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Mothoa, Lerato

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A research report submitted in partial fulfillment of the requirements for the Degree of Masters by Coursework and Research Report in the field of Industrial Organisational Psychology in the faculty of Humanities, University of the Witwatersrand.

Lerato Mothoa
University of the Witwatersrand, Department of Psychology

Dr Calvin Gwandure
University of the Witwatersrand, Department of Psychology

Declaration

I declare that this research project is my own, unaided work. All information taken from other sources have been rightfully acknowledged. It has not been submitted before for any other degree or examination at this or any other university.

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Student: Lerato Mothoa
Supervisor: Dr Calvin Gwandure

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Abstract

The state of public health service and delivery in public hospitals in South Africa is concerning. Allied to this, is the prevalence of nursing shortage experienced in public hospitals in the country. Nursing shortage is an outcome that results from various factors; one such factor is actual turnover, preceded by intent to leave. Intent to leave is a strong predictor of actual turnover. It has been found to be negatively correlated with organisational commitment and job satisfaction. Organisational commitment and job satisfaction stem from various work states such job demands and job resources. It is important to understand that all occupations have job demands that are to be met by the required and relevant job resources. Failure to meet job demands with job resources results in numerous negative employee and organisational implications. In the nursing sector for instance, employee implications were found to include undesirable work behaviours (such as intent to leave) exerted by nurses which ultimately affect the state of the healthcare service and healthcare delivery.

The purpose of the current research was to investigate the nature of relationships that exist among organisational commitment, job satisfaction, demographic variables and intent to leave among nurses working at a public hospital in Johannesburg, South Africa. The research postulated three hypotheses that were tested and proven **Hypothesis 1:** Organisational commitment (O_C) statistically predicts intent to leave (I_T_L) among nurse working at a public hospital; **Hypothesis 2:** Job satisfaction (J_S) statistically predicts intent to leave (I_T_L) among nurses working at a public hospital; **Hypothesis 3:** Demographic variables can also statistically predict intent to leave (I_T_L) among nurses working at a public hospital. Furthermore, the research aimed to find the best predictive model of the data. Lastly, the research investigated the relative importance of each significant independent variable in predicting intent to leave.

The research design was a correlational cross-sectional. The public hospital received 200 questionnaires, of which 136 questionnaires were returned, with only 112 usable questionnaires to be analysed. Due to this, there were 112 participants. The sample fell predominantly in the 26-35 and 36-45 age categories. On the data collection days, nurses working in different wards received approximately three hours to complete a self-administered questionnaire. Participants provided informed consent to be part of the research. The questionnaire collected demographic information, the respondent's organisational commitment level, job satisfaction level and intent to leave level. All the three hypotheses were statistically proven, as indicated by results of the multiple linear regression. O_C was a statistically significant predictor of I_T_L ($p < .05$) among nurses at a public hospital. J_S was a statistically significant predictor of I_T_L ($p < .05$) among nurses at a public hospital. Nursing_position (category) as a demographic variable was also a statistically significant predictor of I_T_L ($p < .05$) among nurses at a public hospital. Hierarchical regression found the best predictive model of the data; the final predictive model was Model 3, which explained 17.3% of the variance in intent to leave. Model 3 included organisational commitment, job satisfaction and nursing position (category). Model3 equation = 61.848 + 2.395Nursing_position (category) + -.170O_C + -.111J_S.

Lastly, the dominance analysis technique was applied in order examine the relative importance of each independent variable, to understand the role of each independent variable, and to assess the additional contribution of each independent variable in predicting intent to leave. O_C was found to have the additional contribution in predicting intent to leave. The current research showed that organisational commitment and job satisfaction remain applicable when examining intent to leave in the organisational behaviour. Therefore, the research findings are consistent with what has been previously discovered in the mid-nineties. Numerous strategies and plans have been put forward to increase organisational commitment and job satisfaction experienced by employees in order to mitigate nursing shortage, and to respond to the state of healthcare delivery in public hospitals. The challenge remains to be to translate these strategies and plans into actions. As it stands currently, thi is the only way to respond meaningfully to the highlighted phenomenon.

Keywords: Organisational commitment, job satisfaction, nursing position (category), nursing shortage, state of health service, job demands, job resources

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Chapter 1:

Introduction and Rationale

1.1 Introduction

The shortage of nurses is increasingly becoming an important area of topic globally (Rispel, Chirwa & Blaauw 2014). The topic is particularly of interest for researchers that focus on brain drain and skills shortages. Most African countries experience a shortage of staff in their public hospitals; as such, understanding the causes and what is related to intent to leave among nurses in public hospitals is especially important in South Africa. The provision of healthcare and the state of public health services in South Africa is regarded to be concernedly poor (Democratic Nursing Organisation of South Africa (DENOSA) (2013; Rispel et.al, 2014)). South African public hospitals are experiencing nursing shortages, which has a negative impact on the delivery and the quality of public healthcare in the country (DENOSA, 2013; Department of Health (DOH), 2011; Rispel et.al, 2014)).

Factors related to intent to leave and ultimately turnover included, but are not limited to organisational commitment: job satisfaction; better job prospects; working conditions and personal reasons. Studying the variables may be one of the few ways of finding out the causes of nursing shortages in public hospitals to help address this problem as part of ways and means that can solve this problem. In doing so, this will expand on already existing strategies and plans aimed to improve healthcare delivery and service. Moreover, the performance and productivity of the remaining nurses can be positively impacted, resulting in a positive impact on the state of public healthcare. This leads further to realising the goal of attaining an effective, efficient and quality public healthcare system in South Africa. Furthermore, this also has the potential to lead to improved and effective solutions aimed at attracting and retaining nurses at public hospitals, thereby curbing and minimising the intent to leave.

Intent to leave has been studied mostly in relation to negative job-related factors such as reduced organisational commitment, low job satisfaction and low leader-member exchange (LMX) relationships (Carr & Currie, 2012; De Milt, Fitzpatrick & Rita, 2011; Meyer & Tett, 1993; Rispel et.al, 2014). These factors can be grouped into two major categories: individual factors and organisational factors (Meyer & Tett, 1993; Rispel et.al, 2014). Literature that has focused on individual factors has demonstrated that there is an inverse relationship between

the aforementioned factors and intent to leave. Nurses who have a lower job satisfaction for instance, are most likely to have higher intentions of leaving their job (Carr & Currie, 2012; De Milt et.al, 2011; Meyer & Tett, 1993; Porter et.al, 1974; Rispel et.al, 2014).

However, it is important to bear in mind that most workers habitually have the basic need to better their current job circumstances. Thus, the intention to leave a current job in search of a better one could be a consequence. Intent to leave is therefore not always related to and caused by negative organisational factors. In any organisation, managers and human resources (HR) practitioners are central to the optimal functioning of the organisation. These functions include, amongst others, providing necessary and relevant assistance to employees. In the light of the mentioned concerns, the retention of nursing staff is increasingly becoming important for the future of public healthcare status in the country.

Public hospitals in the country rely on their staff to deliver healthcare services to those who are reliant on public hospitals for healthcare (Rispel et.al, 2014). According to the World Health Organization (WHO) (2015) health statistics, the morbidity rates of South Africa continued to increase from 2000 to 2013; the morbidity rate for 2014 and 2015 have not yet been documented. The country's state of health is increasingly becoming of great concern and of a high priority (DENOSA, 2013). Furthermore, the income group as documented in the WHO (2015) World Statistics indicates that the majority of the world's population falls in the lower middle-income group. South Africa's population growth rate continued to increase from 2002 to 2014 (Statistics South Africa, 2014). The public healthcare industry is therefore essential to the majority of the South African population since private healthcare is not affordable to the low-income group of the majority of the country's population. The provision of public healthcare services should strive to provide more than a basic service; it should ideally provide a service that is effective, efficient and of high quality.

Due to the increasing population which ultimately leads to an increase in healthcare demand, public hospitals in South Africa are still experiencing a shortage of nurses (Coomberg & Barriball, 2007; Lu, Allsion, While & Barriball, 2005; Rispel et.al, 2014). According to the South African Nursing Council (2015), the estimated population of South Africa to date is 54 956 920 with a nursing manpower of 278 617 across registered, enrolled and auxiliaries nurses. The public healthcare industry is evidently experiencing a shortage of nurses. The healthcare industry requires new staff to fill the unoccupied available vacancies and to retain the nurses currently working in order to keep up with the increasing demands of providing

healthcare. Evidence from DENOSA (2013) affirms that there are nursing students who have completed nursing and have done community service but are sitting at home unemployed. This is due to most provincial departments not having planned and budgeted for their placement in available vacancies (DENOSA, 2013).

Lu et.al (2004) note that the shortage of nurses has become a global concern., this has been the general consensus arrived at by numerous researchers, for instance, Rispel et.al (2014) notes the prominence that staff retention and turnover has received globally. Nursing shortages in the country negatively affect several aspects of public healthcare, such as constraining the effective delivery of healthcare and infringing on the constitutional right that stipulates that everyone in the country has the right to basic healthcare provision and conditions (Department of Health, 2011; Rispel et.al, 2014). Given that the provision of healthcare services globally is considered a vital service, it is important to understand the causes of nursing shortages and factors related to this. The enhanced understanding of this phenomenon can act as a crucial enabler for the provision of better healthcare delivery in the public hospitals of South Africa.

Due to the increasing demand of public healthcare, emphasis is put on the negative consequences that nursing shortages have on the delivery of health care; on patient care and performance (Coomberg & Barriball, 2007). The ability of public hospitals to provide effective, efficient and quality service is increasingly put at risk due to nursing shortages and other organisational related factors such as low organisational commitment, low job satisfaction and intent to leave. The risk is of paramount importance due to the importance attached to healthcare provision and delivery in the country and globally.

There has been an introduction of modernisation and implementation strategies to assist government hospitals in delivering improved public health care and for improving the working conditions of health care staff (National Department of Health, 2003). The National Department of Health (2003) has set out an enabling framework that involves plans and approaches of recruitment and retention; training and skills; equipment and infrastructure; rationing services and technologies; management and organisation and transport and communication for the modernisation of government hospitals. These areas are key elements in achieving a modernised public health care system in South Africa. It is however important to acknowledge that the proposed strategies put in place are dependent on the amount of nurses found in public hospitals (Coomberg & Barriball, 2007).

1.2 Rationale

The purpose of conducting this research is to add to what has been previously researched by others in the area of organisational commitment, job satisfaction and intent to leave among nurses at public hospitals, particularly in the South African context. Most of the research that has been done in this topic has mainly been Western-based. Most research and studies conducted have focused on how organisational commitment and job satisfaction have interacted with and influenced intent to leave through techniques such as correlations and various regression techniques. The peculiarity of this research is that it intended its focus to include the inspection of demographic variables in predicting intent to leave; furthermore, the techniques used were not limited to correlations and regressions. A dominance analysis was conducted in order to investigate the relative importance of the independent variables in predicting the dependent variable.

The research differs from previous studies in that it uses a supplementary technique to strengthen and show consistency in the findings of the multiple and hierarchical regressions with regards to understanding the relative importance of the independent variables in predicting intent to leave among nurses at a public hospital. This is particularly important, as the research aims to find the most influential predictors of intent to leave. This is crucial for understanding what the most prominent factors behind nursing shortages in public hospitals are. The main issues affecting South African nurses have been found to be increasing job demands with no increase in job resources to meet the demands. Stemming from this are the organisational problems that are found in public hospitals in South Africa, one major problem being nursing shortages and the state of healthcare in public hospitals. This current research sought to find the most important predictors behind intent to leave and to further understand nursing shortages as well as the state of public health as a consequence.

Understanding the causes behind nurse's intent to leave is also essential in retaining them (Cortese, 2012). It has come to light that intent to leave and ultimately turnover has been both attributed and seen to relate to several causes dominated by organisational related problems such as lack of resources, shortage of staff, low job satisfaction and low organisational commitment (Meyer & Tett, 1993; Rispel et.al, 2014). Organisational antecedents of intent to leave can be managed through the provision of necessary job resources to meet job demands and through attraction and retention strategies. For instance, retention of employees has been tied to organisational commitment in numerous studies previously. A study that focused on

retention strategies conducted by Shields and Ward (2001) found enrolled nurses to have a greater job satisfaction than registered nurses and lower intent to leave. Enrolled nurses practise under the direction and delegation of registered nurses. Thereby, making nursing position a variable that has implications for various work outcomes such as job satisfaction and intent to leave. Demographic differences among nurses are worthy for consideration when researching intent to leave.

The current research has attempted to contribute major insights on the subject matter of nursing shortages and on providing insights that will be beneficial for public hospitals in Johannesburg, South Africa. The research focused on organisational factors related to intent to leave, and thereby nursing shortage broadly. The variables of the research are organisational commitment and job satisfaction and intent to leave. The aim of the research is to explore the relationship between intent to leave, job satisfaction and organisational commitment among nurses at a public hospital in Johannesburg. Additionally, demographic variables of the research sample also formed part of the research's analyses.

In order to realise the objectives of the research, the structure of the research report is as follows: Chapter 2 has the Literature Review of the research; Chapter 3 contains the Methodology section of the research, while Chapter 4 contains the Results section. The last section of the research is Chapter 5 which is the Discussion and Conclusion section.

The following chapter will review the Job-Demands Resources JD-R model that provides the theoretical basis of the research. The model was chosen as it fits well with the variables of the research, the model can be used to explore and explain the relationships that exist among the three main variables of the research. The chapter will then move on to discuss the research's three main variables separately, which are organisational commitment; global job satisfaction; and intent to leave. Thereafter, the chapter will discuss the relevant demographic variables of the research. Following this, a summation of the literature review is briefly given. This is immediately followed by the aims of the research and the research's statistical hypotheses.

Chapter 2:

Literature review

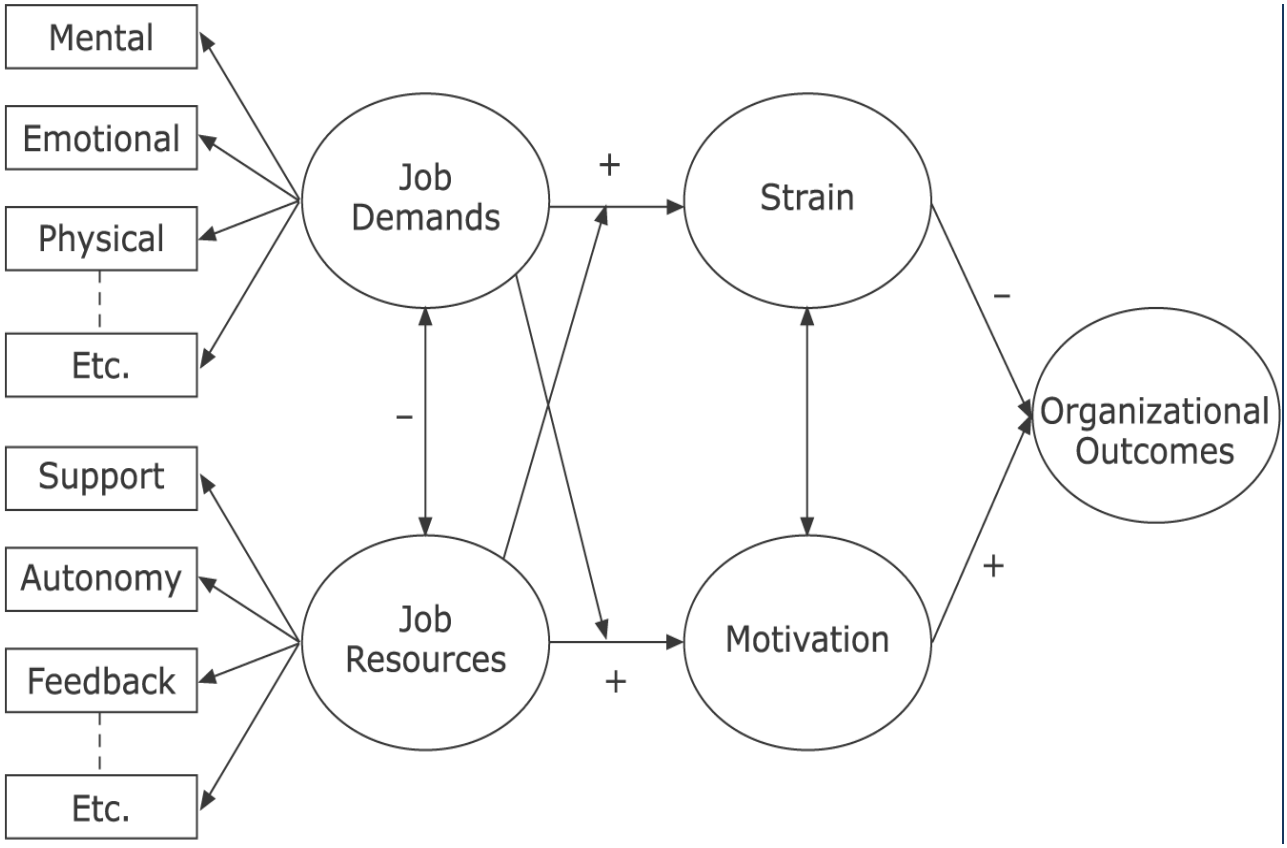
2.1 Introduction

The Job-Demands Resources (JD-R) model has been introduced in literature as a more comprehensive model that can be used in various job positions. The model incorporates a wide range of working conditions prevalent to every occupation (Demerouti, Bakker, Nachreiner & Schaufeli, 2000b). As part of this section, the JD-R model forms part of the foundation base of this chapter. In addition, theories on organisational commitment, global job satisfaction and intent to leave are discussed.

2.2 Job-Demands Resources Model

There is an abundance of literature focusing on the relationship organisational commitment, job satisfaction and intent to leave. There are few researchers who have investigated how these three variables interact together among nurses, this is especially so within the South African context. However, organisational commitment and job satisfaction have dominated in research that is on intent to leave and turnover in general and within the nursing profession. The abundance of research that has formed part of this literature review is evidence of that. Meyer and Allen (1993) have been among the few researchers that have focused intensively on the interaction of organisational commitment, job satisfaction and intent to leave among nurses. Demerouti et.al (2000) developed the JD-R model and who used the model to improve the understanding of the organisational-related variables among nurses. In the beginning, these were burnout, life satisfaction, exhaustion disengagement, working conditions and stress. The model distinguishes between two different categories of working conditions: job demands and job resources (Demerouti et.al, 2000). The JD-R model fits well with the current research's topic area, and serves as a good model to explore and explain the interactions and correlations between the three main variables of the research. The JD-R model is depicted in figure 1 below.

Figure 1: JD-R original model (Bakker & Demerotui, 2007, p. 313)



The JD-R model can be applied to various jobs, irrespective of the pertinent job demands and job resources found in a particular job (Bakker & Demerouti, 2007). Job demands according to Bakker and Demerouti (2007, p. 312) are seen as the "physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs". Examples of these are seen in cases where there is high work pressure, physically demanding cases, and emotionally or psychologically demanding communications and interactions with patients (Bakker & Demerouti, 2007). Since nursing is highlighted among the top stressful occupations (Viotti & Converso, 2016), as such, the consideration of the job demands placed on this occupation are important to discuss.

Among the reasons that make nursing occupation a stressful job is the emotionally demanding relationships with patients and with colleagues (Viotti & Converso, 2016). There are numerous factors, which are considered to add on nurse's job demands. One of these that is alluded to are the ineffective budgetary management systems that do not assist to better the remaining status quo of nurse shortages in the country's public health sector (DENOSA 2013). The shortage of nurses in Southern African hospitals is very prevalent, and this phenomenon is fuelled by migration (Delobelle, Rawlinson, Ntuli, Malatsi, Decock & Depoorter, 2011).

Given the prevalent nursing shortage in public hospitals, the remaining nursing population is constantly working under pressure in attempts to cover the shortage. The shortage of nurses in public hospitals combined with the increasing population have contributed to the intensification of demands placed on nurses; this is especially true with regards to increased workloads, the quality of work being negatively affected, and the decreased pace of work (Viotti & Converso, 2016). The intensification of job demands placed on nurses due to numerous emerging factors should be of concern. The present research takes into account the demands placed on nurses.

The nursing occupation is also characterised by an unfavourable physical environment. The day-to-day activities involve tasks that are physically demanding, such as pushing medication trolleys and patient beds, escorting patients to various wards and assisting patients to change positions in their beds. Nurses also experience emotionally and psychologically demanding interactions with patients. In the nursing occupation, job demands are often required to be met by high effort and very rarely by minimum effort. Job resources on the other hand, also refer to the "physical, psychological, social, or organisational aspects of the job that are "functional in achieving work goals, reduce job demands and the associated physical and psychological costs, stimulate personal growth, learning, and development" (Bakker & Demerouti, 2007, p. 312). Job resources are also seen to have motivational potential, and are resources which are "valued in their own right or because they are means to the achievement or protection of other valued resources" (Bakker & Demerouti, 2007, p. 312). Despite all the numerous negative considerations highlighted, there are positive experiences associated with job resources.

Job resources can be seen as facets of the work environment contributing to the achievement of work goals and can be seen to reduce job demands or help alleviate demands exerted by a job. Examples of working conditions that can be considered as job resources in the nursing occupation include: support, autonomy and feedback. At the interpersonal or social level (Bakker & Demerouti, 2007), for instance, this can be support from other co-workers. Due to nursing shortages, the support received from co-workers may be compromised. Support as a job resource can also be the nature of existing relationship found between those in management and other employees, for instances matrons and auxiliary nurses. Autonomy as a job resource in the nursing occupation can be seen in working conditions that prohibit nurses to choose their own working methods, the lack of opportunity to use their own abilities, the amount of variety in the day-to-day job tasks, and the attention paid to the suggestions nurses make.

As part of measuring Job Satisfaction in the current research, some of the questionnaire items asked participants to rate the level of autonomy in their jobs through various questions linked to autonomy, i.e. questions around their working conditions in terms of the amount of autonomy that exists (see Appendix F). Autonomy as a job resource as observed in the JD-R model is linked to some questionnaire items found in the Job Satisfaction scale. Working conditions that lack or only allow low levels of autonomy according to the Job Satisfaction will be more associated with lowered levels of job satisfaction (Warr, Cook, and Wall's 1979). Feedback as a working condition can also be considered a job resource (Demerouti, et.al, 2000). This can be the performance feedback you receive from those in management and from your co-workers, and the recognition you receive at work for your performance.

Job resources can encompass numerous other aspects of the work environment that are not mentioned in the JD-R model. Job resources are considered to be aspects of the work environment that help in meeting and achieving work goals. Within the nursing occupation, job resources can be aspects such as: adequate nursing staff, necessary equipment, tools and the required material neededto carry out their daily work activities. Without these, it becomes incredibly difficult for nurses to succeed in doing their daily work tasks and activities and this has an effect on job behaviour that can be exerted on the job. Job resources are thus important for successfully carrying out daily work activities. Viotii and Converso (2016) state that job resources have an effect on workers' job behaviour. As stated above in the definition of job

resources provided by Bakker and Demeorouti (2007), job resources can be seen to have motivational potential.

It can then be argued that adequate job resources can lead to positive job behaviour, and that an inadequate amount of job resources may counter the motivational potential job resources have, which leads to undesirable job behaviours. Positive or desirable job behaviour can be employee wellbeing as indicated by Viotti and Converso (2016). This has a direct effect and correlates to positive work input. Job resources can be associated with and exert certain job behaviour (Viotti & Converso, 2016). Sufficient job resources can positively correlate to high levels of work input and lead to high work input.

As such, the nature and quality of service that is received from public hospitals and that is provided by nurses can be linked to the availability of job resources. This is especially true for nurses in public hospitals. The state of public service generally in South Africa is considered to be poor (DENOSA, 2013). The state of service delivery is reliant on sufficient job resources required to respond successfully to job demands, among other factors. The implication that availability of job resources has on organisational outcomes is thus fruitful to explore and understand further. Lack of or insufficient job resources may evoke undesirable outcomes (Demerout et.al, 2000a), which are more associative to intent to leave. In the current research, the lack of job resources in the nursing occupation is associated with important outcomes such as lowered levels of overall job satisfaction and organisational commitment, which in turn, will be associated more with intent to leave. The JD-R model can thus be considered as providing a comprehensive theory for the current research and context for the variables of the research.

Intent to leave could be explained as an outcome of the interacting effect between organisational commitment and job satisfaction. Furthermore, job resources and job demands in the nursing occupation could explain the nurse's level of organisational commitment, job satisfaction and how these two variables interact, correlate and effect intent to leave. From this, the following sections discuss factors associated with intent to leave. The variables that will be discussed are organisational commitment, job satisfaction, and relevant demographic variables. Intent to leave will also be discussed under its own heading.

2.3 Organisational commitment

Mowday, Porter and Steers (1979) defined organisational commitment as “the relative strength of an individual's identification with, and involvement in a particular organisation” (p. 226). On the other hand, Bateman and Strasser (1984) also defined organisational commitment as “multidimensional in nature, involving an employee’s loyalty to the organisation, willingness to exert effort on behalf of the organisation, degree of goal and value congruency with the organisation, and desire to maintain membership” (p. 95). These definitions take into account an employee’s desire to work or to come to work, which make organisational commitment an important variable to consider, especially in relation to intent to leave. Discussing organisational commitment can assist in understanding other organisational related factors among nurses’ working in a public hospital, factors such as job satisfaction. According to Porter, Steers, Mowday and Boulian (1974), employees, who express organisational commitment, who are committed to their organisation are considered beneficial since they are likely to have lower absenteeism rates and longer tenure. As such, understanding and measuring organisational commitment will provide insight required for appropriate interventions aimed at both the attraction and more importantly to the retention of employees in order to mitigate nursing shortage and to respond to the current state of health care delivery.

Meyer and Allen (1991), namely affective commitment, continuance commitment and normative commitment, have divided organisational commitment into three forms. These three subsets of organisational commitment are considered to result in different actions from an employee towards an organisation and have varying implications on an employee and for an organisation. Due to this, Meyer and Allen (1991) developed the three-component model of organisational commitment. Each component speaks to different actions. Porter et.al (1974) defined affective continuance as a strong belief in and acceptance of the organisation’s goals; this can be seen as the affection that an employee has toward their organisation and the organisation’s goals. In turn, the employee commits to working in the organisation for a prolonged duration. This displays an employee’s affection to the organisation. The employee develops a bond that is built on emotions: as such the employee will identify as one with the organisation and will display the willingness to want to work for the organisation.

Secondly, continuance commitment according to Porter et.al (1974) refers to a definitive desire to maintain organisational membership, based on the benefits that the organisation gives the employee. This component of organisational commitment is based on the employee's need to the organisation. As such, the employee remains with the organisation based on obligatory reasons. Often, here an employee stays with the organisation as it is a way of maintaining a livelihood and meeting their needs. This may not necessarily be because the employee wishes to stay with the organisation. An example is seen in the capital gained in return of the inputs the employee has invested in the organisation and the outputs they have produced for the organisation. Lastly, normative commitment on the other hand, is seen as the willingness to apply effort on behalf of the organisation (Porter et.al, 1974; Weiner, 1982). This component of organisational commitment is based on the morality of the employee. This sense of responsibility is experienced as employees feel like it is the only right and moral thing to do, and perceive their departure as a cost to the organisation (Porter et al, 1974).

The organisational commitment model has received an abundance of attention in organisational behaviour research. As such, there has been a need to expand on the well-known three-component model of organisational commitment. Meyer and Herscovith (2001) have expanded the three-component organisational commitment model by including various antecedents and consequent variables associated with the three components of organisational commitment. The antecedent variables are considered to be variables which result in either affective, continuance, or normative commitment, while the consequent variables are considered to be outcomes associated with each of the components of commitment. There are however other variables which can be considered as 'antecedents' of organisational commitment, or which can be considered to form the grounding of organisational commitment.

Organisational support theory arguably forms the basis of organisational commitment, as it posits that in order for socio-emotional needs to be met and to determine an organisation's inclination to reward and award increased work effort, employees will usually develop beliefs about the extent to which an organisation values their increased effort (Tan, 2008). In this way, they will reciprocate the perceived organisational support with increased organisational commitment and other such work behaviours such as performance and loyalty (Tan, 2008). Perceived organisational support was found to have a positive linear relationship with employee's obligation towards the organisation and to help the organisation reach its goal

(Eisenberg, Armeli, Rexwinkel, Lynch & Rhoades, 2001). As such, organisational support is said to be related to normative commitment specifically. It is surmised that this will ultimately relate to lowered levels of intent to leave.

Normative commitment refers to the responsibility the employee has to stay with the organisation due to the perceived cost of their departure on the organisation; and that staying is the moral and right thing to do. In the same vein, the greater the involvement the employee has with the organisation, the less likely they will have the intent to leave. This according to Hartman and Hartman (1995) speaks to the social integration theory. In attempts to better understand intent to leave, studies have previously focused on organisational commitment (Mayer & Schoorman, 1998; Meyer & Tett, 1993). High levels of organisational commitment have generally been associated with low levels of intent to leave and thus of actual turnover (Meyer & Tett, 1993). The researcher thus hypothesised that:

Hypothesis 1: Organisational commitment (O_C) statistically predicts intent to leave (I_T_L) among nurse working at a public hospital.

Organisational commitment has been considered to be a common variable to consider when predicting intent to leave (Meyer & Schooman, 1998; Meyer & Tett, 1993). Arguably, this could be due to the fact that some of the components of organisational commitment are accumulated and secured over long periods of time, such as continuance commitment and normative commitment, as compared to an employee's job satisfaction about their job or about certain components of his/her job. For example, in certain circumstances the employee may be dissatisfied with either his pay or the nature of his relation with his superior or co-employee at a particular period in his career; however, his commitment to the organisation will remain unchanged (Porter et.al, 1974). Employees then wish to still remain with the organisation despite the current low levels of job satisfaction experienced. This is not to exclude job satisfaction as equally a good variable when looking at intent to leave. Porter et.al (1974) argue that in some cases, there are employees who value money and may be dissatisfied with how they are remunerated; and as such this may form adequate grounds for intent to leave. This makes the topic very controversial and worthy to explore further and to gain more insight. Job satisfaction like organisational commitment has been viewed as a component of various employee behaviour and employee outcomes, one such outcome being intent to leave.

2.4 Job satisfaction

Identifying factors related to and leading to nursing shortages and nurses' intent to leave is important in order for this phenomenon to be better understood. A study conducted by Delobelle et al (2011) which aimed to describe the relationship that existed among demographic variables, job satisfaction and intent to leave, found job satisfaction to be statistically associated with intent to leave. Job satisfaction has been known for its association with a variety of important job behaviours exerted by employees, such as intent to leave and intent to stay, turnover, employee performance and absenteeism (Cavanagh & Coffin, 1992; Coomberg & Barriball, 2007; Martin & Roodt, 2008; Unler, et.al, 2013; Volmer, Niessen, Spurk, Linz & Abele, 2011).

Job satisfaction as an organisational variable is complex and has in its own various affecting components which can be considered its antecedents (Coomberg & Barriball, 2007). It has been identified as a contributing factor to intent to leave, intent to stay, and equally as a factor in decreasing employee turnover (Cavanagh & Coffin, 1992; Coomberg & Barriball, 2007). The conceptualisation of a variable has always provided a basis of understanding how the variable will be used in a particular research study. As such, job satisfaction has numerous definitions associated with it and there is no agreed upon universal definition (Cavanagh & Coffin, 1992).

In the current research, job satisfaction is conceptualised as "the extent to which an employee is satisfied with the intrinsic (the job itself) and extrinsic (work conditions) aspects of the job" (Warr, Cook & Walls, 1979, p. 133). This definition views the job in its entirety, rather than focusing on a particular facets or aspects of a job. Job satisfaction has however, been considered as an overall feeling about the job (global measure) or as a feeling related to certain aspects of the job, the latter is known as facet measure (Spector, 1997). The facet approach to job satisfaction focuses on particular aspects of the job such as supervision, relationship with superiors or co-workers or pay. As such, the facet approach to job satisfaction is ideal when one is interested in identifying which particular aspects cause satisfaction or dissatisfaction in the job, or when focusing on specific work conditions, as well as when looking at the nature and the impact of working conditions.

Locke (1976) labelled the various job aspects as 'job dimensions' while Spector (1997) labelled the job aspects as 'job facets' (Tett & Meyer, 1993). Facet job satisfaction has been typically measured using the Job Description Index (JDI) (Tett & Meyer, 1993). It can be

argued that facet job satisfaction is a subset of overall job satisfaction, since overall or global job satisfaction encompasses all the various individual facets of a job. Warr, Cook and Wall's (1979) definition has been among the widely used definitions of Job Satisfaction in the organisational behaviour literature. Warr et.al (1979) defined job satisfaction as the extent to which an employee is satisfied with the intrinsic as well as extrinsic aspects of the job. For this reason, it has been chosen in the current research as it has been measured using the global measure scale by Warr et.al (1979). Furthermore, the current research did not focus on particular facets or aspects of the job, but rather had its focus on the overall attitude towards the job. Warr et al (1979) are profoundly known for the Global Job Satisfaction construct, which is still currently applicable. Global job satisfaction is employed when the overall attitude towards the job is of interest (Lu, et.al, 2005).

Job satisfaction can be conceptualised using either one of these two approaches. The chosen conceptualisation is often related to the objectives of a research. As such, for the current research, overall or global job satisfaction forms the basis of the entire research; however, reference to facet job satisfaction is made. This is particular relevant in instances where certain aspects of a job are discussed to aid the discussion of global job satisfaction. Both these approaches warrant the mention of different theories that have had an influence and a standing in the discussion of job satisfaction. Theorists such as Herzberg's Motivator-Hygiene theory and Maslow Hierarchy of Needs identify various needs and values that need to be fulfilled which results in different employee behaviours at work (Martin & Roodt, 1999). One such behaviour is the level of satisfaction an employee has with their work (Coomberg & Barriball, 2007). For instance, in Maslow's hierarchy, there is an order of needs, where higher order needs focus on an individual realising recognition for their work or performance, and achievement in their work (Martin & Roodt, 1999).

Herzberg's theory identifies maintenance factors such as pay, benefits and organisational policies that need to be realised for satisfaction (Coomberg & Barriball, 2007). Both these theories focus on the realisation and fulfilment or lack thereof of various aspects of the job in order to produce satisfaction or dissatisfaction for the individual. This refers mostly to facet job satisfaction, but arguably it forms a subset of overall or global job satisfaction. For the current research, the global job satisfaction measurement approach is used. Global job satisfaction is used as the overarching approach in the current research and has been applied in the operationalisation of job satisfaction; however, facet job satisfaction also forms part of

the discussion. It is important to acknowledge the reasons for using a particular measurement approach. This forms part of the rationale for this research.

Job satisfaction has been known to influence various work behaviour. For instance, a high level of job satisfaction has been associated with increased work efforts (Altuntas, 2013). Low levels of job satisfaction on the other hand, can lead to undesirable outcomes for organisations such as lowered productivity and behavioural intentions such as intent to leave (Altuntas, 2013; Carsten & Spector, 1987; Lu et.al, 2005; Porter et.al, 1974; Shield & Ward, 2001). As such, nurses with lowered levels of job satisfaction can impact the efforts put into daily job activities and into tasks, and thus impact the quality of healthcare delivery (Arnold & Feldman, 1982; Shield & Ward, 2001).

As such, understanding nurse's job satisfaction is fundamental in devising interventions aimed at heightening job satisfaction as this has a spillover effect on achieving desirable job behaviours required for providing good service in public healthcare hospitals. Moreover, having insight into job satisfaction is important for the attraction and retention of employees. More relevant for this current research, the attraction and retention of nursing staff is fundamental in responding to the apparent nursing shortage experienced in public healthcare hospitals. Recruitment and retention interventions have been considered as challenges in the job satisfaction literature (Lu et.al, 2005).

This argument taps into talent management strategies aimed at getting nurses engaged in and committed to their jobs attempting to increase job satisfaction. This also speaks to working on ways to provide the nursing staff with the required job resources (such as increasing the workforce within public hospitals, by attracting more nursing staff and retaining those currently working). These interventions are aimed at responding to the job demands exerted by the nursing occupation. The JD-R model states that adequate job resources are required to meet high job demands, and thus to successfully carry out daily work duties and activities. Engaging in research that aims to further understand job satisfaction among nurses is required. Research aimed at expanding insight on organisational behaviour, such as job satisfaction in the health sciences, requires serious attention.

Decreased job satisfaction has been found to be related to intent to leave, highlighting job satisfaction as among the contributing factors of intent to leave (Carsten & Spector, 1987; Cavanagh & Coffin, 1992; Coomber & Barriball, 2007; Lu et.al, 2005; Shield & Ward, 2001; Tomey, 2009; Porter et.al, 1974). A study conducted by Blaauw et.al (2013) found that job

satisfaction was statistically related to intention to leave. This study aimed to compare the job satisfaction and intention to leave of health workers in Tanzania, Malawi and South Africa (Blaauw et.al, 2013). Dissatisfaction with the job has been found to be an important factor behind intent to leave and behind employee's decision to eventually leave, i.e. turnover. Related to the current research, Coomber and Barriball (2007) state that job satisfaction is a concept that is closely associated with intent to leave within the nursing profession. In the light of the above mentioned facts, the following was hypothesised:

Hypothesis 2: Job satisfaction (J_S) statistically predicts intent to leave (I_T_L) among nurses working at a public hospital.

Job satisfaction which is an important variable related to and predicting intent to leave has been identified by Coomberg and Barriball (2007) as having a secondary effect of decreasing actual turnover. This is argued, given that many researchers have concluded that a decrease in turnover occurs as a result of a workforce that is characterised by high job satisfaction (Carsten & Spector, 1987; Cavanagh & Coffin, 1992; Coomber & Barriball, 2007; Lu et.al, 2005; Porter et.al, 1974; Shield & Ward, 2001; Tomey, 2009).

Job satisfaction is a phenomenon that can be influenced by managers and Human Resources (HR) practitioners, and therefore, it can be argued to be a controllable factor that leads to intent to leave. Having the control over employees' level of job satisfaction may directly result in managers and HR practitioners to work on mechanisms aimed at retaining employees and reducing intent to leave, and thus in the process allow them to respond to the current nursing shortage in public hospitals.

2.5 Intent to leave

Intent to leave has been a widely studied variable in literature focusing on actual leaving/turnover (Cortese, 2012; Martin & Roodt, 2008: Meyer & Tett, 1993; Rispel et.al, 2014). Turnover has been an organisational concern faced by numerous organisations and in the nursing sector; it has resulted in a significant shortage of nurses (Coomberg & Barriball, 2007; Rispel et.al, 2014). Additionally, actual turnover is a major consequence of intent to leave and other related employee behaviours such as decreased performance, lack of efficiency and effectiveness in carrying out work tasks, and high absenteeism (Coomberg & Barriball, 2007). The organisational and economic implications associated with both actual

turnover and intent to leave warrant the "…attention on retention as a means to inhibit turnover and address the burden of shortages" (Coomberg & Barriball, 2007, p. 298).

There is a difference between turnover initiated by the employee, which is referred to as employee-initiated turnover, and turnover initiated by the employer, referred to as employer-initiated turnover (Meyer & Tett, 1993; Rispel et.al, 2014). As such, there are numerous ways of viewing turnover and the viewpoints of various researchers have been explored. Employee-initiated turnover is seen as the employee's voluntariness of leaving the workplace or of quitting a job, and as such, is seen to be self-motivated (Meyer & Tett, 1993; Rispel et.al, 2014). Similarly, Meyer & Tett (1993) and Rispel et.al (2014) place emphasis on employer-initiated turnover as being the involuntariness of employees leaving their workplace or being motivated by their employer to quit their job.

As observed from the literature review, wanting to quit has been labelled using numerous terms, such as, turnover intention, attrition, intent to quit; exit migration and intent to leave (Mxenge, Dywili & Bazana, 2014). McCarthy, Tyrrel and Lehane (2007, p. 249) saw intent to leave as "the most direct and immediate antecedent of overt behaviour". Furthermore, Coomberg and Barribal (2007) regarded intent to leave as the primary predictor of turnover and to be a cognitive process of turnover intention (Moneke & Uher, 2014). Intent to leave has been considered a consequence of affective variables such as job satisfaction and organisational commitment, in contrast to actual turnover, which is related to various demographic variables such as tenure and age (Coomberg, Barriball, 2007). Among other critical factors worthy of mentioning in understanding antecedents of intent to leave are job demands as depicted by the JD-R model in figure 1. Increased job demands with limited job resources can reduce the level of an employee's job satisfaction and organisational commitment and thus cause an employee to display undesirable work behaviours, such as intent to leave and numerous other undesirable behaviours such as decreased performance and effort.

In the nursing occupation, examples of job demands as previously discussed are intensified workloads, physically demanding work tasks, emotionally demanding interactions with patients and co-workers, and working under pressure. These are among the job demands which can result in intent to leave from an employee, especially where the job demands are not alleviated with adequate job resources.

Intent to leave is considered a behavioural interest and not actual behaviour of quitting (Mxenge et.al, 2014). Essentially, it can be seen as a phenomenon where an employee has thoughts of quitting or leaving the current job in search for lucrative work elsewhere or simply to exit a workforce. In addition to the aforementioned definitions, Vandenberg and Nelson (1999, p. 1315) defined intent to leave as an "individual's own estimated probability that they are permanently leaving the organisation at some point in the near future". For the purposes of this research, Vandenberg and Nelson's (1999) definition of intent to leave is used and referred to. This definition fits best with the scope of the proposed research. The current research aimed to investigate intent to leave among nurses and has therefore looked at gaining insight into variables related to and which may be the cause of intent to leave in the near future among nurses working at a public hospital.

The research aims to investigate nurses' own estimated probability of leaving. As stated, the concept of intent to leave is often used as an antecedent of actual turnover (Martin & Roodt, 2008; Meyer & Tett, 1993; Sousa-Poza & Hanneberger, 2002; Tan, 2008). Increased nurse turnover can decrease an organisation's ability and capacity to meet its demand of delivery of basic healthcare and in a situation like South Africa, where the state of public health care is generally poor, nursing shortages in the public health care sector worsen the state of public health care delivery (DENOSA, 2013; Shield & Ward, 2001). As Cavanagh and Coffin (1992) and Rispel et.al, (2014) state; turnover impacts on working morale and staff practice which in turn has implications for the delivery of healthcare.

Numerous studies have argued that intent to leave is related to actual turnover (Martin & Roodt, 2008; Sousa-Poza & Hanneberger, 2002), making it essential to research and to understand the reasons behind intent to leave and those related to it in order to prevent actual turnover from happening. This will provide organisations with better insight into the matter, and possibly insight into variables that can be considered to be antecedents of it, and thus organisations can know how to better respond to it. In a study conducted by Waldman, Kelly, Arora and Smith (2004) intent to leave was found to be one of the reasons behind the state of healthcare delivery in the country.

As such, intent to leave can be argued to bring about undesirable employee work behaviours that negatively affect daily work activities and tasks, resulting in a decline in organisational effectiveness. Cavangh and Coffin (1992) as well as Rispel et.al (2014) further argue that intent to leave affects staff practices: this involves the manner in which employees carry out

the day-to-day duties that came with the occupation. In the nursing occupation, this can be detrimental to the services required to be delivered by nurses. Waldman et.al (2004) argue that “a departing person, cuts corners, compromises quality and safety, risks malpractice claims, or exemplifies any number of adverse traits, behaviours, and attitudes that staff find offensive” (p. 2). As such, nurses who have intent to leave are more likely to perform poorly in their daily duties and are more likely to disregard important procedures when carrying out their daily activities and duties, and thus diminishing the quality of the delivery of healthcare services.

Furthermore, Robyn and Du Preez (2013) and Du Plooy and Roodt (2010) explained that one of the main reasons behind the investigation of intent to leave in organisations is to help HR take necessary and appropriate retention strategies and to adopt or implement better management strategies for employees’ intent to leave. Moreover, the consequences associated with actual turnover expand beyond the affected organisation. Actual turnover places the country’s economy under jeopardy (Rispel et.al, 2014). As shown thus far in the discussion, intent to leave is related and is seen as an antecedent of numerous undesirable employee work behaviours and to negative organisational outcomes such as declined organisational effectiveness.

Most literature on intent to leave has focuses on the negative effects it has on the overall performance exerted by employees in an organisation and organisational effectiveness. In the nursing occupation, intent to leave along with other related organisational variables can be seen to be antecedents behind the state of public health service. Arguably, that intent to leave may have positive effects on an organisation. This is seen in cases where employees are considered incompetent and where their performance is considered unsatisfactory, even after necessary procedures have been taken to develop them. The loss of these employees will be considered to not be as detrimental to the organisation given that they added no real positive value to the state of the organisation. With this argument, it is shown that the effects of employee intent to leave on organisations is to a great degree dependent on which employees display intent to leave or end up leaving the organisation, with the most negative effect experienced with employees who are considered as assets and are highly competent. This is important to consider when researching the effects of intent to leave or actual turnover on organisations.

2.6 Demographic variables

Literature on the topic of intent to leave has also considered the demographic characteristics when researching intent to leave. Demographic variables are capable of influencing the results of any study (Cortese, 2012). As such, it is important to acknowledge the relationships and impacts they have with organisational commitment, job satisfaction, and intent to leave. Employees' personal characteristics such as age (Arnold & Feldman, 1982; Shields & Ward, 2001), the type of unit they work in (McCarthy et.al, 2007; Takase, Maude & Manias, 2006) which is referred to as unit/ward of work in the current research, years of experience and tenure (Chan & Morrison, 2000; Shader, Broome, Broome, West & Nash, 2001) have been found to either relate to or influence intent to leave. Additionally, professional qualification (Barron & West, 2005) and nursing position (nursing category) were also among variables that have been found to relate and influence intent to leave (Rispel et.al, 2014). There are other demographic and personal variables that have been found to equally contribute to nurses' intent to leave and are not mentioned here. Given these findings, this was the last hypothesis that was formulated:

Hypothesis 3: Demographic variables can also statistically predict intent to leave (I_T_L) among nurses working at a public hospital.

The demographic variables of interest in the current research were: age, unit/ward of work, tenure with current organisation, nursing position/category and employment status.

2.6 Aim of the research

To examine and explore job satisfaction, organisational commitment (affective commitment, continuous commitment and affective commitment) and nurse's intent to leave. There were other factors worth exploring in conjunction with organisational commitment, job satisfaction and intent to leave: as such, the research extended its focus to include the following demographic variables: age; unit/ward of work; years at the job (tenure); position (nursing category) and employment status. The research aimed to test which demographic variables are significantly related to intent to leave.

The research aimed to investigate the relationship between sets of variables to determine the nature of the relationship that exists among the variables: this included the predictive relationship the independent variables had with intent to leave. This was done by running various correlation and regression analyses.

It should be acknowledged that the analyses were highly dependent on the distribution of the data, and in particular, the distribution of the error terms for the regression analyses. In addition to the postulated statistical hypotheses below, the research aimed to end with finding the best fitting predictive model that includes significant demographic variables in predicting intent to leave. Furthermore, the research investigated the relative importance of each independent in predicting intent to leave. This was done in order to know which independent variable is the strongest in predicting intent to leave.

2.7 Summation of literature review

In addition to job satisfaction discussed above, organisational commitment has also been acknowledged as the most prominent antecedent for intent to leave in the organisational behaviour literature (Meyer & Tett, 1993; Rispel et.al, 2014; Shield & Ward, 2001). A decrease in organisational commitment and an increase in dissatisfaction among employees were found to result in intent to leave (Coomberg & Barriball, 2007; Meyer & Tett, 1993; Rispel et.al, 2014; Shield & Ward, 2001). Intent to leave has been associated with a function of job satisfaction influenced by organisational related factors or behaviours such as organisational commitment and certain demographic variables (Meyer & Tett, 1993; Rispel et.al, 2014; Shield, Ward, 2001). The following hypotheses were therefore postulated:

Hypothesis 1: Organisational commitment (O_C) statistically predicts intent to leave (I_T_L) among nurse working at a public hospital.

Hypothesis 2: Job satisfaction (J_S) statistically predicts intent to leave (I_T_L) among nurses working at a public hospital.

Hypothesis 3: Demographic variables can also statistically predict intent to leave (I_T_L) among nurses working at a public hospital.

Based on previous research findings, job satisfaction and intent to leave have been found to be mostly negatively related. These findings have been found in numerous other research studies. Therefore, the current research expects global job satisfaction to be inversely related to intent to leave. It has been shown through previous findings that employees who are high on organisational commitment are less likely to have intent to leave. As such, organisational commitment is also inversely related to intent to leave based on previous research findings. Not only have these variables been found to be inversely related with intent to leave, they

have been found to be correlated to one another (Meyer & Tett, 1993; Porter et.al, 1974; Rispel et.al, 2014).

Job satisfaction plays a significant role in numerous employee work behaviours as extensively discussed. It can be argued that employees who have high a job satisfaction are more likely to remain in their current jobs, such can also be argued to be committed to their organisation. Anis, Rehman, Khan and Humayoun (2011) study explored the relationship that existed among employee retention, job satisfaction, perceived supervisory support and compensation by considering the organisational commitment as mediating variable found significant correlation between job satisfaction and all the components of organisational commitment. Furthermore, they concluded that organisational commitment has a strong and positive relationship with job satisfaction and employee retention. As such, the current research postulates an interaction between organisational commitment and job satisfaction in influencing intent to leave.

Including both organisational commitment and job satisfaction when looking at intent to leave has been common among numerous researchers, and the continuation of investigating the relationship among these three variables has been sustained by the findings that have been reached (Anis et.al, 2011; Martin & Roodt, 2008). It is thus worthy to investigate the relative independent contributions of organisational commitment and job satisfaction in influencing intent to leave. This will be done by using a technique called Dominance Analysis. Dominance analysis is a relatively new development, but this approach will work to determine the relative importance of predictor variables. Anis et.al (2011) argue that the best predictor of intent to leave between organisational commitment and job satisfaction has not yet been successfully established.

The nature of the relationship these variables have with one another is still worthy of further investigation, particularly in the South African context. In summary, research has mostly indicated that there is a negative relationship between organisational commitment and intent to leave as well as between job satisfaction and intent to leave. The South African health system is facing severe challenges in terms of service delivery and nursing shortage. The state of public health service generally is considered to be poor (DENOSA, 2013). Everyone has the right to health care services and as such, public healthcare service delivery needs to be prioritised and constantly improved. In South Africa, modernisation and implementation strategies have been introduced to assist government hospitals in delivering improved health

care and for improving the working conditions of health care staff (National Department of Health, 2003).

These strategies are aimed at the following: recruitment and retention; training and skills; equipment and infrastructure; rationing services and technologies; management and organisation; and transport and communication. These strategies are therefore aimed at enhancing job resources required by nurses to successfully and effectively meet the job demands that come with the nursing profession. As nursing shortages continues and as the population remains to increase as well as a difficulty in retention strategies is experienced, it becomes increasingly important for the reason behind nurse's intent to leave and those related to it are understood in order to meaningfully respond to the problem. This process can assist in securing sufficient health care workers going forward. Increasing emphasis is being put on research directed at the health sciences and therefore it is extremely important to gain further insight into this field.

Chapter 3

Methodology

3.1 Introduction

The aim of the research was to explore the numerous relationships and the nature of dependencies among intent to leave, job satisfaction and organisational commitment among nurses at a public hospital in Johannesburg. In order to collect and analyse data for the research variables, various data collection methods and statistical procedures were employed too. The method that was used in this research is discussed below with reference to the research design that was adopted, and the instruments that were used. The procedure outlined herein formed a guideline of how the research method process unfolded. The procedure section also explains the nature of the sample that was obtained. The research methodology section also outlines ethical considerations that were relevant to the research. Data analysis is also discussed to conclude the research methodology section; this also includes a brief discussion of the statistical analyses that were to be used.

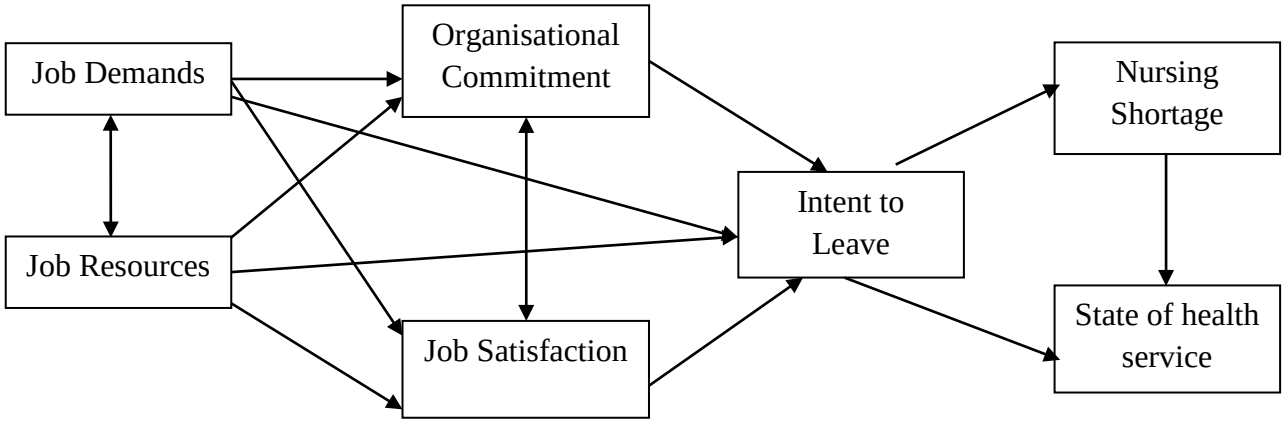
The aim of the research was to explore the numerous relationships and the nature of dependencies among intent to leave, job satisfaction and organisational commitment among nurses at a public hospital in Johannesburg. As observed in the literature review and based on the last chapter and the postulated hypotheses, the researcher suggested a ‘theoretical model’ which provides a visual representation of the research and the nature of the relationships that is postulated among organisational commitment, job satisfaction and intent to leave as derived from the literature review.

3.2 Suggested theoretical model

A theoretical model has been suggested by the researcher to visually represent the variables of the research and the nature of the relationship that is postulated to exist among them as derived from the literature review. The variables of the research are displayed below in the theoretical model to bring together all that has been discussed and argued thus far. For example, job demands which are not met by adequate job resources can effect an employee’s level of organisational commitment and job satisfaction. This in turn leads to undesirable employee work behaviours such as intent to leave. Intent to leave as argued by Shield and Ward (2001) and Waldman et.al (2004) has been associated among the reasons behind nursing shortage and thus the state of health service. The results of the research will be

discussed in detail in Chapter 5 in relation to the literature in the field and based on the suggested theoretical model.

Figure 2: Suggested theoretical model



3.3 Research design

A research design is described as the blueprint for conducting and guiding research (Johnson, 2001). The current research was quantitative in nature as it involved the collection and analysis of data that is quantifiable (Rosenthal & Rosnow, 1984). A correlational design was used as no variables in the research were manipulated and there were no control groups (Gravetter & Forzano, 2006). The research variables were analysed using various statistical techniques to determine how they are related to one another and whether organisational commitment, job satisfaction and the demographic variables that were found to statistically have a linear relationship with intent to leave are predictors of intent to leave. The research was conducted at once, with no pre-testing; thus making it a cross-sectional design (Rosenthal & Rosnow, 1984). A cross sectional research is a study which occurs over one point in time and not across time (Rosenthal & Rosnow, 1984).

3.4 Research procedure

In order to answer the postulated statistical hypotheses of the research, data was collected from volunteers by means of a final questionnaire which consisted of three scales. Permission to conduct the research was first sought and granted by both the Medical Human Ethics Community of the University of the Witwatersrand and by the research site. The ethical

clearance letter to conduct the research was obtained from the Medical Human Ethics Community of the University of the Witwatersrand and can be found under Appendix I. The approval letter to conduct the research at the public hospital can be seen in Appendix H. Hereafter, data collection dates were scheduled with the research site.

Following this, volunteer participants were invited to participate in the research. The public hospital was supplied with 200 questionnaires, which were distributed to the various wards in the hospital. The final questionnaire that was used in the research was anonymous; it did not request any individual information that would make it possible to link a questionnaire to a particular participant. The final questionnaire could not be used to identify any volunteer participants who participated in the research. The anonymity of the participants reduced the likelihood of participants answering untruthfully or the likelihood of participants giving expected answers or socially desirable answers.

Each questionnaire consisted of a participant information sheet that outlined what the research was about and explained the purpose of research. The participant information sheet also explained what participation in the research entailed. In addition to this, the researcher also outlined the purposes of the research and clearly explained what participation in the research meant. This enabled the participants to ask, raise and clarify any issues or concerns they may have had. Every participant in the research was required to give written, informed consent by signing the consent form (see Appendix C). Thereafter, the volunteered participants were given time to complete a self-administered questionnaire. The final questionnaire took a duration of 20 to 30 minutes to complete. Participants who voluntarily participated in the research completed the final questionnaire and were required to leave the completed questionnaires in sealed boxes that were centrally located around the wards. The boxes were emptied at varying time intervals.

3.5 Research sampling

The final sample size was obtained from one public hospital in Johannesburg, South Africa. The demographic and employment information of the 112 volunteer nurses are displayed in Table 1 and Table 2 below. The raw data collected from the participants was captured in Excel spreadsheets and analysed using the IBM® SPSS 23 software programme. The majority of the sample was in the 26-35 and 36-45 age categories. There were a few participants who skipped some of the questions; this resulted in missing-entries. The number of missing items for each respondent was dealt with by excluding the average of those who

had too many missing items in the final questionnaire (respondents who did not respond to 25% or more items in each questionnaire excluded). This in turn had implications for the results yielded.

Table 1: Age of the Sample

Variable	N	Mean	SD	Minimum	Maximum
Age	110	2.57	1.009	1	5
Age missing	2				
Total	112				

Table 2: Demographic and employment information of the sample

Demographic variable	**Variable category group**	**Variable category group name**	**N**	**%**
Age	25 and less	1	11	9.8
	26-35	2	52	46.4
	46-55	3	24	21.4
	56-65	4	19	17.0
	65 and above	5	4	3.6
	Missing		2	1.8
	Total		**112**	**100**
Unit/Ward of work	ICU	1	0	0
	Theatre	2	1	9
	Causality	3	0	0
	General Wards (ward 2-23)	4	90	80.4
	Other	5	19	17.0
	Missing		2	1.8
	Total		**112**	**100**
Duration of employment	0-6 months	1	16	14.3
	6 months- 1 year	2	21	18.8
	1-3 years	3	20	17.9
	3-5 years	4	25	22.3
	Other	5	28	25.0
	Missing		2	1.8
	Total		**112**	**100**
Nursing position (Category)	Auxiliary nurse	1	31	27.7
	Staff nurse	2	24	21.4
	Sister/ Professional nurse	3	49	43.8
	Matron	4	3	2.7
	Other	5	4	3.6
	Missing		1	.9
	Total		**112**	**100**
Employment status	Temporary/Contract	1	3	2.7
	Permanent	2	106	94.6
	Missing		3	2.7
	Total		**112**	**100**

3.6 Instruments

3.6.1 Biographical questionnaire

This section of the final questionnaire asked the volunteer participants to provide information about their age, years at the job (tenure), position (nursing category), unit or ward of work, and employment status (permanent or part-time). This section did not request any identifying information such as names or identity numbers. The demographic questionnaire can be found in Appendix D.

3.6.2 Organisational commitment

Meyer, Allen and Smith's (1993) scale of organisational commitment was used to operationalise organisational commitment (See Appendix E). The original model of organisational commitment developed by Meyer and Allen (1991) explains the antecedents, correlations and consequences of organisational commitment. The scale consists of three subscales namely: affective commitment, continuous commitment, and normative commitment which are operationalised by the revised Three Component Model Employee Commitment Survey. This survey consists of 18 items that are measured on a seven-point Likert-type scale ranging from 1 which is strongly disagree to 7 which is strongly agree.

The participants responded to items such as "I do not feel emotionally attached to this organisation" (Affective commitment scale), "Right now, staying with my organisation is a matter of necessity as much as desire." (Continuance commitment scale), and "This organisation deserves my loyalty." (Normative commitment scale). Meyer et.al (1993) found an internal consistency between the three subscales of the organisational commitment scale to be 0.82 for the affective commitment subscale, 0.83 for the normative scale and 0.74 for the continuance commitment subscale. In the current research, the internal consistency between the three subscales was lower than Meyer et al (1993) study. For the affective commitment scale it was 0.33 (see Table 3), .693 for the normative subscale (see Table 4), for the continuance commitment subscale it was 0.756 (see Table 5).

Table 3: Affective commitment internal consistency

Reliability Statistics

Cronbach's Alpha	N of Items
.333	6

Table 4: Normative commitment internal consistency

Reliability Statistics

Cronbach's Alpha	N of Items
.693	6

Table 5: Continuance commitment internal consistency

Reliability Statistics

Cronbach's Alpha	N of Items
.756	6

The internal consistency of the overall organisational commitment scale was reported to be .456. The researcher reports this as it is reported in the correlation matrix and is used as a variable in the regression analyses.

3.6.3 Job satisfaction

Job satisfaction was operationalised using Warr, Cook, and Wall's (1979) measure of Global Job Satisfaction. The questionnaire can be found in Appendix F. The scale has 15 items

which are measured on a Likert-type scale (1 is extremely dissatisfied and 7 is extremely satisfied). A sample item is “The amount of responsibility you are given”, and the participant will then indicate the degree of their satisfaction on this question. None of these items were reverse-score items. In the South African context, a study conducted by Unterslak (2009), which examined a model of employee wellbeing and its determinants as developed by Warr (1999) reported an internal reliability of 0.88 for the global job satisfaction scale. The internal consistency of the J_S scale in the current research was found to be .900, indicating an excellent reliability. See Table 6 below for the internal consistency output.

Table 6: Job Satisfaction (J_S) internal consistency output

Reliability Statistics

Cronbach's Alpha	N of Items
.900	15

3.6.4 Intent to leave

The turnover intention scale developed by Martin and Roodt (1993) was used to measure intent to leave (See Appendix G). Most scales that are used to measure turnover intentions have used scales that have either one item or three items (Becker, 1992). There has been a lack of consistency in scales used to measure turnover intentions that have a sufficient number of items to measure this variable (Martin & Roodt, 2008). The chosen questionnaire consisted of 15 items that were measured on a five-point scale, where 1 is never and 5 is always. The scale was been reported to have a Cronbach Alpha of 0.90 (Mxenge et.al, 2014). The internal consistency between the I_T_L items was found to be .728 in the current research, indicating a good reliability score. See Table 7 below for the internal consistency output. Participants responded to items such as “How often have you considered leaving your job? “ and “How frequently do you scan newspapers in search of alternative job opportunities?”

Table 7: Intent to leave (I_T_L) internal consistency output

Reliability Statistics

Cronbach's Alpha	N of Items
.728	15

3.7 Data analysis

The data that was obtained in the research was analysed using both descriptive and inferential statistics. Frequency tables were used to describe the demographic and employment information of the participants. The analysis section was made up of two phases. The first phase of the data analysis was focused on steps that are used to ensure that the techniques and instruments were reliable and valid for the research. This included running normality tests to ensure that the data follows a normal distribution as well as running reliability analyses to ensure that the instruments are reliable for the purposes of the research. The second phase included analyses that were directed at carrying out the aims of the research, this was the inferential statistics component. Various statistical procedures were performed on the data. Data was captured on Excel spreadsheets and analysed using the IBM® SPSS 23 software programme.

A Pearson Moment correlation matrix consisting of all the variables in the research, was run in order to investigate the associations and the relationships that occurred between all the variables of the research. The correlation matrix was used to determine which demographic variables had a statistically significant relationship with intent to leave as the dependent variable.

A multiple linear regression analysis was performed to determine which of the variables acting as independent variables explained the most variance in intent to leave. This analysis was used to answer the three statistical hypotheses of the research. The purpose of the regression was to investigate what the predictors of intent to leave were and to further inspect the relative importance of each independent variable on intent to leave.

A hierarchical regression analysis was performed to determine the significance of each step of the model in predicting intent to leave. This analysis incorporated the independent variables (organisational commitment and job satisfaction) and the demographic variable

(nursing position (category)) that was found to have a significant relationship with intent to leave from the correlation matrix. The purpose of the hierarchical linear regression was to determine the best fitting predictive model.

Lastly, the dominance analysis was used to determine the relative independent contributions of organisational commitment, job satisfaction and nursing position (category) over and beyond the information provided by the multiple regression. Dominance analysis is a statistical technique used to investigate the relative independent contributions of independent variables in predicting a dependent variable and is a relatively new development.

3.8 Ethical considerations

Before the research was conducted, permission was obtained from the Human Ethics Community of the Witwatersrand University and from the Human Resources department of the public hospital. Following this, questionnaires were distributed to the various units of work/wards of the public hospital. Every questionnaire had a participant information sheet attached to it and all participants detached and kept the participant information sheet (see Appendix B). Participation in the research involved completing the final questionnaire, which took between 20 to 30 minutes. Participation was voluntary; no one was obliged to participate in the research. Participants were informed that they might discontinue participation at any time without penalty or loss of benefits. The participant information sheet outlined what the purpose of the research was as well as what participation meant. It also explicitly stated that participation in the research was voluntary and employees were not to be disadvantaged in any way for choosing not to participate in the research. Additionally, the participant information sheet and the consent form informed the participants that the research might also be presented at a local/international conference and published in a journal and/or book chapter. The anonymity of the participants was guaranteed. The questionnaire did not request information such as names or identity numbers. The return of completed and signed consent form was regarded as formal consent to be a participant in the current research.

Confidentiality was ensured because the responses of each of the participants were treated as highly confidential and all the responses were pooled together in order to summarise the findings, furthermore, the responses were not looked at individually. The participants were informed that the individual responses would in no way be made available to the organisation. The grouped results, however, could be made available to the organisation or

any participants who requested them. Participants were not coerced to take part in the research, and were told they may withdraw from the research at any point.

Participation in the research had no major risks. However, the researcher's contact details were given on the participant information sheet. The participants were encouraged to contact the Researcher for any further queries and any related concerns. The contact details for the Human Research Ethical Committee Chair and Administrator were also attached in the participant information sheet in cases where the participant would require direct queries, concerns or complaints regarding the ethical activities surrounding the research. Additionally, the organisation had a psychological and social department that offered free counselling, and the department is available to provide counselling and debriefing to participants should it be needed. Chances that participants would seek or need counselling and debriefing were however unlikely, as the design of the research did not pose health or ethical challenges.

Chapter 4

Results

4.1 Introduction

This current chapter discusses the results of the current research. The data obtained in the research was analysed using descriptive and inferential statistics. The demographic information of the participants was used to provide descriptive statistics represented in the frequency tables. The analysis section was made up of two phases. The first phase was characterised by steps that assessed whether the techniques and instruments used were reliable and valid for the research. This included running normality tests to ensure that the residuals of the data followed a normal distribution, as well as various other regression techniques to check whether the regression assumptions were met. Normally distributed residuals are generally important in regressions (Field, 2009). This model required normally distributed residuals.

Furthermore, reliability analyses were also run to assess whether the instruments used were reliable and valid for the purposes of the research. The results of the reliability analyses of the different questionnaires used in the research were reported on in Chapter 3 under the instruments section. Also, the demographics of the research sample were also discussed in Chapter 3. The second phase will prove or disprove the postulated hypotheses. The second phase started off with a correlation matrix that included all the variables (organisational commitment, job satisfaction, intent to leave and the demographic variables). A multiple linear regression, a hierarchical regression and a dominance analysis also formed part of the inferential statistical analyses that were carried out in phase two. The research performed various statistical procedures on the data. All analyses were run using the IBM® SPSS 23 software programme.

Before the data was analysed using SPSS, missing entries were identified. According to Schlomer, Bauman and Card (2010) missing data in behavioural sciences is mostly common. There are statistical techniques that can address this. The missing data method that was used in the current research was mean substitution and it runs the analyses as if all cases are available and complete (Schlomer et.al, 2010). Listwise deletion was not used, since it deletes cases that have missing data (Schlomer et.al, 2010). Due to this, it loses considerable amount of data, for instance, in cases where respondents missed one entry, the entire case would be

deleted. Mean substitution is equivalent to replacing the missing item scores with the mean of the answered item. Finding the sum of the items may be problematic since respondents may have more missing entries than completed entries.

In the current research, after the missing data was identified, the missing item scores were replaced with the mean of the answered items. The deletion method that was used was pair wise deletion; this method retains the maximum amount of the available data (Schlomer et.al, 2010). The advantage of this deletion method is that it uses all information where possible, meaning that it keeps as many cases where possible. According to Schlomer et.al (2010) consensus around the percentage of missing data that is considered problematic has not been reached, due to this, there are various cutoff points that have been used by numerous authors which have ranged from 5%, 10%, 20% and 25%. Moreover, Enders (2003) stated that a cutoff between 15% and 20% was common in both the educational and psychological studies. Due to this, the current research opted to go with the 20% cutoff point. Hence, respondents who did not respond to more than 20% of the items in each data set were excluded from the analyses carried in the research.

4.2 Correlation matrix

Pearson's Moment correlation is a statistical technique used to infer the strength as well as the direction of a relationship between two or more variables (Howell, 1999). In order to do this, an investigation of the covariance between two variables is done (Howell, 1999). The limitation of correlation is that it is limited to only inferring the nature of the relationship that exists between two or more variables and not to further predict a score on one variable from a score on another variable (Field, 2009; Howell, 1999). A correlation is based on the general linear model, and by extension, regression is also based on the general linear model (Howell, 1999). Below is a correlation matrix that was carried out to infer the strength and the direction of the relationships that existed between all the variables of the research. The correlation matrix was used to inspect which independent variables, had a linear relationship with the dependent variable (Intent to leave = I_T_L), including the demographic variables of the research as they formed part of the independent variables. From this, multiple and hierarchical regressions were conducted with the independent variables found to be correlated with Intent to Leave. The independent variables included the demographic variables of the research. Below is the correlation matrix consisting of all the research's variables.

Table 8: Correlation matrix including all variables

		Age	Unit/Ward_of_work	How_long_have_you_been_at the_organisation (Tenure)	Nursing_position_(category)	Employment_status	Organisational Commitment (O_C)	Job Satisfaction (J_S)	Intent to Leave (I_T_L)
Age	Pearson Correlation	1	.299**	.398**	-.053	-.123	.367**	.204*	-.114
	Sig. (2-tailed)		.002	.000	.580	.205	.000	.034	.236
	N	110	109	109	110	108	101	108	109
Unit/Ward_of_work	Pearson Correlation	.299**	1	-.049	.009	-.010	.235*	.259**	.020
	Sig. (2-tailed)	.002		.616	.926	.921	.018	.007	.840
	N	109	110	109	110	108	101	108	109
How_long_have_you_been_at the_organisation	Pearson Correlation	.398**	-.049	1	.004	.014	.144	-.109	.169
	Sig. (2-tailed)	.000	.616		.969	.886	.148	.262	.079
	N	109	109	110	110	109	102	108	109
Nursing_position_(category)	Pearson Correlation	-.053	.009	.004	1	.303**	.020	.050	.244*
	Sig. (2-tailed)	.580	.926	.969		.001	.845	.606	.010
	N	110	110	110	111	109	102	109	110
Employment_status	Pearson Correlation	-.123	-.010	.014	.303**	1	-.097	-.047	.112
	Sig. (2-tailed)	.205	.921	.886	.001		.336	.632	.249
	N	108	108	109	109	109	101	107	108
O_C	Pearson Correlation	.367**	.235*	.144	.020	-.097	1	.438**	-.306**
	Sig. (2-tailed)	.000	.018	.148	.845	.336		.000	.002
	N	101	101	102	102	101	103	103	103
J_S	Pearson Correlation	.204*	.259**	-.109	.050	-.047	.438**	1	-.227*
	Sig. (2-tailed)	.034	.007	.262	.606	.632	.000		.017
	N	108	108	108	109	107	103	110	110
I_T_L	Pearson Correlation	-.114	.020	.169	.244*	.112	-.306**	-.227*	1
	Sig. (2-tailed)	.236	.840	.079	.010	.249	.002	.017	
	N	109	109	109	110	108	103	110	111

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

From the correlation matrix above, it is possible to infer the strength of the relationships found among the variables of the research. The significant relationships between the research's variables as indicated in the correlation matrix are as follows:

The results report the statistically significant correlations at the .01 level first, as the .01 is arguably more reliable and better than the .05 level. This is only true if the assumptions of the test are assumed to hold. The statistically significant correlations at the .05 level are reported last.

Age:

Age and Unit/Ward of work are correlated. The correlation coefficient is .299 and is statistically significant at the .01 level. There is a weak positive linear relationship between Age and Unit/Ward of work.

Age and Tenure are correlated. The correlation coefficient is .398 and is statistically significant at the .01 level. There is a weak positive linear relationship between Age and Tenure.

Age and organisational commitment (O_C) are correlated. The correlation coefficient is .367 and it is statistically significant at the .01 level. There is a weak positive linear relationship between Age and O_C.

Age and job satisfaction (J_S) are correlated. The correlation coefficient is .204 and is statistically significant at the .05 level. There is a weak positive linear relationship between Age and J_S.

Unit/Ward of work:

Unit/Ward of work and J_S are correlated. The correlation coefficient is .259 and is statistically significant at the .01 level. There is a weak positive linear relationship between Unit/Ward of work and J_S.

Unit/Ward of work and O_C are correlated. The correlation coefficient is .235 and it is statistically significant at the .05 level. There is a weak positive linear relationship between Unit/Ward of work and O_C.

Nursing position (category):

Nursing position (category) and Employment Status are correlated. The correlation coefficient is .303 and it is statistically significant at the .01 level. There is a very weak positive linear relationship between Nursing position (category) and Employment Status.

Nursing position (category) and Intent to leave (I_T_L) are correlated. The correlation coefficient is .244 and is statistically significant at the .05 level. There is a very weak positive linear relationship between Nursing position (category) and I_T_L.

O_C:

O_C and J_S are correlated. The correlation coefficient is .438 and is statistically significant at the .01 level. There is a weak positive linear relationship between O_C and J_S.

O_C and I_T_L are correlated. The correlation coefficient is -.306 and is statistically significant at the .01 level. There is a very weak negative linear relationship between O_C and I_T_L.

J_S:

J_S and I_T_L are correlated,. The correlation coefficient is -.227 and it is statistically significant at the .01 level. There is a very weak negative linear relationship between J_S and I_T_L.

Of particular interest from the above observations are the statistically significant relationships inferred between the independent variables and dependent variable. The relationships were: Nursing position (category) and I_T_L, O_C and I_T_L, and lastly J_S and I_T_L. The correlation coefficient between Nursing position (category) and I_T_L was .244, and it was statistically significant at the .05 level. This relationship is not particularly strong and the level of significance it is significant at (i.e. .05). Nursing position (category) and I_T_L were still analysed further in the regression component. Secondly, the correlation coefficient between O_C and J_S was -.306 and was statistically significant at the .01 level.

The correlation indicates that as O_C increases, I_T_L will decrease. This negative relationship was anticipated by the researcher. Lastly, the correlation coefficient between J_S and I_T_L was -.227 and was statistically significant at the .01 level. Like the negative relationship found between O_C and I_T_L, the negative relationship between J_S and I_T_L also indicates that as J_S increases, I_T_L will decrease. This is inferred from the negative correlation between the two variables. This negative relationship between J_S and I_T_L was also anticipated.

These identified relationships are important because they highlight which independent variables are correlated to the dependent variable (I_T_L). By identifying and differentiating which independent variables are correlated with I_T_L from that were initially selected and analysed, it became easier to narrow down the focus on identifying which independent variables were the predictors of I_T_L. This led to the next analysis that was conducted after

the correlation matrix. A multiple regression was conducted consisting of Nursing position (category), O_C, and J_S as the independent variables and I_T_L as the dependent variable.

4.3 Regression assumptions

As stated above, an important aspect of correlation is that it is based on a general linear model, and by extension, regression is also based on the general linear model (Howell, 1999). Regression extends correlation by not only allowing one to infer the strength and direction of the relationship between two or more variables, but also the prediction of scores on one variable based on the scores of another variable (Field, 2009; Howell, 1999). It is important to note that there are regression assumptions that need to be met and reported on before interpreting the results. In the current research, there were a numerous assumptions that were checked.

4.3.1 Assumption 1: Normally distributed residuals

The first regression assumption that was checked is the normality of the residuals. Normally distributed residuals are important in regression (Field, 2009). In the current research, the standardised residuals were inspected.

Figure 3: Histogram of residuals

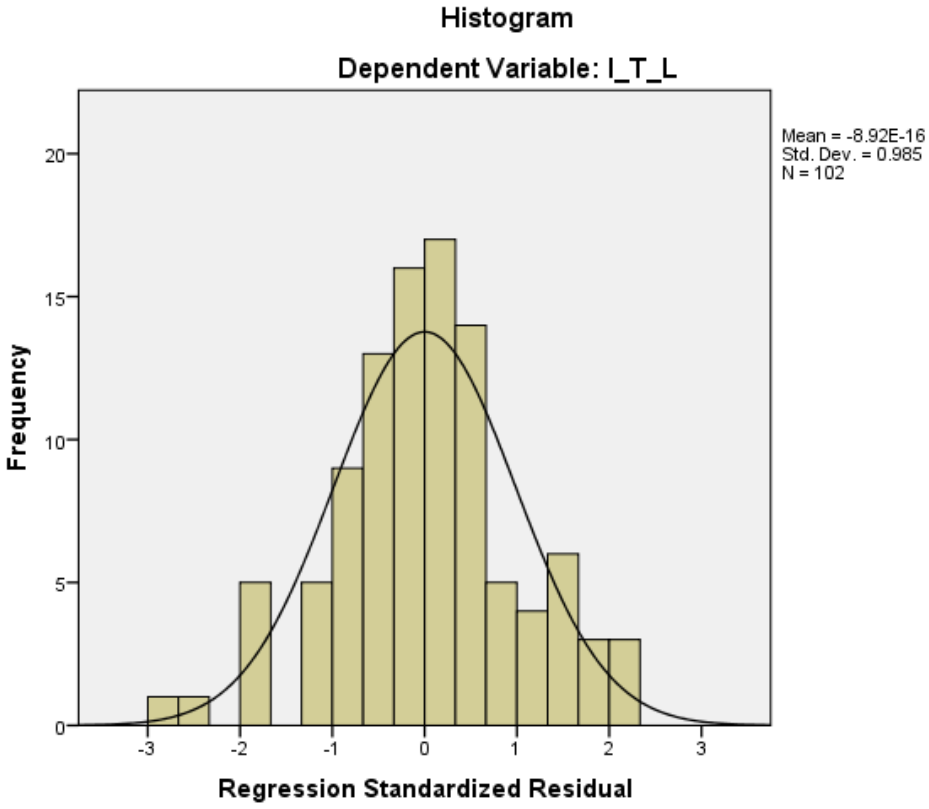
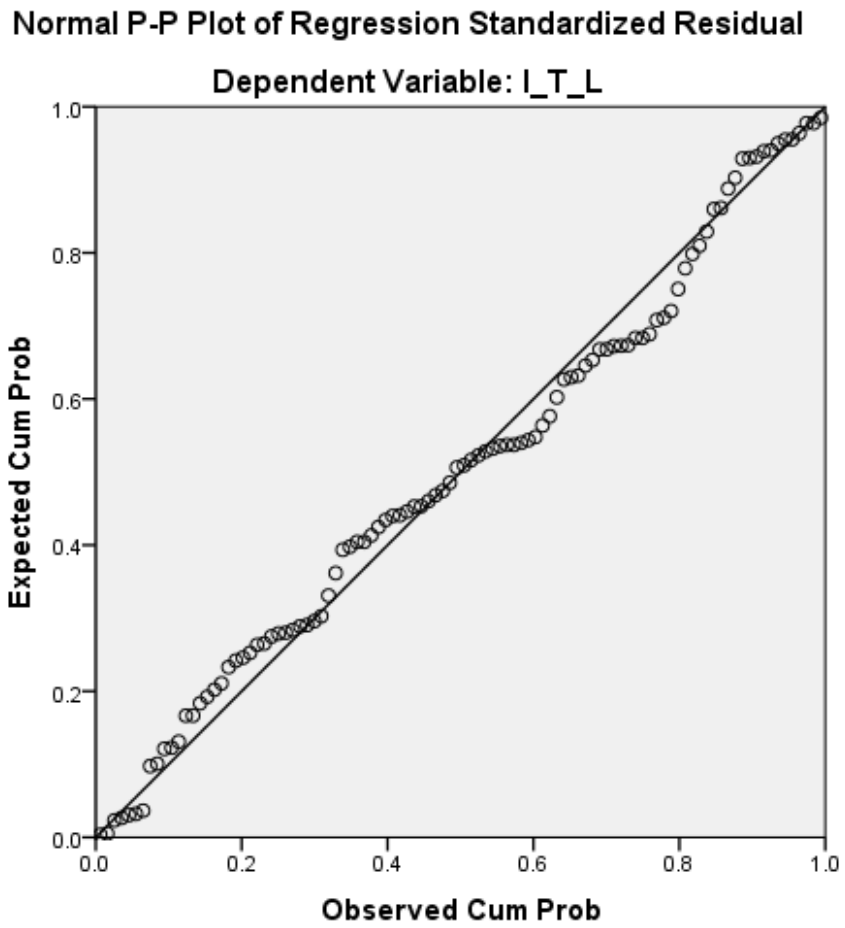


Figure 4: P-P Plot



As stated above, the residuals in regression should be normally distributed. The histogram of the residuals shows a normal distribution. The P-P plot also shows that residuals are normally distributed. If the distribution was perfectly normal, the data points in the P-P plot would all be on the straight line. The residuals were further inspected to determine if there were any problematic values. According to Field (2009), researchers should be particularly concerned with: standardized residual values >_ 3 (i.e. 3 standard deviations from the mean); having 1% of the sample with an absolute standardized value >_ 2.50; or, 5% of the sample having an absolute standardized residual with an absolute value of >_ 2.

If the above mentioned principles are violated, then there is evidence that the model fit may be poor; meaning that the regression line does not fit the data well (Field, 2009). In order to inspect for the above, an additional variable was created called SRE_1. This variable contained the values of the Studentized residuals. These residuals were standardised as they had a mean of zero and a standard deviation of 1. The researcher sorted the SRE_1 variable in

ascending order (lowest number to highest number) and inspected the size of the residuals. First, the researcher looked at whether there were any standardised residuals that had an absolute value >3. There were no values that were greater than 3, as the lowest value was -2.70636 and the largest value was 2.20664.

Next the researcher looked at whether more than 1% of the total sample had an absolute standardised residual >2.5. The total sample was 112 but due to excluded participants who had too many missing items, the sample size came down to 102. 1% of 102 is 1.02 (round of to 1). There were two cases with absolute standardised residuals > 2.5 (Field, 2009). This criteria has therefore been violated, as only one case should have an absolute residual of > 2.5 (Field, 2009). In this case, there were 2 cases with an absolute residual of >2.5 (Field, 2009).

Lastly, the researcher inspected whether or not more than 5% of the sample had an absolute standardised residual with an absolute value >_2. Given that 1% of the sample was 1.02 cases, 5% will be 5.1 cases (round of to 5). There were 5 cases with absolute residuals >_2, there were not more 5% of the cases.

With the exception of the second criteria being violated by just being one case above, the researcher therefore concluded with caution that the assumption of normally distributed residuals were reasonably met. This conclusion is met with caution since one criteria was violated.

4.3.2 Assumption 2: Multicollinearity between the independent variables

The next assumption was the inspection of multicollinearity between the independent variables. Multicollinearity is when the independent variables are highly correlated. As seen above from the correlation matrix in Table 8, the independent variables did not show any signs of multicollinearity. The correlation coefficient between O_C and J_S was .438, between O_C and Nursing_position (category) was .020, and between J_S and Nursing_position (category) was .050. There were no variables with correlations of .80 and more, independent variables having a correlation of more than .80 were considered problematic (Pallant, 2007).

The variance inflation factor (VIF) has been considered to be a second way of investigating if there is multicollinearity between the independent variables of a research (O'Brien, 2007). VIF works similarly to correlation. It indicates whether there is a strong linear relationship between the independent variables of the research. A VIF value that is greater than 10 (> 10)

is problematic and indicates that there is a strong linear relationship between the independent variables of the research (O' Briend, 2007; Tabachnick & Fidell, 2007). The VIF was used in conjunction to the multicollinearity check in order to reach a conclusion of whether the independent variables are highly correlated and dependent on each other.

Table 9: Collinearity diagnostic between independent variables

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	61.848	5.315		11.636	.000		
	O_C	-.170	.079	-.220	-2.160	.033	.807	1.239
	J_S	-.111	.055	-.207	-2.028	.045	.803	1.245
	Nursing_position _(category)	2.395	.931	.236	2.571	.012	.995	1.005

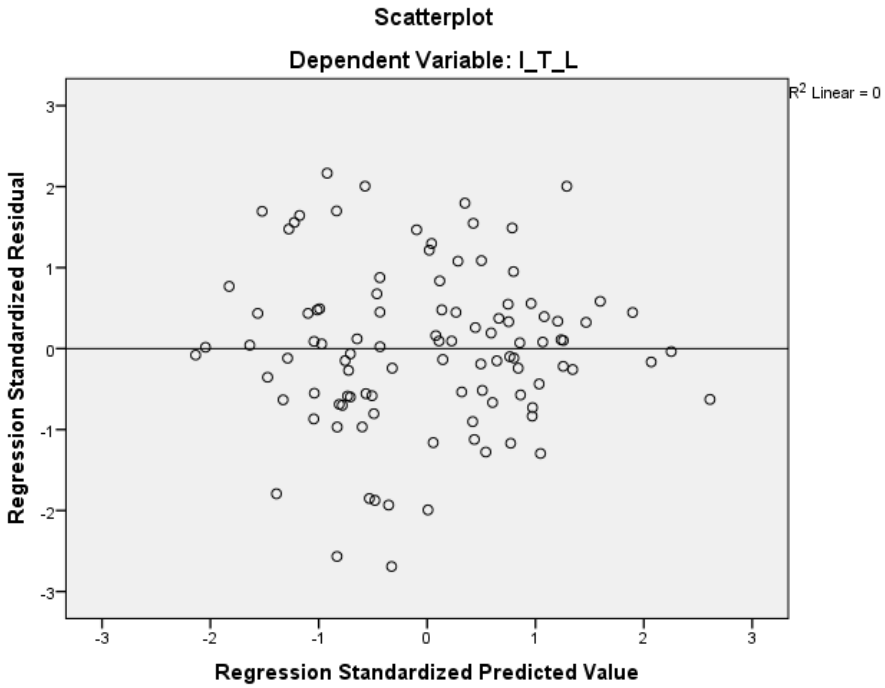
a. Dependent Variable: I_T_L

The VIF values are 1.239 for O_C, 1.245 for J_S and 1.05 for Nursing_position (category). All the VIF values are less than 10 and can conclude that there is no multicollinearity.

4.3.3 Assumption 3: Homoscedasticity

Homoscedasticity states that the variance of the residual terms should be constant at each level of the independent variable. This means that the residuals should have the same variance across all the independent variables. If this assumption is met, then there is homoscedasticity, if not, then there is heteroscedasticity (Field, 2009; Pallant, 2007). In addition to homeoscedasticity of the standardised residuals is they should be constant at zero, since the standard normal distribution has a variance of zero. In Figure 5, the data values were observed for homeoscedasticity. To assist with interpretation, a straight line was added to the values. The line of best fit formed a straight line, hence it was concluded with confidence that there was homoscedasticity. It would be concerning and problematic if the residuals were curvilinear or created a funnel type shape. A curvilinear line and a funnel type shape are characteristics of heteroscedasticity (Pallant, 2007).

Figure 5: Homoscedasticity Diagnostic



4.3.4 Assumption 4: Independence of errors (Autocorrelation)

In this assumption, the residual term should be uncorrelated for any two observations; this assumption is also referred to as autocorrelation. To investigate this, a Durbin-Watson test was run. The test produces output ranging from 0 to 4 and the value of 2 indicates autocorrelated residuals. Values greater than 2 indicate a negative correlation, and values less than 2 a positive correlation (Field, 2009). According to Field (2009), generally, the values should be between 1 and 3.

Table 10: Autocorrelation Diagnostic

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.422[a]	.178	.153	9.37984	1.612

a. Predictors: (Constant), Nursing_position_(category), O_C, J_S
b. Dependent Variable: I_T_L

In table 10, Durbin-Watson value is 1.612, this means that the residuals are mostly uncorrelated.

4.3.5 Assumption 5: Linearity

In this assumption, the researcher investigated whether the relationship between the dependent variable and the independent variables was linear. The relationship should be linear. If the relationship between the dependent variable and the independent variables is not linear, then the results become spurious (Field, 2009). Below are three plots (i.e., one plot for each independent variable).

Figure 6: O_C Linearity Plot

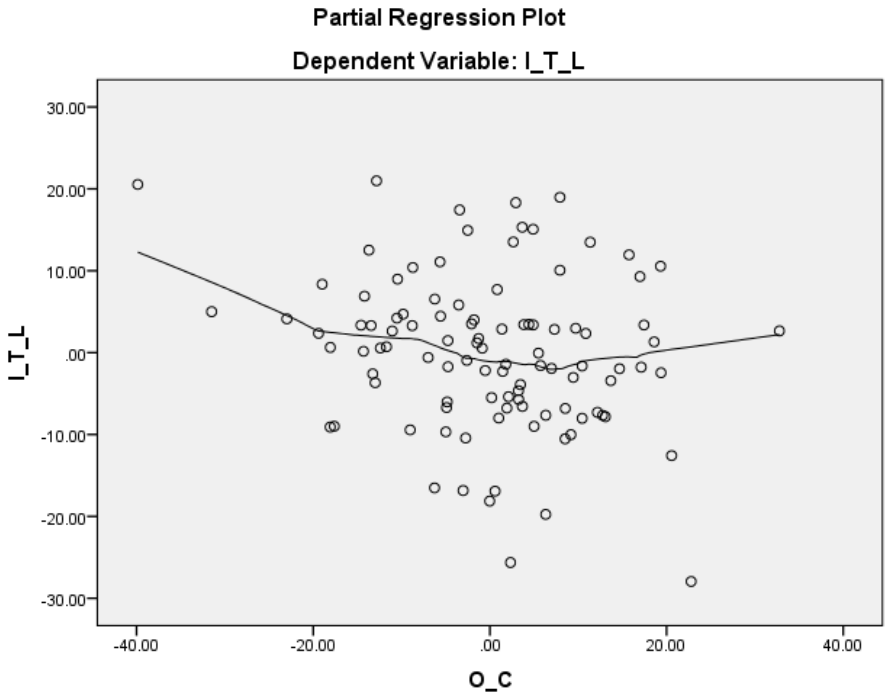


Figure 7: J_S Linearity Plot

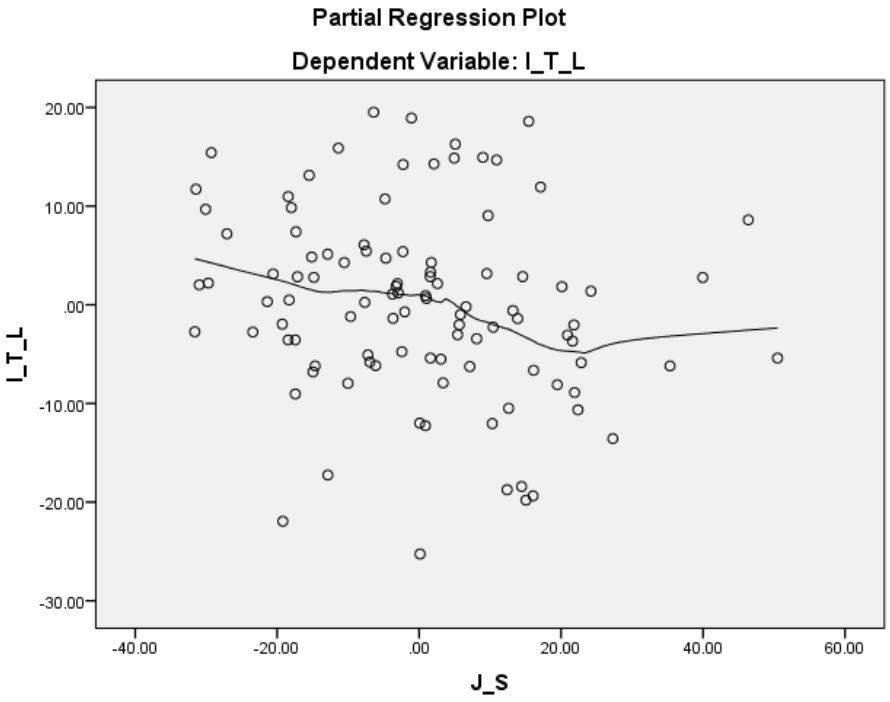
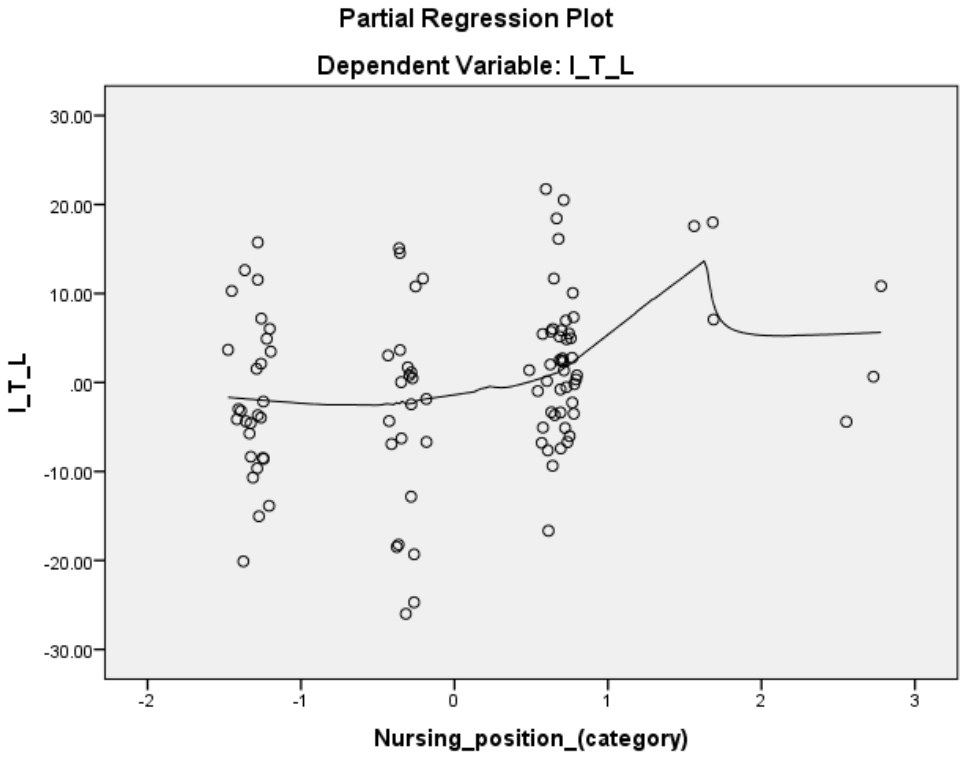


Figure 8: Nursing_position (category) Linearity Plot



If the relationships between the intent to leave (dependent variable) and the independent variable were perfectly straight, the Loess line would be perfectly straight. The linearity plots in Figure 7 and Figure 8 can be treated as linear, as they are closer to a straight line than they are to a quadratic line. The relationship found in Figure 9 however, for nursing category and I_T_L is of concern since the line is closer to forming a quadratic shape. This could be a function of there being a few data points towards the end of the graph.

4.3.6 Assumption 6: Influential Cases

Influential cases give an indication of whether or not there are certain cases that exert influence over the model parameters (Field, 2009). The influential statistics that were investigated were Cook's distance and leverage. Cook's distance considers the influence of a single variable on the model as a whole. A value > 1 is generally considered problematic (Field, 2009). Leverage values on the other hand, consider the influence of an observed value on the dependent variable over the independent variable, the average leverage value is calculated as number of independent variables plus 1 divide by sample number (k+1)/n)) (Field, 2009). In the current research, there were three independent variables, and the average leverage value was calculated as 4/112=.036. Leverage values that are three times larger than the average value (i.e., .10) are considered problematic (Field, 2009).

The largest value in the Cook's distance data set was .11951, indicating that there were no major problems. A Cook's distance larger > 1 is considered problematic. This could have been a function of the sample size. Leverages values >.10 are problematic and there was only one value that was >.10 (.14775). This variable could have had an undesirable impact on the results of the research.

4.3.8 Assumptions Conclusion

From the above mentioned assumptions, there were minor problems that were identified. All the assumptions other than the linearity of nursing position (category) inspection of the influential cases were met, meaning that 4 out of the 6 assumptions were met. The researcher could thus move to interpreting the results of the regression outputs without fear of the results being spurious. In extreme cases where most of the assumptions are not met, a robust regression can be used. This is one way of dealing with the problem of not meeting regression assumptions.

4.4 Multiple Linear Regression

The assumptions of regression have been extensively covered and reported on. From this section onwards, the results of the analyses pertinent to the hypotheses of the research are discussed. In a standard multiple regression, all the independent variables of the research are entered at the same time (Pallant, 2007). In the current research, O_C, J_S, and Nursing_position (category) were the independent variables that were entered in the standard multiple regression, with I_T_L being the dependent variable.

Table 11: Model Summary Table

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.422[a]	.178	.153	9.37984	.010

a. Predictors: (Constant), Nursing_position_(category), O_C, J_S
b. Dependent Variable: I_T_L

From Table 11, the R^2 value is .178 (adjusted R^2 = .153), which means that the linear combination of the three independent variables can explain 17.8% of I_T_L in the research's sample. According to Field (2009), the adjusted R^2 gives us an indication of what the R^2 would have been if the model was obtained from the population. This does not appear to be a good result. However, this is discussed in more detail in the following chapter. Chapter 5 includes the discussion of the results of the current research in relation to the literature review conducted.

Table 12: Anova Table

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1869.467	3	623.156	7.083	.000[b]
	Residual	8622.186	98	87.981		
	Total	10491.653	101			

a. Dependent Variable: I_T_L
b. Predictors: (Constant), Nursing_position_(category), O_C, J_S

The overall model is statistically significant ($F= 7.083$, $p< .01$ and $p< .05$) both at the .01 and .05 level, which means that the relationship in the population is not 0.

Table 13: Coefficients Table

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	61.848	5.315		11.636	.000		
	O_C	-.170	.079	-.220	-2.160	.033	.807	1.239
	J_S	-.111	.055	-.207	-2.028	.045	.803	1.245
	Nursing_position _(category)	2.395	.931	.236	2.571	.012	.995	1.005

a. Dependent Variable: I_T_L

Based on table 13, all the independent variables (O_C, p<. 05; J_S, p< .045; Nursing position (category), p< .012) are significant predictors of I_T_L. However, they are only significant at the .05 level. This inspection answers the first two hypotheses of the current research, which were:

Hypothesis 1: Organisational commitment (O_C) statistically predicts intent to leave (I_T_L) among nurse working at a public hospital.

O_C is a statistically significant predictor of I_T_L ($p < .05$) among nurses working at a public hospital.

Hypothesis 2: Job satisfaction (J_S) statistically predicts intent to leave (I_T_L) among nurses working at a public hospital.

J_S is a statistically significant predictor of I_T_L ($p < .05$) among nurses working at a public hospital.

Hypothesis 3: Demographic variables can also statistically predict intent to leave (I_T_L) among nurses working at a public hospital.

Nursing_position (category) as a demographic variable is also a statistically significant predictor of I_T_L ($p < .05$) among nurses working at a public hospital.

Following this, the researcher was interested in finding out how much variance each independent variable contributed to the overall R^2 value and thus to the adjusted R^2 value. This according to Pallant (2007) is the investigation of checking which of the independent variables contribute to the variance in the dependent variable. The overall R^2 value consists of

both the unique variance and shared variance. In order to obtain the unique variance that each variable contributes to the overall R^2 value, while controlling for the other variables, part and partial correlations are used (Pallant, 2007). The coefficient table below includes the part and partial correlations.

Table 14: Coefficients Table with part and partial coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	61.848	5.315		11.636	.000					
	O_C	-.170	.079	-.220	-2.160	.033	-.307	-.213	-.198	.807	1.239
	J_S	-.111	.055	-.207	-2.028	.045	-.287	-.201	-.186	.803	1.245
	Nursing_position_(category)	2.395	.931	.236	2.571	.012	.217	.251	.235	.995	1.005

a. Dependent Variable: I_T_L

In order to get the amount of unique variance contributed to the dependent variable by each independent variable, the part correlation value was squared (Pallant, 2009). Thus, O_C contributed $-.198^2 = .039$ (i.e., 3.92%). J_S contributed 3.45% and lastly Nursing_position (category) contributed 5.52% unique variance. The summation of these values is 12.89%. Usually this value is less than the overall R^2 value (Pallant, 2009), and this is the case here too. The overall R^2 was 17.8% (adjusted R^2= 15.3%) as seen in table 11. From the correlation matrix, it was shown that the independent variables had very low correlations with each other (see Table 8).

4.5 Hierarchical regression

The standard multiple linear regression is an extension of correlation, because it is based on the general linear model. Hierarchical regression is also an extension of a standard multiple regression. In a standard multiple regression, the independent variables are entered to the equation all at once. By contrast, in hierarchical regression the independent variables are added to the equation in steps (Pallant, 2009). The steps in hierarchical regression are often based on theory or substantial reasons (Pallant, 2009). By entering the independent variables in steps, it is easier to determine how much variance has been added to the dependent variable when a new independent variable is entered. This also makes it simpler to assess

how much the R^2 and adjusted R^2 values changes. The change in the R^2 value is known as R^2 change. This is done by controlling for the other independent variables. The purpose of the hierarchical linear regression was to determine the best fitting predictive model of the data. The purpose of the regression analysis above was to investigate what the predictors of intent to leave were and to further inspect the relative importance of each independent variable on intent to leave.

The steps of the hierarchical regression in the current research were added based on the unique variance that was calculated for each of the independent variables This was calculated above using the part correlation in Table 14. As seen above, nursing position (category) contributed the most unique variance of 5.52%; O_C contributed 3.92% with J_S only contributing 3.45%. A further reason that underpinned the steps of the hierarchical regression in the current research was the inspection of the Standardised Coefficients Beta found in Table 13. The Standard Coefficients Beta indicate that Nursing position (category) added more to the model (.236), this was a positive direction, followed by O_C (-.220), this was a negative direction, and J_S (-.207), this was also a negative direction. Generally, the Standard Coefficients Beta is not interpreted in regression, but there are instances when it is informative (Pallant, 2009), such as in this instance.

Both these inspections served as substantial reasons behind the steps of the hierarchical regression in the current research. The first step of the hierarchical regression included Nursing position (category) as it contributed mostly to the model in the standard multiple regression, based on the unique variance and Standard Coefficients Beta. The second step added O_C to the model because it contributed the second most unique variance to the model and it had the second highest Standard Coefficients Beta. The last step of the hierarchical regression added the last independent variable; J_S. By entering independent variables in steps, it becomes easier to determine with better accuracy how much variance is added to the dependent variable when entering a new independent variable. As such, the hierarchical regression was performed in order to end with the best fitting predictive model of the data.

Table 15: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.217[a]	.047	.037	9.99912	.047	4.935	1	100	.029
2	.379[b]	.144	.126	9.52612	.097	11.177	1	99	.001
3	.422[c]	.178	.153	9.37984	.034	4.112	1	98	.045

a. Predictors: (Constant), Nursing_position_(category)

b. Predictors: (Constant), Nursing_position_(category), O_C

c. Predictors: (Constant), Nursing_position_(category), O_C, J_S

It is shown in Table 15 that three models were analysed.

Model 1: I_T_L= Nursing_position (category);
Model 2: I_T_L= Nursing_position (category) + O_C; and
Model 3: I_T_L= Nursing_position (category) + O_C + J_S.

For Model 1, the R^2 value is .047 (adjusted R^2 = .0.37). For Model 2 it is .144 (adjusted R^2 = .126), and for Model 3 it is .178(adjusted R^2 = .153). In the R^2 change block, the value in Model 2 is .097 (i.e., when Nursing position (category) is controlled for Model 2 it adds 9.7% variance to I_T_L). Hence, by adding O_C in the model, the research was able to predict an extra .097 in I_T_L. Furthermore, the Sig. F Change block, observed whether Model 2 led to a statistically significant improvement in prediction. The value is statically significant at both the .01 and .05 level; therefore, adding O_C did lead to better prediction of I_T_L. Lastly, the R^2 change value for Model 3 is .034 (i.e., when Nursing position (category) and O_C are controlled for Model 3 adds 3.4% variance to I_T_L). This observation indicates that adding J_S led to a lower variance to I_T_L than for Model 2; however, there was still an increase in variance.

The researcher was able to predict an extra 3.4% in I_T_L. The Sig. F Change Block indicated that Model 3 led to a statistically significant improvement in prediction but only at the .05 level and not at the .01 level. Thus .045 is non-significant at the .01 level; ($p > .01$), which means that adding J_S did not lead to a better prediction at the .01 level. Indeed, when Table 14 is observed, J_S is only significant at the .05 level and not at the .01 level; this is

shown in Table 16. The adjusted R^2 is found next to the R^2 value. In regression, the adjusted R^2 is regarded to be more informative than the R^2 (Field, 2009). It specifies what the R^2 value would have been if the model was obtained from the population and not from the sample, it therefore tends to be lower than the R^2 value (Field, 2009).

From Table 11, the adjusted R^2 value is .153. Based on these observations, the best predictive model of I_T_L is Model 3, since this model adds more variance to the predication of I_T_L. The overall model does not have very good predictive power; however, it is still the best predictive model in the current research. The final predictive model explains 17.3% of the variance in intent to leave.

Model 3 equation = 61.848 + 2.395Nursing_position (category) + -.170O_C + -.111J_S

Table 16: Coefficients Table

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	45.563	2.496		18.255	.000
	Nursing_position_(category)	2.200	.990	.217	2.221	.029
2	(Constant)	61.765	5.398		11.442	.000
	Nursing_position_(category)	2.262	.944	.223	2.397	.018
	O_C	-.240	.072	-.311	-3.343	.001
3	(Constant)	61.848	5.315		11.636	.000
	Nursing_position_(category)	2.395	.931	.236	2.571	.012
	O_C	-.170	.079	-.220	-2.160	.033
	J_S	-.111	.055	-.207	-2.028	.045

a. Dependent Variable: I_T_L

4.6 Dominance Analysis

In addition to the inspection of the Standard Coefficients Beta and the calculated unique variance of each independent variable toward predicting I_T_L, the research used another technique to assess which independent variables added more to the model and to intent to leave (I_T_L). Dominance Analysis extends the multiple linear regression toward determining the relative importance of independent variables (Azen & Budescu, 2003; Budescu, 1993; Tonidandel & LeBreton, 2011). It has in other instance been considered to be a supplement of multiple regression with regard to understanding the relative importance of each independent variable in predicting a dependent variable (Budescu, 1993; Tonidandel &

LeBreton, 2011). In multiple regression, the relative importance of each independent variable is given and shown. However, in order to supplement this inspection, the researcher used another technique to assess the relative importance of independent variables. This was done in order to really understand the key drivers of the prediction in I_T_L over and above the information that has been found so far in the analyses. Dominance Analysis was thus calculated in order to supplement the findings of the multiple regression in respect to the relative importance of independent variables.

Dominance analysis has three levels of dominance, which are achieved between pairs of predictors; the three levels are complete dominance; conditional dominance; and general dominance (Azen & Budescu, 2003). Complete dominance between pairs of predictors occurs when the additional contribution of one predictor dominates across all subset models, conditional dominance occurs when the average additional contribution of one predictor is greater than the other predictor in the models; lastly, general dominance occurs when the overall additional contribution of one predictor is greater than the other predictor (Azen & Budescu, 2003). From this, it is shown that the three levels of dominance are related to one another in a hierarchical manner. Complete dominance looks at the additional contribution of one predictor in relation to the other predictor in the subset model, conditional dominance looks at the average additional contribution of one predictor in the models in relation to the other predictor, and general dominance considers the overall average of predictors.

By merely observing the Dominance Analysis output below, it is shown that the model that explains the most variance in I_T_L is the last model that has all the variables (Nursing_position (category), O_C, J_S. However, that was not the focus of running a dominance analysis since this information has already been obtained above in the multiple regression. Table 16 below indicates the relative importance of each variable in all the regressions that were run. It was calculated using the R^2 values obtained from the regression outputs (Pallant, 2009). O_C has complete dominance over the other predictors since its additional contribution to each of the subset models is greater than the other predictors. By inspecting the two average columns of the models, O_C added the most variance in predicting I_T_L in all the models, followed by O_C and J_S. According to Azen and Budescu (2003), O_C is said to conditionally dominate the other predictors since its average additional contribution within all the models is greater than the other predictors. Furthermore, the overall averaged additional contribution of O_C is greater than that of

Nursing_position (category) and J_S. Based on this, O_C adds the most variance in predicting I_T_L according to this technique.

These results were not observed above in both the multiple regression. Nursing_position (category) by virtue of having the highest Standard Coefficients Beta and the highest calculated unique variance added the most variance in predicting I_T_L according to the multiple regression, followed by O_C and J_S. A dominance analysis was carried out to supplement the result pertaining to the relative importance of each independent variable in predicting I_T_L calculated in the multiple regression and in the hierarchical regressions.This additional finding reaffirms that Model 3 is the best fitting predictive model of I_T_L in the data.

Model 3 equation = 61.848 + 2.395Nursing_position (category) + -.170O_C + -.111

Table 17: Dominance Analysis Excel Output

Dominance Analysis Dependent variable = Intent to leave (I_T_L)					
	R^2	Sign.	Nursing_position (category)	Organisational commitment (O_C)	Job satisfaction (J_S)
Model 0			0.06	0.094	0.051
Nursing_position (category)	0.06	0.01		0.084	0.058
O_C	0.094	0.002	0.05		0.027
J_S	0.051	0.017	0.067	0.07	
Average			**0.059**	**0.082667**	**0.04533**
Nursing_position (category)+O_C	0.144	0			0.034
Nursing_position (category)+J_S	0.118	0.001		0.06	
O_C + J_S	0.121	0.002	0.057		
Average			**0.057**	**0.06**	**0.034**
Nursing_position + OC + J_S	0.178	0			
Overall Averages			**0.0585**	**0.077**	**0.0425**

4.7 Conclusion

The researcher started by first investigating which variables were correlated with the dependent variable. Once this was achieved, the researcher was interested in finding out which. A correlation matrix was performed in order to understand the relationships that existed between the variables of the research. More importantly; the correlation matrix was used to inspect which independent variables had a linear relationship with the dependent variable (I_T_L). This included the demographic variables of the research as they were treated as independent variables as well. From this, the researcher was able to identify which independent variables to focus in predicting I_T_L, by virtue of being linearly related to I_T_L. This was used as a starting point. The identified independent variables were: Nursing position a (category), O_C, and J_S. From this point onwards, the focus of the results section was limited to inspecting how Nursing position a (category), O_C, and J_S predict I_T_L.

This section was followed by an extensive discussion of the assumptions underpinned by regression. There were minor problems that were identified; this may have been a function of the sample size and missing entries. Four out of six of the assumptions were met, thus a multiple regression was performed. Multiple linear regression was then performed to answer the three statistical hypotheses of the research and to also assess the amount of variance in I_T_L that was accounted for and explained by the linear combination of the Nursing position (category), O_C, and J_S. The three statistical hypotheses were statistically proven at the .05 level.

Furthermore, the overall model was found to be statistically significant; meaning that the amount of variance in I_T_L was explained and accounted for by three independent variables. From conducting the multiple regression, the researcher was able to have an indication of how much variance each independent variable added to the prediction of I_T_L. This was done by calculating the unique variance of each variable and inspecting the Standard Coefficients Beta. This formed the basis of the steps formed in the hierarchical regression. The independent variables of the research were ranked in terms of their importance in predicting I_T_L based on the calculated unique variance and from the Standard Coefficients Beta.

The independent variables were added to the steps of the hierarchical regression in terms of the variance they added in predicting I_T_L, with the variable adding the most variance being added to the first step. As such, nursing position (category) was added in the first, the second

step added O_C, and the last step had J_S. Hierarchical regression was used to test and compare the three models. Model 3 was chosen as the best predictive fitting model as it explained the most variance in I_T_L, following the inspection of the adjusted R^2 value of Model 3 being the largest.

Hence, Model 3 led to a better prediction in I_T_L. Model 3 however, did not have very good predictive power. Nevertheless, it was still the best predictive model of the data. As stated, regression is an extension of correlation. This is by virtue of being based on the general linear model. Hierarchical regression is also an extension of standard regression, where the independent variables are added to the equation in steps.

An important aspect of multiple linear regression is the inspection of the relative importance of independent variables (Budescu, 1993), second to indicating the amount of variance in the dependent variable that can be accounted for by the linear combination of the independent variables (Field, 2009). In the current research, this was particularly useful for identifying which independent variables added more variance in predicting I_T_L., i.e. the relative importance of each independent variable in predicting I_T_L. To supplement this inspection and in order to better understand the importance of each independent variable in predicting I_T_L, a Dominance Analysis was used.

The findings of the dominance analysis indicated O_C has complete dominance as its additional contribution to each of the subset models was greater than the other predictors. Moreover, O_C was said to conditionally dominate the other predictors as its average additional contribution within each model was greater. Lastly, it was concluded that O_C generally dominates as its overall average additional contribution was greater as compared to the other predictors. The following chapter discusses the results of the research in more in depth detail; this is done particularly in relation to the literature review that was conducted. The following chapter also documents the findings in the South African context, and adds to the topic in the local context.

Chapter 5

Discussion

5.1 Introduction

The current chapter discusses the research's results and findings further; this is mainly in relation to the literature review. The discussion section first focuses on the results that are statistically significant at the .01 level followed by the statistically significant results at the .05 level. Furthermore, this chapter discusses the findings of the research in relation to the theoretical model that was developed which is found in Chapter 3. The aim of the research was to understand the nature of the relationship that existed between organisational commitment, job satisfaction, demographic variables and intent to leave among nurses. The research postulated three hypotheses that were then tested.

5.2 Discussion of the research findings

The research inspected the relative importance of each independent variable in predicting intent to leave. Four analyses were conducted. A correlation matrix that included all the variables in the research. A multiple linear regression to test the significant contribution of each independent variable in predicting intent to leave. A hierarchical regression in order to find the best fitting predictive model of intent to leave. Lastly, a dominance analysis to supplement the findings of the multiple linear regression with regards to examining the relative importance of each independent variable in predicting intent to leave. In addition to these analyses, in order to analyse the internal consistency of the items, reliability analyses were conducted for scales used to operationalise organisational commitment, job satisfaction and intent to leave.

It has been noted that organisational commitment and job satisfaction are negatively related to intent to leave; this was the finding reached at numerous studies as seen in the literature review. Furthermore, the literature review found various demographic variables to be related to either organisational commitment or job satisfaction and in some cases both of the variables. The demographics of the nursing sample were found to be also related as well as to influence intent to leave.

Organisational commitment and job satisfaction were expected to have a statistical linear relationship with one another. Previously, the two variables were been found to be

statistically related with one another. A study conducted by Anis et.al (2011) investigated the relationships between employee retention, job satisfaction, perceived supervisory support and compensation by considering the organisational commitment as a mediating variable in the pharmaceutical industry. The study found organisational commitment and job satisfaction to be statistically correlated. Numerous studies on this topic have examined intent to leave as an outcome of organisational commitment and job satisfaction, rather than focusing on intent to leave as related either to organisational commitment or to job satisfaction.

Moneke and Umeh (2014) in their recent study which aimed to test the significant relationship between organisational commitment and job satisfaction among critical care nurses, found a positive correlation between organisational commitment and job satisfaction. This relationship expressed that nurses who were high on organisational commitment would generally be high on job satisfaction. This meant that nurses who were satisfied with their jobs would more likely be committed to their organisation. As depicted in figure 2 found in Chapter 3; organisational commitment and job satisfaction are related to one another; the double-sided arrow shows this. If organisational commitment and job satisfaction are low, then the outcomes are undesirable. According to Arnold and Feldman (1982), and Shield and Ward (2001) nurses who had low job satisfaction impacted the efforts they put in their daily job duties and into daily tasks, and because of this, the quality and the state of health care service diminished.

Low organisational commitment has been associated with intent to leave. Job satisfaction has also been associated with intent to leave (Altuntas, 2013; Carsten & Spector, 1987; Lu et.al, 2005; Porter et.al, 1974; Shield & Ward, 2001). Figure 2 (found in Chapter 3) shows that both organisational commitment and job satisfaction are related to intent to leave and that ultimately this could be related to both nursing shortage and the state of health service. Organisational commitment and job satisfaction being a function of job demands and job resources are related to intent to leave which in turn is related to nursing shortage and ultimately to the state of health service (see Figure 2).

Organisational commitment and job satisfaction were expected to have a negative linear relationship with intent to leave. As observed from the literature review, intent to leave was found to be seen in employees work behaviour that resulted from decreased organisational commitment and job satisfaction (Altuntas, 2013; Carsten & Spector, 1987; Lu et.al, 2005; Meyer & Tett, 1993; Porter et.al, 1974; Shield & Ward, 2001). This was usually due to job

demands that had not been met by required job resources (Cavanagh & Coffin, 1992; Coomberg & Barriball, 2007; Rispel et.al, 2014; Shield & Ward, 2001; Waldman et.al, 2004; Viotti & Converso, 2016).

In the current research, organisational commitment was found to have a negative linear relationship with intent to leave. This means that as the level of organisational commitment increased, intent to leave decreased. As depicted by Figure 2, job demands which were not adequately met by job resources could influence the level of organisational commitment and job satisfaction negatively. As a result of organisational commitment and job satisfaction being negatively impacted, undesirable work outcomes such as intent to leave could be experienced. According to Waldman et.al (2001) intent to leave has been regarded as among the reasons behind nursing shortages and equally behind the state of public health service. Furthermore, Delobelle et.al (2011) regarded nursing shortages as an outcome fuelled by turnover intention and migration.

Organisational commitment in the current research was found to have a negative linear relationship with intent to leave. This means that as organisational commitment is high; intent to leave will be low. Employees who showed high organisational commitment were less likely to have turnover intentions and arguably had longer tenures with one organisation (Porter et.al, 1974). In numerous studies, the relationship organisational commitment has with intent to leave has been examined (Mayer & Schoorman, 1998; Meyer & Tett, 1993; Porter et.al, 1974).

It was argued in the literature review section that among the three types of organisational commitment, normative commitment is was most closely linked to intent to leave since this subscale spoke to the morality of the employee. The employee felt that leaving the organisation would not be the right and moral thing to do and considered their departure as a cost to the organisation (Porter et.al, 1974). In a recent study conducted by Yasmin and Marzuki (2015), organisational commitment and quit intentions were found to be highly correlated. This 2015 study in Pakistan explored the effect of organizational commitment on intention to quit among psychiatric nurses. Before the impact was analysed; the relationship between the two variables was analysed.

In the current research, job satisfaction was expected to have a negative linear relationship with intent to leave. As shown in the correlation matrix in the previous chapter, there was a negative linear relationship between job satisfaction and intent to leave. Campbell and

Campbell (2003) found job satisfaction to be correlated with an individual's intention to quit. Their studied examined the relationship between quit intentions and global job satisfaction. An earlier study conducted by Delobelle et al (2011) found job satisfaction to be statistically associated with turnover intent. The study examined the correlation relationship among demographic variables, job satisfaction and turnover intent among nurses in a rural area of South Africa (Delobelle et.al, 2011). Turnover intent is referred to as intent to leave in the current research.

The study conducted by Delobelle et.al (2011) also found job satisfaction to be significantly associated with tenure. In the current research, unit of ward was found to also be significantly associated with job satisfaction. Hence, the ward nurses work in is related to the level of job satisfaction experienced. This means that job satisfaction varied across the type of ward the nurses worked in. Moreover, the unit tenure as seen in the 2011 study was also related to the level of job satisfaction experienced by nurses. Another recent study that associated job satisfaction and intention to leave of the different categories of health workers in Tanzania, Malawi, and South Africa found job satisfaction to be statistically related to intention to leave (Blaauw et.al, 2013). This study showed the differences in levels of job satisfaction and intention to leave between groups of health workers from Tanzania, Malawi, and South Africa. The groups of the health workers were different.

There are considerable differences in study findings regarding which demographic variables are related to intent to leave as well as how they relate to other variables such as organisational commitment and job satisfaction (Cortese, 2012; McCarthy et.al, 2007; Takase, Maude & Manias, 2006; Rispel et.al, 2014). The findings of the current research are also indicative of this, as only nursing position (category) was found to be statistically correlated to intent to leave. The other demographic variables of the research were not found to be statistically correlated with intent to leave.

The finding of nursing position (category) being statistically correlated with intent to leave in the current research is similar to that found in Rispel et.al (2011). Rispel et.al (2014) looked at factors associated with intent to leave and nursing position (category) was among the factors found to be associated with intent to leave. A 2008 study in South Africa among nurses found that turnover intentions had a significant relationship with the age of the respondents (Martin & Roodt, 2008). The relationship between turnover intentions and intent to leave was negative; Martin and Roodt (2008) stated that as age increased turnover,

intentions decreased. In the same study, turnover intentions and tenure were also found to be statistically related. The relationship between these two variables indicated that as tenure increased so did turnover intentions. Very interestingly, Martin and Roodt's (2008) study found that gender was also statistically related with turnover intentions. In the current research, gender did not factor as a demographic variable as the nursing occupation is dominated by females.

In previous research studies, organisational commitment, job satisfaction, and demographic variables have been found to influence and to predict intent to leave among nurses working in both public and private hospitals. Due to this, organisational commitment and job satisfaction were hypothesised to predict intent to leave. Moreover, demographic variables that were found to have a linear relationship with intent to leave were also hypothesised to predict intent to leave. The results of the research proved that organisational commitment, job satisfaction and nursing position (category) are indeed significant predictors of intent to leave. This was observed from the multiple regression conducted in the previous chapter, where the overall model was statistically significant. These findings were consistent with the results of other studies done both globally and in South Africa.

A recent study in 2014 in South Africa, which looked at factors, associated with intent to leave and evaluated if moonlighting was also a predictor behind nurse's intent to leave, found nursing category to be a statistically significant predictor of intentions to leave among nurses working in a South African hospitals (Rispel et.al, 2014). The results of the study indicated that intentions to leave varied for nursing category. Rispel et.al (2014) asserted that they did not find any studies that investigated whether nursing category was statistically a significant predictor of intent to leave.

In the literature review that was conducted, only the study conducted by Rispel et al (2014) investigated nursing category and intention to leave. Given this observation, the current research is among one of the few that investigated the relationship between nursing position (category) and intent to leave, and to further find a statistically significant relationship between the two variables. This finding is indicative that there intent to leave varies between nurses of different categories ranks. However, the understanding as to how the differences are between different nursing positions (categories) and intent to leave is limited.

Since organisational commitment and job satisfaction were found to have a negative linear relationship with intent to leave, they were found to statistically predict intent to leave. The

research hypothesised organisational commitment to be a statistically significant predictor of intent to leave, and job satisfaction to be a statistically significant predictor of intent to leave. Previously, this type of relationship has been proven. Mayer and Schoorman (1998) and Meyer and Tett (1993) argued that organisational commitment has been considered a common predictor of intent to leave. Arguably, this can be applicable to various occupations outside of nursing. Martin and Roodt (2008) found that organisational commitment was a statistical predictor of turnover intentions. Interestingly, they reported that organisational commitment was not a strong a predictor as was job satisfaction in predicting turnover intentions.

This however is not to exclude job satisfaction as an important predictor of intent to leave. In a study conducted by Coomber and Barriball (2007), job satisfaction was found to be a significant predictor of intent to leave among hospital-based nurses. Going back to Figure 2, the relationship between organisational commitment and job satisfaction was shown to be related and to lead to an impact of intent to leave which was linked to nursing shortage. Coomber and Barriball (2007) stated that nursing shortage was to some extent due to low retention rates. Moreover, Delobelle et.al (2010) stated that the nursing sector had a workforce resource shortage. Employees can be regarded as resources required to meet job demands, since a shortage of employees negatively impacts on how tasks are carried out and the quality of public healthcare delivery. In Figure 2, job resources are shown to have a relationship with job demands. Organisational commitment and job satisfaction are significant predictors behind intent to leave which is related to nursing shortage and as such to the state of healthcare delivery.

Over and above organisational commitment and job satisfaction being predictors of intent to leave, demographic variables were shown to influence intent to leave. The multiple linear regression showed that nursing position (category) was a predictor of intent to leave more strongly than organisational commitment and job satisfaction. However, the findings of the dominance analysis indicated that organisational commitment had the most additional contribution in relation to nursing position (category) and job satisfaction. The findings of the multiple linear regression and dominance analysis are contradictory in that the findings varied on which predictor is the strongest in predicting intent to leave. It is not clear why these findings are not consistent. Going forward, a third statistical technique could be used in order to reach a more informed decision on which predictor adds more contribution in predicting intent to leave.

The research has used enhanced methods to analyse the relative importance of independent variables in predicting a dependent variable. Dominance Analysis is a technique used to supplement the findings of the multiple linear regression. Dominance Analysis extends the multiple linear regression towards determining the relative importance of independent variables (Budescu, 1993; Tonidandel & LeBreton, 2011). It is considered to supplement multiple linear regression with regards to understanding the role played by each predictor in predicting a dependent variable (Tonidandel & LeBreton, 2011). Researchers who are interested in understanding the role played by independent variables in a multiple linear regression, that is, the relative importance of independent variables in predicting a dependent variable should consider using Dominance Analysis. This technique will assist in identifying which independent variable is strongest in predicting a dependent variable, in conjunction to the findings observed in the multiple linear regression.

5.3 Limitations of the Research

The results of the current research have been discussed in relation to the literature review that was conducted, and, in relation to the findings of other studies that have been conducted both locally in South Africa and globally. These studies may not be comparable since they have analysed the same variables using different statistical techniques and the data was collected from different samples. Furthermore, the operationalisation of the variables of interest varied across all the studies, including in the current research. The questionnaires used for collecting data of the variables were different and the measurement approaches were different. Due to these differences, the current research may not be directly comparable to the studies that were featured in the literature review.

Moreover, the questionnaires used in the research had limitations of their own. The return rate of the questionnaires was just over 50% since the hospital was supplied with 200 questionnaires, however, only 136 were returned of which only 112 questionnaires were usable for analysis. Some of the questionnaires had ambiguous responses in that instead of circling, ticking, marking or crossing a number on the Likert-scales, the respondents marked in between two numbers, making it difficult to know which point was ticked. The questionnaires were also dependent on the truthfulness of the respondent. In order to mitigate these limitations, unstructured interviews could have been used resulting in a mixed methods research.

The respondents had put comments on the questionnaires they returned, and some even had a considerable amount of comments to share verbally with the researcher upon collection of the questionnaires. A mixed methods research could have allowed for a greater exploration of issues and yielding more in-depth information that could have been used in conjunction to the quantitative findings of the research. Furthermore, unstructured interviews could have provided an opportunity to help the respondents in their interpretation of question, thereby preventing ambiguous answers as was experienced. Making use of both qualitative and quantitative methods such questionnaires and semi-unstructured interviews could have mitigated the limitations of each method.

The results of the current research caution against generalising the findings to the population of South African nurses, and in different contexts. The research sample was from nurses of one public hospital in Johannesburg, South Africa. Due to this, the generalisability of the results to the nursing population is cautioned against. However, the response rate could be considered adequate for the research population since the respondents were from various wards of the hospital and was not confined to only a few wards of the hospital. In order for the results to be generalisable to the nursing population, a bigger sample size from different public hospitals could have been used. The research highlights the need for a bigger sample and from different contexts than was observed in the current research. Furthermore, the results of the research were statistically significant at the .01 and .05 levels; as such, the research suggests that results should be analysed against the .001 and .005 levels.

The nature of the relationship that exists between organisational commitment, job satisfaction and intent to leave has usually been investigated using correlations and causality techniques such as regressions. Findings have also shown that these variables are statistically correlated and that organisational commitment and job satisfaction do statistically predict intent to leave. The nature of the research design in the current research was cross-sectional, as it was conducted at one point in time and not conducted over time. Even though the results were found to be statistically significant, the results could be argued to only be applicable during this time and may not necessarily be consistent. It is not certain that the same respondents when re-examined with the same test will have the same scores. A useful way of dealing with this could be the use of a longitudinal study.

Allied to this, a correlation matrix was used to infer which variables had a relationship with the dependent variable which was intent to leave. Following this inspection, only the

variables which were found to have a statistically linear relationship with intent to leave were examined further. The correlation matrix was used to drop variables which did not have any sort of linear relationship with intent to leave. This could be a limitation to the research, as the research relied on only the correlation matrix to make a decision on which variables should be kept for further analysis and which should be dropped. Other statistical techniques could have been used to inform this conclusion. The variables could have been dropped based on model significance, AIC or adjusted in conjunction to the correlation.

The cross-sectional design does not help with socially desirable answers which could have resulted in bias. This is seen in cases where respondents refrained from disclosing that they might have intent to leave as a form of appearing socially desirable both to the researcher and to their organisation. Intent to leave has been considered to precede actual turnover, and even though it is seen as a good predictor of actual turnover, it does not always result in actual turnover (Rispel et.al, 2014). Intent to leave is considered to be a behavioural interest and not actual behaviour of quitting (Mxenge et.al, 2014). It is a phenomenon where an employee has thoughts of quitting or leaving the current job; however, it does not guarantee that the employee will indeed leave or quit his job. Therefore, intent to leave as examined in the current research may not result in actual turnover and nursing shortage. However, even with this limitation in mind, intent to leave does bring undesirable work behaviours that can negatively affect the delivery of healthcare.

Lastly, the research developed a theoretical model to visually represent the key concepts and arguments in the literature review that was conducted and to specifically visualise the expected relationships between the variables. The suggested theoretical model was also used to bring together all that has been discussed. Interpreting the results based on the suggested theoretical model is cautioned against; there is a need for a fully developed and validated theoretical model to guide the interpretation of research findings in this area.

5.4 Recommendations for Future Research

As noted, some of the respondents of the research had hand-written notes and verbally expressed points that could have been worthy for inclusion in the results and discussions had this research been qualitative in design. This warrants the need for a research design that includes more qualitative element. Going forward, research work or studies should consider looking into doing a mixed method design for this topic or area of research. This can allow for both a more in-depth and exploratory research, while quantitatively analysing the data

received. For instance, in both the current research and in the study conducted by Rispel et.al (2014) nursing position (category) was found to be statistically related to intent to leave and to be a predictor of intent to leave. A qualitative design could have been used to explore this finding further and to unpack the reasons behind the differences indicated by the multiple linear regression.

Intent to leave is only seen as a strong predictor of actual turnover (Rispel et.al, 2014). As such, it is not certain that it will result in actual turnover. Intent to leave is considered to be a behavioural interest and not the actual behaviour of quitting (Mxenge et.al, 2014). It is a phenomenon where an employee has thoughts of quitting or leaving the current job, however, it does not guarantee that the employee will indeed leave or quit his job. This can be argued to be subject to change, as it can be argued to be dependent on the here and now; i.e. what the respondent is currently thinking and how they are currently feeling at the time. This also leads to bias in responses. Therefore, in order to examine the consistency of intent to leave among nurses, a longitudinal study is recommended. In this way, the consistency of intent to leave can be tested again after a passage of time among the same respondents and under the same conditions where possible. A test-retest design could mitigate research issues such as response bias or socially desirable responses.

Since organisational commitment is a three-subset scale, varying findings have been reported for each subscale on how each subscale relates to another variable and how the subscales predict dependent variables separately. As shown in Chapter 3, the internal consistency of the first subscale of the organisational commitment was found to be weak (r= .333). This could have affected the results of the current research. As such, focusing on the subscales separately could have given the opportunity to inspect how this one subscale affected the results. As it stands, organisational commitment was analysed as one variable and not as three distinct variables. The researcher recommends that this trend be kept going.

In the current research, organisational commitment was only analysed as a whole and the three subscales were not given attention separately. In this way, it will be easier to pinpoint which type of commitment speaks mostly to other independent variables and to certain dependent variables. As a result, this will allow for a more nuanced understanding of how organisational commitment relates to and predicts other variables and will also allow for targeted strategies aimed at mitigating the issues and concerns raised.

The findings of the research have implications for nursing shortages and the state of health care delivery in South African public hospitals. As extensively discussed in the literature review chapter, as depicted in Figure 2, and as discussed in the current chapter, intent to leave is related to and can influence nursing shortage and as a result the state of health care delivery. Intent to leave is considered a function of lowered levels of organisational commitment and lowered job satisfaction, which are also functions of job demands which are not adequately met by job resources.

The need for an intervention aimed at increasing organisational commitment and job satisfaction, as well as at resolving nursing shortages in public hospitals in South Africa is urgently required. Emphasis on interventions aimed at staff retention is also highly recommended. This should be included as part of strategic planning particularly by Democratic Nursing Organisation of South Africa (DENOSA) and the National Department of Health. This vision can then be cascaded and incorporated into public hospitals. Furthermore, the National Department of Health (2003) introduced modernisation and implementation strategies which are dedicated to assist government hospitals in delivering improved health care and for improving the working conditions of nurses.

However, these strategies have not been implemented and currently, public hospitals are still experiencing lack of job resources required to meet job demands in order to improve the delivery of healthcare. It easy to discuss strategies and solutions required to respond to the challenge of inadequate job resources required to meet job demands, for increasing the levels of organisational commitment and job satisfaction in order to decrease intent to leave. Of which these could ultimately lead to nursing shortage and a poor healthcare delivery state.

However, as Rispel et.al (2014) stated, the challenge in South Africa has been to transfer mitigation plans and solutions into action. The strategies introduced by the National Department of Health are aimed at the following: recruitment and retention; training and skills; equipment and infrastructure; rationing services and technologies; management and organisation; and transport and communication (National Department of Health, 2003). With such strategies, job resources such as equipment and adequate workforce required to meet the job demands could be improved, resulting in improved healthcare delivery. The biggest challenge here is not having strategies and plans, but to translate these strategies and plans into actionable steps and practice. That is the only way to respond meaningfully to the highlighted phenomenon.

5.5 Conclusion

Public Healthcare services in South Africa are considered to be among the most important and most required services by people in the country, especially considering that more of the South African population falls in the low and middle income groups, and due to the increasing population. In the literature review, it was shown that organisational commitment became an interest in the organisational behaviour area decades ago. The references cited in the current research dates as far back as 1974. This reference is among the earliest references cited in the current research.

The research findings around this topic have been consistent. This was observed from studies conducted earlier on up to very recent studies in 2015. Organisational commitment and job satisfaction have been found to have a negative linear relationship with intent to leave. Moreover, organisational commitment and job satisfaction were found to statistically predict intent to leave. These findings are consistent with the findings in the current research as well. Organisational commitment and job satisfaction are still worthy to be studied when examining intent to leave in any occupation.

Furthermore, demographic variables have shown to yield varying findings as shown in the various researches that formed part of the literature review discussion. The nature of relationships that were reported between demographic variables and intent to leave have varied across studies, and the findings have not been similar. In order to respond to the challenges experienced in public hospitals in South Africa, a move away from merely discussing and developing strategies and plans aimed at mitigating nursing shortage and as such improving the state of healthcare delivery and to putting these strategies and plans into concrete action is critical. It has been shown from numerous studies that recommendations have been put forward and suggested even by the National Department of Health; the challenge remains to translate these key recommendations into actions.

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Appendix A: Letter to Organisation

Psychology
School of Human & Community Development
University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

Research title: Organisational commitment, job satisfaction and intent to leave among nurses at a public hospital in Johannesburg, South Africa

Dear Sir/Madam,

My name is Lerato Mothoa, and I am currently studying for my Masters degree in Industrial psychology at the University of the Witwatersrand. As part of my Masters degree, I am expected to conduct a research as this is part of the requirements that are to be fulfilled to obtain my Masters degree. The research is conducted under supervision of my supervisor, Dr Calvin Gwandure at the Department of Psychology.

My research focuses on organisational commitment, job satisfaction and how these two relate to intent to leave among Nurse's in a Public hospital in Johannesburg. The research considers nurse's intention to leave their job, because of or lack of organisational commitment and the level of job satisfaction they have in their work. Organisational commitment can be seen as how close you identify yourself with your organisation and how involved you are in it. Job satisfaction is seen as how satisfied you may be in your aspects of your job or with your entire job.

I hereby request to conduct my research at the organisation. These employees will only have to be Nurse's. I would ideally propose to recruit 250 nurses as possible nurses to participate in my research; however, more volunteers will gladly be welcome to volunteer in the research. Participation in the research involves completing the attached questionnaire, which should take a maximum of 30 minutes. The questionnaire will ask nurses demographic questions such as: age, the ward they work in, how long they have been at the hospital, their nursing position and employment status (temporary/contract or permanent). Questions about the level of organisational commitment they have for the hospital, your job satisfaction, and questions around possible intention to leave your job will also be asked in the questionnaire.

Participation to the research is voluntary and no employee will be forced or obliged to participate. Participants responses will be pooled together in order to establish trends and summarise the major findings, no responses will be looked at individually as this will be of no aid to what the research is aimed at. The results of the research will only be used for research purposes and the organisation is welcome to request feedback on the

general outcome and grouped results of the research. The data will be stored in a password protected company, and only my supervisor and I will have access to it. There are no risks involved in the research. However, the psychological and social department in the hospital will provide counselling and/or debriefing to participants should it be needed. You will be referred to the department. Chances that you will seek or need counselling and debriefing are however unlikely.

I propose to conduct the research in the third or fourth term of the current year. I will need to come to the organisation to explain the purposes of the research and what participation will entail to the volunteers, and then I will proceed to distributing the final questionnaires. Please contact me on 011 318-3738 (home) and 078-260-0365 (cell) for any further information or queries related to the research.

Yours sincerely,

Lerato Mothoa
Masters in Industrial psychology Student
limothoa@gmail.com

Dr Calvin Gwandure
Research Supervisor
Calvin.Gwandure@wits.ac.za

Below are also the contact details for the Human Research Ethical Committee Chair and Administrator in cases where you would require direct queries, concerns or complaints regarding the ethical activities surrounding the research.

Human Research Ethical Committee Chair
Professor P Cleaton
Tel: 011 717 2301
peter.cleaton-jones1@wits.ac.za

Human Research Ethical Committee Administrator
Ms Z Ndlovu
Tel: 011 717 2700/125
zanele.ndlovu@wits.ac.za

Thank you for taking time to read this letter.

Appendix B: Participant Information Sheet (Confidentiality)

Psychology
School of Human & Community Development
University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

Research title: Organisational commitment, job satisfaction and intent to leave among nurses at a public hospital in Johannesburg, South Africa

Dear Sir/Madam

My name is Lerato Mothoa, and I am currently studying for my Masters degree in Industrial psychology at the University of the Witwatersrand. Research is just the process to learn answers to questions. My research focuses on organisational commitment, job satisfaction and how these two relate to intent to leave among Nurse's in a Public hospital in Johannesburg. The research is conducted under supervision of my supervisor, Dr Calvin Gwandure and the Department of Psychology.

You are kindly invited to participate in the following research which is considering nurse's intention to leave their job, because of or lack of organisational commitment and the level of job satisfaction they have in their work. Organisational commitment can be seen as how close you identify yourself with your organisation and how involved you are in it. Job satisfaction is seen as how satisfied you may be in your aspects of your job or with your entire job.

Participation in the research involves completing the attached questionnaire, which should take a maximum of 30 minutes. The questionnaire will ask you demographic questions such as: age, the ward you work in, how long you have been at the hospital, your nursing position and employment status (temporary/contract or permanent). Questions about the level of organisational commitment you have for the hospital, your job satisfaction, and questions around possible intention to leave your job will also be asked in the questionnaire.

Participation is entirely voluntary; no one is obliged to participate in the research. No employee will be advantaged or disadvantaged in any way for participating or not participating in the research. You may discontinue participation at any time without giving a reason and without any penalty or loss of benefits. No identifying details, such as names or ID numbers will be requested in the demographic section of the questionnaire. Confidentiality will be made to keep personal information confidential. Absolute confidentiality cannot be guaranteed. Personal information may be disclosed if required by law. Your responses will be pooled together in order to establish trends and summarise the major findings. No responses will be looked at individually as this will be of no aid to what the research is aimed at. I will have access to the raw data, as well as my supervisor. The data will be stored in a password protected company. There are no risks involved in the research. However, the psychological and social department in the hospital will provide counselling and/or

debriefing to participants should it be needed. You will be referred to the department. Chances that you will seek or need counselling and debriefing are however unlikely.

If you will be participating in the research, please complete the questionnaire. Under no circumstances will your individual responses be made available to the organisation. The pooled results of the research will, however, are made available if requested by any participants or by the organisation. Please detach and keep this sheet. Please be aware that the pooled results of the research will be included in the research report for the partial completion of my Masters degree in Industrial Psychology. The research report will also be available on the internet for any individual to access.

Please note that the research may also be presented at a local/international conference and published in a journal and/or book chapter. Please read through the consent form below and sign it before completing the questionnaire. The consent form just confirms that you are aware of everything that has been outlined in the participation information sheet and everything that was discussed by the researcher.

Please contact me on 011 318-3738 (home) and 078-260-0365 (cell) for any further information or queries related to the research.

Yours sincerely

Lerato Mothoa
Organisation Psychology Masters Student
limothoa@gmail.com

Dr Calvin Gwandure
Research Supervisor
Calvin.Gwandure@wits.ac.za

Below are also the contact details for the Human Research Ethical Committee Chair and Administrator in cases where you would require direct queries, concerns or complaints regarding the ethical activities surrounding the research.

Human Research Ethical Committee Chair
Professor P Cleaton
Tel: 011 717 2301
peter.cleaton-jones1@wits.ac.za

Human Research Ethical Committee Administrator
Ms Z Ndlovu
Tel: 011 717 2700/125
zanele.ndlovu@wits.ac.za

Thank you for taking the time to read this information sheet.

Appendix C: Consent Form

Psychology
School of Human & Community Development
University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

Consent Form

I give my consent for participating in Lerato Mothoa's research. I understand that:

- Participation in this research is voluntary.
- Refusal to participate will involve no penalty or loss of benefits, and thus, I may refrain from answering any questions.
- I may withdraw my participation and/or my responses from the research at any time without penalty or loss of benefits.
- There are no risks or benefits associated with the research. However, the psychological and social department in the hospital will provide counselling and/or debriefing to participants should it be needed. You will be referred to the department. Chances that you will seek or need counselling and debriefing are however unlikely.
- All of my responses provided will remain confidential.
- I am aware that the results of the research will be included in the research report for the partial completion of the degree, Masters in Industrial Psychology.
- The research report will be available on the internet for any individual to access.
- The research may also be presented at a local/international conference and published in a journal and/or book chapter.

Signed:

Date:

Appendix D: Demographic Questionnaire

Demographic Information

Please fill and mark the appropriate block with a cross. This information is only for research purposes.

1. Age :

25 and less	26-35	36-45	56-65	65 and over

2. Unit/Ward of work:

ICU	Theatre	Casualty	Folateng	2	4	5	6	7	8
9	10	11	12	13	14	15	16	17	18
19	22	23							

Other, please specify

3. How long have you been at the organisation?

0-6 months	6 months- 1 year	1-3 years	3-5 years

Other, please specify

4. Nursing position (Category):

Auxiliary nurse	Staff nurse	Sister	Matron

Other, please specify

5. Employment status:

Temporary/ Contract	Permanent

Appendix E: Organisational Commitment Scale

Listed below is a series of statements that represent feelings that individuals might have about the company or organisation for which they work. With respect to your own feelings about the particular organisation for which you are working now, please indicate the degree of your agreement or disagreement with each statement by circling a number from 1 to 7 using the scale below.

1 = strongly disagree

2 = disagree

3 = slightly disagree

4 = undecided

5 = slightly agree

6 = agree

7 = strongly agree

AFFECTIVE COMMITMENT SCALE				
1.	I would be very happy to spend the rest of my career with this organisation.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
2.	I really feel as if this organisation's problems are my own.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
3.	I do not feel a strong sense of "belonging" to my organisation.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
4.	I do not feel "emotionally attached" to this organisation.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
5.	I do not feel like "part of the family" at my organisation.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
6.	This organisation has a great deal of personal meaning for me.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree

CONTINUANCE COMMITMENT SCALE				
1.	Right now, staying with my organisation is a matter of necessity as much as desire.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
2.	It would be very hard for me to leave my organisation right now, even if I wanted to.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
3.	Too much of my life would be disrupted if I decided I wanted to leave my organisation now.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
4.	I feel that I have too few options to consider leaving this organisation.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
5.	If I had not already put so much of myself into this organisation, I might consider working elsewhere.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
6.	One of the few negative consequences of leaving this organisation would be the scarcity of available alternatives.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree

NORMATIVE COMMITMENT SCALE				
1.	I do not feel any obligation to remain with my current employer.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
2.	Even if it were to my advantage, I do not feel it would be right to leave my organisation now.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
3.	I would feel guilty if I left my organisation now.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree

4.	This organisation deserves my loyalty.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
5.	I would not leave my organisation right now because I have a sense of obligation to the people in it.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree
6.	I owe a great deal to my organisation.	Disagree	1-------2-------3-------4-------5-------6-------7	Agree

Appendix F: Global Job Satisfaction Scale

CONFIDENTIAL

Please indicate the degree of your satisfaction with each of the following questions regarding your work experiences by placing a cross on the appropriate statement where 1 is “extremely dissatisfied” and 7 is “extremely satisfied”.

1. The physical work conditions

1	2	3	4	5	6	7
extremely dissatisfied						extremely satisfied

2. The freedom to choose your own method of working

1	2	3	4	5	6	7

3. Your fellow workers

1	2	3	4	5	6	7

4. The recognition you get for good work

1	2	3	4	5	6	7

5. Your immediate boss

1	2	3	4	5	6	7

6. The amount of responsibility you are given

1	2	3	4	5	6	7

7. Your rate of pay

1	2	3	4	5	6	7

8. Your opportunity to use your abilities

1	2	3	4	5	6	7

9. Industrial relations between management and workers in your firm

1	2	3	4	5	6	7

10. Your chance of promotion

1	2	3	4	5	6	7

11. The way your firm is managed

1	2	3	4	5	6	7

12. The attention paid to suggestions you make

1	2	3	4	5	6	7

13. Your hours of work

1	2	3	4	5	6	7

14. The amount of variety in your job

1	2	3	4	5	6	7

15. Your job security

1	2	3	4	5	6	7

Appendix G: Intent to leave Scale

The following section aims to ascertain the extent to which you intend to stay at the organisation. Please read each question and indicate your response using the scale provided for each question:

During the past 9 months…

1.	How often have you considered leaving your job?	Never	1-------2-------3-------4-------5	Always
2.	How frequently do you scan newspapers in search of alternative job opportunities?	Never	1-------2-------3-------4-------5	All the time
3.	To what extent is your current job satisfying your personal needs?	Not Happy	1-------2-------3-------4-------5	Very Happy
4.	How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?	Never	1-------2-------3-------4-------5	Always
5.	How often are your personal values at work compromised?	Never	1-------2-------3-------4-------5	Always

6.	How often do dream about getting another job that will better suit your personal needs?	Never	1-------2-------3-------4-------5	Always
7.	How likely are you to accept another job at the same compensation level should it be offered to you?	Never	1-------2-------3-------4-------5	Always
8.	How often do you look forward to another day at work?	Never	1-------2-------3-------4-------5	Always
9.	How often do you think about starting your own business?	Never	1-------2-------3-------4-------5	Always
10.	To what extent do responsibilities prevent you from quitting your job?	Not the reason at all	1-------2-------3-------4-------5	The biggest reason

11.	To what extent do the benefits associated with your current job prevent you from quitting your job?	Better at other places	1-------2-------3-------4-------5	Better at current employer
12.	How frequently are you emotionally agitated when arriving home after work?	Never	1-------2-------3-------4-------5	All of the time
13.	To what extent does your current job have a negative effect on your personal well-being?	Not at all	1-------2-------3-------4-------5	Very much
14.	To what extent does the “fear of the unknown”, prevent you from quitting?	Not at all	1-------2-------3-------4-------5	Very much
15.	How frequently do you scan the internet in search of alternative job opportunities?	Never	1-------2-------3-------4-------5	All of the time

Appendix H: Letter of permission from research site

GAUTENG PROVINCE
INFRASTRUCTURE DEVELOPMENT
REPUBLIC OF SOUTH AFRICA

Enquiries: Mrs J.K. Moitsiwa
Assistant Director – Nursing
Tell: 011 489 0896
Fax: 011 489 1038
Date: 25 June 2015

To whom it may concern:

This letter is to confirm that Ms. Lerato Mothoa was given permission to conduct her research at Helen Joseph Hospital by Nursing Department from 27 August 2014 to 3 September 2014. This letter also serves as permission granted to Ms. Lerato Mothoa to conduct her research at Helen Joseph Hospital in the third and fourth term of the current year, 2015.

Kind Regards

Mrs. J.K. Moitsiwa
Assistant Director Nursing

GAUTENG PROVINCIAL GOVERNMENT
HELEN JOSEPH HOSPITAL
PRIVATE BAG X 47
25 -06- 2015