retaining nurses within organisations.

Moreover, while organisational turnover presents its own costs to organisations, professional turnover presents costs to organisations, as well as the health system. The costs involved in the educational preparation of the nursing professional who leaves the profession cannot be recovered. Furthermore, just as the knowledge, experience and expertise that the nursing professional has developed is lost to an employing organisation when a nursing professional leaves the profession of nursing, it is not transferred to another health care organisation but is also lost to the entire health system. In the current climate of a worldwide shortage in the nursing workforce, loss of nursing professionals from the workforce needs to be minimised.

Research in relation to the effects of unrealistically demanding workloads for nursing professionals, thus indicates that the increased organisational and possibly professional turnover intention that results, adds to, rather than reduces the operating costs of organisations. This research indicates that organisational-professional conflict has a direct negative relationship with job satisfaction and organisational commitment in the initial period of workplace exposure, as well as indirect relationships with organisational turnover intention and professional turnover intention. Therefore, attempts to reduce operating costs by adopting a leadership style that does not recognise or value the unique characteristics that nursing professionals bring to their employing organisation, may result in outcomes that actually increase the overall operating costs of the organisation.

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**Appendix 2: Central Queensland University  
Human Ethics Research Committee – Initial Letter of  
Approval of Project**

**MEMORANDUM**  
*From the Office of Research*



Secretary, Human Research Ethics Committee  
Ph: 07 4923 2603  
Fax: 07 4923 2600  
Email: n.turner@cqu.edu.au

6 August 2004

Ms Julianne Parry  
Faculty of Business and Law  
Building 20, Central Queensland University  
ROCKHAMPTON QLD 4702

Dear Ms Parry,

**HUMAN RESEARCH ETHICS COMMITTEE APPROVAL FOR PROJECT  
H04/07-79, *ONCE WERE NURSES: WHY NURSES LEAVE NURSING*.**

The Human Research Ethics Committee is an approved institutional ethics committee constituted in accord with guidelines formulated by the National Health and Medical Research Council (NHMRC) and governed by policies and procedures consistent with principles as contained in publications such as the joint Australian Vice-Chancellors' Committee and NHMRC *Statement and Guidelines on Research Practice*.

At its round robin on 13 July 2004, the Human Research Ethics Committee of the Central Queensland University granted ethics approval for the research activity, *Once Were Nurses: Why Nurses Leave Nursing*. (Project Number H04/07-79).

The period of ethics approval is 01 October 2004 to 17 December 2004.

The approval number is H04/07-79.

The conditions of approval for this research project are that you:

- (a) lodge a copy of the questionnaire with the Office of Research;
- (b) amend the Information Sheet to include
  - (i) the following statement "Please contact Central Queensland University's Office of Research (Tel 07 4923 2607)";
  - (ii) more information on the purpose of the research;
- (c) ensure the Information Sheet and Consent are separate;
- (d) address section 4.1 – some participants may have potential distressing reasons for leaving nursing;
- (e) provide a letter of support from Alumni Association;
- (f) conduct the research project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments required to be made to the proposal by the Human Research Ethics Committee;

- (g) report immediately anything which may warrant review of ethics approval of the project, including:
  - (i) serious or unexpected adverse effects on participants;
  - (ii) proposed changes in the protocol;
  - (iii) unforeseen events that might affect continued ethical acceptability of the project;

(A written report of any adverse occurrence or unforeseen event that might affect the continued ethical acceptability of the research project must be submitted to the Chair of the Human Research Ethics Committee by no later than the next working day after recognition of an adverse occurrence/event.)

- (h) provide the Human Research Ethics Committee with a written "Final Report" by no later than 31 January 2005;
- (i) if the research project is discontinued, advise the Committee in writing within 5 working days of the discontinuation;
- (j) comply with each and all of the above conditions of approval and any additional conditions or any modification of conditions which may be made subsequently by the Human Research Ethics Committee.

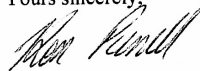
Please note that failure to comply with the conditions of approval and the *National Statement on Ethical Conduct in Research Involving Humans* may result in withdrawal of approval for the project.

A copy of the reporting pro formas may be obtained from the Human Research Ethics Committee Secretary, Nicole Turner please contact at the telephone or email given on the first page.

You are required to advise the Secretary in writing within 5 working days if this project does not proceed for any reason. In the event that you require an extension of ethics approval for this project, please make written application in advance of the end-date of this approval. The research cannot continue beyond the end date of approval unless the Committee has granted an extension of ethics approval. Extensions of approval cannot be granted retrospectively. Should you need an extension but not apply for this before the end-date of the approval then a full new application for approval must be submitted to the Secretary for the Committee to consider.

If you have any queries in relation to this approval or if you need any further information please contact the Secretary, Nicole Turner or myself.

Yours sincerely,



Associate Professor Ken Purnell  
Chair, Human Research Ethics Committee

### **Appendix 3: The Time Two Copy of the Survey Questionnaire**

The Time Two copy of the survey questionnaire which includes the Blau (2003) occupational commitment measure (Questions 1-24) and the demographic questions that were included in the Time One copy of the survey questionnaire.



## **Once Were Nurses: Why Nurses Leave Nursing**

Investigator: Julie Parry RN, EM, B.Hlth Sc.(Nsg), Grad Dip (Psych), MN(Lead).  
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## **HOW TO COMPLETE THE QUESTIONNAIRE**

Dear Participant

The survey is divided into sections, each of which is designed to collect specific information. The usefulness and potential positive outcomes of the survey will depend upon the honesty and care with which you answer the questions. Please read instructions for each section carefully.

### **PLEASE NOTE THAT:**

- ✓ Your employment will not be affected in any way whether you decide to participate in the study or not.
- ✓ The survey will be administered and analysed by the investigator; no-one in your organization will see your answers.
- ✓ All your answers will be treated as confidential (do not write your name on the questionnaire).
- ✓ When the research is completed the questionnaires will be destroyed.
- ✓ The data when analysed, will be grouped so that no individual's response can or will be identified.



**For the research purposes only, we need to create a code identifier, which is specific for each person, but will retain anonymity and confidentiality. The code identifier is used for data handling and analysis purposes and will also be used in the follow-up surveys.**

Please use the instructions and example below to complete the following code identifier. Place your particular responses on the lines marked a), b) and c): As an example: Mothers name is Jane, your family name is Smith and you were born in June 1968. The result is: a) N, b) M c) 6 and d) 8. CODE ID: NM68.

\_\_\_\_ a) What is the third letter of your mother's first name?

\_\_\_\_ b) What is the second letter of your family name?

\_\_\_\_ c) What is the month (numerically) of your birthday?

\_\_\_\_ d) What is the last number of your year of birth?

### **Completing the Questions**

The most accurate assessment is gained from people who respond to the statements honestly. Therefore it is essential that the responses that you give are those that best reflect your true feelings or beliefs. In general, try not to spend too long thinking about responses. Most often the first answer that occurs to you is the most accurate. However, do not rush your responses or respond without giving due consideration to each statement. Below is an example.

Nursing is important to my self-image.

You are required to indicate on the response scale, the extent to which the statement is indicative of the way you think/feel or thought/felt when you were working in your most recent nursing job. There are six possible responses to each statement (shown below). You are required to mark the appropriate box that corresponds to your answer where the possible responses are...

Very Strongly Agree

Strongly Agree

Agree

Disagree

Strongly Disagree

Very Strongly Disagree

When considering a response, it is important not to think of the way you thought or felt in any one situation, rather how you typically think or feel about the situation. If you feel a statement does not apply to you, choose a response that gives the best indication of how you think you would typically think or feel. Some of the statements may not give all the information you would like to receive. If this is the case, please choose a response that seems the best even if you are not sure. There is no time limit to the survey; however it should take between 10-15 minutes to complete.

**WHEN THE SURVEY AND CONSENT FORM HAVE BEEN COMPLETED PLEASE PLACE THEM IN THE SEPARATE REPLY-PAID ENVELOPES PROVIDED AND POST THEM AT YOUR EARLIEST CONVENIENCE.**

**THANK YOU FOR YOUR PARTICIPATION**

Below is a series of statements. The following questions relate to how you feel about nursing. Please read each question carefully, consider how you feel most of the time and tick the response that fits you best. Please be sure to respond to ALL of the questions.

Section 1	Very Strongly Agree	Strongly Agree	Agree	Disagree	Strongly Disagree	Very Strongly Disagree
1. Nursing is important to my self-image.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I am happy that I have entered the nursing profession.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I am proud to be a nurse.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I like being a nurse.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I strongly identify with the profession of nursing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I am enthusiastic about nursing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I believe that people who have been educated in a profession have a responsibility to stay in that profession.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I feel an obligation to remain in nursing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I feel a responsibility to continue in nursing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Even if it were to my advantage, I do not feel it would be right to leave nursing right now.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I would feel guilty if I left nursing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I am in nursing, partly because of my sense of loyalty to it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I have too much time invested in nursing to change occupations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. It would be very costly for me, income wise to switch my profession.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I have too much invested, e.g. education, personal effort, in nursing to change professions at the moment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. For me to enter another profession would require giving up a substantial investment in education.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. There would be a great emotional price involved, e.g. disrupted personal relationships, in changing professions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Changing from nursing to another profession would not be easy emotionally for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. It would be hard emotionally for me to change from nursing because of the difficulties it would impose on my family.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Section 1 (continued)</b>	<b>Very Strongly Agree</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Very Strongly Disagree</b>
20. Leaving nursing would cause some emotional trauma for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Given my background and experience, there are other attractive alternatives available for me in other professions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I would have many options if I decided to change professions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I am pleased that I have many alternatives available for changing professions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. If I left nursing, I feel that I would have desirable options to pursue.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**The following questions relate to how you feel about the organization in which you work. Please read each question carefully, consider the way that you usually feel and tick the response that fits you best. Please be sure to respond to ALL of the questions**

<b>Section 2</b>	<b>Very Strongly Agree</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Very Strongly Disagree</b>
1. My current employment situation gives me the opportunity to express myself fully as a professional.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. In my organization there is conflict between the work standards and procedures of the organization and my ability to act according to my professional judgment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I often have to choose between following professional standards and doing what is required by my organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization to be successful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I talk up this organization to my friends as a great organization to work for.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I feel very little loyalty to this organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I find that my values and the organization's values are very similar.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I am proud to tell others that I am part of this organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. This organization really inspires the very best in me in the way of job performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I am extremely glad that I chose this organisation to work for over other that I was considering at the time I joined.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Section 2 (continued)</b>	<b>Very Strongly Agree</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Very Strongly Disagree</b>
11. Often, I find it difficult to agree with this organization on important matters relating to its employees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I really care about the fate of this organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**The following statements relate to how satisfied or dissatisfied you are with your job. Please read each question carefully and be sure to respond to the ALL questions and tick the response that reflects the way that you usually feel about your job.**

<b>Section 3</b>	<b>Very Strongly Agree</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Very Strongly Disagree</b>
1. I am very satisfied with my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Most days, I am enthusiastic about my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I like working here better than most other people I know who work for this employer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I do not find enjoyment in my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I am often bored with my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I would consider taking another kind of job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**The following statements relate to your thoughts about staying with or leaving your current organization. Please read each question carefully and tick the response that reflects the way that you usually think about your current organization. Please be sure to respond to ALL of the questions.**

<b>Section 4</b>	<b>Very Strongly Agree</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>	<b>Very Strongly Disagree</b>
1. I will probably look for a new job in the near future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. At the present time I am actively searching for another job in a different organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I do not intend to quit my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. It is unlikely that I will actively look for a different organization to work for in the next year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I am not thinking about quitting my job with this organization at the present time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following statements relate to your thoughts about staying with or leaving nursing. Please read each question carefully, and tick the response that reflects the way that you usually think about your current organization. Please be sure to respond to ALL of the questions.

Section 5	Very Strongly Agree	Strongly Agree	Agree	Disagree	Strongly Disagree	Very Strongly Disagree
1. I will probably look for a non-nursing job in the near future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. At the present time I am actively searching for another job in a different profession or occupation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I do not intend to quit nursing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. It is unlikely that I will actively look for a different profession or occupation to work in over the next year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I am not thinking about quitting nursing at the present time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following questions relate to what you are doing now and your plans for the future.  
Please read each question carefully and tick the response that fits you best. Please respond to ALL of the questions.

Section 6	Very Strongly Agree	Strongly Agree	Agree	Disagree	Strongly Disagree	Very Strongly Disagree
1. I am currently practicing as a registered nurse and intend to continue practicing until I retire from the workplace.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I am currently practicing as a registered nurse and intend to continue practicing for the moment. However I entertain the possibility of leaving for another career at some stage in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I am currently practicing as a registered nurse and intend to continue practicing for the moment. However I am actively looking for work or actively working towards making a career in a non-nursing field.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am not currently practicing as a registered nurse but consider that it is likely that I will return to nursing at some stage in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I am not currently practicing as a registered nurse and consider that I will not return to nursing in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for your responses to these questions.  
Please complete the following demographic questions

## Section 7

Please place a circle around the response that is most true for you.

1. Please indicate your gender.	F	M		
2. Please indicate your approximate age.	20-24	25-30	31-45	45-60
3. Were you previously an enrolled nurse?	Y	N		
4. If you were previously an enrolled nurse please indicate the number of years worked as an EN.	_____yrs			
5. Do you have any <b>non-nursing</b> qualifications that you gained prior to gaining your nursing degree?	Y	N		
6. Have you commenced study to gain a non-nursing qualification since completing your nursing degree?	Y	N		
7. Please indicate the type of non-nursing qualification that you have or are studying to achieve.	None	Certificate/ Diploma	Bachelor	Grad Dip/Grad Cert/ Master
8. Do you intend to use this qualification to remain in nursing or to take up work in another occupation?	Remain in Nursing	Work in other occupation	Undecided	
9. Please indicate the number of months that you have been with your current organization.	0-3	3-6	6-9	9-12
10. Please indicate the type of organization that you work in.	Public Health Care	Private Health Care	Other	
11. Please indicate the state or territory in which you are practicing nursing.	QLD NSW	VIC SA	WA TAS	NT ACT

**Thank you for your responses to this questionnaire. Please ensure that your unique code identifier is written in the space provided on page 2.**

**If you wish to add comments or offer insights that you may have, in regard to nurses' satisfaction with nursing please feel free to do so here.**

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**Thank you for your comments.**

**Please place the questionnaire in the reply-paid envelope supplied and post it at your earliest convenience.**





## **Appendix 4: Initial Letter of Invitation to Participate in Research and Consent Form**



## Invitation to Participate in the Research Study

### Once Were Nurses: Why Nurses Leave Nursing.

#### Information Sheet and Consent to Participate

Dear Colleague

This invitation to participate in the research study has been sent to you via the kind cooperation of your University. The university has maintained the privacy of your personal details. No names or addresses have been given to the researcher.

My name is Julie Parry. I have been a nurse for over 20 years and am currently a Ph.D. student at Central Queensland University. Throughout my nursing career I have had an interest in the study of organizational behaviour and how it can be used to improve the work life of nurses.

I would like to invite your collegial participation in this research. The research is about factors that affect **nurses' satisfaction with nursing** and how these factors may affect intentions to continue nursing or to leave nursing. The purpose of the research is to increase our understanding of the relationships among these factors and ultimately to find ways to increase nurses' job satisfaction. As you probably already know, there is a worldwide shortage of nurses. Increased job satisfaction is linked with better retention of nurses within organizations as well as within the profession. **Your participation in this research will assist in developing knowledge vital to improving the retention of nurses in the workplace.**

You will be sent further questionnaires in July and November next year (2005) Participation in the research will require only about **15 minutes** of your time on each occasion to complete the attached survey. If you wish to add comments or offer insights that you may have in regard to nurses' satisfaction with nursing at the end of each survey, please feel free to do so. Once completed kindly place the survey in the reply-paid envelope and post it at your earliest convenience.

The **confidentiality** of your responses to this study is assured. You do not need to provide any identifying information on the questionnaires so your responses are completely anonymous. Under no circumstances is it possible that your name or any identifying institutional association that you may have could appear in publications associated with this research. To ensure your anonymity, consent forms and requests for a plain English copy of the results should be returned to the researcher in the separate reply-paid envelope provided. These will be kept in confidence and stored in a secure place at Central Queensland University. You are under no obligation to participate in the study and your choice will have no bearing on your academic or professional progress. However your professional contribution to the research will be greatly appreciated and valued.

**THROUGHOUT THE COURSE OF THE PROPOSED RESEARCH PROGRAM, YOU ARE FREE TO WITHDRAW AT ANY TIME FOR WHATEVER REASON Should you have any concerns about the proposed research please contact Central Queensland University's Office of Research (Tel 07 4923 2607). Please quote project number HO4/07-79.**

A “Plain English” copy of the results of the research findings will be supplied to you should you request this using the sheet provided below.

The results of the research will be used to prepare a thesis for the award of Ph D. It is anticipated that aspects of the research results will also be published in professional journals and presented at professional conferences. It is also likely that the results of the research will be used in submissions to government agencies and may be communicated in radio, television and newspaper broadcasts.

If you have any further enquiries regarding purpose of the research or the questionnaire items please feel free to contact the researcher,

Kind regards,

Julie Parry  
Faculty of Business and Law  
Building 20  
Central Queensland University: Mackay Campus,  
Boundary Road, Mackay 4074. QLD.  
Ph +61 7 4940 7829  
Email [j.m.parry@cqu.edu.au](mailto:j.m.parry@cqu.edu.au)

**CONSENT FORM**

**Research Project**

***Once Were Nurses: Why Nurses Leave Nursing.***

In signing the consent form I am indicating that;

1. I have read the information sheet provided that details the nature and purpose of the study and am voluntarily agreeing to participate in it.

2. I understand that the questionnaire responses are anonymous and contain no identifying information.

3. I understand that this consent form and my request for a plain English copy of the results will be kept in confidence and stored in a secure place at Central Queensland University.

Signature..... Date.....

Name (please print).....

This research seeks to maintain your privacy in a manner that you are comfortable with. If you are happy to provide your contact details to the researcher so that the questionnaires may be sent directly to you in July and November 2005, then please do so below. Your address will be kept in confidence and not shared with any other person or group. It will be stored in a secure place at Central Queensland University.

Address.....  
.....  
.....postcode.....

If you would prefer to not supply your contact details to the researcher then your name only will be supplied to your Alumni Association so that the questionnaires may be sent to you in July and November 2005.

**THANK YOU FOR YOUR VALUABLE INPUT TO THIS RESEARCH**

## **Appendix 5: Samples of Results Output**

## Full Model Output

### Matrices (Group number 1 - Model Number 1b)

#### Standardized Total Effects (Group number 1 - Model Number 1b)

	MPC1	M2OPC	M7ORGCO	M5JSAT	MPC2	MORGTO
M2OPC	-.125	.000	.000	.000	.000	.000
M7ORGCO	.343	-.488	.000	.537	.000	.000
M5JSAT	.320	-.234	.000	.000	.000	.000
MPC2	.100	-.015	.196	.253	.000	.000
MORGTO	-.232	.344	-.240	-.548	-.190	.000
MPROFTO	-.205	.299	-.217	-.484	-.241	.503

#### Standardized Direct Effects (Group number 1 - Model Number 1b)

	MPC1	M2OPC	M7ORGCO	M5JSAT	MPC2	MORGTO
M2OPC	-.125	.000	.000	.000	.000	.000
M7ORGCO	.125	-.363	.000	.537	.000	.000
M5JSAT	.291	-.234	.000	.000	.000	.000
MPC2	.000	.115	.196	.148	.000	.000
MORGTO	.000	.151	-.203	-.391	-.190	.000
MPROFTO	.000	.059	-.068	-.135	-.146	.503

#### Standardized Indirect Effects (Group number 1 - Model Number 1b)

	MPC1	M2OPC	M7ORGCO	M5JSAT	MPC2	MORGTO
M2OPC	.000	.000	.000	.000	.000	.000
M7ORGCO	.217	-.125	.000	.000	.000	.000
M5JSAT	.029	.000	.000	.000	.000	.000
MPC2	.100	-.130	.000	.105	.000	.000
MORGTO	-.232	.193	-.037	-.157	.000	.000
MPROFTO	-.205	.240	-.149	-.349	-.096	.000

**Matrices (Group number 1 - Model Number 1b)**

**Standardized Total Effects - Two Tailed Significance (BC) (Group number 1 - Model Number 1b)**

	MPC1	M2OPC	M7ORGCO	M5JSAT	MPC2	MORGTO
M2OPC	.250	...	...	...	...	...
M7ORGCO	.003	.003	...	.002	...	...
M5JSAT	.004	.011	...	...	...	...
MPC2	.002	.768	.035	.001	...	...
MORGTO	.003	.002	.004	.003	.005	...
MPROFTO	.002	.002	.024	.002	.003	.002

**Standardized Direct Effects - Two Tailed Significance (BC) (Group number 1 - Model Number 1b)**

	MPC1	M2OPC	M7ORGCO	M5JSAT	MPC2	MORGTO
M2OPC	.250	...	...	...	...	...
M7ORGCO	.076	.002	...	.002	...	...
M5JSAT	.003	.011	...	...	...	...
MPC2	...	.092	.035	.077	...	...
MORGTO	...	.019	.026	.003	.005	...
MPROFTO	...	.404	.437	.105	.037	.002

**Standardized Indirect Effects - Two Tailed Significance (BC) (Group number 1 - Model Number 1b)**

	MPC1	M2OPC	M7ORGCO	M5JSAT	MPC2	MORGTO
M2OPC	...	...	...	...	...	...
M7ORGCO	.002	.011	...	...	...	...
M5JSAT	.170	...	...	...	...	...
MPC2	.002	.004	...	.027	...	...
MORGTO	.003	.004	.023	.001	...	...
MPROFTO	.002	.002	.002	.001	.003	...

**Squared Multiple Correlations: (Group number 1 - Model Number 1b)**

	Estimate
M2OPC	.016
M5JSAT	.156
M7ORGCO	.595
MPC2	.211
MORGTO	.533
MPROFTO	.576



## Affective Professional Commitment Component Model Output

### Affective Commitment Model

#### Matrices (Group number 1 - Model Number 1b)

##### Standardized Total Effects (Group number 1 - Model Number 1b)

	MPCA1	M2OPC	M5JSAT	M7ORGCO	MPCA2	MORGTO
M2OPC	-.010	.000	.000	.000	.000	.000
M5JSAT	.494	-.265	.000	.000	.000	.000
M7ORGCO	.421	-.519	.480	.000	.000	.000
MPCA2	.215	-.100	.439	-.008	.000	.000
MORGTO	-.309	.379	-.530	-.248	-.171	.000
MPROFTO	-.258	.336	-.440	-.211	-.328	.498

##### Standardized Direct Effects (Group number 1 - Model Number 1b)

	MPCA1	M2OPC	M5JSAT	M7ORGCO	MPCA2	MORGTO
M2OPC	-.010	.000	.000	.000	.000	.000
M5JSAT	.491	-.265	.000	.000	.000	.000
M7ORGCO	.180	-.392	.480	.000	.000	.000
MPCA2	.000	.013	.443	-.008	.000	.000
MORGTO	.000	.144	-.335	-.249	-.171	.000
MPROFTO	.000	.069	-.027	-.090	-.243	.498

##### Standardized Indirect Effects (Group number 1 - Model Number 1b)

	MPCA1	M2OPC	M5JSAT	M7ORGCO	MPCA2	MORGTO
M2OPC	.000	.000	.000	.000	.000	.000
M5JSAT	.003	.000	.000	.000	.000	.000
M7ORGCO	.241	-.127	.000	.000	.000	.000
MPCA2	.215	-.113	-.004	.000	.000	.000
MORGTO	-.309	.235	-.195	.001	.000	.000
MPROFTO	-.258	.267	-.414	-.121	-.085	.000

**Matrices (Group number 1 - Model Number 1b)**

**Standardized Total Effects - Two Tailed Significance (BC) (Group number 1 - Model Number 1b)**

	MPCA1	M2OPC	M5JSAT	M7ORGCO	MPCA2	MORGTO
M2OPC	.892	...	...	...	...	...
M5JSAT	.002	.002	...	...	...	...
M7ORGCO	.003	.003	.002	...	...	...
MPCA2	.002	.076	.004	.849	...	...
MORGTO	.002	.003	.003	.002	.047	...
MPROFTO	.002	.002	.002	.026	.002	.002

**Standardized Direct Effects - Two Tailed Significance (BC) (Group number 1 - Model Number 1b)**

	MPCA1	M2OPC	M5JSAT	M7ORGCO	MPCA2	MORGTO
M2OPC	.892	...	...	...	...	...
M5JSAT	.001	.002	...	...	...	...
M7ORGCO	.008	.002	.002	...	...	...
MPCA2	...	.814	.002	.849	...	...
MORGTO	...	.025	.002	.002	.047	...
MPROFTO	...	.270	.691	.272	.003	.002

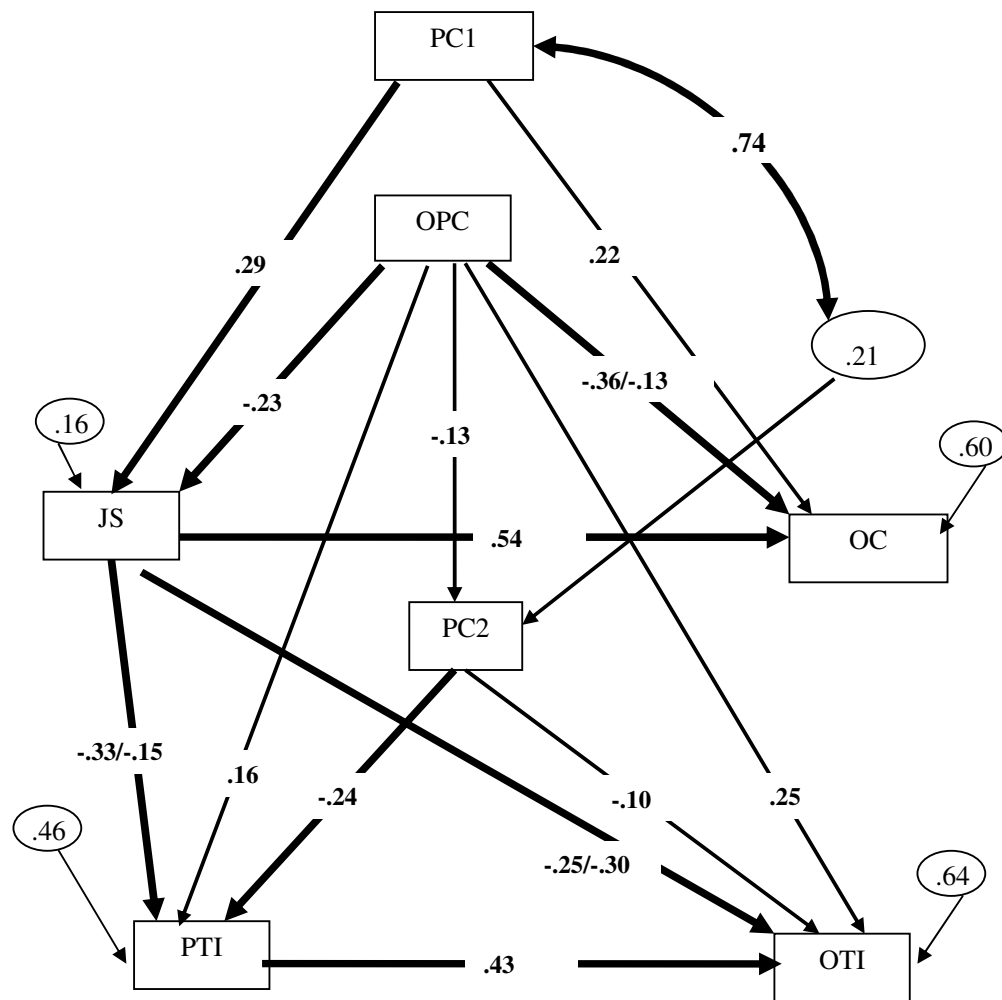
**Standardized Indirect Effects - Two Tailed Significance (BC) (Group number 1 - Model Number 1b)**

	MPCA1	M2OPC	M5JSAT	M7ORGCO	MPCA2	MORGTO
M2OPC	...	...	...	...	...	...
M5JSAT	.860	...	...	...	...	...
M7ORGCO	.003	.002	...	...	...	...
MPCA2	.002	.020	.829	...	...	...
MORGTO	.002	.003	.002	.808	...	...
MPROFTO	.002	.002	.002	.021	.025	...

**Squared Multiple Correlations: (Group number 1 - Model Number 1b)**

	Estimate
M2OPC	.000
M5JSAT	.314
M7ORGCO	.605
MPCA2	.389
MORGTO	.523
MPROFTO	.592

## **Appendix 6: Model of the Relationship between Professional Commitment and Organisational Turnover Intention**



**Appendix Figure 6.1: Model of the Relationship between Professional Commitment and Organisational Turnover Intention**

**Appendix Table 6.1 Goodness-of-fit Indices for the Model of the Relationship between Professional Commitment and Organisational Turnover Intention**

Model Estimation	Chi-Square	<i>df</i>	<i>p</i>	CFI	RMSEA
Full Professional Commitment Measure	.05	2	.98	1.0	.00

## Professional Turnover Intention to Organisational Turnover Intention Model Results

### Standardized Total Effects (Group number 1 - Model Number 1b)

	MPC1	M2OPC	M5JSAT	M7ORGCO	MPC2	MPROFTO
M2OPC	-.125	.000	.000	.000	.000	.000
M5JSAT	.320	-.234	.000	.000	.000	.000
M7ORGCO	.343	-.488	.537	.000	.000	.000
MPC2	.100	-.015	.253	.196	.000	.000
MPROFTO	-.205	.299	-.484	-.217	-.241	.000
MORGTO	-.232	.344	-.548	-.240	-.190	.433

### Standardized Direct Effects (Group number 1 - Model Number 1b)

	MPC1	M2OPC	M5JSAT	M7ORGCO	MPC2	MPROFTO
M2OPC	-.125	.000	.000	.000	.000	.000
M5JSAT	.291	-.234	.000	.000	.000	.000
M7ORGCO	.125	-.363	.537	.000	.000	.000
MPC2	.000	.115	.148	.196	.000	.000
MPROFTO	.000	.135	-.332	-.170	-.241	.000
MORGTO	.000	.092	-.248	-.129	-.086	.433

### Standardized Indirect Effects (Group number 1 - Model Number 1b)

	MPC1	M2OPC	M5JSAT	M7ORGCO	MPC2	MPROFTO
M2OPC	.000	.000	.000	.000	.000	.000
M5JSAT	.029	.000	.000	.000	.000	.000
M7ORGCO	.217	-.125	.000	.000	.000	.000
MPC2	.100	-.130	.105	.000	.000	.000
MPROFTO	-.205	.164	-.152	-.047	.000	.000
MORGTO	-.232	.252	-.300	-.111	-.104	.000

### Correlations: (Group number 1 - Model Number 1b)

Estimate  
z2 <--> MPC1 .736

**Squared Multiple Correlations: (Group number 1 - Model Number 1b)**

	Estimate
M2OPC	.016
M5JSAT	.156
M7ORGCO	.595
MPC2	.211
MPROFTO	.458
MORGTO	.635

**Matrices (Group number 1 - Model Number 1b)**

**Standardized Total Effects - Two Tailed Significance (BC) (Group number 1 - Model Number 1b)**

	MPC1	M2OPC	M5JSAT	M7ORGCO	MPC2	MPROFTO
M2OPC	.256	...	...	...	...	...
M5JSAT	.005	.006	...	...	...	...
M7ORGCO	.003	.002	.001	...	...	...
MPC2	.002	.834	.002	.044	...	...
MPROFTO	.002	.002	.002	.025	.005	...
MORGTO	.004	.002	.003	.001	.001	.003

**Standardized Direct Effects - Two Tailed Significance (BC) (Group number 1 - Model Number 1b)**

	MPC1	M2OPC	M5JSAT	M7ORGCO	MPC2	MPROFTO
M2OPC	.256	...	...	...	...	...
M5JSAT	.003	.006	...	...	...	...
M7ORGCO	.080	.003	.001	...	...	...
MPC2	...	.078	.083	.044	...	...
MPROFTO	...	.061	.002	.100	.005	...
MORGTO	...	.097	.007	.080	.110	.003

**Standardized Indirect Effects - Two Tailed Significance (BC) (Group number 1 - Model Number 1b)**

	MPC1	M2OPC	M5JSAT	M7ORGCO	MPC2	MPROFTO
M2OPC	...	...	...	...	...	...
M5JSAT	.185	...	...	...	...	...
M7ORGCO	.002	.005	...	...	...	...
MPC2	.002	.002	.037	...	...	...
MPROFTO	.002	.003	.003	.036	...	...
MORGTO	.004	.002	.001	.012	.003	...