CHAPTER ONE

ORIENTATION TO THE STUDY

1.1 Introduction

Various factors in organizations and work environments have been identified as contributory to employee dissatisfaction in general. These factors become particularly important in organizations that undergo change through restructuring and transformation, which directly impacts on the nature of employees' work environment.

As a consequence employees in general and nurses in particular may experience increasing dissatisfaction and stress, followed by an inability to respond appropriately to these effects; quality of care may be compromised as a result.

Any factors in the work environment that threaten the quality of care are potentially serious and worthy of being prevented. However, not enough is known about aspects of nurses' work environment, which may contribute to stress and burnout. This study sought to investigate nurses' satisfaction with their work environment and whether it has any bearing on them experiencing burnout.

The purpose of this chapter is to orientate the reader to the background of the study, the problem statement, and the purpose and objectives of the study.

1.2 Background

Over the past years, organizational transformation in health institutions has made nurses to be less effective in their work. In this study context rationalization and deployment are important features of organizational transformation. In this regard nurses are generally deployed to work in other hospitals or community health centers. As such, nurses may become unhappy since they did not have much choice regarding their place of work. Nurses have also become more uncertain about their roles in public health centers, and this has resulted in poor quality of work life, decreased productivity, increased work stress, job dissatisfaction, high burnout levels and the propensity to leave the profession. Job satisfaction and work related stress are important determinants of nurses' retention and turnover, and may affect the performance of quality nursing care. If nurses are satisfied with their job, they in turn can influence patient satisfaction and compliance. Over the past few years, many nurses have increasingly left the profession and the country for better working conditions and opportunities. Young nurses in particular are resigning for better jobs or leave the nursing profession altogether. This leaves behind an ageing population of nurses. Vacant posts are not being filled in the public sector thus leading to a further shortage of staff, increased workloads and increased responsibility.

The growing shortage of nurses reported in many countries compounded with factors of job dissatisfaction and burnout, has led to a growing interest among researchers and practitioners in designing effective organizational interventions to prevent the costly toll resulting from burnout (Kalliath and Morris, 2002:648). The practice of every registered nurse (RN) is affected in varying degrees by her

patients' pathology or social environmental factors such as high workload, lack of staff support, low salaries, lack of promotion opportunities and contact with critically ill patients.

Social environmental factors of the workplace arise from organizational transformation, cost containment strategies, diminishing resources and increasing responsibilities; all these have effects on the nurse's meaning of work and quality of work life. Nurses suffer repeated minor or major disruptions of their sense of self, and this can affect their responses to their patients / clients, co-workers and to their work. Good training and years of experience are no guarantee that RNs will not reach a point of burnout. The effect of work related stress could be pervasive, that is, potentially affecting all areas of the RNs life. Psychological and physical well being is thus posited as a significant predictor of job satisfaction. Personal involvement of registered nurses may result in a feeling of belonging and a sense of power thus increasing job satisfaction and commitment.

1.3 Rationale for the study

A study to determine levels of job satisfaction as a predictor of burnout among nurses was conducted in a general community hospital located in Midwestern United States. The reason for the above study was because social environmental factors of the workplace arising from organizational restructuring cost containment strategies, diminishing resources and increasing responsibilities, caused highly stressed, emotionally exhausted nurses to leave the profession. This situation is no different in South Africa. If reasons for job dissatisfaction and burnout are known, the following may be achieved:

- Less nurses will leave the profession and the country
- Patient care will be improved
- Less violence and conflict among nurses
- Improved relationship between employees and employers / managers
- Reduced sick leave and reduced absenteeism

1.4 Statement of the problem

Recent organizational restructuring, cost containment, diminishing resources, and increased responsibilities have been implicated in increasing dissatisfaction and burnout amongst nurses. Observations in practice suggest that nurses no longer render quality-nursing care; there is increasing job dissatisfaction causing nurses to leave the profession. In addition, many experience violence and conflict in the workplace. This has prompted the researcher to conduct a replication study to determine whether variables in job satisfaction levels and burnout are present among RNs at a hospital in Johannesburg and whether these are in any way related to one another. The question of this study therefore is "what is the relationship between burnout and nurses' job satisfaction levels?

1.5 Purpose of the research

The purpose of the research was to determine the relationship of differential levels of job satisfaction on burnout levels among registered nurses at a hospital in Johannesburg, hypothesizing that there is a relationship between burnout and job satisfaction. Higher levels of job satisfaction predict lower levels of burnout. To achieve the purpose of the study, four study objectives were formulated.

1.6 Objectives of the study

The objectives were to:

- assess the overall level of job satisfaction, both extrinsic and extrinsic job features, among registered nurses using a job satisfaction scale.
- determine registered nurses' emotional exhaustion and extent of depersonalization using the MBI scale.
- determine whether the development of depersonalization is related to the experience of emotional exhaustion.
- measure registered nurses' personal accomplishment using the MBI scale.

1.7 Definitions of terms

Registered Nurse (RN): One who has completed a prescribed educational program and is registered with the South African Nursing Council (SANC) as a nurse to attend to the needs of the patients.

Job satisfaction: The level of self reported contentment or agreement of nurses with the requirements of their job according to the scale developed by Maslach, Jackson and Leiter (1996). The extrinsic factors and intrinsic factors should be present or in place in the work environment for job satisfaction to be experienced.

Burnout: Is a prolonged response to chronic emotional and interpersonal stressors on the job, and is defined by the dimensions of emotional exhaustion, depersonalization and personal accomplishment. These dimensions of burnout are explained below.

- Emotional Exhaustion: to feel overwhelmed by the emotional demands imposed by other people. Maslach, Jackson and Leiter (1996: 4).
- Depersonalization: detachment and dehumanized response signals, developing poor opinion about other people. Maslach, Jackson and Leiter (1996: 4).
- Personal Accomplishment: feelings of competence and successful achievement in one's work with people. Maslach, Jackson and Leiter (1996: 4).

1.8 Significance of the study

The study was justified by the scarcity of research on the relationship between burnout and job satisfaction among registered nurses locally, using the MBI-HSS scale and Job Satisfaction scale of Warr, Cook and Wall (1979: 32-33). There is a need to establish whether a higher level of job satisfaction leads to lower levels of burnout. More importantly, it is vital that hospital management should strive to ensure job satisfaction among registered nurses, which is expected to impact positively on the quality of nursing care and decreased work related stress.

1.9 Conclusion

This chapter gave an overview of the study. It described the rationale for the study, the purpose and the objectives of the study. The following chapter outlines the literature review followed by the research methodology and data collection in chapter three and

chapter four respectively.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, the researcher presents a literature review, which gives an overview of job satisfaction and burnout. The extrinsic factors and intrinsic factors of work described by Herzberg, Mausner and Synderman, (1959: 113-119) were used as the theoretical framework for the job satisfaction component of this study. For the component on burnout, Maslach, Jackson and Leiter, (1996:1-48) theory guided this study. Studies on employees' burnout and job satisfaction are discussed below.

2.2 Overview of the literature

An international study conducted by Kaliath and Morris, (2002: 648-653) entitled, "Job satisfaction among RNs: A predictor of burnout levels", was carried out in a general community hospital located in Midwestern United State of America. The objective of their study was to assess the impact of differential levels of job satisfaction on burnout among nurses. They hypothesized that higher levels of job satisfaction may predict lower levels of burnout. In their research, Kaliath and Morris, (2002: 649) explain that in a stressful work environment, higher levels of job satisfaction might reduce levels of burnout among employees. They also state that higher levels of job satisfaction might protect employees from extreme psychological strain induced by experiencing burnout. Nurses react to environmental factors such as reduced psychic income, excessive

workload, and budget limits that make the nurses not to care for others. The meaning of work diminishes due to self-care deficits, which will be shown by lack of emotional development, intellectual growth and physical well being that is followed by powerlessness and loss of purpose.

Kaliath and Morris (2002: 648) used a cross-sectional study design to collect data. Their sample consisted of 203 nurses from the population of 340 employed nurses. The mean age of their participants was 38 years, 95% were women and most of the participants were in the present position for more than three years. In their research design they used two questionnaires namely, the Maslach Burnout Inventory (MBI), which is a 22-item scale with a 7-point rating scale. The Maslach Burnout Inventory (MBI) is a human service measure with three subscales, which measure Emotional Exhaustion (EE), Depersonalization (Dp) and Personal Accomplishment (PA) .The respondents were requested to answer subscale items as follows: (0=never; 6=every day).

The job satisfaction scale of Katzel, Ewen and Korman (1979) has 3 items; it measures the participant's overall job satisfaction. The respondents answered job satisfaction scale as follows (1=strongly disagree; 7=strongly agree). The researchers used Confirmatory Factor Analysis (CFA) for five items of Emotional Exhaustion and two items of Depersonalization. Structural Equation Modeling (SEM) was used to test the fit of theoretical model, which is the relationship between job satisfaction and burnout. The chi-square statistic measured the discrepancy between the sample covariance matrix and the fitted covariance matrix. Root Mean Square Error of Approximation (RMSEA) was

used to assess goodness of fit, 90% confidence interval (CI) of RMSEA, Goodness of Fit Index (GFI) and Comparative Fit Index (CFI). All the above were used for statistical tests of significance.

Their findings showed that job satisfaction has a significant direct negative effect on Emotional Exhaustion, whereas Emotional Exhaustion has a direct positive effect on Depersonalization. A significant indirect effect was seen of job satisfaction on depersonalization via emotional exhaustion. Path coefficient analysis showed that job satisfaction has both direct and indirect effects on burnout, confirming job satisfaction as a significant predictor of burnout. Internal consistency for their research was comparable to those reported in other literature. They found that Personal Accomplishment items did not converge sufficiently to bring about reliable factors in the Confirmatory Factor Analysis. The predicted direct effect of satisfaction was not obtained.

A local study was conducted by Cilliers (2003: 62-74) in hospitals in the Gauteng Province of South Africa. The researcher's theoretical statement and research question was that, the individual nurse who functions on high levels of burnout will function on low levels of salutogenic functioning and vice versa. The research question was whether a meaningful negative relationship exists between burnout and salutogenic functioning as measured by a sense of coherence, hardiness and learned resourcefulness. The aim of the researcher was to determine whether a meaningful relationship exists between burnout and salutogenic functioning and to ascertain the nature thereof.

The sample consisted of 105 registered general nurses, who have a three-year nursing

diploma and at least five years nursing experience. The sample consisted of females with ages ranging between 28years and 57years. All participants were in full time employed and were involved in general nursing practice.

Cilliers (2003: 63) used four instruments, namely, Maslach Burnout Inventory (MBI); Orientation to life questionnaire; the Personal View Survey and the Self-control schedule for their conceptual congruence to burnout, sense of coherence, hardiness and learned resourcefulness because the instruments were acceptable psychometric characteristics provided in the literature. The researcher used Maslach Burnout Inventory (MBI) to measure burnout in three subscales, emotional exhaustion, depersonalization and personal accomplishment. The Orientation to life questionnaire measured sense of coherence in total score as well as in three sub scores, namely, comprehension, meaningfulness and manageability. The Personal View Survey measured hardiness in a total score as well as in three sub scores namely, commitment, control and challenge. The Self-control schedule measured learned resourcefulness in a single score.

Cilliers (2003:65) used descriptive statistics to present the data. Cronbach alpha coefficients were used to determine the reliability of the instrument. Cilliers (2003:65) used Pearson product moment correlation coefficients for inter correlations. Exploratory factor analysis was used to measure observed variables through the four measuring instruments; the data representing the variables were subjected to factor analysis. The orthogonal transformation matrix rotated factor pattern method was used to determine the factor structure variables. The researcher used confirmatory factor analysis because exploratory factor analysis has limited value for the specification and testing of the

hypotheses, allowing her to specify the hypotheses and providing information to determine whether the observed data confirm the hypothesized model structure.

Cilliers (2003:65) tested the hypothesis that a meaningful relationship exists between burnout (negative for emotional exhaustion and depersonalization and positive for personal accomplishment) and salutogenic functioning with its dimensions. A good fit exists between the theoretical structure of the two constructs and the empirical data.
Cronbach alphas and total dimensions results of the four instruments were as follows, burnout: 0.75/3 dimensions; sense of coherence: 0.85/3 dimensions and the total score; hardiness: 0.85/3 dimensions and the total score; learned resourcefulness: 0.80 one dimension. The results showed that an overall significant negative correlation exists between burnout and salutogenic functioning. Emotional Exhaustion and depersonalization both correlate negatively with all the salutogenic dimensions of sense of coherence, hardiness and learned resourcefulness. Personal accomplishment correlates positively to all the salutogenic dimensions. Confirmatory factor analysis showed a reasonable fit with a Steigerlind Root mean square of approximation index of 0.15. The findings indicated that the instruments are valid for the study and the empirical data fit the theoretical model.

Westway, Wessie, Viljoen, Booysen and Wolmarans, (1996:17-20) conducted a study on job satisfaction and self-esteem of South African nurses. Their sample consisted of 2,000 nurses drawn by the South African Nursing Council from the register of their members. The sample consisted of practicing and non - practicing nurses. Out of 2,000 nurses only

489 respondents answered the questionnaire and majority were females aged between 21 and 65 years; all have a diploma qualification in nursing. The objectives of the study were to ascertain South African nurses' satisfaction with their work, pay, promotion, supervision and co-workers, to compare job satisfaction of South African nurses with that of North American nurses; to determine levels of self-esteem and to test direct and indirect effects of self-esteem on job satisfaction. Westway, et al., (1996: 18) hypothesized that self-esteem is positively related to job satisfaction and that job satisfaction is based upon work related needs for high self-esteem nurses and social approval for low esteem nurses.

In their results, the researchers found that the respondents were the least satisfied with promotion and pay. They also found that the respondents were more satisfied with supervision and co-workers. Alpha coefficient was 0.79 with work, 0.85 with pay, 0.84 with supervision, 0.91 with co-workers, 0.93 with overall job satisfaction, 0.72 for self-esteem scale, 0.87 for the work related needs scale and 0.80 for social approval scale. The researchers also found that self-esteem was not significantly related to work related needs or social approval. They found that there was modest relationship between work- related needs and social approval, accounting for 4% of the variance. Westway, et al., (1996: 19) found that self-esteem is positively related to job satisfaction. On job diagnosis individual subscales, self-esteem was significantly related to work, supervision and co-workers. Their results suggested that nurses with high levels of self -esteem gain more satisfaction from their work, supervision and co-workers than nurses with low levels of self-esteem. Nurses with high level of self-esteem were more satisfied with their job than those with

low esteem; (t =4.02, *df* =277, p<0.001).

2.3 Theoretical framework

This study is based on Herzberg, Mausner, and Synderman, (1959: 113-119) two-factor theory and Maslach's Burnout Inventory (MBI) theory. These theoretical frameworks are described in the text below.

2.3.1 Herzberg's theory.

Hertzberg's theory posits that job satisfaction and dissatisfaction stem from two types of needs. The first type is called "Motivators" or intrinsic factors; this type of needs relate to the nature and challenge of the work itself, such as intrinsic or work-content based variables. Herzberg, Mausner and Snyderman (1959:114) suggested intrinsic factors such as recognition, the work itself, growth, responsibility and advancement are important satisfiers and they form part of the motivators. An individual's job title reflects and represents an individual's advancement, responsibility and recognition within an organization. The researcher is of the opinion that job title serve as motivators in order to improve and increase levels of job satisfaction.

The second type of need is called the "Hygiene factors" or extrinsic factors; these factors relate to the physical and psychological environment in which the work is performed. Items such as policy of the company, supervision, interpersonal relationships, working conditions, and status and job security belong to hygiene factors. If the above-mentioned

items are not present and are not at acceptable levels it could lead to nurses' dissatisfaction (Herzberg, 1959:114). In the researcher's view, job titles are reflective of an individual's status within an organization, as well as within the community. Job title is also indicative of an individual's position within an organization. The higher an individuals position within the organization, the greater compensatory packages and benefits, as well as greater levels of control and power in terms of organizational decision-making. A job title can be perceived as either a motivator due to emphasis placed on issues of responsibility, recognition and advancement or it can be perceived as a hygiene factor due to emphasis placed on issues of status. Job satisfaction may also be influenced by promotion, potential mobility, autonomy characteristics of the job itself and the relationship within the organization (Matrunola, 1996: 829; Loke, 2001: 193).

2.3.2 The Maslach Burnout Inventory

If the extrinsic and intrinsic factors are not in place in the place of employment, the employees may experience burnout or have low self - esteem. Burnout can psychologically affect health or medical professionals. Burnout may diminish professional efficacy and is discussed in detail below.

Burnout is a common metaphor for a state of extreme mental exhaustion, usually work related. Nurses who are burnt-out are indifferent towards their work and are less able to provide quality nursing care in a consistent caring manner, while they may still feel concerned, they can no longer give of themselves as they had formerly (Maslach, et al., 1996: 16). Aiken, et al., (2002: 1988) reported on the worsening problems of burnout among hospital nurses and the resulting lack of safety to patients.

The development of Maslach Burnout Inventory – Human service survey (MBI-HSS) to measure burnout occurred over a period of eight years. Maslach, et al., (1996: 11) designed a preliminary form of MBI-HSS containing 47 items. Each item was answered using two responses, frequency and intensity of feelings. The Maslach Burnout Inventory (MBI) is recognized as the leading measure of burnout. The MBI-HSS measure burnout as it manifests itself in staff members in human services institutions and health care occupations such as nursing, social work and psychology. Maslach, Jackson and Leiter (1996: 4) used the items for Maslach Burnout Inventory- Human Service Survey (MBI-HSS) to measure hypothetical aspect of the burnout syndrome. In this study the burnout inventory was used to measure participants' level of burnout. Maslach, et al., (1996: 4) theory and research predicted that people experiencing burnout would be dissatisfied with opportunities for personal growth and development on the job. Further more Maslach, (1976: 17) theory predicts that burnout would be related to the desire to leave one's job. The burnout inventory consists of three subscales, each designed to measure respondents' emotional exhaustion, depersonalization and personal accomplishment. These constructs are described below.

2.3.2.1 Emotional exhaustion

Research on emotional exhaustion emerged from Maslach's (1982) influential model of burnout. The Emotional Exhaustion (EE) subscale is used to describe feelings of being emotional overextended and exhausted by one's work. The Emotional Exhaustion subscale has nine items, Maslach, et al., (1996:18) described the item with highest factor

loading as the one referring directly to burnout, “I feel burned out from my work", its frequency was .84 and .81 on intensity. Maslach, (1988, 1986 and 1996) indicated that human service staff that scored low on measures of peer and co-worker satisfaction or and those that are not on good terms with their supervisors scored higher on emotional exhaustion.

2.3.2.2 Depersonalization

Depersonalization is used to describe an unfeeling and impersonal response toward recipients of one’s care or service, care treatment, or instructions. The Depersonalization subscale has five items; one of the items is “I worry that this job is hardening me emotionally". According to Maslach, et al., (1996:10) higher mean score for emotional exhaustion and depersonalization correspond to higher degrees of experienced burnout. In their research Maslach, et al., (1996:12) found that some of the items in emotional exhaustion and depersonalization subscales had a low loading on others and there was a moderate correlation between the two subscales. Maslach, et al., (1996:13) also indicated that human service staff that scored low on measures of peer and co-workers satisfaction scored higher on depersonalization.

2.3.2.3 Personal Accomplishment

Personal accomplishment refers to feelings of competence and successful achievement in one’s work. This subscale has eight items; one of the items is "I have accomplished many worthwhile things in this job". According to Maslach, et al., (1996:10) lower mean scores on this subscale correspond to higher degrees of experienced burnout. The

Personal Accomplishment (PA) subscale is independent of the other subscales and its items do not load negatively on them Maslach, et al., (1996: 4). According to Maslach, personal accomplishment cannot be the opposite of emotional exhaustion or depersonalization. Maslach, et al., (1996; 12) indicated that correlations between personal accomplishment and other subscales are low. Maslach, (1986: 13) reported that nurses who are on good terms with their co-workers scored higher on personal accomplishment and those nurses who are not on good terms with their peers and co-workers scored low on personal accomplishment.

2.4 Conclusion

This chapter gave an overview of the studies done on job satisfaction and burnout and the framework of the research. The following chapter orientates the reader to the methodology used in the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter orientates the reader to the research design and methods used, the research setting, research instruments, reliability and validity of instruments, population, sample and sampling methods used. Ethical principles that guided the study are presented.

3.2 Research design

A quantitative, descriptive survey design was used to determine participants' job satisfaction and to determine the relationship between job satisfaction and burnout. Descriptive surveys generally achieve more information about the research phenomenon, surveys describe patterns and correlations that might go unnoticed and help to relate facts obtained in order to gain greater insight into phenomenon (Burns and Grove, 2001: 247). The research was conducted to obtain information about and patterns between job satisfaction and burnout, and to make judgements based on the data collected. The survey was thus an appropriate design for this study.

3.3 The research setting

Data were collected at a hospital in Johannesburg in the duty room specifically of departments, wards and units during teatime and lunch breaks. Participants were given an

information sheet to read and were required to sign a consent form when they agree to participate. Participants were required to complete the demographic data, the job satisfaction and Maslach Burnout Inventory (MBI) scales. On completion the researcher personally collected the questionnaires.

3.4 Research methods

Research methods include the procedure for data collection, the instruments used, the population, sample and sampling methods and the approach to data analysis. This study examined the relationship between burnout and job satisfaction experiences of 200 registered nurses (n=200) employed in a public hospital in Johannesburg, South Africa. The researcher obtained permission from the Head of Department from the Gauteng Department of Health, the Chief Executive Officer of the institution and the Deputy Director of Nursing who gave the permission verbally.

After approval the registered nurses were approached individually or in a group and invited to participate in the study. They were given the information sheet explaining the content of the study. They were requested to sign the consent form if they agree to participate. Participation was voluntary, confidentiality and anonymity was ensured by using codes instead of participants' names on each questionnaire. The researcher was the only person who had access to completed questionnaires. Aggregate data were used in reporting the study.

3.4.1 Population, sample and sampling method

The study population consisted of registered nurses at a hospital in Johannesburg (N=680). A sample of two hundred registered nurses (n=200) was selected from day and night duty schedules, which constituted the sampling frame. Simple random sampling was done to allow every member in the RN population a probability more than zero to be included in the study (Burns & Groves, 2001: 250). Names of registered nurses were requested from the Director of Nursing Services. These were allocated numbers and were randomly selected until the sample of two hundred was reached. One hundred and sixty five RNs (n=165) agreed to participate in the study.

The following inclusion criteria were applied: -

- Participants who were registered with the SANC as a nurse.
- Participants who were permanently employed.
- Participants who have a minimum clinical experience of five years.

3.4.2 Data collection and research instruments

A self- administered questionnaire was used to collect data. The questionnaire consisted of two scales namely Job satisfaction scale of Warr, et al., (1979: 32-34) and Maslach Burnout Inventory (MBI) developed by Maslach, et al., (1996: 1-48). Firstly, the participants were required to complete the demographic data sheet requesting their gender, their age, the years of experience and job title (Annexure 6).

3.4.2.1 Job Satisfaction scale

The overall Job Satisfaction scale of Warr, et al., (1979: 33), addresses both extrinsic and intrinsic job features (Parbhoo, 2000: 15). The scale comprises of two subscales: extrinsic and intrinsic factors with a total of 15 items. The extrinsic satisfaction sub-scale contains eight items (1, 3, 5, 6, 8, 9, 10 and 12) (see annexure 6). The intrinsic satisfaction sub-scale contains seven items (2, 4, 7, 11, 13, 14 and 15) (see annexure 6). The participants were required to indicate their level of satisfaction on a 7-point Likert scale, ranging from dissatisfied to satisfied.

3.4.2.2 Maslach Burnout Inventory

The Maslach Burnout Inventory (MBI), containing 22-items, assesses burnout on three dimensions: emotional exhaustion, which has nine, items (1, 2, 3, 6, 8, 13, 14, 16, and 20). The Emotional Exhaustion subscale measures feelings of being emotionally overextended and worn out by one's work; Depersonalization has five items (5, 10, 11, 15 and 22); it assesses unfeeling and impersonal response towards the patients or clients of one's care. The Personal Accomplishment subscale has eight items (4, 7, 9, 12, 17, 18, 19 and 21); this subscale measures feeling of competence and achievement in one's work with people (see annexure 6). Registered nurses rated the frequency of experiencing feelings related to each subscale using a 7- point scale. The participants were requested to respond to the following: "*Never, A few times a year or less, once a month or less, A few times a week and every day"*. They wrote their responses from 0 through 6 (see annexure 6).

3.4.2.3 Reliability and validity of instruments

A reliable instrument enhances the power of a study to detect significant differences or relationships actually occurring in the population under study (Burns & Groves, 2001:249). Reliability is threatened when there are many researchers covering different parts of the sampled area. MBI-HSS scores were correlated with the presence of certain job characteristics that were expected to contribute to experienced burnout. In this study, reliability was ensured since the researcher collected the data without research assistants, ensuring degree of consistency. The reliability measure of the scales used in this study is reported below.

3.4.2.3.1 Job satisfaction scale

Job satisfaction scale has been reported by Warr, et al., (1979: 33) to have high internal reliability (Cronbach alpha=0. 85 and 0.88). Using a South African sample, Barling, Bluen and Fain (1987: 684) reported a retest reliability of 0.69 for this scale, while Bluen (1987) reported a high internal consistency of 0.95 and a significant one-month test-retest reliability of 0.63. Barling, et al., (1987: 685) reported acceptable internal consistency of 0.81 for the scale. This scale has also been shown to be valid (Warr, et al., 1979: 33)

3.4.2.3.2 Maslach Burnout Inventory

The items of each subscale, that is, emotional exhaustion, depersonalization and personal accomplishment, ensure content validity of MBI-HSS. A study conducted by Hasting, Horne and Mitchell (2004: 268) supports the construct validity and reliability of the MBI for staff in intellectual services. Validity ensures that a researcher is consistent in

measuring only what they set to measure. Maslach, et al., (1996: 11) reported internal consistency estimates of reliability: 0.90, 0.79, and 0.71, for the emotional exhaustion, depersonalization, and personal accomplishment subscales, respectively. The reliability coefficients (Cronbach's alpha) for the three subscales were as follows: emotional exhaustion (9 items, 0.90), depersonalization (5; items, 0, 79), and personal accomplishment (8 items, 0.71). Maslach, et al., (1996: 11) published group norms for nurses and doctors as 22.19, 7.12, and 36.53 for the three subscales respectively.

3.5 The pilot study

The purpose of the pilot study was to determine whether the participants understood the questions and to test the feasibility of the study. A sample of nine participants in the same population was included in the pilot study. The participants did not understood some of the words in Maslach Burnout Inventory questionnaire, item 10, **"**I've become more "**callous"** toward people since I took this job**"** and item 18, **"**I feel **"exhilarated"** after working closely with my "**recipient"** the meaning of the words written in bold letters were explained in the questionnaire (see Annexure 6). The result of the pilot study and these participants were not included in the main study.

3.6 Approach to data analysis

The data were captured on a spread sheet using Microsoft Excel using the codes listed from the questionnaires, job satisfaction questionnaire, "1 to 7" and MBI questionnaire, "1 to 7", zero (0) was reported as "1". The data were saved on floppy disks and a USB device and later printed. The printed and stored data were given to the statistician from

the Epidemiology Data Center at Wits University, to analyze using Statistical Analysis Software (SAS). Descriptive statistics were used to summarize and present data. Summarized data were displayed in frequency tables and pie graphs. Responses were coded as 1, 2 and 3, which means all the 2s became 1s and 3, 4, and 5s became 2s and 6 and 7s became 3s.

Data were reported as percentages; relationships were determined using cross tabulation and Chi-square test. Fisher's Exact tests were used to test significance of associations between age and extrinsic and intrinsic job satisfaction factors, age and emotional exhaustion, depersonalization and extrinsic and intrinsic job satisfaction factors, age and depersonalization, personal accomplishment and extrinsic and intrinsic job satisfaction factors and age and personal accomplishment. Testing was done at 0.05 level of significance. Moonstats was used to analyze job satisfaction (extrinsic and intrinsic) factors per item. Raw data in the computer were cleaned and checked.

3.7 Ethical considerations

In order to protect the rights of participants, and meet the standards of any scientific enquiry, certain procedures were followed prior to conducting the study and in the course of the study. The researcher conducted the research after approval from the Postgraduate Committee (Annexure 1) and ethical clearance from the University of the Witwatersrand's Committee for Research in Human Subjects (Annexure 2).

A letter of approval was granted by the Head of Department of the Gauteng Department of Health (Annexure 3) and permission to conduct research at the hospital was given verbally by the Chief Executive Officer of the hospital and the Deputy Director of

Nursing Services. To ensure anonymity and privacy, participants' names were not used on the data collection tool; and only codes were used. The data were kept in a safe place under lock and key and only the researcher had access to data.

Informed consent was sought from each participant. The informed consent process involved the following:

- Each participant was given essential information about the study in writing (Annexure 4).
- Each participant could exercise choice to participate or to withdraw from the study if they felt like without any penalty.
- Having each participant read and sign a consent form (Annexure 5)

3.8 Conclusion

In this chapter the research methodology was described. The research design, the research setting, population, sample and sampling method, data collection and instruments, reliability and validity, pilot study, approach to data analysis and ethical considerations were discussed. The results of this study are presented in chapter four and discussed in chapter five.

CHAPTER FOUR

RESULTS OF THE STUDY

4.1 Introduction

This chapter presents the results of the study relating to burnout and job satisfaction of registered nurses at a hospital in Johannesburg. A descriptive study was conducted to determine the relationship between burnout and job satisfaction among registered nurses. Closed-ended questions were answered by participants and analyzed quantitatively. The assistance of a statistician was sought to ensure that data analysis approaches were appropriate and the results were precise.

4.2. Approach to data analysis.

Quantitative data analysis was done using the computer programs: Statistical Analysis Software (SAS) and Moon Stats. Responses were captured on Microsoft Excel spread sheet; data were loaded, cleaned, responses rated from one to seven, and analyzed quantitatively. Chi-square and Fisher's Exact tests were used to test significance of associations between variables; testing was done at 0.05 level of significance.

4.3 Results

The results of the study are presented according to the demographics of the sample, job satisfaction and burnout. The job satisfaction questionnaire was analyzed according to intrinsic variables and extrinsic variables to determine if there is an association between

selected demographic variables. For the purpose of the study responses to intrinsic variables were considered as “dissatisfied” if between 7 and 14, “indifferent” if between 15 and 35, and “satisfied” if between 36 and 49. Responses to extrinsic variables were considered as “dissatisfied” if between 8 and 16, “indifferent” if between 17 and 40, “satisfied” if between 41 and 54.

For the Maslach Burnout Inventory (MBI) subscales, Emotional Exhaustion (EE) was considered low if between 9 and 18; moderate if between 19 and 45; high if between 46 and 63. Depersonalization (Dp) was considered low if between 5 and 10; moderate if between 11 and 25; high if between 26 and 35. Personal Accomplishment (PA) was considered low if between 41 and 56; moderate if between 17 and 40; high if between 8 and 16.

4.3.1 Demographic data

The population consisted of registered nurses employed in a hospital in Johannesburg (N=680). The target population consisted of two hundred (n=200) registered nurses. Only one hundred and sixty-five (n=165) registered nurses participated fully in the study, giving a response rate of 82.5%. Results of the demographic variables of the study participants are presented. Data comprised gender, age, years of work experience and job title of the participants in the institution under study. These variables are described and presented as frequencies and percentages as shown in pie diagrams.

4.3.1.1 Gender.

The computer program SAS was used to analyze this data set. The vast majority of participants (97.58 %; n=161) were female; only (2.42 %; n=4) were male. Figure 4.1 shows the gender distribution of the sample, rounded off as percentages.

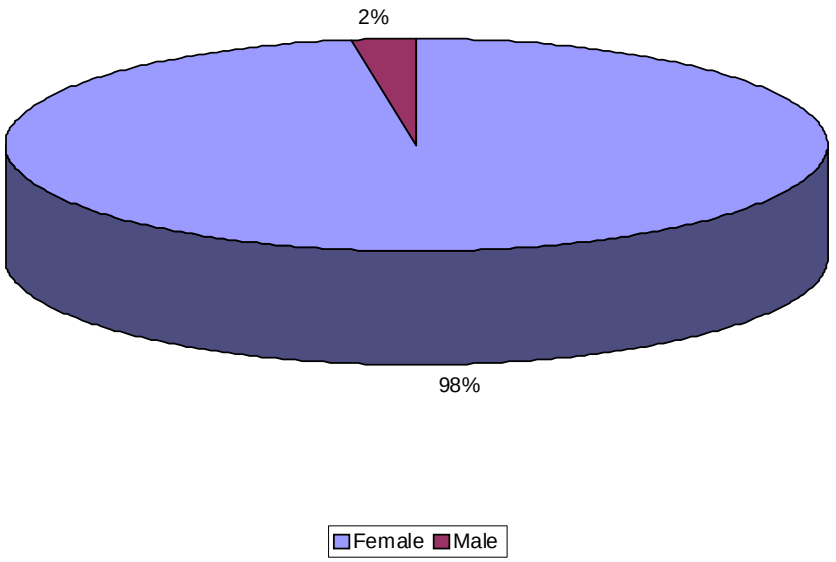

Figure 4.1: Gender distribution of sample (n=165)

4.3.1.2 Age

Age is an important variable because it may be a determinant in the relationship between burnout and job satisfaction. The results showed that 33.94% of the sample (n=56) were in the age range 26 to 35 years; 43.64% of the sample (n=72) were in the age range 36 to 45 years; 19.39%; of the sample (n=32) were in the age range 46 to 55 years, 3.03% of the sample (n=5) were above 55 years. Figure 4.2 displays the age distribution of the sample rounded off as percentages.

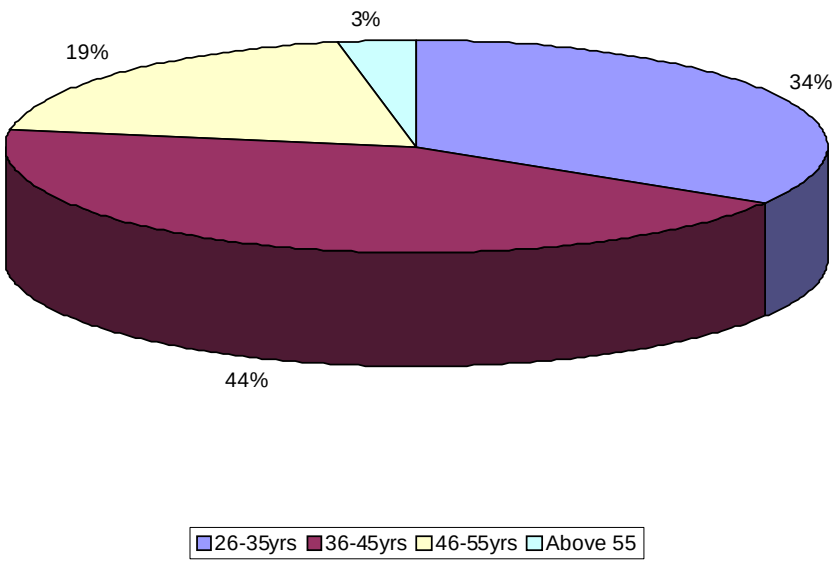

Figure 4.2: Age distribution of sample (n=165)

4.3.1.3 Years of work experience.

The results showed that 15.76% of the sample (n=26) worked for 5 years; 55.15% of the sample (n=91) has work experience of more than 6 to 15 years; 21.82% of the sample (n=36) has work experience of more than 16 to 25 years; 7.27% of the sample (n=12) has work experience of more than 25 years. Figure 4.3 shows years of work experience of the sample rounded off as percentages.

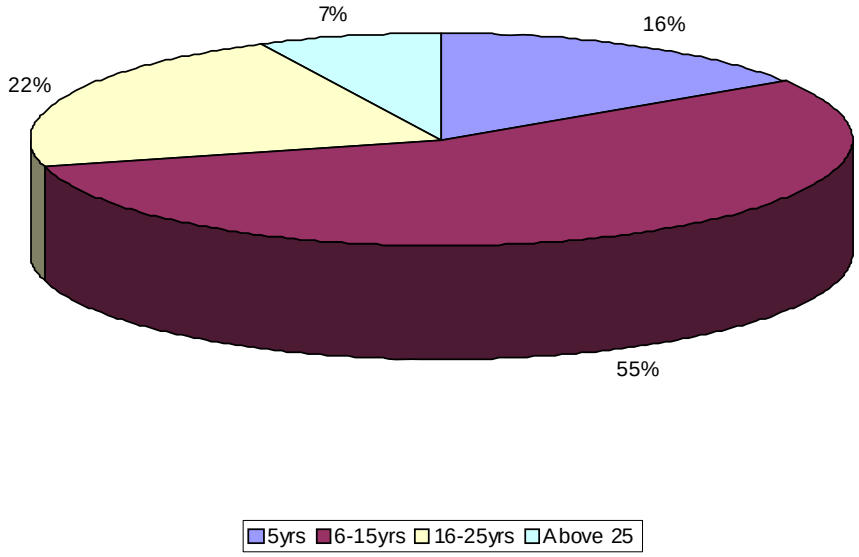

Figure 4.3: Years of work experience of sample (n=165)

4.3.1.4 Job grade

The results showed that 27.88% of the sample (n=46) comprised professional nurses; 26.06% of the sample (n=43) were senior professional nurses; 46.06% of the sample (n=76) were chief professional nurses as indicated in figure 4.4 below.

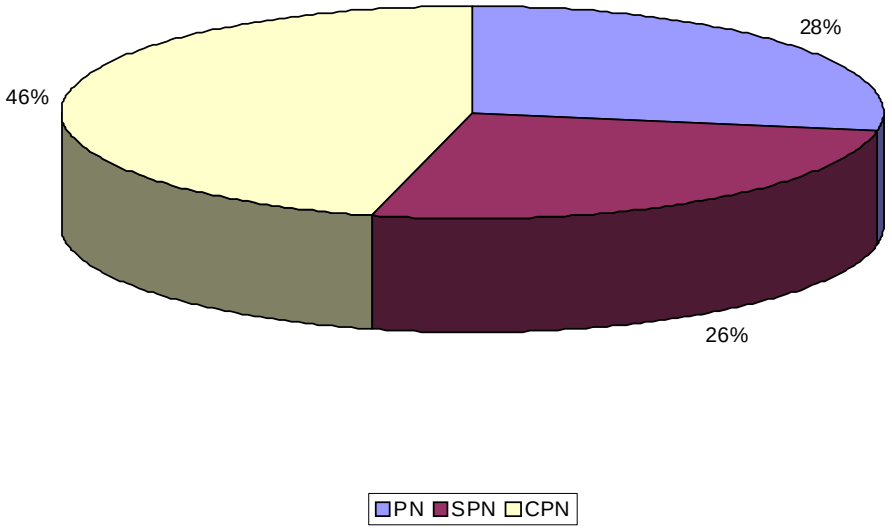

Figure 4.4: Characteristics of sample by job grade

4.3.2 Job Satisfaction

The job satisfaction scale of Warr, Cook and Wall (1979: 32-33) was used to elicit information regarding the study objective, namely to assess the overall level of job satisfaction, in relation to extrinsic and intrinsic variables among registered nurses. For the purpose of the study RNs responses were rated as “dissatisfied” with extrinsic variables if scores fell between 8 and 16; “indifferent” if between 17 and 40; “satisfied” if between 41 and 54. Satisfaction with intrinsic variables was rated as “dissatisfied” if scores fell between 7 and 14; “indifferent” if between 15 and 35; and “satisfied” if scores fell between 36 and 49. Registered nurses were requested to respond to all items, informing the researcher how they felt about various aspects of their job. Job satisfaction variables were categorized into extrinsic and intrinsic factors and were analyzed accordingly. Testing was done at 0.05 level of significance. The results are presented in

the text that follows.

4.3.2.1 Extrinsic job satisfaction variables

Items for extrinsic factors are: item 1 “the physical work conditions”; item 3 “your hours of work”; item 5 “your immediate boss”; item 6 “your fellow workers”; item 8 “industrial relations between management and workers”; item 9 “the way your institution is managed” and item 10 “your job security” and item 12 “your rate of pay”.

4.3.2.1.1 Overall satisfaction with extrinsic factors

Overall satisfaction with extrinsic factors was low; 6.67% of RNs (n=11) were dissatisfied. The majority, 58.79% (n=97) were indifferent and 34.55% (n=57) were satisfied with the overall extrinsic factors. See figure 4.5 rounded off as percentages.

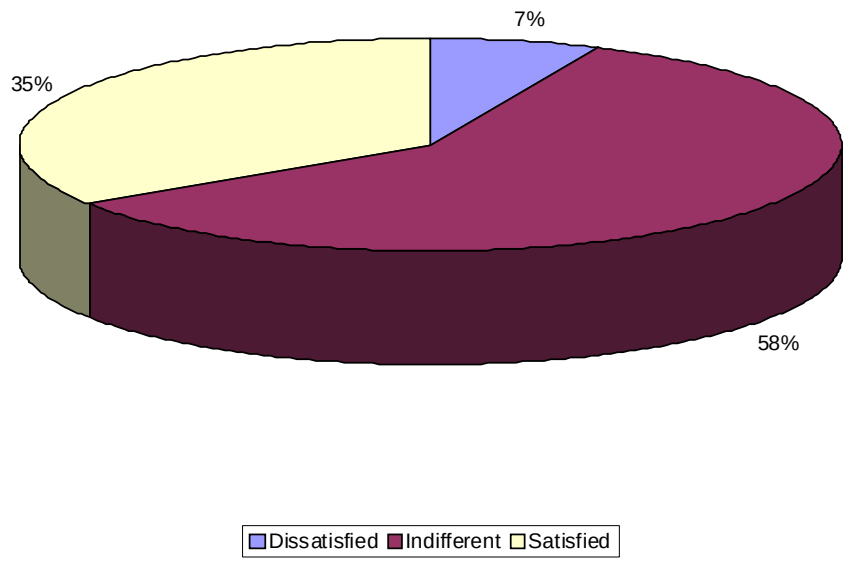

Figure 4.5: Overall satisfaction with extrinsic factors

4.3.2.1.2 Satisfaction with specific extrinsic factors

To determine RNs (n=165) overall satisfaction with specific extrinsic factors, Moon Stats was used to analyze the data. The results are discussed and presented as percentages. The majority of the registered nurses were satisfied with the following items of extrinsic factors in their work environment: -

- Item number 3, *your hours of work* (53.94%; n=89).
- Item number 5, *your immediate boss* (53.93%; n=89).
- Item number 6, *your fellow workers* (69.70%; n=115).
- Item number 10, *your job security* (50.90%; n=84).

Registered nurses displayed dissatisfaction with the following factor (item):

- Item 12, *your rate of pay* (70.91%; n=117)

Registered nurses were indifferent to item 8, *industrial relations between management and workers* (40.61%; n=67).

The number of RNs who were dissatisfied with and indifferent to *industrial relations between management and workers*, (item 8), were equally spread, i.e., 40.00% and 40.61% in each case. These results are reflected in table 4.1.

Table 4.1: Extrinsic job satisfaction per item of the sample (n=165)

ITEM	Dissatisfied	Indifferent	Satisfied	Total %
1.The physical work condition	**38.79**	30.30	30.91	100
3.Your hours of work	20.00	26.06	**53.94**	100
5.Your immediate boss	23.04	23.02	**53.93**	100
6.Your fellow workers	9.09	21.22	**69.70**	100
8.Industrial relations between management and workers	**40.00**	**40.61**	19.39	100
9.The way your institution is managed	**40.60**	33.34	26.06	100
10.Your job security	20.60	28.48	50.90	100
12.Your rate of pay	**70.91**	22.42	6.67	100

4.3.2.1.3 Association between age and extrinsic factors

Fisher's Exact Test was used to determine whether a relationship exists between age and extrinsic job satisfaction factors, because 50% of the cells have expected counts <5. Of the total number of RNs (n=56) who were between the ages of 26 to 35 years, 57.14% were indifferent to the extrinsic factors. Of the total number of RNs (n=72) who were between the ages of 36 to 45 years, 63.89% were also indifferent to the extrinsic factors. Of the total number of RNs (n=32) who were between 46 to 55 years, 56.25% were indifferent to the extrinsic factors. In general, the majority (58.79%) of registered nurse**s** within varying age groups were indifferent to the extrinsic factors. See table 4.2. The results showed no significant relationship between age and satisfaction with extrinsic

factors (p= 0.3930). Colour coding is used to differentiate between age and extrinsic factors, green represents age and related results, and purple represents extrinsic factors.

Table 4.2: Association between age and extrinsic factors (n =165)

Age	EXTRINSIC			Total
	Dissatisfied (n) %	Indifferent (n) %	Satisfied (n) %	(n) %
26-35	**5** **3.03** **8.93** **45.45**	**32** **19.39** **57.14** **32.99**	**19** **11.52** **33.93** **33.33**	**56** **33.94**
36-45	**3** **1.82** **4.17** **27.27**	**46** **27.88** **63.89** **47.42**	**23** **13.94** **31.94** **40.35**	**72** **43.64**
46-55	**3** **1.82** **9.38** **27.27**	**18** **10.91** **56.25** **18.56**	**11** **6.67** **34.38** **19.30**	**32** **19.39**
> 55	**0** **0.00** **0.00** **0.00**	**1** **0.61** **20.00** **1.03**	**4** **2.42** **80.00** **7.02**	**5** **3.03**
Total	**11** **6.67**	97 58.79	**57** **34.55**	**165** **100.00**

4.3.2.1.4 Association between years of work experience and extrinsic job satisfaction

In the case of participants (n=26) who worked for 5 years, 11.54% were not satisfied*;* 57.69% were indifferent and 30.77% were satisfied with the extrinsic factors in their work environment. Of those RNs (n=91) who worked between 6 to 15 years 4.40% were dissatisfied*;* 61.54% were indifferent and 34.07% were satisfied with extrinsic factors. Of those participants (n=36) who worked for 16 to 25 years 8.33% were dissatisfied; 58.33% were indifferent and 33.33% were satisfied with their working conditions. In the case of RNs (n=12) who worked for more than 25 years, 8.33% were not satisfied; 41.67% were indifferent and 50.00% were satisfied with the extrinsic factors. There was no significant relationship between years of work experience and extrinsic factors, (*df* =6, chi-square =3.5101 and p= 0.7426). See table 4.3.

Table 4.3: Years of experience and job satisfaction (n=165)

Years of work	**Sample (n=165)**	**Satisfied %**	**Indifferent %**	**Satisfied %**	**Total %**
5 yrs	26	11.54	**57.69**	30.77	100
6 to 15 yrs	91	4.40	**61.53**	34.07	100
16 to 25 yrs	36	8.33	**58.33**	33.33	100
> 25 yrs	12	8.33	41.67	**50.00**	100

4.3.2.1.5 Comparison between job grade and extrinsic job satisfaction variables

In the professional nurse grade (PN), 8.70% (n=4) were dissatisfied; 60.87% (n=28) were indifferent and 30.43% (n=14) were satisfied with extrinsic factors in their work environment. Senior professional nurses (SPN), 6.98% (n=3) were dissatisfied; 62.79% (n=27) were indifferent and 30.23% (n=13) were satisfied with various factors of their work. Chief professional nurses (CPN), 5.26% (n=4) were dissatisfied; 55.26% (n= 42) were indifferent and 39.47% (n=30) were satisfied with extrinsic factors of their work. The analysis (*df* =4, chi-square= 1.8174 and p= 0.7693), shows there was no significant relationship between job grade and extrinsic job satisfaction factors. See table 4.4.

Table 4.4: Job grade and extrinsic job satisfaction (n=165)

Job grade	**Sample (n=165)**	**Dissatisfied (8-16)**	**Indifferent (17-40)**	**Satisfied (41-56)**	**Total %**
Prof nurse	46	8.70	**60.87**	30.43	100
Sen. prof nurse	43	6.98	**62.79**	30.23	100
Chief prof nurse	76	5.26	**55.26**	30.23	100

4.3.2.2 Intrinsic job satisfaction variables

Items for intrinsic variables are item 2 “the freedom to choose your own method of working”; item 4 “the amount of variety in your job”; item 7 “the attention paid to suggestions you made”; item 11 “your chance of promotion”; item 13 “the recognition

you get for good work"; item 14 "the amount of responsibility you are given" and item 15 "your opportunity to use your abilities"**.** Moon Stats was used to determine overall job satisfaction of the registered nurses with intrinsic factors. Intrinsic variable scores are as follows: dissatisfied 7 to 14; indifferent 15 to 35 and satisfied 36 to 49. The results are discussed and presented in the text that follows.

4.3.2.2.1 Overall satisfaction with intrinsic factors

Overall, 15.76% of registered nurses, (n=26) expressed dissatisfaction with extrinsic factors in their work environment. The majority of RNs 56.36% (n=93) were indifferent and 27.88% (n=46) were satisfied. Figure 4.6 shows overall satisfaction of the sample rounded off as percentages.

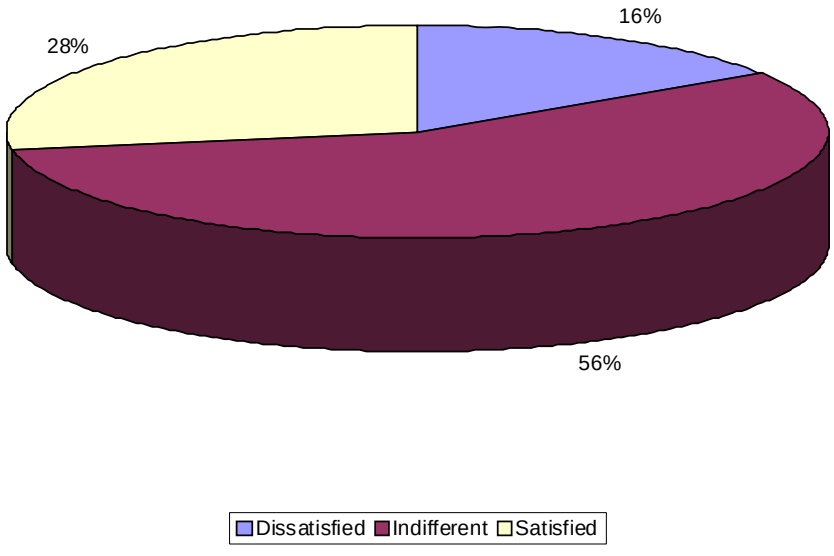

Figure 4.6: Overall satisfaction with intrinsic factors

4.3.2.2.2 Satisfaction with specific intrinsic factors

The majority of RNs were dissatisfied with the following intrinsic factors:

- Item 11, *your chance of promotion*, (58.79%; n=97)
- Item 13, *the recognition you get for good work*, (58.79%; n=97).

The number of RNs who were dissatisfied with items 11 and 13 were equally spread, i.e., 58.79% in each case.

Registered nurses where satisfied the following intrinsic factors in their work environment:

- Item 4, *the amount of variety in your work*, (44.24%; n=73)
- Item 14, *the amount of responsibility you are given*, (38.79%; n=64)
- Item 15, *your opportunity to use your abilities*, (40.60%; n=67). See table 4.5.

Table 4.5: Intrinsic job satisfaction per item of sample (n=165)

Item	**Dissatisfied (7-14) %**	**Indifferent (15-35) %**	**Satisfied (36-49)** %	**Total%**
2.The freedom to choose your own method of working	31.52	32.13	36.36	100
4.The amount of variety in your work	27.88	27.88	**44.24**	100
7. The attention paid to suggestion you made.	28.49	38.19	33.33	100
11. Your chance of promotion	**58.79**	24.84	16.36	100
13. The recognition you get for good work	**58.79**	25.45	15.75	100
14. The amount of responsibility you are given	31.52	29.70	38.79	100
15. Your opportunity to use your abilities	23.64	35.75	**40.60**	100

Lastly, registered nurses were requested to respond to item 16, *now taking everything into consideration, how do you feel about your job as a whole*? The registered nurses (33.34%) demonstrated dissatisfaction with the overall conditions of their work; 34.54% were indifferent and 32.12% were satisfied with both extrinsic and intrinsic factors of their work.

4.3.2.2.3: Association between age and intrinsic factors

Since 25% of the cells have expected counts less than 5, Fisher's Exact Test was used to determine whether a relationship exists between age and satisfaction with intrinsic factors. Of the total number of RNs (n=56) who were between the ages of 26 to 35 years, 57.14% were indifferent to the intrinsic factors. Of the total number of RNs (n=72) who were between the ages of 36 to 45 years, 61.11% were also indifferent to the intrinsic factors. Of the total number of RNs (n=32) who were between 46 to 55 years, 46.88% were indifferent to the intrinsic factors. In general, the majority (56.36%) of registered nurses within the different age groups were indifferent to the intrinsic factors. Colour coding was used to differentiate age from intrinsic factors. The colour green represents age and related results and purple for intrinsic factors. The results showed no significant relationship between age and intrinsic factors; (p= 0.5399). See table 4.6.

Table 4.6: Association between age and intrinsic factors

Age	INTRINSIC			Total
	Dissatisfied n (%)	Indifferent n (%)	Satisfied n (%)	n (%)
26- 35	**10** **6.06** **17.86** **38.46**	**32** **19.39** **57.14** **34.41**	**14** **8.48** **25.00** **30.43**	**56** **33.94**
36- 45	**11** **6.67** **15.28** **42.31**	**44** **26.67** **61.11** **47.31**	**17** **10.30** **23.61** **36.96**	**72** **43.64**
46- 55	**5** **3.03** **15.63** **19.23**	**15** **9.09** **46.88** **16.13**	**12** **7.27** **37.50** **26.09**	**32** **19.39**
> 55	**0** **0.00** **0.00** **0.00**	**2** **1.21** **40.00** **2.15**	**3** **1.82** **60.00** **6.52**	**5** **3.03**
Total	**26** **15.76**	93 56.36	**46** **27.88**	**165** **100.00**

4.3.2.2.4. Association between years of work experience and intrinsic job satisfaction

The results showed that 11.54% of RNs (n=26) who worked for 5 years, were dissatisfied; 69.23% were indifferent and 19.23% were satisfied with intrinsic variables. RNs (n=91) who worked between 6 to 15 years, 17.58% were dissatisfied; 57.14% were indifferent and 25.27% were satisfied. The RNs (n=36) who worked for 16 to 25 years, 16.67% were dissatisfied; 47.22% were indifferent and 36.11% were satisfied with intrinsic job satisfaction factors. Those RNs (n=12) who worked for more than 25 years, 8.33% were dissatisfied; 50.00% were indifferent and 41.67% were satisfied with intrinsic factors. There was no association between years of work experience and intrinsic job satisfaction variables. (*df*= 6, chi-square= 4.9304 and p= 0.5528). The results are shown as percentages in table 4.7.

Table 4.7: Years of work experience and intrinsic job satisfaction variables (n=165)

Years of work experience	Sample (n=165)	Dissatisfied %	Indifferent %	Satisfied %	Total %
5 years	26	11.54	**69.23**	19.23	100
6-15 years	91	17.58	**57.14**	25.27	100
16-25 years	36	16.67	47.22	36.11	100
>25 years	12	8.33	**50.00**	41.67	100

4.3.2.2.5 Association between job grade and intrinsic job satisfaction

The results showed that 21.73% (n=10) professional nurses (PN), were dissatisfied, 58.70% (n=27) were indifferent and 19.57% (n=9) were satisfied with the intrinsic factors of their job. In the senior professional nurses (SPN) grade, 13.95% (n=6) were dissatisfied; 58.14% (n=25) were indifferent and 27.91% (n=12) were satisfied with the intrinsic variables. In the chief professional nurses (CPN) grade, 13.16% (n=10) dissatisfied; 53.95% (n=41) were indifferent and 32.89% (n=25) were satisfied. The results (*df* =4, chi-square =3.4327 and p=0.4882) show that there was no significant relationship between these variables. See table 4.8.

Table 4.8: Association between job grade and intrinsic job satisfaction factors (n=165)

Job grade	**Sample (n=165)**	**Dissatisfied %**	**Indifferent %**	**Satisfied %**	**Total %**
Prof nurses	46	21.74	58.70	**19.57**	100
Sen. prof nurses	43	13.95	58.14	**27.91**	100
Chief prof nurses	76	13.16	53.95	**32.89**	100

4.3.3 The Maslach Burnout Inventory (MBI)

This questionnaire was previously designed and used to meet the following objectives: to measure registered nurses' personal accomplishment and emotional exhaustion; to determine whether the development of depersonalization is related to the experience of emotional exhaustion and to determine the relationship between burnout and job satisfaction using Chi-Square and Fisher's Exact Test. The MBI is divided into three subscales, namely Emotional Exhaustion (EE), Depersonalization (Dp) and Personal Accomplishment (PA). Data were analyzed quantitatively using SAS.

4.3.3.1. Emotional exhaustion (EE) subscale

The results of the study are discussed according to the job grade of participants. For the purpose of this study EE was considered low if between 9 and 18, moderate if between 19 and 45, high if between 46 and 63.

The items for emotional exhaustion were: item 1 " I feel emotionally drained"; item 2 " I feel used up at the end of the workday"; item 3 " I feel fatigued when I get up in the morning and have to face another day on the job"; item 6 " Working with people all day is really a strain for me"; item 8 " I feel burned out from my work"; item 13 " I feel frustrated by my job"; item 14 " I feel I'm working too hard on my job"; item 16 " Working with people directly puts too much stress on me"; item 20 " I feel I'm at the end of my rope"

Forty participants (24.24%) demonstrated low EE. The majority of RNs (59.40%; n=98) demonstrated moderate EE and 16.36% (n=27) of registered nurses demonstrated high emotional exhaustion. The levels of emotional exhaustion are presented as percentages in the pie diagram (Figure 4.7).

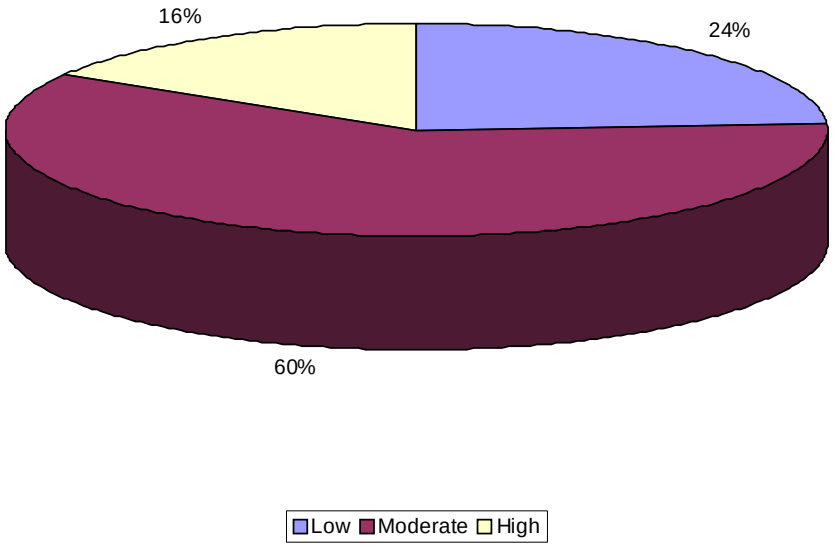

Figure 4.7: Level of emotional exhaustion of sample (n=165)

4.3.3.1.2 Association between Emotional Exhaustion and extrinsic job satisfaction factors

The Chi-square test was used to determine whether a relationship exists between EE and extrinsic factors of job satisfaction. Of the total number of RNs (n=40) who experienced low EE, 60.00% were satisfied with extrinsic factors. Of the total number of RNs (n=98) who experienced moderate EE, 64.29% were indifferent to the extrinsic factors. Only 16.36% of RNs experienced high EE, 66.67% were indifferent

to extrinsic factors. Color-coding was used to differentiate between EE (blue) and extrinsic factors (purple). There was a significant a relationship between EE and the extrinsic factors of job satisfaction (df = 4, = the chi-square =28.2507, p=<0.0001). See table 4.9.

Table 4.9: Association between Emotional Exhaustion and extrinsic factors

EE	EXTRINSIC			Total
	Dissatisfied n %	Indifferent n %	Satisfied n %	 n %
Low	**0** **0.00** **0.00** **0.00**	**16** **9.70** **40.00** **16.49**	**24** **14.55** **60.00** **42.11**	**40** **24.24**
Moderate	**5** **3.03** **5.10** **45.45**	**63** **38.18** **64.29** **64.95**	**30** **18.18** **30.61** **52.63**	**98** **59.39**
High	**6** **3.64** **22.22** **54.55**	**18** **10.91** **66.67** **18.56**	**3** **1.82** **11.11** **5.26**	**27** **16.36**
Total	**11** **6.67**	**97** **58.79**	**57** **34.55**	**165** **100.00**

4.3.3.1.3 Association between EE and intrinsic factors

The Chi-square test was used to determine whether a relationship exists between emotional exhaustion and intrinsic factors of job satisfaction. Of the total number of RNs (n=40) who experienced low EE, 55.00% (n=22) were satisfied with intrinsic factors. Of the total number of RN's (n=98) who experienced moderate levels of EE, 65.59% (n=61) were indifferent to intrinsic factors. Of the total number of RN's (n=27) who experienced high levels of EE, 55.56% (n=15) were indifferent with intrinsic factors. Color coding EE (blue) and intrinsic (purple) was used to differentiate the two variables. There was a significant relationship between emotional exhaustion and intrinsic factors, (df = 4, chi-square= 26.4825 and p= <0.0001). See table 4.10.

Table 4.10: Association between EE and intrinsic factors

EE	INTRINSIC			Total
	Dissatisfied (n) %	Indifferent (n) %	Satisfied (n) %	(n) %
	1 0.61 2.50 3.85	17 10.30 42.50 18.28	22 13.33 55.00 47.83	40 24.24
Moderate	16 9.70 16.33 61.54	61 36.97 62.24 65.59	21 12.73 21.43 45.65	98 59.39
High	9 5.45 33.33 34.62	15 9.09 55.56 16.13	3 1.82 11.11 6.52	27 16.36
Total	26 15.76	93 56.36	46 27.88	165 100.00

4.3.3.1.4 Association between age and emotional exhaustion

Fisher's Exact Test was used to determine whether a relationship exists between age and intrinsic factors because 25% of the cells have expected counts less than 5. Of the total number of RN's (n=56) who were between the ages of 26 to 35 years, 50.00%

experienced moderate emotional exhaustion. Of the total number of RN's (n=72) who were between the ages of 36 to 45 years, 62.50% had moderate exhaustion. Of the total number of RN's (n=32) who were between 46 to 55 years, 65.63% also experience moderate emotional exhausted.

In general, the majority of registered nurses with different age groups experienced moderate emotional exhaustion. The results showed no significant relationship between age and emotional exhaustion, (p= 0.5948). The colour green stands for age and related results and blue stands for emotional exhaustion. See table 4.11.

Table 4.11: Age and Emotional exhaustion

Age	EMOTIONAL EXHAUSTION			Total
	Low n %	Moderate n %	High n %	 n %
26- 35	17 10.30 30.36 42.50	28 16.97 50.00 28.57	11 6.67 19.64 40.47	56 33.94
36- 45	17 10.30 23.61 42.50	45 27.27 62.50 45.92	10 6.06 13.89 37.04	72 43.64
46- 55	5 3.03 15.63 12.50	21 12.73 65.63 21.43	6 3.64 18.75 22.22	32 19.39
> 55	1 0.61 20.00 2.50	4 2.42 80.00 4.08	0 0.00 0.00 0.00	5 3.03
Total	40 24.24	98 59.39	27 16.36	165 100.00

4.3.3.1.5. Association between emotional exhaustion and job grade

Of the sample (n=46), of the professional nurses, 28.26 %(n=13) reported low EE, (n=27) 58.70% reported moderate EE and 13.04% (n=6) reported high EE. The total sample of senior professional nurses was 43 (n=43); 27.91% of RNs (n=12) reported low EE, 53.49% (n=23) reported moderate EE and 18.60% (n=8) reported high EE. Out of the total sample (n=76) of CPN 19.74% (n=15) reported low EE; 63.16% (n=48) reported moderate EE and 17.11% (n=13) reported high EE. There was no association between EE and job grade. (*df* = 4 and p= 0.7200). See table 4.12

Table 4.12: Emotional exhaustion and job grade of registered nurses

Job grade	**Emotional exhaustion**				**Total**
	Sample (n=165)	**Low 9-18 %**	**Moderate 19-45 %**	**High 46-63 %**	**%**
PN	46	28.26	**58.70**	13.04	100
SPN	43	27.91	**53.49**	18.60	100
CPN	76	19.74	**63.16**	17.11	100

4.3.3.1.6 Association between emotional exhaustion and depersonalization of sample

Of the total number of registered nurses (n=40) who reported low EE, 55.00% reported corresponding low levels of Dp. The RNs (n=98) who reported moderate levels of EE;

76.53% reported corresponding moderate levels of Dp. Of the total number of RNs (n=27) who reported high levels of EE, 74.07% reported moderate levels of Dp.

Chi-square was done to determine whether an association exists between RNs emotional exhaustion and the extent of their depersonalization. The colour blue represents EE and red represents depersonalization. There was a significant relationship between emotional exhaustion and depersonalization, (*df* = 4, chi-square =44.7755 and p= <0001). See table 4.13.

Table 4.13: Association between EE and Dp

EE	DEPERSONALIZATION			Total
	Low n %	Moderate n %	High n %	n %
Low	**22** **13.33** **55.00** **46.81**	**18** **10.91** **45.00** **15.93**	**0** **0.00** **0.00** **0.00**	**40** **24.24**
Moderate	**23** **13.94** **23.47** **48.94**	**75** **45.45** **76.53** **66.37**	**0** **0.00** **0.00** **0.00**	**98** **59.39**
High	**2** **1.21** **7.41** **4.26**	**20** **12.12** **74.07** **17.70**	**5** **3.03** **18.52** **100.00**	**27** **16.36**
Total	**47** **28.48**	**113** **68.48**	**5** **3.03**	**165** **100.00**

The majority of RNs (59.39%; n=98) experienced moderate levels of EE with corresponding moderate levels of Dp. Similarly; those RNs (68.48%; n=113) who have a sense of depersonalization were also moderately emotionally exhausted.

4.3.3.2 Depersonalization (Dp) subscale

For the purpose of this study depersonalization was considered low if between 5 and 10, moderate if between 11 and 25, high if between 26 and 35. Items for Dp included, item 5 “I feel I treat some recipients as if they were impersonal objects”; item 10 “I’ve become more unfeeling toward people since I took this job”; item 11 “I worry that this job is hardening me emotionally”; item 15 “I don’t really care what happens to some recipients” and item 22 “I feel recipients blame me for some of their problems”. The results of depersonalization are discussed and presented as frequencies and percentages below. Forty-seven (28.49%) registered nurses reported low Dp; 68.48% of RNs (n=113) reported moderate Dp and 3.03% of RNs (n=5) reported high Dp. According to these results, the majority of RNs (71.51%) reported moderate to high level of depersonalization. See figure 4.8.

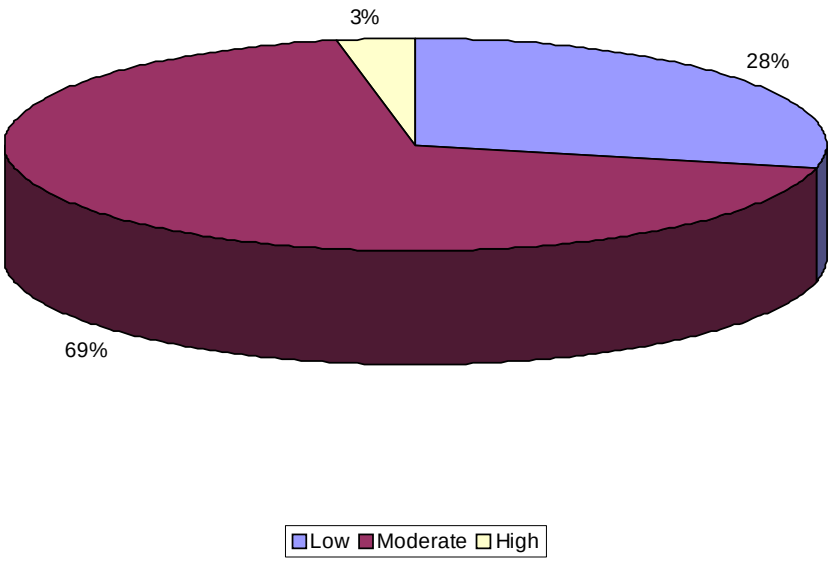

Figure 4.8: Level of depersonalization of sample (n=165)

4.3.3.2.1 Association between depersonalization and extrinsic job satisfaction factors

Fishers Exact Test was used to determine whether an association exists between Dp and extrinsic job satisfaction factors. Of the total number of RNs (n=47) who experienced low Dp, 53.19% were satisfied with extrinsic factors. Of the total number of RNs (n=113) who experienced moderate Dp, 64.60% were indifferent with extrinsic factors. The colour red stands for depersonalization and purple stands for extrinsic factors. The result showed a significant relationship between depersonalization and satisfaction with extrinsic factors; (p=0.0083)**.** See table 4.14.

Table 4.14: Association between Dp and extrinsic factors

Dp	EXTRINSIC			Total
	Dissatisfied n %	Indifferent n %	Satisfied n %	n %
Low	**2** **1.21** **4.26** **18.18**	**20** **12.12** **42.55** **20.62**	**25** **15.15** **53.19** **43.86**	**47** **28.48**
Moderate	**8** **4.85** **7.08** **72.73**	**73** **44.24** **64.60** **75.26**	**32** **19.39** **28.32** **56.14**	**113** **68.48**
High	**1** **0.61** **20.00** **9.09**	**4** **2.42** **80.00** **4.12**	**0** **0.00** **0.00** **0.00**	**5** **3.03**
Total	**11** **6.67**	**97** **58.79**	**57** **34.55**	**165** **100.00**

4.3.3.2.2 Association between depersonalization and intrinsic job satisfaction factors

Fisher's Exact Test was used to determine whether an association exists between Dp and intrinsic job satisfaction factors. Of the total number of RNs (n=47) who

experienced low Dp, 57.45% were indifferent to the intrinsic factors. Of the total number of RNs (n=113) who experienced moderate levels of Dp, 67.74% were indifferent to intrinsic factors. The colour red represents depersonalization and related results and purple intrinsic factors. The result showed no significant relationship between Dp and intrinsic job satisfaction factors (p= 0.0734). See table 4.15

Table 4.15: Association between Dp and intrinsic factors

Dp	INTRINSIC			Total
	Dissatisfied n %	Indifferent n %	Satisfied n %	n %
	3 1.82 6.38 11.54	27 16.36 57.45 29.03	17 10.30 36.17 36.96	47 28.48
Moderate	21 12.73 18.58 80.77	63 38.18 55.75 67.74	29 17.58 25.66 63.04	113 68.48
High	2 1.21 40.00 7.69	3 1.82 60.00 3.23	0 0.00 0.00 0.00	5 3.03
Total	26 15.76	93 56.36	46 27.88	165 100.00

4.3.3.2.3 Association between age and depersonalization

Fisher's Exact Test was used to determine whether a relationship exists between age and intrinsic factors because 50% of the cells have expected counts less than 5. Of the total number of RNs (n=56) who were between the ages of 26 to 35 years, 71.43% were moderately depersonalized. Of the total number of RNs (n=72) who were between the ages of 36 to 45 years, 65.28% reported moderate depersonalization. Of the total number of RNs (n=32) who were between 46 to 55 years, 78.13% reported moderate levels of depersonalization. In general, the majority of registered nurses (68.48%) in the different age groups reported moderate depersonalization. The results showed no significant relationship between age and Dp; (p= 0.1827). See table 4.16.

Table 4.16: Age and depersonalization

Age	DEPERSONALIZATION			Total
	Low n %	Moderate n %	High n %	 n %
26- 35	14 8.48 25.00 29.79	40 24.24 71.43 35.40	2 1.21 3.57 40.00	56 33.94
36- 45	22 13.33 30.56 46.81	47 28.48 65.28 41.59	3 1.82 4.17 60.00	72 43.64
46- 55	7 4.24 21.88 14.89	25 15.15 78.13 22.12	0 0.00 0.00 0.00	32 19.39
> 55	4 2.42 80.00 8.51	1 0.61 20.00 0.88	0 0.00 0.00 0.00	5 3.03
Total	47 28.48	113 68.48	5 3.03	165 100.00

4.3.3.2.4 Association between depersonalization and job grade

In the professional nurse category, 34.78% (n=16,) reported low Dp; 60.87% (n=28), reported moderate Dp and only 4.35% (n =2), reported high Dp. In the senior professional nurse category, 30.23% (n=13), reported low Dp; 69.77% (n=30), reported moderate Dp. There were no SPNs who reported feelings of high depersonalization. In the CPNs category 23.68% (n=18) reported low Dp, 72.37% (n=55), reported moderate Dp and 3.95 %(n=3,) reported high Dp. There was no significant association between depersonalization and job grade of the registered nurses, (*df* = 4 and p-=0.4560). See table 4.17.

Table 4.17: Depersonalization and job grade of registered nurses (n=165)

Job grade	**Sample (n=165)**	**Low 5-10 %**	**Moderate 11-25 %**	**High 26-35 %**	**Total %**
PN	46	34.78	**60.87**	4.35	100
SPN	43	30.23	**69.77**	__	100
CPN	76	23.68	**72.37**	3.95	100

4.3.3.3 Personal Accomplishment (PA) subscale

The items for personal accomplishment were item 4 “I can easily understand how my recipients feel about things”; item 7 “ I deal effectively with the problems of my recipients”; item 9 “ I feel I’m positively influencing other people’s lives through my work”; item 12 “ I feel very energetic”; item 17 “ I can easily create a relaxed atmosphere with my recipients”; item 18 “ I feel exhilarated after working closely with my recipients”; item 19 “ I have accomplished many worthwhile things in this job” and item 21 “In my work, I deal with emotional problems very calmly”.

Out of the total sample (n= 165), 127 registered nurses (76.97%) reported high personal accomplishment; 37 (22.42%) reported moderate PA and one (0.61%) reported low personal accomplishment. The results are presented as percentages in figure 4.9.

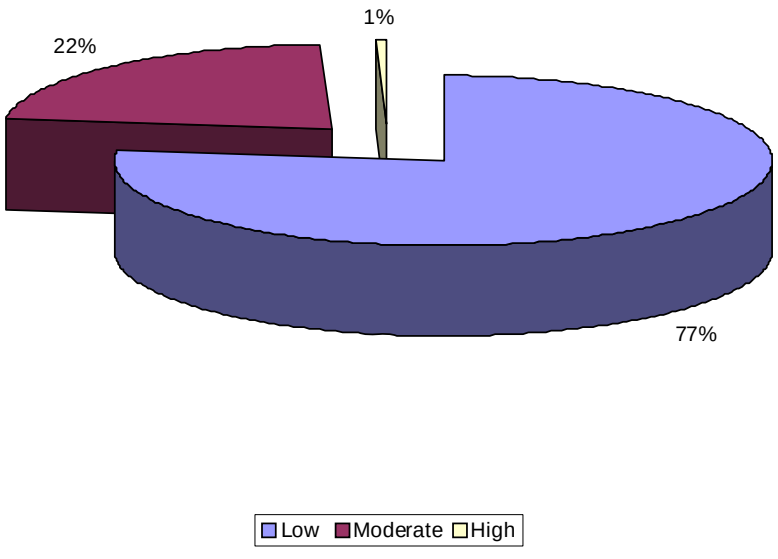

Figure 4.9: Level of personal accomplishment of sample (n=165)

4.3.3.3.1 Relationship between personal accomplishment and extrinsic job satisfaction

Fisher's Exact Test was used to determine whether a relationship exists between PA and extrinsic factors of job satisfaction, because 33% of cells have expected frequencies < 5. The majority of RNs (n=127; 76.97%) felt that they had accomplished on a personal level; 77.32% were indifferent with extrinsic factors. Of the total number of registered nurses (n=37) who reported moderate personal accomplishment, 59.46% were indifferent towards extrinsic factors. There result showed no significant relationship between PA and extrinsic job satisfaction factors; (p= 0.1977). See table 4.18.

Table 4.18: Association between PA and extrinsic factors

PA	EXTRINSIC			Total
	Dissatisfied n %	Indifferent n %	Satisfied n %	n %
High	**8** **4.85** **6.30** **72.73**	**75** **45.45** **59.06** **77.32**	**44** **26.67** **34.65** **77.19**	**127** **76.97**
Moderate	**2** **1.21** **5.41** **18.18**	**22** **13.33** **59.46** **22.68**	**13** **7.88** **35.14** **22.81**	**37** **22.42**
Low	**1** **0.61** **100.00** **9.09**	**0** **0.00** **0.00** **0.00**	**0** **0.00** **0.00** **0.00**	**1** **0.61**
Total	**11** **6.67**	**97** **58.79**	**57** **34.55**	**165** **100.00**

4.3.3.3.2 Association between personal accomplishment and intrinsic job satisfaction factors

Since 33% of cells have expected frequencies of < 5, Fisher's Exact Test was used to determine whether a relationship exists between PA and intrinsic factors of job

satisfaction. Even though the majority of registered nurses (n=127) felt they did accomplish on a personal level, 59.91% (n=71) were indifferent towards intrinsic factors. Of the total number of RNs (n=37) who felt that they have moderately accomplished on a personal level, 59.46% (n=22) were indifferent towards intrinsic job satisfaction factors. There was no significant relationship between PA and intrinsic job satisfaction factors, (p=0.2599). The plum Colour represents personal accomplishment and purple intrinsic factors. See table 4.19.

Table 4.19: Association between PA and intrinsic factors

PA	INTRINSIC			Total
	Dissatisfied n %	Indifferent n %	Satisfied n %	n %
	18 **10.91** **14.17** **69.23**	**71** **43.03** **55.91** **76.34**	**38** **23.03** **29.92** **82.61**	**127** **76.97**
Moderate	**7** **4.24** **18.92** **26.92**	**22** **13.33** **59.46** **23.66**	**8** **4.85** **21.62** **17.39**	**37** **22.42**
Low	**1** **0.61** **100.00** **3.85**	**0** **0.00** **0.00** **0.00**	**0** **0.00** **0.00** **0.00**	**1** **0.61**
Total	**26** **15.76**	**93** **56.36**	**46** **27.88**	**165** **100.00**

On job satisfaction questionnaire, RNs were also requested to respond to item 16, now *taking everything into consideration, how do you feel about your job as a whole?* Annexure 6. The RNs 33.34% expressed dissatisfaction with overall conditions of their work, 34.54% were indifferent and 32.12% were satisfied with both extrinsic

and intrinsic factors of their work.

4.3.3.3.3 Association between age and personal accomplishment

Fisher's Exact Test was used to determine whether a relationship exists between age and personal accomplishment because 50% of the cells have expected counts of < 5. Of the total number of RNs (n=56) who were between the ages of 26 to 35 years, 75.00% reported high personal accomplishment. Of the total number of RNs (n=72) who were between the ages of 36 to 45 years, 80.00% reported high personal accomplishment. Of the total number of RNs (n=32) who were between 46 to 55 years, 78.13% also reported high personal accomplishment. In general, the majority of registered nurses in the different age groups reported high personal accomplishment. The results showed no significant relationship between age and personal accomplishment (p= 0.2650). See table 4.20

Table 4:20 Age and PA

Age	PERSONAL ACCOMPLISHMENT			Total
	High n %	Moderate n %	Low n %	n %
26- 35	42 25.45 75.00 33.07	13 7.88 23.21 35.14	1 0.61 1.79 100.00	56 33.94
36- 45	58 35.15 80.56 45.67	14 8.48 19.44 37.84	0 0.00 0.00 0.00	72 43.64
46- 55	25 15.15 78.13 19.69	7 4.24 21.88 18.92	0 0.00 0.00 0.00	32 19.39
> 55	2 1.21 40.00 1.57	3 1.82 60.00 8.11	0 0.00 0.00 0.00	5 3.03
Total	127 76.97	37 22.42	1 0.61	165 100.00

4.3.3.3.4 Association between personal accomplishment and job grade of registered nurses

Out of the total sample, (n=46), 80.43% professional nurses reported high personal accomplishment. Senior professional nurses (n=43), 83.72% reported high personal accomplishment. Out of the sample (n=76) 71.05% CPNs reported high personal accomplishment. There was no significant relationship between the two variables. (*df* = 4, chi-square 6.4950 and p= 0.1651), See table 4.21.

Table 4.21: Association between personal accomplishment and job grade (n=165)

Job grade	**PERSONAL ACCOMPLISHMENT**				**Total**
	Sample (n=165)	**High 8-16 %**	**Moderate 17-40 %**	**Low 41-56 %**	**%**
PN	46	**80.43**	19.57	_	100
SPN	43	**83.72**	13.95	2.33	100
CPN	76	**71.05**	28.95	_	100

4.4 Conclusion

The findings of the study were presented and showed that the number of registered nurses who were indifferent towards both extrinsic and intrinsic factors of their work were equally spread, i.e., 58.79% and 56.36% in each case.

The results indicated that RNs (59.40%) displayed moderate emotional exhaustion. 68.48% of the RNs displayed low depersonalization and 79.67% displayed high personal accomplishment. The results are discussed in the chapter five.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

5.1 Introduction

The study results indicate that selected extrinsic factors and intrinsic factors need to be addressed in the health institution under study. According to Herzberg (1959:114) job satisfaction stems from two factors namely: hygiene factors or extrinsic factors and motivators or intrinsic factors, and all of these needs must be in place for employees to be satisfied; this may prevent or reduce the incidence of burnout. The main findings will be discussed according to the satisfaction of registered nurses in relation to both extrinsic and intrinsic factors, demography of the sample and the relationship between job satisfaction factors and burnout. Recommendations are made, followed by the limitations of the study.

5.2 Discussion of results

This study showed that in general, RNs were dissatisfied with some of the factors affecting their work. RNs felt that certain extrinsic and intrinsic factors were not met by the employer. If extrinsic and intrinsic factors are not met by the employer, this may cause skilled and experienced registered nurses to leave the institution for better or improved working conditions. The Chi-square test was used to determine the relationship between burnout and job satisfaction. The results indicate that there is a significant relationship between burnout and job satisfaction. Nurses who are

dissatisfied with extrinsic and intrinsic factors in their work environment are more likely to experience emotional exhaustion. Registered nurses who are emotionally exhausted may experience depersonalization as a component of burnout. The result will be discussed in the text that follows.

5.2.1 Sample demography

The population consisted of 680 hospital-employed registered nurses. Through simple random sampling 200 RNs (n=200) were selected. A total 165 registered nurses participated fully in the study, yielding a response rate of 82.5%. The participants were requested to provide the following data: gender, age, and their years of work experience and job grade, to find out if these variables had an effect on job satisfaction and / or burnout.

In this study, the majority of participants were females (98%; n=161); only (2%; n=4) were males. It is not uncommon to recruit so many females in this study because nursing is predominantly a female profession.

Seventy-two registered nurses (43.64%) were in the age range of 36 years to 45 years. According to the South African Nursing Council statistics as at December 2005, 36% of registered nurses were in the age range of 40 years to 49 years. According to SANC statistics 36% of registered nurses are in the middle age group, the results of this study showed that 33.94% are in the middle age group.

In this study 55% of registered nurses reported work experience of six to 15 years. The largest proportion of registered nurses (46%) was in the chief professional nurse category. This is likely, due to previous rank promotions which were afforded every three years and when RNs' length of service exceeded six years. Chi-square tests applied showed no significance in the relationship between participants' age and extrinsic and intrinsic job satisfaction (p=0.3930) and (p=0.5399) respectively, between participants years of experience and extrinsic and intrinsic job satisfaction (0.7426) and (p=0.5528), and between participants' job grade and extrinsic and intrinsic job satisfaction (p=0.7693) and (p=0.4882) respectively.

5.2.2 Job satisfaction of registered nurses

According to Hertzberg's (1959: 113) theory, job satisfaction and dissatisfaction stem from two types of needs namely hygiene factors and motivators. Hygiene factors (extrinsic), relate to the physical and psychological environment in which work is performed. If these needs are not met, the employee will be stressed and dissatisfied in his or her work. Herzberg (1959:114) explains motivators (intrinsic factors) as the challenges of work itself such as recognition, growth and the work itself, as satisfiers for employees. If they are not in place, the worker may become dissatisfied.

Registered nurses were requested to respond to a Likert- type job satisfaction questionnaire of Warr, Cook and Wall (1979:33). The questionnaire comprises two parts namely extrinsic and intrinsic factors. The results indicated that registered

nurses were satisfied with the following extrinsic factors: hours of work (53.94%), immediate boss (53.93%) and fellow workers (69.70%). It may be deduced that the working relationships that RNs have with their immediate supervisors and their fellow workers are satisfying. This is congruent with the unpublished study of Selebi (2006: 53), which found that nurses were generally satisfied with their fellow workers. In this study half of the registered nurses (50.90%) were satisfied with job security. According to the employment Act (Act 75 of 1997) all employees' work is guaranteed; this may be a factor, which makes RNs feel more secure in their jobs.

Nurses reported dissatisfaction with other extrinsic factors, namely physical work condition (38.79%), industrial relations between management and workers (40.00%) and the highest proportion (70.91%) was dissatisfied with their rate of pay. According to unpublished statistics of nurses resigning from an academic hospital as at November 2006, 38 out of 68 (55.8%) registered nurses gave reasons for leaving as private or personal, and 20 (29.4%) resigned because of low salaries, five relocated to other areas, three resigned to further their education, two migrated to work overseas. The findings of this study showed that the hygiene factors are not in place in this particular institution (See table 4.1).

A study by Minnaar, Uys, Reid and Naidoo (2004: 52) pointed out that problems nurses encounter and are dissatisfied with include training opportunities, supervision and pay. These researchers compared the salaries of South African nurses with the salaries of international nurses and concluded that the salaries of nurses in South

Africa are not attractive and needed to be reviewed. Minnaar, et al., (2004: 52) also stated that nurses in Kwazulu Natal were dissatisfied mostly with their pay and workload. These results are similar to the findings of Clary, Normandien, Krukow, O'Brien and Strachota (2003; 115) that 55% of nurses were dissatisfied with salaries. Salary was thus considered to be the most important dimension of nurses' job satisfaction (Willem, Buelens, and De Jonghe, 2006). Hegney, Plank and Parker (2006) pointed out that extrinsic factors do impact on nurses' job satisfaction and therefore their intention to leave employment. A similar study by Hall (2004:28) found that nurses lacked job satisfaction due to heavy workloads, stressful conditions, staff shortage and lack time for quality care and low salaries. Job satisfaction is not all about money or benefits; respect, recognition and organizational commitment are what employees wanted in their job.

In this study registered nurses were dissatisfied with the intrinsic factors such as promotion opportunities (58.79%) and recognition for good work (58.97%). These findings are similar to those in Selebi's (2006: 52) study, which showed that nurses were dissatisfied with promotion opportunities, and acknowledgement they receive from their health institution. It may be concluded that if the employer or institutional management increases efforts to acknowledge nurses for work well done, their satisfaction with these intrinsic factors will be enhanced.

RNs demonstrated satisfaction with the other intrinsic factors namely, "amount of variety in your work, responsibility and opportunity to use their abilities (Table 4.5). A study done by Minnaar (2003:53) showed that caring was not experienced by

nurses in hospitals', trust between managers and nurses, support, the recognition and handling concerns of nurses were not met. Chi-square tests applied showed no significance in the relationships between participants' age and job satisfaction (p=03930; 0.5399), their years of experience and job satisfaction (p=0.7426; 0.5528), and between participants' job grade and job satisfaction (p=0.7693; 0.4882).

5.2.3 Association between extrinsic and intrinsic job satisfaction factors and emotional exhaustion

The findings of this study indicate that the majority of registered nurses (75.76%) experienced moderate to high emotional exhaustion. According to Aiken, et al., (2002: 1988), job satisfaction is linked to high level of stress, mental and physical exhaustion and high workloads. In a study entitled "Examining the burnout of academics in relation to job satisfaction and other factors", Bilge (2006; 1151) found that the variables that predict emotional exhaustion, depersonalization and personal accomplishment are the intrinsic factors.

Chi-square tests applied showed a significant relationship between emotional exhaustion and extrinsic factors (*df* = 4, chi-square= 28.2507, p= 0.001) and emotional exhaustion and intrinsic factors *(df* = 4, chi-square= 26.4825, p= 0.001), see table 4.9 and 4.10. The findings of this study show that there is no significant relationship between participants' age and emotional exhaustion (p=0.5948), their years of work experience and emotional exhaustion, and between participants' job grade and emotional exhaustion (*df* = 4, p= 0.7200).

5.2.4 Level of emotional exhaustion

According to this study majority of registered nurses reported moderate emotional exhaustion (59.40%). These results are in congruence with the findings by Halm, Peterson, Kandels and Sabo; (2005: 241) that revealed that nurses reported moderate emotional exhaustion. According to the researcher' observations exhausted workers tend to have poorer work attitudes, lower levels of work performance and are more likely to seek employment else where. The findings of this study show that there is no significant relationship between participants' age and emotional exhaustion (p=0.5948), their years of work experience and emotional exhaustion, and between participants' job grade and emotional exhaustion (*df* = 4, p= 0.7200).

5.2.5 Association between emotional exhaustion and depersonalization

Most participants (59.39%) reported moderate emotional exhaustion with corresponding levels of depersonalization. These findings concur with those of Kaliath and Morris (2002:648) in their study title, "Job satisfaction among registered nurses: a predictor to burnout" that emotional exhaustion has a direct effect on depersonalization. Doctors and nurses were found to have particularly high emotional exhaustion (Grau, Suner and Garcia; 2005: 464). Findings by Kaliath and Morris (2002: 648) indicated that job satisfaction has a direct negative effect on emotional exhaustion, whereas emotional exhaustion has a direct positive effect on depersonalization. The findings by Grau, et al., (2005:465) indicated that 41.6% of doctors and nurses have high levels of emotional exhaustion. Poor promotion prospects are reported to cause high levels of emotional exhaustion and

depersonalization in nurses who experience effort-reward imbalance. Given that close to 60% of RNs in this study reported poor promotion opportunities, it may be hypothesized that an inverse relationship exists between emotional exhaustion and promotion opportunities. The results indicated a significant relationship between EE and Dp, (*df* = 4, Chi-square = 44.7755 and p= < 0001).

5.2.6 Level of depersonalization among registered nurses

The majority (68.48%) of registered nurses reported moderate depersonalization (see figure 4.8). The findings by Willem, et al., (2006) indicated that nurses and doctors experience high levels of depersonalization. Despite this, the personnel make a greater effort to maintain high performance that medical care requires. Results indicate that levels of work support and job stress were both significant predictors of burnout. Additionally, higher burnout levels were significantly associated with poorer self-rated and supervisor-rated job performance, more sick leaves, and more reported absences for mental health reasons (Parker and Kulik, 1995: 581).

5.2.7 Association between depersonalization and extrinsic and intrinsic job satisfaction

Registered nurses (64.60%) who experienced moderate depersonalization were indifferent to extrinsic factors. People with low self worth, low self-esteem may be depersonalized. The findings by Kangas, Sandra, Kee, Carolyn, McKee-Waddle and Rebecca, (1999: 32) pointed out there was no difference in nurses job satisfaction or

patients' satisfaction with nursing care. Fisher's Exact Test applied showed no significance in the relationship between depersonalization and satisfaction with intrinsic factors (p= 0.0734). However, the findings of this study also indicated that there is a significant relationship between depersonalization and extrinsic job satisfaction (p=0.0083).

5.2.8 Level of personal accomplishment of registered nurses

The majority of registered nurses (77.00%) felt that they had accomplished on a personal level. The researcher is of the knowledge that the management of the institution under study has offered many short courses for the advancement of nurses. The findings of this study show that the employer does indeed allow the employees to advance their profession, unlike the findings by Selebi (2005; 53) that indicated nurses' dissatisfaction with advancement in their hospital. There was however, no significant relationship between RNs level of personal accomplishment and their satisfaction with extrinsic factors (p= 0.19770) and intrinsic factors (p= 0.2599) in their work environment.

5.3 Conclusions drawn

With reference to job satisfaction: RNs were dissatisfied with extrinsic job satisfaction factors of job such as: physical work conditions, industrial relations between management and workers and their rate of pay. According to unpublished statistics of the hospital as at November 2006, registered nurses resigned because of low salaries. Nurses expressed overall dissatisfaction with extrinsic factors.

The majority of RNs expressed dissatisfaction with the following items intrinsic job

satisfaction factors: chance of promotion and the recognition they get for good work. With regard to recognition of the employees, the employer has developed awards to be given to qualifying nurses. The RNs reported dissatisfaction to this question: “now taking everything into consideration, how do you feel about your work as a whole”. In general registered nurses were dissatisfied with their work as a whole.

With reference to job satisfaction and burnout: Nurses who are dissatisfied with extrinsic and intrinsic job factors are more likely to experience emotional burnout. In this study over 75% of RNs reported moderate to high levels of emotional exhaustion. It is concluded that low job satisfaction is related to the development of emotional exhaustion as a dimension of burnout.

The majority of RNs reported moderate to high depersonalization. High levels of depersonalization are related to RNs dissatisfaction with extrinsic factors in their work environment. Dissatisfaction of RNs with intrinsic factors in their work environment is not related to depersonalization as a dimension of burnout.

The majority of RNs reported high levels of personal accomplishment. Their personal accomplishments are not related to their levels of satisfaction with extrinsic and intrinsic job factors in the work environment.

5.4 Recommendations

Since the researcher intends to present the findings of this study to the Provincial Health

Department, recommendation will also be made to the Head of this Department. In order to retain healthy and happy nurses, attention should be given to the nurses' basic needs such as working conditions, salaries, the relationship between management and workers, the way the institution is managed, promotion and recognition. Recommendations are presented below.

5.4.1 Nursing management

Immediate supervisors need to attend all the programs or short courses provided by the Department of Health so that they contribute to meeting the needs of their subordinates and to be able to recognize an employee who is not performing well. Nursing managers should keep a register of personnel’s absenteeism rate and sick leave and their reasons and report their findings to the Department of Health. Early detection of emotional burnout is of outmost importance for the institution. To this end:

- A wellness centre for employee should be established.
- Succession planning should be practiced; all the unit managers should be trained and should be encouraged to upgrade / update themselves to take up future positions.
- Newly elected unit managers should be provided with a mentor or a buddy system should be put in place for effective management and improved patient care.

5.4.2 Department of Health

The employer needs to recognize the qualifications of nurses and to restructure salaries. The Department of Health needs to recruit nurses by providing attractive salaries,

recognition of out standing nurses and promotions. Since RNs are dissatisfied with employer recognition, the employer should popularized or make employees aware of Provincial Khanyisa Awards and Premier Service Excellence Awards that are in place for the recognition and acknowledgement of nurses.

5.4.3 Further research

Further research needs to be done using a larger sample of registered nurses, in different academic health institutions in order to establish whether satisfaction levels and burnout levels will be the same or not. Further research needs to be done to determine the direct causes of depersonalization and emotional exhaustion, and the prevention thereof. Future research needs to be undertaken using models that can prevent job dissatisfaction and prevent the development of burnout among nurses in South Africa.

5.5 Limitations

The findings can be generalized to academic hospitals only or to hospitals with a similar patient and nurse populations. The study methodology placed limitations on determining causality in relation to burnout. However, this study shows that the interplay between job satisfaction and burnout may be of predictive value for nurse managers.

5.6 Conclusion

The evidence suggests that the registered nurses are dissatisfied with the extrinsic factors of their job. The extrinsic factors such as, the physical working conditions, industrial relations between management and workers, the way the institution is managed and the

rate of pay, should be improved for job satisfaction to be realized and possibly, to reduce the development of burnout. The RNs were also dissatisfied with the intrinsic factors of their job such as chance of promotion and the recognition they get for good work. Once job satisfaction factors are in place, it may be concluded that emotional exhaustion and depersonalization of registered nurses will be reduced. In turn, the quality of patient and client care may be improved.

ANNEXURE 1

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Sangweni

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER M040909**
PROJECT	Job Satisfaction of Registered Nurses in a Public Hospital as a Predicator of Burnout: A Replication Study
INVESTIGATORS	Ms B Sangweni
DEPARTMENT	School of Therapeutic Sciences
DATE CONSIDERED	04.10.01
DECISION OF THE COMMITTEE*	Approved unconditionally

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE 04.10.04 **CHAIRPERSON** .....
(Professor PE Cleaton-Jones)

*Guidelines for written 'informed consent' attached where applicable

cc: Supervisor : Prof J Bruce

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10005, 10th Floor, Senate House, University.
I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.** .....

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

ANNEXURE 2

Faculty of Health Sciences
UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

7 York Road PARKTOWN Johannesburg 2193 Telegrams WITSMED Telex 4-24655.SA
FAX 643-4318 TELEPHONE 717-2075/2076
E-MAIL healthpg@health.wits.ac.za

MRS B SANGWENI
PO BOX 1815
NATURENA
2064

APPLICATION NUMBER 0314884V
STATUS (DEG 71) (MM033) PZZ

2004-11-11

Dear Mrs Sangweni

Approval of protocol entitled Job satisfaction of registered nurses in a public sector hospital as a predictor of burnout: a replication study

I should like to advise you that the protocol and title that you have submitted for the degree of Master Of Science In Nursing (Full-Time) (Coursework) have been approved by the Postgraduate Committee at its recent meeting. Please remember that any amendment to this title has to be endorsed by your Head of Department and formally approved by the Postgraduate Committee.

Prof JC Bruce has/have been appointed as your supervisor/s. Please maintain regular contact with your supervisor who must be kept advised of your progress.

Please note that approval by the Postgraduate Committee is always given subject to permission from the relevant Ethics Committee, and a copy of your clearance certificate should be lodged with the Faculty Office as soon as possible, if this has not already been done.

Yours sincerely

S Benn (Mrs)
Faculty Registrar
Faculty of Health Sciences

Telephone 717-2075/2076

Copies - Head of Department____Supervisor/s

ANNEXURE 3

Recommendation:

Taking into account the preceding, we have no objection to recommend this study.

Evaluators: Dr M L Likibi/ Prof Lucy Wagstaff.

Research and Epidemiology unit.
Tel: 011-355-3310
Fax: 011-355-3338
Cell: 0827819921
E-mail: MupataL@gpg.gov.za

Approved /~~not approved/ approved as amended.~~ (Results should be made available to the department. No cost should be incurred by the department.

HOD

Dr L Rispel Acting HOD

24/2/2014

Cc: MS S. Dumela
Ms T. Chane
Dr M Ahern
Dr A Rahman
Research data base

3

ANNEXURE 4

INFORMATION SHEET

Researcher: Beauty Sangweni, MSc (Nursing) student

Dear_____

(Potential participant)

I am a student registered at the University of Witwatersrand, Department of Nursing Education. I am conducting a research study as part of my course requirements. The purpose of the study is to determine the level of job satisfaction among registered nurses in their work environment. I kindly invite you to participate in the study, which may not benefit you directly, but may provide important information that might help the hospital management in future.

The study procedure requires you to answer questions in three questionnaires. This will take about 20 minutes to complete. Your participation in this study is voluntary; you are under no obligation to participate. You have the right to withdraw at any time and without any penalty. If you agree to participate, kindly sign the consent form provided.

Your name or any confidential information will not be divulged. Your identity will not be revealed while the study is being conducted or when the study is reported or published. All study data will be collected by me, stored in a secure place and not shared with any other person without your consent except my supervisor. You are free to ask any questions about the study, about being a participant and you may call me (Beauty Sangweni) at 0823493264 or email me at*: sangwenib@yahoo.com*

ANNEXURE 5

CONSENT FORM

I……(initials of participant) have read the content of the information sheet, and I have been given the opportunity to ask questions regarding the study. I hereby consent by appending my signature to participate in the study.

_____ _____

Participant's signature Date

I Beauty Sangweni have explained this study to the participant and have sought his/her understanding for informed consent.

_____ _____

Researcher's signature Date

ANNEXURE 6

GENDER

Male	
Female	

AGE

30 years and under	
31 years-40 years	
41 years-50 years	
51 years and over	

YEARS OF WORK EXPERIENCE

5 years	
6 years- 15 years	
16 years- 25 years	
> 25 years	

JOB GRADE OR TITLE

Professional nurse	
Senior professional nurse	
Chief professional nurse	

ANNEXURE 6

A set of items deals with various aspects of your job. I would like you to tell me how satisfied or dissatisfied you feel with each of these features of your present job. Please indicate the appropriate answer with an "X".

	I am very dissatisfied	I am moderately dissatisfied	I am slightly dissatisfied	I am indifferent	I am slightly satisfied	I am moderately satisfied	I am very satisfied
1.The physical work conditions							
2.The freedom to choose your own method of working							
3.Your hours of work							
4.The amount of variety in your job							
5.Your immediate boss							
6.Your fellow workers							
7.The attention paid to suggestions you make							
8. Industrial relations between management and workers in your institution							
9.The way your institution is managed							
10. Your job security							
11. Your chance of promotion							
12. Your rate of pay							
13. The recognition you get for good work							
14. The amount of responsibility you are given.							
15. Your opportunity to use your abilities							
16. Now, taking everything into consideration, how do you feel about your job as a whole							

ANNEXURE 6

On the following page, there are 22 statements of job related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write "O'' (zero) before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way.

:	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a wee	Every day
HOW OFTEN:	0	1	2	3	4	5	6
1. I feel emotionally drained from my work							
2. I feel used up at the end of the workday							
3. I feel fatigued when I get up in the morning and have to face another day on the job.							
4. I can easily understand how my recipients feel about things							
5. I feel I treat some recipients as if they were impersonal objects.							
6. Working with people all day is really a strain for me.							
7. I deal very effectively with the problems of my recipients							
8. I feel burned out from my work							
9. I feel I'm positively influencing other people's lives through my work							
10. I've become more **callous (unfeeling)** toward people since I took this job.							
11. I worry that this job is hardening me emotionally							
12. I feel very energetic							
13. I feel frustrated by my job							
14. I feel I'm working too hard on my job.							
15. I don't really care what happens to some **recipients (patients / clients).**							
16. Working with people directly puts too much stress on me.							
17. I can easily create a relaxed atmosphere with my recipients**.**							
18. I feel **exhilarated (happy)** after working closely with my recipients.							
19. I have accomplished many worthwhile things in this job.							
20. I feel like I'm at the end of my rope.							
21. In my work, I deal with emotional problems very calmly.							
22. I feel recipients blame me for some of their problems.							

REFERENCES

Aiken LH, Clarke SP, Sloane DM, Sochalski J, Silber JH. Hospital Nurse Staffing and Patient Mortality, Nurse Burnout, and Job Satisfaction. JAMA 2002 Oct; 288(16): 1987-1993.

Barling C, Fullager, & Bluen S. Behavior in Organization: South African Perspective. Lexion Publishers, Johannesburg.

Barling J, Bluen SD, and Fain R. Psychological functioning following an acute disaster. Journal of Applied Psychology. 1987; 72(4): 683-90.

Bilge F. Social behaviour and personality. International Journal. 2006 September; 34 (9):1151-1160.

Borda RG and Norman IJ. Testing a Model of Absence and intent to Stay in Employment: a study of registered nurses in Malta. Int. J. Nurs. Stud. 1997 June; 34(5) 375-383.

Burns N. Grove SK. The practice of Nursing Research. Conduct, Critique, and Utilization (2001) 4th Edition. United States of America: W.B. Saunders Company.

Clary M, Normandin P, Krukow, O'Brien N and Strachota E. Reasons registered nurses leave or change employment status. Journal of Nursing Administration. 2003. Vol. 33 (2): 111-117.

Cook JD, Wall TD and Warr PB. The experience of work. 1985.

Dolan N. The Relationship between Burnout and Job Satisfaction in Nurses. Journal of Adv Nurse. 1987 March, 12:3-12.

Ciliers F. Curationis.2003 May; 26(1): 62-74. Burnout and salutogenic functioning of nurses.

Draft Charter of Nursing Practice, 2004.

Garrett DK and McDaniel AM. A new look at nurse burnout. Journal of Nursing Admin. 2001 February; 31(2): 91-95.

Grau A, Suner R and Garcia MM. Burnout syndrome in health workers and relationship with personal and environmental factors. Gac Saint. 2005 Nov –Dec; 19 (6): 463-470.

Grunfeld E, Zitzelsberger L, William AR, Montesanto B and Evans WK. Cancer Care Workers in Ontario: Prevalence of Burnout, Job Stress and Job Satisfaction. Canadian Medical Association. Journal 2000 July; 16(2): 166-9.

Hall EJ. Curationis. 2004 November. Employment and Economic Policy Research, Human Sciences Research Council.

Halm M, Peterson M, Kandels M, Sabo J, Blalock M and Braden R. Hospital nurse staffing and patient mortality, emotional exhaustion, and job satisfaction. Clin Nurse Spec. 2005 Sept- Oct; 19(5): 241-251.

Hastings RP, Hornes, S, Mitchell G. Burnout in Direct Care Staff in Intellectual Disability Services: a factor analytic study of the Maslach Burnout Inventory. Journal of Intellectual Disability Research. 2004 March; 48(3): 268.

Hegney D, Plank A and Parker V. Extrinsic and intrinsic work values: their impact on job satisfaction in nursing. Journal of Nursing Management. 2006 May; 14(4): 271-281.

Herzberg F, Mausner B, Snyderman BB. 1959. The motivation to work.2nd Ed. United State of America: The World publishing company.

Kaliath T and Morris R. Job satisfaction among nurses: A predictor of burnout levels. Journal of Nursing Admin 2002 December; 32 (12): 648-651.

Leiter MP, Harvie P and Frizzell C. The correspondence of Patient Satisfaction and

Nurse Burnout. Soc. Sci. Med. 1998; 47(10): 1611-1617.

Loke CFJ. Leadership Behaviors: effects on job satisfaction, productivity and organizational commitment. J. Nursing Management. 2001 July; 9(4): 191-204.

Maslach C, Jackson SE and Leiter MP. Maslach Burnout Inventory Manual. 1996 3rd Edition.

Maslach C and Leiter MP. Impact of interpersonal environment on burnout and organizational commitment. Journal of Organizational Behaviour. 1988 (9): 229- 243

Maslach C, Jackson SE 1986: The Maslach Burnout Inventory. Palo Alto: Consulting Psychology Press.

Maslach C 1982: Burnout, the cost of caring. Englewood Cliffs: Prentice-Hall.

Maslach C 1976: Burned-out. Human Behaviour 5(9), 16-22

Matrunola P. Is there a Relationship between Job Satisfaction and Absenteeism? J. Adv. Nurse. 1996 May; 23, 827-834.

Minnaar A. The views of the nurses regarding caring in the workplace. Curationis. 2003: 26 (1): 37-42

Minnaar A, Naidoo JR, Reid S and Uys LR. The perception of nurses in a district health system in Kwazulu-Natal of their supervision, self-esteem and job satisfaction. Curationis.2004; 27(2): 50-55.

Parbhoo H. The effect of Job Titling upon work-related variables. (2001) Unpublished doctoral dissertation, Johannesburg: University of the Witwatersrand.

Parker PA and Kulik JA. Burnout , self- and supervisor –rated job performance, and absenteeism among nurses. Journal of Behvioral Medicine.1995; Vol. 18 (6)

Riggs K and Beus KM. Job Satisfaction in Extension. Journal Extension. 1993 Summer;

3(2).

Selebi OC. Nurse's satisfaction with their working environment in a hospital. (2005). Unpublished research report, Johannesburg: University of the Witwatersrand.

Shader K, Broome ME, Broome CD, West ME and Nash M. Factors influencing satisfaction and anticipated turnover for nurses in an Academic Medical Center. Journal of Nursing Administration. 2001 April; 31 (4): 213-214.

Song R, Daly BJ, Rudy EB, Douglas S and Dyer MA. Nurses' Job Satisfaction, Absenteeism, and Turnover after Implementing a Special Care Unit Practice Model. Research in Nurses Health. 1997: 20:443-452.

South Africa. 1977. Act to outline basic condition of employment. Pretoria: Government Printer. (Act 75 of 1977: Basic condition of Employment Act, 1977 [as amended])

Westway MS, Wessie, Viljoen, Booysen and Wolmarans. Curationis. 1996; September; 19(3): 17-20. Job satisfaction and self –esteem of South African Nurses,

Willem A, Buelens M and De Jonghe I. Impact of organizational structure on nurses' job satisfaction: A questionnaire survey. International Journal of Nursing Studies. 2006 May 16.