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AN INVESTIGATION INTO THE ASSOCIATION BETWEEN ROLE STRESS AND ABSENTEEISM AMONG NURSES IN THE SOUTH AFRICAN PUBLIC HEALTH SECTOR

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Abstract

Absenteeism in the nursing profession poses a serious threat to South African health care institutions (Sarudi, 2000; McHugh, 2001). This research investigated the association between role stress, and the impact thereof on nurse absence frequency, voluntary and involuntary absence. Data was collected from 230 nurses (N = 230) in the Western Cape using a structured self-report survey. Statistical analysis of the results revealed that *constant change* and *resource scarcity* were weak yet significant predictors of nurse absence frequency. The remaining role stress constructs had no influence on the outcome variables. A major finding of the research was that the association between the role stress constructs and absenteeism amongst public sector nurses was weak. Two possible reasons for these findings were explored, the first being a measurement error associated with self-report data in absenteeism research. The second involved questions raised about the theoretical model on which the research question was based. Implications for theory and practice were discussed and recommendations for future research, provided.

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Chapter 1
Contextual Factors

Introduction

Absenteeism amongst nurses in the public sector is both a symptom, and a result, of the crises facing the country's public health services ("SA faces nursing crisis", 2000). The current research project was borne out of a proposal by the Employee Assistance Programme (EAP) director of a large South African health services organisation (the umbrella body of various public health care facilities in the Western Cape) to investigate the problem of absenteeism amongst staff.

The primary objective of this research was to explore the association between role stress and absenteeism among nurses in the South African public health sector. Furthermore the researcher wished to investigate possible contributing factors to absenteeism amongst nurses who worked in the aforementioned facilities within the public health sector.

The main aim of the health services organisation in question is to provide a comprehensive primary health service, mainly to lower income population groups in the Metropole (Hall, 2002; Hall, Haynes & McCoy, 2002). This is achieved through the establishment of public health facilities, Level 2 hospital services and the provision of health service support (Hall, 2002). In addition, it establishes, supports and coordinates comprehensive district-based health services (Hall et al., 2002). In order to fully appreciate the results of the research, it is important to discuss the broader organisational context in which this research took place.

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Setting the Context

Changes to the South African Health Care Delivery System (SAHCDS)

The SAHCDS is currently undergoing chronic and unremitting change as the Department of Health is implementing a wide range of policies that will fundamentally transform the health care delivery system (Hall et al., 2002). These changes are aimed at rectifying the pre 1994 South African health care system which was based on apartheid policies and characterized by racial and geographic disparities as well as fragmentation (Ntsaluba & Pillay, 1998). Some of the changes taking place include decentralisation of the management of health services and increasing access to services by making primary health care available to all South African citizens for example through district clinics (Pillay, 1995; Pillay, 2001; Hall et al., 2002). Further changes involve ensuring the availability of safe, good-quality essential drugs in health care facilities as well as rationalising health financing through budget reprioritisation.

These changes are filtering down from the executive level to the hospitals and clinics throughout the Cape Metropole. While the reasoning behind the changes is positive, there are significant ramifications for the nurses who are working in the public health sector who have to implement these changes (Pillay, 1995).

Implications for Public Sector Nurses

As a result of the new demands placed on nurses, the role and function of the public sector nurse is changing in day to day practice. As primary health is becoming a nurse driven service the role of the nurse is expanding. Nurses are being placed in managerial, leadership as well as administrative positions for which they are unsatisfactorily trained and inadequately prepared (Pillay, 2001; DENOSA, 2005).

These fundamental changes have implications for the skills and competencies of South African nurses in terms of the definition of nursing roles. Furthermore they necessitate

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changes to the education and preparation of nurses in order to provide them with the competencies necessary to deliver effective care in a time of rapid change (DENOSA, 2005)

The facilities and district clinics which comprise the organisation in question are currently experiencing continuous flux and movement of management structures and reporting lines within, and external to the organisation. This has resulted in nurses being forced to undertake additional responsibilities and administrative duties, over and above their normal jobs requirements. Poor communication around these changes and the threat of constant change has led to a lack of trust and general dissatisfaction amongst nursing staff. This discontentment is exacerbated by poor working conditions and staff shortages in many of the district clinics where absenteeism amongst the nurses is perceived to be a problem (Masilela, Molefakgotla & Visser, 2004).

This widespread change is experienced by the nurses in the various district clinics which constitute the focal point of this research. The objective of this study is therefore to explore the extent to which absenteeism amongst nurses in the South African public health sector can be attributed to the role stress experienced by these nurses. For the purpose of this research, the term role stress comprises six constructs namely role conflict, role ambiguity, role overload, resource scarcity, skills inadequacy and constant change. Each of these constructs will be tested in relation to absenteeism data in order to obtain empirical evidence as to the significance of role stress in understanding and predicting absenteeism amongst nurses in the South African public health sector.

To this end a cross sectional survey was conducted with 230 nurses from 10 district clinics and one hospital in the public sector. The primary outcome variables focused on the frequency of absenteeism episodes in addition to both voluntary and involuntary absenteeism.

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Structure of the Dissertation

The following chapter comprises a review of the literature pertaining to absenteeism as a theoretical construct in addition to that of role stress in the nursing profession and its related constructs. The review then proceeds with a focus specifically on literature in relation to absenteeism amongst public sector nurses. The third chapter provides an outline of the research method, followed by a detailed description of the study's results in the forth. The final chapter comprises a comprehensive discussion and critique of the research findings, followed by the possible limitations to the research in addition to recommendations for future research.

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Chapter 2
Literature Review

Introduction

This chapter aims to present an in-depth, critical review of the literature pertaining to absenteeism and role stress, with a specific focus on nurses within the public health sector. The review will be divided into three main sections. The first section shall explore the literature pertaining to absenteeism as a theoretical construct, followed by a review of the debates surrounding the most appropriate ways to measure the absenteeism construct. The second section of the review will examine the literature pertaining to role stress in the nursing profession and its related constructs. Thereafter the third and final section of the review will tie the two previous sections together by focusing on a review of the literature specifically in relation to absenteeism amongst public sector nurses. This section will address the precipitating factors to public sector nurse absenteeism, linking absenteeism to the six role stress constructs.

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An extensive amount of research has been conducted internationally into the area of employee absenteeism with a large body of literature stemming from studies conducted in the United States, the East and Europe (Hackett & Bycio, 1989; Johns & Xie, 1998; Frans 1999; Hemmingway & Smith, 1999; Woo, Yap, Oh, & Long, 1999; Peiro, Gonzalez-Roma, Lloret, Bravo & Zurriaga, 1999; Benson & Leona, 2002; Siu, 2002; Timmins & Kaliszer, 2002; Johnson, Croghan & Crawford, 2003; Cohen & Kirchmeyer, 2005, Silcox, 2005; Gooding, 2005 & Bekker, Croon & Bressers, 2005). A review of the literature indicates that absenteeism has been linked to various occupational contexts. There is, however, little available research linking absenteeism to organisational behaviour matters in the South African public health sector, particularly in relation to nurses. This research deficit presents an opportunity for future exploration in this area (Melchior, Krieger, Kawachi, Berkman, Niedhammer & Goldberg, 2005).

The following section presents a variety of definitions of absenteeism. An overview of these definitions is necessary in order to explain and contextualise the problem of absenteeism measurement, which is of primary importance in the current research. The definitions will then be critiqued, focusing on the lack of uniformity amongst existing definitions of absenteeism and the largely unstandardised nature of these definitions, which has important implications for absenteeism measurement. In addition to understanding the controversies that impact on absenteeism measurement, it is also of importance to this research to understand the different categories and consequences of absenteeism. Previous studies such as those of Buchan and Seccombe (1995), Coughlan (2005) and Melchior et al. (2005) have focused on sickness absence as well as authorised absence neither of which are tapped into by this research endeavour; however of primary importance to the current research is the problem of unauthorised absenteeism.

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Absenteeism: A Contextual Framework

Definitions of Absenteeism

A review of the literature highlights the difficulties in defining the concept of absenteeism which may be attributed to the broad scope of the term and the multi-faceted nature of the construct (Goodman, Atkin & Associates, 1984; Buchan & Seccombe, 1995). Moreover, the definition of absenteeism has transformed over time as employee's constitutional leave entitlements and authorised company leave have increased (Coughlan, 2004).

In terms of South African labour legislation, absenteeism is addressed in both statute law and common law (Jackson, 2006). With regard to statute law, the Basic Conditions of Employment Act (1997) defines unauthorised absenteeism as an employee who takes leave without obtaining permission from the employer and who is not sick. Alternatively, the Labour Relations Act (1995) defines absenteeism in the context of incapacity, referring to the inability of the employee to perform to the terms of the contract of employment. The Employment Equity Act (1998) and the Occupational Health and Safety Act (1993) are two further statutes which address the issue of employee absenteeism. The issue of absenteeism is a concern from

both a labour relations and a general human resource management perspective. Absenteeism is included in the legislation because of the potentially damaging impact it can have on the effective operation of a business. Furthermore, absenteeism often denotes problems in a given workplace and can require the attention of management, both remedially and from a disciplinary perspective.

As stipulated in common law, it is the duty of the employee to provide the employer with his/her labour by coming to work punctually and being present at his/her workstation during the agreed hours (Jackson, 2006). Should the employee not keep to these rules, he/she is in breach of the common law conditions of employment.

An additional body of definitions of absenteeism exists in human resource management literature which differs from those proposed by the South African legislative framework. These definitions do not emphasise the legal implications of employee absenteeism however they are similar to the aforementioned definitions in the way in which they attempt to define employee absenteeism. Furthermore they illustrate the debate between authors as to the most accurate definition of absenteeism. For example, Goodman et al. (1984) defined absenteeism as the distribution of time across activities unrelated to work, when an employee is expected to be working. An alternative definition is that of Nel, van Dyk, Haasbroek, Schultz, Sono, and Werner, (2004, p. 548) who defined absenteeism as "the non-attendance of an employee when scheduled to work", and the more sophisticated definition proposed by Landy and Conte (2004) who stated that absenteeism is a type of counterproductive behaviour that involves failure of an employee to report for or remain at work as scheduled.

Critique of Definitions

As is evident from the literature, definitions of absenteeism are abundant yet often ambiguous and vague (Goodman, et al., 1984). Moreover there is a great deal of controversy surrounding the definitions that are present within the literature. A proposed reason for the lack of a clear definition of absenteeism is as a result of the complexities surrounding the definition of the theoretical construct (Goodman et al., 1984; Buchan & Seccombe, 1995; Gibson, Ivancevich

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& Donnelly, 2000). Most definitions of absenteeism contain implicit theories, untested attributions and assumptions, in addition to operational problems intrinsic in their construction (Goodman et al., 1984). This is possibly due to the absence of an accurate means of measuring absenteeism which thus poses a problem in terms of understanding the phenomenon and making sense of it.

The definition by Nel et al. (2004) for example, did not give any possible causes for absenteeism whilst Goodman et al. (1984) questioned the meaningfulness of the construct itself. Furthermore these authors queried as to whether different theoretical constructs for example sickness absence, implied different definitions of absenteeism.

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Categories of Absenteeism

Absenteeism can be divided into three main categories namely sickness absence i.e. when an employee is absent due to a reported illness, authorised absence i.e. when the employee is absent for a reason other than illness and it is accepted by management. This is typically long term absenteeism i.e. maternity leave or study leave. The third type of absence is unauthorised or unscheduled absence where the employee does not come to work without warning and without valid reason (Nel et al., 2004). This type of absence is often short term in nature and is typically dealt with by disciplinary procedures (Dolezalek, 2005). A further type of absenteeism proposed by Bendix (1989) referred to deliberate or continued absenteeism whereby the employee is continually absent from work without valid reason or deliberately absents him/herself when instructed to be at work.

Sickness absence.

Previously the term 'sickness absence' referred to absent behaviour on the part of the employee as a result of illness, which its name implies (Coughlan, 2005). Nowadays, however, use of the term sickness absence not only encompasses absent behaviour as a result of illness, but often masks the many absence related causes of a voluntary nature which have little to do with illness (Melchior et al., 2005).

Unscheduled absence.

The literature highlights many varied terms for unscheduled absence, namely unauthorised absence, incidental absence, or more commonly short-term absence (STA). In addition the literature highlights a debate amongst researchers as to the number of absent days that constitute STA (Nel et al., 2004; Dolezalek, 2005). The Disability Management Employer Coalition (DMEC) defined STA as unscheduled, illness-related employee absences for a duration of between one to five days (Bates, 2004), while Buchan and Seccombe (1995) defined STA as lasting three days or fewer. Alternatively, a study undertaken by the European Foundation for the Improvement of Living and Working Conditions classified STA as lasting between one to seven days (Mirabile & Carrera, 1995).

STA or uncertified absence is increasing amongst nursing staff and is posing a greater concern for management as opposed to long-term absence (LTA). The reason for managerial concern is that no preparation can be made for unexpected, recurrent, short-term absences (Cockburn, 2005). Often employees who are not completely familiar with the job requirements have to cover for the absent individual, thereby resulting in lowered production rates and compromised quality of service delivery (Taunton, Perkins, Oetker-Black, & Heaton, 1995). A controversial issue raised by Gooding (2005) is that STA is on the increase as employees in her research indicated that they felt it a waste to forsake their sick leave owing to them and therefore they used their remaining sick leave to take a day off work.

Research indicates that STA also poses a key concern amongst nursing students with most student nurse absenteeism episodes lasting on average between one to three days (Northcott, 1990; Timmins, 2002). The fact that similar results were found from these two studies which were conducted within twelve years of each other indicates that twelve years later, short-term absenteeism continues to pose a problem amongst the student nursing population. This is a concern as this pattern of behaviour, if not eradicated, may follow through to their occupational environments once qualified.

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While unauthorised absenteeism is the primary focus of the current research it is noteworthy that no previous literature was located which focused on unauthorised absenteeism amongst public sector nurses in the South African context. The current research will therefore contribute to the paucity of research in this area.

Authorised absence.

Unlike unauthorised absenteeism which poses the largest threat and the most difficulties for organisations, authorised absence which is often long term in nature is usually planned in advance such as study leave, maternity leave and holidays (Buchan & Seccombe, 1995). Presently, authorised absenteeism incorporates a variety of leave types such as sick leave, annual leave, compassionate leave, maternity/paternity leave, study leave and marriage leave, to name a few. As a result of forward planning, long-term absences are less of a problem for management than frequent short-term absences. Hence this type of absenteeism is not explored further in this research.

Having reviewed the debates surrounding the definitions of absenteeism, it is evident that the lack of a uniform, standardised definition thereof has fundamental implications for measurement of the absenteeism construct. The review shall now progress to the various debates surrounding the most effective method in which to measure absenteeism.

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Measurement of Absenteeism

Difficulties around Measurement of the Absenteeism Construct

The definition and hence measurement of absenteeism is surrounded by controversy and debate as there is widespread disagreement concerning what exactly constitutes absenteeism and its precipitating factors (Goodman et al., 1984; Chaudhury & Ignace, 1992; Buchan & Seccombe, 1995; Tauton et al., 1995; Nel et al., 2004; Bates, 2004; Dolezalek, 2005; Melchior et al., 2005; Cockburn, 2005). As a result, it is difficult to measure something that has not been adequately defined (Goodman et al., 1984; Tauton et al., 1995).

A further argument which emerged from the early research by Latham and Pursell (1977) was that absenteeism implied an absence of something i.e. behaviour. A debate therefore arose around whether it was possible to measure something that was not present i.e. an absence of behaviour (Ilgen, 1977). This argument led to the development of a relatively new construct that is gradually gaining popularity in the area of absenteeism measurement, known as 'presenteeism'. This term alludes to employees who are ill who continue to come to work (Dolezalek, 2005). In light of the argument presented by Ilgen (1977), it was proposed that it was potentially easier and more accurate to measure the extent of absenteeism in an organisation indirectly, through the utilisation of statistics depicting the number of individuals present at work, rather than attempting to utilise absenteeism figures.

It is important to note that the way in which organisations measure absenteeism amongst their workforces is conceptually different to the way in which academic researchers measure absenteeism for research purposes. Organisations tend to calculate the scale of absenteeism through the utilisation of statistical formulae and matrices. While these formulae will never be totally accurate, they provide broad trends which can assist management to conceptualise the extent of the absenteeism problem.

Furthermore the degree to which an organisation can accurately conceptualise and measure the extent of absenteeism within its workforce is largely dependent on the ability of the organisation to keep comprehensive records of absenteeism as well as the way in which they store and organise this information. With regards to the current research, access to the organisation's absenteeism records was not available. These records had not been uniformly recorded, they were unreliable as they differed across the various facilities and they were largely dependent on the conscientiousness of the administrator. Therefore the lack of standardisation in the recording of this data meant that these records could not be used in this research.

Where available, academic researchers utilise the raw data from the aforementioned calculations in conjunction with various measurement scales as well as qualitative and

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quantitative research tools to gain a deeper understanding of the core construct (Neuman, 1997; Terre Blanche & Durrheim, 1999).

Measuring Absenteeism from an Organisational Standpoint

As a result of the difficulties surrounding measurement of the absenteeism construct, the phenomenon is largely misunderstood and hence inaccurately measured and predicted (Breaugh, 1981). Nevertheless organisations continue to engage in measuring absenteeism for numerous reasons. It provides a means of upholding discipline in the organisation as members of the organisation keep absenteeism records in order to ensure that staff are fulfilling their obligations and conditions of employment. In addition, measuring absenteeism and maintaining absenteeism records theoretically enables members of an organisation to determine the scale of the problem amongst the workforce. Furthermore, using this data, inferences can be made as to the nature of the problem and the possible reasons for absenteeism amongst staff members (Buchan & Seccombe, 1995; Nel et al., 2004).

In relation to nurse absenteeism in particular, Buchan and Seccombe (1995) proposed two methods of measuring and thus 'costing' nurse absence, namely a top down approach and a bottom up approach. The top down approach used estimates of absence levels and the direct costs of replacements to give an indication of costs. This method was criticised for overestimating the costs of absence, however it still provided a broad, overall view of the magnitude of absenteeism in an organisation. The bottom up approach, more detailed in nature, utilised a checklist to identify all organisational costs both direct and indirect, incurred when a nurse was absent thereby assisting management in costing nurse turnover.

Owing to a lack of a standard measure to assess employee absences, employers are failing to track the actual costs and impact of absenteeism on their organisations (Anderson, 2005). In addition, there are many confounding variables that may mask the bigger picture as to what exactly constitutes employee absenteeism (Ootim, 2002).

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Measuring Absenteeism from an Academic Researchers Perspective

Measures of a quantitative nature pervade the research in this area such as those of Hackett and Bycio (1989), Frans (1999), Hemmingway and Smith (1999), Peiro, Gonzalez-Roma, Lloret, Bravo, and Zurriaga, (1999); Siu (2002), Timmins and Kaliszer (2002), Benson and Leona (2002), Lavoie-Tremblay, Viens, Bourbonnais, Vezina, Durland, and Rochette (2005), Melchior et al. (2005), Bekker, Croon and Bressers (2005). Furthermore previous research in this area suggests that the self-report questionnaire is a popular research tool for exploration of the absenteeism phenomenon (McNeely, 1996; Chan & Morrison, 2000; Timmins & Kaliser, 2002; Diraz, Ortlepp & Greyling, 2003; Bekker et al., 2005).

Siu (2002), Timmins and Kaliszer (2002) as well as Bekker et al. (2005) all pointed out the inherent limitation of self-report measures in their research as a results of respondents tendency towards presenting a positive view of themselves and providing socially desirable responses. Johns (1994) argued that self-report measures were potentially inaccurate as employees do not accurately perceive their own absenteeism levels, with a tendency to underestimate their own absenteeism and overestimate the absenteeism of their co-workers. Shiu (1998) further emphasised the two main concerns of self-report data namely those of common method variance and consistency bias.

However while the limitations of self-report data are apparent, the self-report questionnaire remains a popular method of investigating the absenteeism phenomenon. Furthermore a large amount of research exists where the self-report questionnaire was the primary data collection instrument and statistically significant results were obtained. Siu (2002) made use of self-report questionnaires as the only data collection instrument and statistically significant results were obtained. Similarly, Diraz et al. (2003) also made use of only self-report questionnaires in their research and they too found statistically significant results. Moreover in addition to the self-report questionnaire, Timmins and Kaliszer (2002) also utilised an analysis of organisational absenteeism records and their research also produced statistically significant results.

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In accordance with the research of McNeely (1996), Chan and Morrison (2000), Timmins and Kaliser (2002), Diraz et al. (2003) as well as Bekker et al. (2005), the current research made use of self-report questionnaires whereby participants reported on their own perceptions of their absenteeism levels. The choice of the self-report measurement instrument was informed by the following constraining factors: As a result of the inability to access the organisation's absenteeism records and the unstandardised nature of these records, the self-report measure was the best option to utilise for the current research. While the use of self-report data is a popular method of obtaining information on employee absenteeism, this research acknowledges the limitations inherent in self-report data (Kosslyn & Rosenberg, 2005). The limitations to the current research will be discussed in more detail in the concluding sections of the dissertation.

The review will now progress from an exploration of measurement issues associated with the absenteeism construct to a further body of literature which deals with role stress in the nursing profession, particularly amongst nurses in the public sector.

The literature highlights role stress as being one of the primary antecedents of nurse absenteeism in the public sector. Furthermore the organisation that requested the research felt strongly that there was a correlation between absenteeism and role stress. Hence, the review shall now progress from definitions of absenteeism and debates about the measurement thereof, to the second major component of the research question which examines the various forms of role stress and their impact on the nursing profession. In order to fully understand the problem of public sector nurse absenteeism, the role of the public sector nurse needs to be explored. This section will begin with a brief survey of the literature around the role of a nurse in the public health sector and the challenges incumbent in such a position.

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Role Stress in the Nursing Profession

The Role of the Public Sector Nurse

The nursing profession is inherently stressful and emotionally taxing as nurses are exposed to chronic pain, suffering, death and hopelessness on a daily basis (Smythe, 1994; Curtis & Rubenfeld, 2001; Levy, 2004). Moreover, public sector nurses often work in hospital settings that are understaffed and lacking in crucial resources. They are also frequently subjected to verbal abuse by both patients and their supervisors (Banda & Simuknoda, 1994; Edgington, 2000; Ootim, 2002; Eriksen, Bruusgaard & Knardahl, 2003; Johnson, Croghan & Crawford, 2003; Verhaeghe, Mak, Van-Maele, Kornitzer & De-Backer, 2003; Farrell & Cubit, 2005; Gooding, 2005).

In South Africa, nurses who work in the public sector face the risk of HIV infection almost on a daily basis in addition to having to treat an increasing number of patients, many of them children who are suffering from incurable fatal diseases (Seidel, 1996; Aiken & Sloane, 1997; Hall, 2004). The findings of Booysen (2005) indicated that South African nurses who dealt with child trauma and illness each day, experienced emotional fatigue and work related exhaustion which also manifested in physical symptoms such as headaches, influenza symptoms and low energy levels. The nurse's personal and work relationships were affected. An additional finding was the apparent lack of support from management and poor communication between management and staff which contributed to the nurse's frustration and emotional strain.

The facilities and equipment in South African public sector hospitals, particularly in the rural areas are often inadequate, broken or missing (DENOSA, 2004). Tawfiq and Kinoti (2003) found that with regards to the occupational risk of HIV contraction, lack of protective gear such as gloves, goggles, gowns and disinfectants was an important contributing factor to occupational stress amongst caregivers. Shisana, Hall and Maluleke (2003) found that an estimated 15.7% of health care workers working in the Free State, Mpumalanga, KwaZulu-Natal and North West provinces were living with HIV and AIDS.

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In terms of staff shortages, in 2003 the South African government estimated that there was an estimated 31 000 nursing staff shortage in the public sector, which meant that one nurse did the work of more than one person (DENOSA, 2004). In response to the aforementioned challenges, nursing staff are increasingly turning to absenteeism as a means of coping with the stressors inherent in their daily jobs (Shisana et al., 2003; Tawfiq & Kinoti, 2003; Booysen, 2005).

An analysis of the literature highlights that there are a number of factors which contribute to perceived role stress in the nursing profession, particularly in the South African context. Working conditions, the risk of contracting HIV and AIDS, workload and interpersonal relationships with supervisors and colleagues, amongst other factors all contribute to perceived role stress amongst nurses (Seidel, 1996; Aiken & Sloane, 1997; Shisana et al., 2003; Tawfiq & Kinoti, 2003; Hall, 2004; DENOSA, 2004; Booysen, 2005).

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The current research focuses on role conflict, role ambiguity, role overload, resource scarcity, skills inadequacy and constant change as contributing factors to perceived role stress amongst nurses in the public sector. These six work-related conditions cannot be viewed as independent from each other as they are largely interlinked and mutually supportive. For example, role conflict often occurs as a result of constant changes in the working environment and resource scarcity and skills inadequacy often exacerbates a sense of role overload.

An individual obtains a "social identity" by performing in clearly defined social and professional roles in a social context, such as an occupational group (Kirpal, 2004, p. 276). The benefits of conforming to such roles include recognition and acceptance with other group members. In a work setting, a role can be defined as the tasks and behaviours that colleagues and supervisors expect an employee to perform while doing a job. The work context comprises pre-defined roles, which when accepted, assist the individual to integrate into a work-related community (Apker, 2004; Kirpal, 2004).

In South Africa at present, nurses are struggling to define their roles and understand what it means to be a nurse in the current health care environment, which is characterised by large

scale change and uncertainty (Shisana et al., 2003; Tawfiq & Kinoti, 2003; Hall, 2004). The following section will explore nurse's role stress in greater detail by reviewing the latest literature pertaining to each of the six role stress constructs addressed in the current research and assessing their relative impact on the nursing profession.

Role conflict.

Role conflict refers to differing expectations of or demands on an employee. It occurs as a result of a clash between the employee's perceptions and expectations of their role in the organisation versus other people's perceptions and expectations of the employee's role (Luthans, 1992). Furthermore it arises when there are difficulties inherent in meeting one set of needs without rejecting the other (Newstrom & Davis, 1993).

Within the nursing profession, role conflict is not a new phenomenon as the topic has received attention in research as early as 1953 (McLemore & Hill, 1965). The role of the nurse was seen as changing toward an increasingly technical, specialised, bureaucratic and managerial role, for which the nurses were not trained. Taking on a technical-managerial role produced conflict within the nursing profession as nurses were undertaking tasks which conflicted with those they inherently desired to do and for which they were untrained (McLemore & Hill, 1965). The findings of Corwin (1961) emphasised this in stating that role conflict in nursing could be attributed to the separation of a nurses training from his/her actual career.

The role conflict construct can further be extended to those individuals juggling many different work duties and tasks. This is because their external roles tend to place different demands on their jobs as opposed to their internal roles (Newstrom & Davis, 1993).

Moreover, nurses experience conflict between the high levels of responsibility inherent in their profession and the perceived low status of their profession in the medical field and in society as a whole (Verhaeghe et al., 2003; Farrell & Cubit, 2005). This lack of recognition is a primary factor contributing to low self esteem and a tainted occupational identity among nurses (Newman & Maylor, 2002; Ledgister, 2003; Kirpal, 2004). It is often larger hospitals

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with established hierarchies which perpetuate the subordinate role of nurses. This is also evident in the significantly lower salaries that nurses receive in relation to the medical doctors (Kirpal, 2004). Lack of financial incentives and significantly lowered rates of remuneration for nursing staff is an important issue and contributes significantly to nurse's perception of their work being undervalued (Kirpal, 2004). In addition, physical and verbal abuse by patients further intensifies the nurses perception of being undervalued (Ledgister, 2003).

In South Africa role conflict amongst nurses is largely as a result of conflicting demands placed on nurses in addition to internal conflict within health care institutions (Levert, Lucas & Ortlepp, 2000). There is however little empirical research on role conflict amongst public sector nurses in the South African context and hence the current research will add to the paucity of research in this area.

Constant change.

Large scale change incorporating new work-related and personal demands impact, to a large extent, on the nursing profession. As previously mentioned, the nursing profession has undergone dramatic change since 1953. In 2006 nurses continue to face new demands and expectations, challenging them to become more flexible and mobile (Rees, 1995; Kirpal, 2004). The provision of healthcare facilities and services is beginning to be viewed from a broader perspective in South Africa as well as on a global scale. Emphasis is now being placed on changing from a primary focus on provision of health care services to prevention, counselling and promotion of patient self-help approaches (Kirpal, 2004).

Changes in work organisation, structural reforms and medical innovations are further ongoing changes which are continually present in the nursing profession. Apker (2004) stated that nurse's roles would be continually redefined in the age of managed care. These constantly changing work demands have lead to increased perceived role stress amongst nurses (Apker, 2004).

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The shift towards nurses performing administrative and managerial duties is taking nurses away from hands-on nursing care which is a critical component of their job satisfaction (Rees, 1995). This is particularly prevalent in the South African context at present as a result of the delegation of all services, both health care and administrative, to the primary health care sector in 1994. This resulted in large scale change in both the role and function of the public sector nurse in daily practice. These changes in organisational roles and structures have caused wide spread fear amongst South African nursing personnel as to their place in the newly emerging health care delivery system (Elloker, 2003).

Resource scarcity.

Resource inadequacy in South African public health care institutions is a severe problem which affects the manner in which both chronic and acute illnesses can be treated (Gilson, 1998; Masilela et al., 2004). There is currently a shortage of essential resources necessary to manage high infection rates such as those related to HIV and AIDS, resulting in compromised patient care (Masilela et al.). While the problem of resource scarcity is currently receiving attention from the South African Department of Health, there is still much that needs to be done to adequately rectify and redress the issue (Gilson, 1998; Masilela et al.). It is noteworthy that minimal empirical research has been conducted into the problem of resource scarcity in the South African context.

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The South African Department of Health needs to ensure greater resource availability in order to improve the quality of health care provision in the public sector (Gilson, 1998). The disparity of resources between the public and the private sectors further exacerbates the crisis. Moreover, the private sector, due to its ability to pay higher wages, attracts essential human resource personnel away from the public sector, as do foreign countries.

Gilson (1998) highlighted the importance of redistribution of resources and the challenges incumbent in such a task. Resources need to be redistributed from the private to the public sector and then further redistributed between and within the province. Re-allocation of resources between provinces has resulted in some improvement in primary care provision. In

the Northern Province, for example, fifty new clinics have been constructed and seventy nine have been upgraded in addition to upgrading of forty three hospitals and provision of essential equipment to all clinics (Gilson, 1998). However these improvement and resources are still lacking in the majority of clinics and hospitals in the South African public health sector.

The inadequacy of resources in these institutions affects the way in which nurses conduct their jobs and results in frustration and anger when essential resources are required yet are unavailable (Masilela et al., 2004). Responses from the Facility and District Managers in their sample reported that the clinics were often unsuited to the volume of patients requiring treatment. The nurses emphasised the inadequacy of equipment, shortage of staff as well as inadequate transport to and from the facilities which directly impacts on their work (Masilela et al.).

Role ambiguity.

When roles are inadequately defined or are substantially unknown, role ambiguity is the result (Newstrom & Davis, 1993). A lack of a clear job description and lack of clarity accompanied by uncertainty about a single role contributes to role ambiguity (Luthans, 1992; Traynor, 1993). Furthermore, Chiarella (2002) stated that in contrast to medical doctors who have clearly defined competencies and responsibilities, the job profiles of nurses lack coherence and a clear definition. When role conflict and role ambiguity occur, job satisfaction and organisational commitment are likely to decline (Dyer & Quine, 1998). Role conflict and role ambiguity are significant sources of job-related stress. Both role conflict and role ambiguity can trigger excessive anxiety which in turn results in coping behaviours such as aggression, hostility or withdrawal (Newstrom & Davis, 1993).

In South Africa, role ambiguity can be regarded as a resultant factor of the significant changes affecting the work organisation, standards and expectations of nurses (Masilela et al., 2004). The constant changes in nursing roles and amendments and additions to job descriptions contributes to increased role ambiguity amongst South African nurses (Levert, 2000; Elloker, 2003; Masilela et al., 2004)

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Miller, Joseph and Apker (2000) found that nurses attempted to deal with role ambiguity through traditional communication practices such as interpersonal relations with peers as well as alternative strategies such as adopting behaviours of other hospital roles. In her research on Registered Nurses, Apker (2001) determined that managed care heightened both role ambiguity and role conflict. Nurses attempted to deal with unclear and conflicting roles by interacting with role set members namely doctors, co-workers, patients and supervisors.

Skills inadequacy.

In terms of skills inadequacy, Kirpal (2004) noted that the increasing cognitive demands being placed on nurses remained largely underdeveloped in nurse training programmes and curricula. Technical proficiency is often taken for granted, with technical and social skills becoming more complex in the nursing role. Further skills incorporating managerial and administrative proficiency, counselling and mediating functions between the patient and the medical doctor are now being required of nurses, for which they have been inadequately prepared and trained (Rees, 1995; McNeely, 1996; Apker, 2004).

Nurses have traditionally been trained in the skills of treating disease, empathy, patient support and education, as well as rapport building. With the implementation of managed care, the focus on cost reduction strategies requires nurses to reduce their time spent with patients and develop new skills which facilitate administrative efficiency and cost reduction (McNeely, 1996; Apker, 2004).

As a result of the aforementioned changes to the SAHCDS, nursing roles have expanded to include becoming leaders, educators, managers, administrators and researchers over and above their clinical roles for which they have been trained (Alexander & Spradley, 2001). Feeling unprepared to cope with workplace changes can result in nurses using absenteeism as a coping mechanism (Muller, 1997).

Appropriate changes are currently being made to the curriculum for health personnel education in South Africa whereby emphasis is placed on managerial as well as technical

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competencies and skills (Schaay, Heywood, & Lehmann, 1998). However, responses from qualitative interviews with nurses operating within the new health care system indicated that the attempts by the Department of Health to develop and offer appropriate curricula which are responsive to changing needs and demands of the SAHCDS have been inadequate (Ntshona, 2000). The following obstacles face South African educational institutions with regards to newly emerging curricula: Developing undergraduate and postgraduate curricula which are responsive to changes, inadequate preparation of nurse educators for change, the theory and practice divide, distribution of nurses in urban and rural areas, lack of standardised training for nurses (Ntshona, 2000).

Furthermore, the nurses who have been in the nursing profession for many years and particularly those who have now been appointed as Facility Managers and District Managers in the new District Health System experience much difficulty with skills gaps. Masilela et al. (2004) reported that the skills which the majority of District Managers in South Africa lack, are those of leadership skills, capacity building, skills planning and financial management. They also reported a need for guidance on the District Health Information System. There was mixed opinion amongst the District Managers as to whether the Department of Health had provided adequate opportunities for skills development (Masilela et al., 2004).

Role overload.

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Role overload exists when work demands exceed the capacity of the employee to meet all of them adequately. Too much work and too little time to accomplish tasks results in perceived role overload (Luthans, 1992). A shortage of nursing staff is a problem which has existed in the profession for years and is often a result of fundamental problems in the profession itself (Ledgister, 2003).

In South Africa, the large number of nursing staff leaving the country is exacerbating the problem of the nurses who remain, as they become overworked and suffer from burnout (Ntshona, 2000). As a result of this nursing shortage, the pressure placed on those nurses who

remain in the system is heightened. Moreover, this pressure is magnified by absenteeism of those nurses who are experiencing burnout and exhaustion.

A further contributing factor to role overload amongst public sector nurses in South Africa is the oppositional role expectations required of nurses in the new District Health System. Rather than doing the job for which they are trained i.e. caring for patients, nurses are now forced to take on administrative and managerial roles for which they are unprepared. This causes nurses to feel overwhelmed in their roles and overloaded in terms of pressure to acquire new skills for which they are unprepared (Masilela et al., 2004).

The interplay between the various role stress factors is evident in the findings of Kirpal (2004) who stated that staff shortages, resource scarcity and a continuously changing work environment contribute to the nurse feeling pressurised and overloaded. Increased pressure and time constraints leads to a conflict between providing patient-oriented care and rationalization as it is left up to the nurse to establish a balance between efficiency, cost containment and patient care demands. The findings of Kirpal (2004) emphasised the apparent lack of support from supervisory and managerial staff in assisting staff to attain this balance. This conflict then impacts negatively on the occupational identity of the nurse, leading to unproductive workplace behaviour, burnout and decreased organisational commitment.

Having reviewed the extensive literature on absenteeism in addition to the six role stress constructs which are central to the current research, the review shall now progress to a further body of literature which ties these two broad sections together. This section will address the precipitating factors to public sector nurse absenteeism. It will link absenteeism to the aforementioned role stress constructs, an association which has received much attention in recent literature.

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Precipitating Factors to Nurse Absenteeism

The precipitating factors to nurse absenteeism have been grouped under five main headings namely stress related and emotional factors, occupational factors, psychosocial factors, demographic factors, as well as physical factors. While stress related factors in addition to occupational, psychosocial and demographic factors are of primary importance to the current research, it is important to present a comprehensive picture of such factors and hence physical factors are included in this section. Minimal empirical research has been conducted with regard to precipitating factors to nurse absenteeism in the South African context. Therefore the information contained in this section is primarily internationally based however local information is included wherever possible.

Stress Related and Emotional Factors

Various international findings support the idea that stress related factors play a primary role in precipitating nurse absenteeism (Smythe, 1994). More specifically, absenteeism has been attributed to stress-related illness such as burnout, work-related anxiety as well as depression (Woo et al., 1999; Verhaeghe, et al., 2003; Hale, 2005; Lavoie-Tremblay et al., 2005; Daniel, 2005; Paton, 2005). In the nursing profession, excessive job demands contribute to burnout and hence absenteeism (Smythe, 1994).

The positive associations between stress-related factors and increased absenteeism link directly to the earlier research by Hackett and Bycio (1996) as well as the South African research by Elloker (2003). Hackett and Bycio (1996) determined that hospital nurses tend to utilise absenteeism as a coping mechanism as a result of stressors such as job dissatisfaction, emotional and physical fatigue, sleep disturbances, personal problems as well as ill health. Similarly Elloker (2003) found that absenteeism amongst public sector nurses was a manifestation of an inability to cope with change and excessive work stressors.

These stress-related factors hinder the nurse's ability to cope, which in itself is a source of stress (Ootim, 2002). The research shows that nurses feel their only option is to resort to absence from

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work and those who have reached their tolerance limit, decide to leave permanently which only perpetuates the problem (Ootim, 2002). In their controversial argument opposing resignation due to burnout, Hackett and Bycio (1996) proposed that the effects of occasional absences on the absentee are beneficial as it allows burnt out employees to take a break, enabling them to recuperate thereby strengthening their overall coping mechanisms.

Occupational Factors

The literature highlights the importance of a positive working environment and the moderating effect thereof on nurse absenteeism (Hemingway & Smith, 1999; Ledgister, 2003; Adams & Bond, 2003; Ose, 2005). Companies that strive to improve the lives of their employees through the development of a positive, supportive working environment, create a healthy workplace with a resultant decrease in absenteeism (Borda & Norman, 1997; Hemingway & Smith, 1999; Adams & Bond, 2003; Ose, 2005). In South Africa, public hospital settings are predominantly characterised by stressful working conditions and a lack of facilities and equipment which indirectly impact on nurse absenteeism (Rees, 1995; Ledgister, 2003; Elloker, 2003; Masilela et al., 2004). As previously highlighted, occupational factors such as resource scarcity and continuous change contribute immensely to the degree of role stress experienced by nursing staff, particularly those in the public health sector.

Research studies of a quantitative nature were conducted by Siu (2002) and Melchior et al. (2005) who examined the influence of work factors and occupational class disparities on sickness absence. Their findings were in line with those of Rees (1995) as well as Hemingway and Smith (1999) and led them to conclude that work conditions, work-related stress as well as the organisational climate contribute greatly to sickness absence, particularly in specific occupational groups such as nurses.

Existing international literature further highlights, organisational change as a factor that precipitates nurse absenteeism (Ledgister, 2003; Apker, 2004; Lavoie-Tremblay et al., 2005). As previously mentioned, role stress amongst nurses can be increased considerably by challenging comfort zones and inopportunity to partake in joint decision making with hospital management.

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If employees are not involved in the change process, they feel a loss of control and hence engage in absent behaviour as this is an area over which they feel they have direct control (Van Loon, 2001; Stanley, Meyer & Topolnytsky, 2005). Furthermore, nurses whose work environments are turbulent and inconsistent may experience overwhelming levels of anxiety and stress prompting them to leave their jobs or engage in counterproductive work behaviour such as absenteeism (Apker, 2004). While these findings are internationally based, they are pertinent to the South African context as a result of the large scale change occurring in the health care delivery system, and hence these findings are of importance to the current research.

Psychosocial Factors

A review of the international literature indicated that a breakdown in interpersonal relationships within the workplace could act as a further precipitating factor to nurse absenteeism (Weinberg & Creed, 2000; Almost, 2006). Their research indicated that an absence of adequate supervisory support as well as support from colleagues lead to increased role stress and hence increased levels of absenteeism. Within the nursing profession all nursing departments have a Senior or Head nurse to whom the rest of the nurses report. There are often conflicts and breakdowns in interpersonal relations between nurses and their supervisors which may contribute to the role stress experiences by these nurses and hence result in absenteeism amongst nursing staff (Watson, 1985; Baumgart & Larsen, 1992; Smythe, 1994, Wicks, 1998; Rowe & Sherlock, 2005; Farrell & Cubit, 2005).

A further area of concern for nurses is the perceived low status of the nursing profession amongst society as well as amongst colleagues in the medical profession i.e. medical doctors and specialists (Kirpal, 2004). The South African research findings of Masilela et al. (2004) support those of Kirpal (2004) in stating that nurses feel that their comparatively low rate of remuneration does not reflect the high degree of responsibility required in the nursing role, particularly those nurses who are now in managerial and leadership roles. This perpetuates the feeling of resentment, low self esteem and low morale amongst nursing personnel.

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In relation to the perceived low status of the nursing profession in society, violence and bullying in the workplace by patients is a further psychosocial factor highlighted in both local and international literature which may contribute to increased nurse absenteeism in the public health sector (Verghaege et al., 2003; Farrell & Cubit, 2005; Gooding, 2005). Rowe and Sherlock (2005) in line with the work of Farrell and Cubit (2005) determined that stress and verbal abuse in nursing by both patients and colleagues, impacts on occupational burnout, which in turn results in increased levels of absenteeism.

South African nurses are increasingly being exposed to assault and patient abuse in their daily work relations (Elloker, 2003; Kennedy, 2004). A major stressor for nurses working in the South African public health sector involves working with patients who have a known history of violence (Elloker, 2003). The fear of contracting HIV and AIDS perpetuates this fear and anxiety. Kennedy (2004) found that the tendency of nurses to under report incidences of abuse was very high, with many nurses believing that abuse was merely part of the job and it should be tolerated.

The British National Health Service reported that many nurses suffer bullying, harassment and abuse by patients causing them to endure both physical and psychological distress (Gooding, 2005). Research findings by Dyer and Quine (1998) indicated that the most common types of bullying among nurses took the form of continuous devaluation of their efforts, decreasing levels of responsibility without warning, changing goals as well as demoralisation.

An alternative view which emerged from the international literature is that employees are more likely to be absent for reasons unrelated to their work far more than work-related difficulties (Haccoun & Desgent, 1993). This leads to the concept of work-family conflict (WFC) which has also been highlighted in the literature as a precipitating factor to nurse absenteeism (Bacharach, Bamberger & Conley, 1991). Nurses who struggle to balance their work and family lives experience overflow in both areas, often leading to conflict (Bacharach et al., 1991). Boyar (2005) found that women who experienced higher degrees of WFC had the highest incidence of absences. In contrast, however, Cavanagh and Coffin (1992) as well as Borda and Norman

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(1997) found no significant relationship between family responsibility and absenteeism amongst the nurses in their samples.

Demographic Factors

In their quantitative study of predictors of absenteeism among public health service employees, Peiro et al. (1999) established from their research that gender, age and work-team climate had statistically significant influences on absenteeism. Alternatively, findings from a three-year longitudinal study on absence behaviour conducted by Frans (1999) reported that in addition to age, health and prior absence of employees were the best predictors of later absence behaviour. These studies confirmed the findings of an earlier study by Buchan and Seccombe (1995), which showed that the number of multiple nurse absences amongst nurses in their sample reduced with age. Their research showed that one in five of the respondents under the age of twenty five had more than one absence in the six months prior to the research, compared to fewer than one in ten of nurses over forty five. In addition they found that female nurses tended to be absent more often than males nurses.

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Additionally, research showed that contractual hours (i.e. part-time or full-time) as well as organisational tenure were positively associated with absenteeism (Chaudhury & Ignace, 1992). The findings of Chaudhury and Ignace (1992) indicated that companies with a predominantly part-time staff component displayed lower levels of absenteeism than companies with a predominantly full-time staff component. Additionally it was noted that long serving employees i.e. individuals who had dedicated a large proportion of their lives to serving a company tended to be absent less than relatively new recruits. The research by Buchan and Seccombe (1995) as well as Chan and Morrison (2000) supported that of Chaudhury and Ignace (1992) with findings that length of service amongst nursing personnel was positively associated with employee absenteeism. Their results showed that as length of service increased, the incidence of absenteeism decreased. Nurses with shorter lengths of service tended to be absent more often.

In contrast to the results of Chaudhury and Ignace (1992), Benson and Leona (2002) determined that working full-time was more likely to result in absent behaviour as opposed to working part-

time. Furthermore, they discovered that higher rates of absenteeism amongst nurses were associated with lower job satisfaction, longer shifts as well as working in acute care facilities.

In terms of cultural factors, Bussing and Glasser (1999) emphasised the considerable differences in the nature of nursing between different cultures such as Western and European Cultures. Shiu (1998) in support of this argument further emphasised the cultural differences between Western and Chinese societies with regard to the nursing profession. These research studies therefore indicate that cultural factors should be taken into account when researching the nursing profession and interpreting the results of such research.

Physical Factors

More recent literature has focused on the impact of physical health problems, in particular musculoskeletal strain and injury as further precipitating factors to nurse absenteeism (Shamian, 2003; Alexopoulos, 2006). This is most likely due to the physical requirements inherent in the nurses role such as lifting patients and adjusting beds both of which contribute to back, neck and shoulder strain and hence injury (Baumgart & Larsen, 1992; Smythe, 1994; Wicks, 1998). Buchan and Seccombe (1995) stated that management should ensure that all nurses are properly trained in handling and lifting techniques such that resultant back and neck injuries are prevented.

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The literature therefore points to the multi faceted nature of nurse absenteeism and highlights the numerous factors which can lead to absenteeism behaviour in the nursing profession. The aforementioned precipitating factors need to be viewed in a holistic manner in order to gain an accurate view of the factors which may contribute to and exacerbate the problem of nurse absenteeism (Bussing & Glasser, 1999; Ledgister, 2003). The following section will present a summary of the findings from previous research in the area of nurse absenteeism in the public sector, highlighting the central themes which have emerged.

Summary of Research Findings

This review has presented the latest literature surrounding the concept of absenteeism with a specific focus on nursing staff in the public health sector. The literature demonstrates that absenteeism is a complex construct which is difficult to measure. Furthermore it highlights the fact that absenteeism is linked to a variety of different contexts. However there is a scarcity of research pertaining to the association between absenteeism and role stress factors in the South African context.

While there is much literature around management of absenteeism, the problem continues to persist particularly amongst nurses in the public health sector. The frequency of absenteeism episodes, particularly short term absences is increasing and is providing more cause for managerial concern than authorised absenteeism. Benson and Leona (2002) stated that in light of the current nursing shortage, hospitals need to take immediate action in terms of reducing absenteeism and increasing job satisfaction amongst their nurses. Johnson et al. (2003) called for hospitals to re-evaluate their current absenteeism policies and assess the effectiveness of these policies.

While a clearly defined absenteeism management programme is imperative, a proactive programme to empower employees to remain healthy and productive is equally valuable (Pinder, 2005). There is a dual responsibility that needs to be shared between both employee and employer in relation to nurse absenteeism (Ootim, 2002).

Having reviewed the relevant literature in the area of public sector nurse absenteeism, the following chapter shall outline and discuss the research method.

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Chapter 3

Research Method

Introduction

The objective of this research was to determine whether an association exists between role stress and absenteeism among nurses in the public sector. This chapter outlines the method that was employed to achieve these aims. It will begin with a discussion around the research design, followed by the research paradigm and its applicability for the current research. Thereafter the specific quantitative tool utilised namely survey research and the survey questionnaire will be discussed. A description of the sample method will then ensue followed by a detailed description of the sample characteristics. The data collection procedure will be detailed in the penultimate section, providing an overview of the pilot study conducted and the process of administrating the survey to the participants. Finally the data analysis procedure will be discussed including both descriptive and inferential statistics as well as thematic analysis of the open-ended question.

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Research Design

The research design in the current research was descriptive in nature. It aimed to describe the problem of nurse absenteeism in public sector hospitals (Hair, Babin, Money & Samouel, 2003). The relationship between absenteeism and role stress was explored in an attempt to determine why absenteeism was so rife within this sector (Neuman, 1997).

The type of descriptive study employed in this research was that of a cross-sectional study. The cross-sectional study relies on a sample of elements from a population that are measured at a given point in time (Churchill, 1995; Fink, 1995). Therefore the current research examined the problem of absenteeism amongst nurses in the public sector using a sample of nurses that was selected at a particular point in time.

Research Paradigm

This research fell within the quantitative research paradigm as the underlying assumption of this paradigm is that knowledge is objective and can be acquired by empirical evidence (Neuman, 1997). By making use of an objective data collection instrument namely the survey questionnaire, the researcher sought to infer characteristics of the nursing sample to the larger population of public sector nurses (Stern & Kalof, 1996; Hair et al., 2003). The generalisability of the results was compromised however by the use of a non-probability sampling method namely convenience sampling. The limitations inherent in this method of sampling will be discussed in the final chapter of this dissertation.

The survey questionnaire was pre-determined and highly structured such that reflexivity and flexibility on the part of the sample respondents was minimized (Brannen, 1992). In this research the data obtained from the survey questionnaire was converted into discrete units which allowed for comparison using statistical methods of analysis (May, 1993). The primary purpose of this analysis was to establish general trends in the nurses' opinions, values and perceptions and to determine relationships between the role stress composite constructs and absenteeism (Hair et al., 2003).

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Survey Research

Survey research involves collection of information with the aim of describing participants' attitudes, beliefs and behaviours (Fink, 1995). The main objective of the descriptive surveys in the current research was to describe the observed responses of the nursing sample in terms of proportions and percentages of nurses who responded in specific ways to varied questions (Trochim, 2000). Statistical analyses were then carried out in order to transform the survey data into meaningful information.

As a result of the large target population of nurses, survey research was selected as the most appropriate research tool as questionnaires could be distributed to large numbers of people in widespread areas and it was cost effective as large groups could be targeted

concomitantly (Backstrom & Hursh-Cesar, 1981). Further advantages of survey research included the fact that it provided in-depth information at a reduced cost to the researcher (Bourque & Fiedler, 1995). Moreover, in accordance with the quantitative research paradigm, responses could be recorded and summarised in the form of percentages, tables and graphic representations (Oppenheim, 1992; Neuman, 1997). Survey research was beneficial as respondents could complete them at their own pace, potential interviewer bias was avoided and greater anonymity for respondents was ensured (Oppenheim, 1992).

Measuring Instrument

The scales in the survey probed and assessed the absenteeism construct in relation to the nurses perceived role stress. More specifically the role stress construct was broken down into six sub-categories namely role conflict, role ambiguity, role overload, resource inadequacy, constant change and skills inadequacy (See Appendix A for a list of the scale items utilised in the survey). The scale items in each of the initial four scales were selected from previously established scales. Bagraim (2005) had modified these scale items from various sources namely Rizzo, House and Lirtzman (1970) as well as Caplan, Cobb, French, Harrison and Pinneau (1975). For the purpose of this research, specific items were selected from existing scales that adequately probed the constructs under investigation.

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Following a meeting with the organization representatives, the last two scales namely constant change and skills inadequacy were included in the questionnaire. Both of these issues were identified by the members of the organisation as potential contributing factors to absenteeism amongst nurses in the public sector. The choice of the six scales and their composite items was informed by the theoretical relationship between these role stress and absenteeism variables documented in the literature.

The questionnaire therefore comprised six scales which measured the aforementioned role stress factors. Each scale comprised five separate items (with the exception of the skills inadequacy scale which contained four items). The reason for developing a five

item scale was that should one or two of the items need to be removed following initial statistical analyses, there would still be sufficient items remaining to continue with the data analysis. Initial statistics conducted on the scales revealed that the alpha coefficients of all of the scales were above .70. This indicated that the scales used in this research were adequately reliable and internally consistent.

Absenteeism was measured using self-report data whereby participants reported on their own perceptions of their absenteeism levels. The scale items relating to absence frequency, voluntary and involuntary absenteeism were obtained from multiple sources. Absence frequency items were obtained from the Price and Mueller (1986) measure used in Brooke and Price (1989). Voluntary and involuntary absenteeism items were obtained from Meyer, Allen and Smith (1993) as well as Johns (1994) which were also used in Johns and Xie (1998).

While the use of self-report data is a popular method of obtaining information on employee absenteeism, the limitation inherent in self-report data is the tendency for respondents to give socially desirable responses (Kosslyn & Rosenberg, 2005). The use of the self-report measure will be dealt with in detail in both the discussion and limitations sections of this paper.

Demographic data was placed at the end of the questionnaire as this can be tedious to complete and it was decided that it would be best if the respondents began answering the questions immediately. The demographic variables were selected based on previous research in this area and included gender, race, age, marital status, occupational level, occupational tenure and professional tenure (Buchan & Seccombe, 1995; Peiro et al., 1999; Frans, 1999; Chan & Morrison, 2000). The choice of these demographic variables was informed by documented relationships between these demographic and absenteeism variables in the literature. The researcher therefore wished to test whether similar relationships would be found in the current research.

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The final page of the survey provided respondents with an open-ended question which enabled them to add any additional information or expand upon previous answers in the questionnaire (Trochim, 2000). This type of question provides a good way of ending a questionnaire as upon completion, respondents are left feeling that their opinions are valued and that they have not provided limited responses to prescribed questions (Gillham, 2000).

Sample Design

Sample method.

The sampling technique used in this research was that of convenience sampling whereby the sample selection was based on the researcher's judgment or convenience. Convenience sampling is classified as a type of non-probability sampling (Terre Blanche & Durrheim, 1999; Trochim, 2000). Non-probability samples do not rely on chance to find participants but rather make use of human judgment in selecting the respondents. This sampling technique enabled the researcher to identify and target the nurses most suitable to the research question (Hair et al., 2003). Furthermore, due to the time constraints of Masters research, non-probability sampling enabled the researcher to target the identified sample in less time and at less expense.

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Sampling procedure.

A list of the various day clinics was obtained, all of which formed part of the health services organization that contracted the research. This list indicated the locations of the day clinics, the staff component in each unit and the Facility Managers responsible for each clinic. Ten district clinics and one hospital were selected in the following areas: Greenpoint, Woodstock, Athlone, Elsies River, Khayalitsha, Gugulethu, Kraaifontein, Vanguard, Mitchells Plein, Plumstead, False Bay. The selection of clinics was based on the areas in which they were situated as the researcher aimed to cover the broad spectrum of socio-economic areas in and around the Western Cape. This was done in order to

increase the representativeness of the sample. Furthermore the researcher wished to determine whether there were any unique differences in the responses from the nurses in different socio-economic areas.

The limitations of the sampling method will be discussed in the limitations section of this paper.

Sample description.

The research report is based on survey data collected from the ten district clinics and one hospital situated in and around the Western Cape. Out of approximately 420 surveys distributed, 230 usable surveys completed by the nurses were returned, representing an overall response rate of 55% (N = 230). Of the 230 nurses, 22 (10%) were male and 208 (90%) were female. The ages of the sample ranged from student nurses who were in the 25-30 age category to senior nurses who were in the 55-65 age category. The average number of hours worked per week was 40 hours with the average organizational tenure being 10 years and the average professional tenure, 17 years.

The sample had the following characteristics:

Gender	Number	Percentage
Male	22	10%
Female	208	90%

Marital Status	Number	Percentage
Single	119	52%
Married	101	44%
Prefer not to answer	10	4%

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Race	Number	Percentage
White	19	8%
Black	84	37%
Coloured	92	40%
Prefer not to answer	35	15%

Occupational Category	Number	Percentage
Chief Professional Nurse	58	25%
Senior Professional Nurse	19	8%
Professional Nurse	43	19%
Enrolled Nurse	33	14%
Enrolled Nurse Assistant	64	29%

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Data Collection

Upon completion of the questionnaire design, a pilot study was conducted with 16 nurses from a selected day clinic in Cape Town. The nurses were requested to complete the questionnaire and to raise any concerns they had regarding any misunderstanding of scale items or questionnaire length. The feedback was positive in that no problems were raised and the length proved manageable for the entire pilot group.

Following the pilot study the Facility Managers were contacted telephonically and via e-mail and were provided with a detailed description of the research and its purpose. Facility Managers were provided with a letter of permission which the researcher had obtained from the umbrella organization to conduct the research. Following their consent to the process, an appropriate date was determined as to when the largest nursing component would be present in the various units such that a maximum response rate could be obtained. The researcher personally distributed the survey questionnaires to the Facility Managers in the various district clinics.

Nurses were informed of the nature and purpose of the research by means of an attached covering letter. Anonymity and confidentiality were addressed in this covering letter, in addition to information pertaining to where and when the surveys would be collected.

In the interest of confidentiality, the questionnaires were distributed by the Facility Managers and the completed questionnaires were placed in a clearly marked, sealed box by the nurses themselves. Respondents were given one week to complete their questionnaires and hand them back, after which the questionnaires were collected. A courier was utilized for two of the day clinics which were situated in areas that were difficult to access.

Data Analysis

Upon completion of the data collection process, data analysis was conducted using the statistical analysis package STATISTICA (version 7.0). Statistical analyses were conducted in order to reduce sample data to convenient summaries which allowed for easier interpretation and hence understanding of phenomena (Howell, 1995; Neuman, 1997). Data were graphically presented in the form of tables and histograms. In addition to the statistical analyses, thematic analysis was used to analyse the open-ended question that was included at the end of the questionnaire. All survey data was captured onto a spreadsheet, thereafter the data was cleaned whereby the researcher checked for incomplete, inaccurate or inconsistent responses. The response rate was 55% as 420 surveys were distributed and 230 were completed and returned.

Missing data.

Prior to conducting the statistical analyses, case wise deletion of missing data was employed to exclude any responses in the sample who omitted items. This was done to ensure that the most accurate sample would be used for the statistical analyses. The number of deleted cases was 86, leaving the remaining workable sample at N=144.

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Prior to examination of quantitative data the data was systematically reorganised and coded (Neuman, 1997) whereby numerical values were assigned to responses such that answers could be analysed (Churchill, 1995).

Reliability and item analysis techniques.

The first phase of the data analysis comprised testing the reliabilities of the six scales in the questionnaire. All scales were assessed using Cronbach's Alpha which was followed by the verification of factor structures for the six scales that comprised the role stress construct. Exploratory Factor Analysis was conducted for each scale in order to determine their underlying dimensions and the items that loaded on more than one factor were deleted (Howell, 1995; Terre Blanche & Durrheim, 1999). The Role Overload scale was removed as the items cross loaded on three of the scales.

Descriptive statistics.

Once scale reliability was determined, descriptive statistics were conducted upon the demographic variables in order to describe the characteristics of the sample. Furthermore descriptive statistics were performed on the five remaining scales in order to describe the response patterns to the role stress scales.

Inferential statistics.

Based on the modified scales, inferential statistics were conducted which enabled the researcher to make inferences about the data set. Included in the analysis was the use of t-tests for independent samples, in addition to ANOVA and correlation analysis of the variables identified as important to the research hypothesis. The penultimate stage of the data analysis comprised multiple regression analysis. Multiple regression was conducted in order to explain the variance in nurse absenteeism (the dependent variable) from knowledge of one or more of the independent variables in the research question (Howell, 1995).

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Thematic analysis.

The final stage of the analysis entailed analysis of the open-ended question through the use of thematic analysis. This technique enabled the researcher to extract themes which arose from qualitative data. Themes are defined as units derived from patterns such as 'vocabulary, recurring activities, meanings and feelings' (Taylor & Bogdan, 1989, p. 131). Themes pull together fragments of ideas or experiences which are often meaningless when viewed alone (Leininger, 1985).

Each answer was read several times and potential themes that arose were recorded on a separate document using different coloured markers. Nine key themes emerged that described the essence of the data (Smith, 1995). The classification of the data into themes enabled the researcher to draw valid inferences from the data.

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Chapter summary

This chapter has presented the research method that was followed throughout this current study. Initially the research design and paradigm were discussed, followed by a discussion of the quantitative research tool that was utilized in this study namely the survey questionnaire. The measurement instrument was then presented, followed by a discussion around the sample method, procedure and description. The method of data collection was then explored and thereafter the data analysis techniques were presented. Having discussed the research method, the following chapter will present the results that emerged from the research process.

Chapter 4

Results

Introduction

The following chapter presents the results of the research which have been organised according to six primary sections. The first section focuses on the results of the factor analysis and thereafter the results of the reliability and item analysis will be presented. The next section depicts the descriptive statistics that were performed on the five role stress scales in addition to the three outcome variables. The sections which follow present the results from the data exploration which entailed the use of t-tests for independent samples, ANOVA, correlation analysis in addition to multiple regression analysis. The final section of this chapter presents the results of the thematic analysis that was conducted to analyse the responses to the open-ended question.

Results are graphically presented using tables and histograms. Statistical analyses were conducted using the statistical analysis package STATISTICA (version 7.0).

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Section 1: Factor Analysis

Principle Axis factor analysis was carried out to determine if each of the items for the six different role stress constructs loaded satisfactorily on different scales. The factor analysis was run five times to ensure that the scales were completely cleaned and all items that loaded unsatisfactorily were removed. The final factor analysis, at the .5 significance level, revealed that five out of the six scales loaded satisfactorily on their respective factors. The Role Overload (RO) scale cross-loaded with three items in the other scales, thus it was eliminated.

The Resource Scarcity (RS) scale proved to be the strongest scale as all five factors loaded well. The Skills Inadequacy (SI) scale comprised three items, as items 1 and 5 were removed. The Role Ambiguity (RA) scale comprised four items, as item 2 was

removed, whilst the Role Conflict (RC) scale also comprised four remaining items, as item 1 was removed. Furthermore, the Constant Change (CC) scale was also reduced to four items, as item 5 was removed. The remaining scale items were used to create the five sum scales which were the basis of all the statistical analyses conducted.

Table 1.
Results from Principal Axis Factor Analysis

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
RS1	0.799873*	0.109722	0.170255	0.102262	0.114343
RS2	0.801518*	0.084335	0.150866	0.075190	0.060672
RS3	0.745681*	0.184090	0.162396	0.076576	0.191352
RS4	0.730110*	0.147894	0.129519	0.075463	0.296541
RS5	0.627906*	0.216587	0.193074	0.141191	0.311900
SI2	0.091119	-0.000732	0.128484	0.834158*	0.091380
SI3	0.038394	0.238856	-0.051412	0.672195*	0.130046
SI4	0.191663	0.267843	0.170308	0.619436*	0.031874
RA1	0.280574	0.564011*	0.231482	0.263716	0.268002
RA3	0.194712	0.795985*	0.193669	0.225888	0.187329
RA4	0.115749	0.866706*	0.208216	0.133749	0.182213
RA5	0.199657	0.844617*	0.243438	0.123599	0.200162
RC2	0.318995	0.192356	0.264013	0.065133	0.588215*
RC3	0.256322	0.215426	0.236657	0.154166	0.734702*
RC4	0.132413	0.144464	0.192491	0.023821	0.728578*
RC5	0.185832	0.180838	0.233868	0.158207	0.745288*
CC1	0.185391	0.249384	0.741862*	0.080977	0.322525
CC2	0.214982	0.200875	0.747271*	0.094340	0.334269
CC3	0.144925	0.233726	0.857272*	0.052426	0.152867
CC4	0.250556	0.127224	0.597242*	0.105322	0.180504
Expl.Var	3.365898	2.977212	2.791880	1.815614	2.688823
Prp.Totl	0.168295	0.148861	0.139594	0.090781	0.134441

Note. *N* = 119. **Marked (*) loadings significant at p<0.05. RS=Resource Scarcity SI= Skills Inadequacy RA=Role Ambiguity, RC=Role Conflict, CC=Constant Change.**

Upon examination of the Eigenvalues it was evident that the Resource Scarcity (RS) scale was by far the most dominant Eigenvalue, as it explained five times as much of the variance in the scores than the rest of the sum scales.

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Section 2: Reliability and Item Analysis

Prior to conducting the statistical analyses the reliability of the five sum scales was assessed by calculating the Cronbach Alpha values for each scale. This analysis was intended to prove that each of the five sum scales measured the construct that they intended to measure i.e. displayed internal consistency. Table 2 depicts the reliabilities of the scales in this current study, all of which were above .70. This indicates that all five scales used in this research were adequately reliable and internally consistent.

Table 2.
Reliabilities of Scales in Current Study

Scale Name	Valid N	Cronbach Alpha
Resource Scarcity (RS)	212	0.89
Skills Inadequacy (SI)	217	0.77
Role Ambiguity (RA)	221	0.91
Role Conflict (RC)	202	0.88
Constant Change (CC)	217	0.89

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No items needed to be deleted in order to improve reliability (Cronbach Alpha). The role ambiguity scale was the most well constructed scale as it displayed the highest Cronbach Alpha. However all of the scales displayed high reliability and item variance.

While additional items were included, the high Cronbach Alpha values for the role ambiguity, role conflict and resource scarcity scales were consistent with the reliability values of the existing scales from which they were adapted namely Rizzo et al. (1970), Caplan et al. (1975) and Bagraim (2005). Furthermore these reliability values were found to be consistent with previous research by Jackson and Schuler (1985) and Hemmingway and Smith (1999).

Section 3: Descriptive Statistics

Table 3.
Response Patterns to the Five Role Stress Scales

Scale	Valid N	Mean	Median	Mode	Variance	Std. Dev.
RA Sum Scale	221	2.56	2.25	2.00	1.15	1.07
RC Sum Scale	202	2.97	2.80	2.00	1.077	1.04
CC Sum Scale	217	2.94	3.00	2.00	1.02	1.01
RS Sum Scale	212	3.37	3.40	4.00	1.05	1.02
SI Sum Scale	217	3.31	3.33	2.00	1.09	1.05

Note. **RA=Role Ambiguity, RC=Role Conflict, CC=Constant Change, RS=Resource Scarcity, SI= Skills Inadequacy.**

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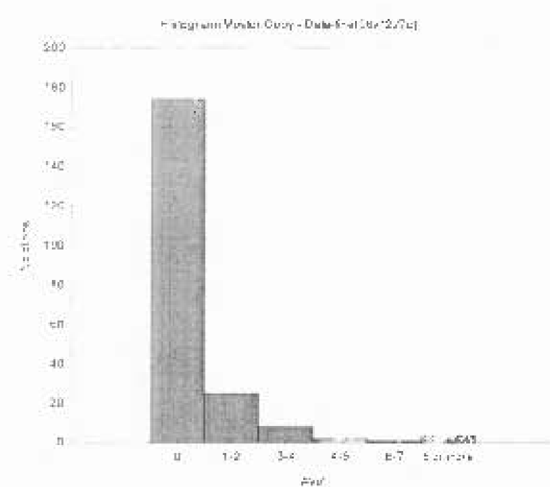
A mean score closer to 4 signified that the average response indicated agreement with the majority of scale items, while a mean score closer to 1 signified an average response of disagreement with the scale items. The mode for the Resource Scarcity (RS) scale was 4, corresponding to the 'agree' response on the five point Likert scale. This indicates that a large segment of the respondents agreed with the items relating to resource scarcity. The mode for the Role Ambiguity (RA) scale, the Role Conflict (RC) scale, the Constant Change (CC) scale and the Skills Inadequacy (SI) scale was 2, indicating that 'disagree' was the most popular response to the scale items.

Table 4.
Descriptive Statistics for Three Outcome Variables

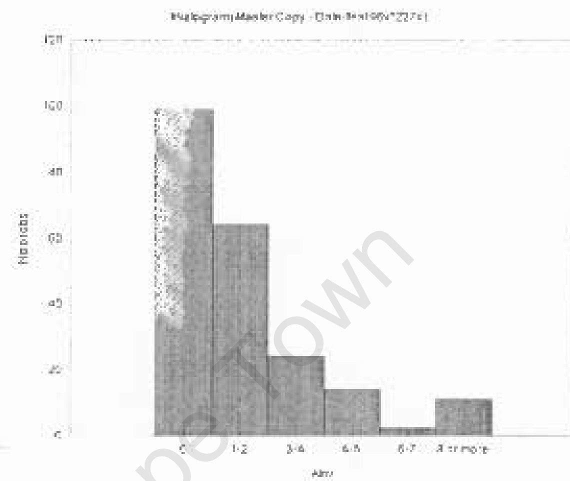
Variable	Valid N	Mean	Median	Variance	Std. Dev.
ADay	215	1.29	1.00	2.19	1.48
AInv	214	1.01	1.00	1.75	1.32
AVol	214	0.33	0.00	0.78	0.89

Note. **ADay =Number of days absent (absence frequency), AInv=Involuntary absence, AVol= Voluntary absence.**

The following histograms illustrate the response patterns, to two of the outcome variables:



Histogram representing Voluntary Absenteeism



Histogram representing Involuntary Absenteeism

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The first histogram illustrates that the majority of the sample (77%) of nurses perceived themselves to rarely be absent from work voluntarily. The second histogram illustrates that 28% of the sample indicated being absent for one to two days (within a five month period) due to reasons beyond their control and 10% stated that they were absent for three to four days due to reasons beyond their control.

Section 4: Data Exploration

The five scales represented the independent variables (IV's) which for the purpose of this research were intended to predict the three outcome variables (DV's) namely voluntary absenteeism (Avol), involuntary absenteeism (AInvol) and absence frequency (ADay). Prior to embarking upon the statistical analyses, these three outcome variables were selected from the eleven absenteeism dimensions in the questionnaire. The researcher was guided by the literature in this respect, as these were the most prominent areas of absenteeism which have been researched in relation to the role stress constructs in this research. Therefore, the researcher explored the data using t-tests, ANOVA and correlation analysis to determine whether any relationships existed between the

independent variables (sum scales) and the three outcome variables and the extent of such relationships.

T-tests for independent samples by grouping.

T-tests for independent samples by grouping were carried out to determine if there were any significant mean differences between the sum scales (RS, SI, RA, RC, CC) as well as the outcome variables when compared with the demographic data namely gender and marital status.

One significant difference was determined in the response for Role Ambiguity (RA) for the two marital status groupings (N=200). The computed T value with 198 degrees of freedom was 2.46 with a p value of 0.014. Therefore nurses who were single displayed considerably higher degrees of role ambiguity than those who were married. A further significant mean difference was detected when comparing the Constant Change (CC) scale with marital status (N=198). The computed T value with 196 degrees of freedom was 2.64 with a p value of 0.008. Thus nurses who were single displayed significantly higher perceptions of constant change than their married colleagues.

No significant gender differences were detected for the sum scales. Furthermore, no significant mean differences were detected when comparing the absenteeism variables (outcome variables) with gender and marital status. Therefore, contrary to what was expected, neither gender nor marital status was associated with the three outcome variables and thus it was not necessary to use them as control variables.

Analysis of variance (ANOVA).

Analysis of variance was carried out for the categorical variables. The researcher wished to explore whether any differences existed between occupational level, race and the three absenteeism variables. Furthermore, with regard to the sum scales, the researcher wished to determine whether differences existed between race and the sum scales and

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occupational levels and the sum scales. Prior to the analysis, it was determined that the data satisfied the requirements of both homogeneity and normality prior to the ANOVA calculations.

When comparing occupational level and the absenteeism variables, no significant differences were found between these groups. The same was true for the comparison between occupational levels and race.

However, a comparison of the differences between occupational level and the sum scale variables yielded three significant mean differences. Perception of resource scarcity was found to differ between the various occupational levels. The computed F value with 5 degrees of freedom was 2.48 with a p value of 0.03. Professional Nurses (PN's) displayed higher amounts of resource scarcity concern than Enrolled Nurses (EN's) and Enrolled Nurse Assistants (ENA's). Differences were also detected for the Skills Inadequacy (SI) scale when compared to the various occupational levels. The computed F value with 5 degrees of freedom was 2.62 with a p value of 0.03. Professional Nurses (PN's) appeared to display greater concern about skills inadequacy than Chief Professional Nurses (CPN's).

Lastly, differences were detected when comparing the Role Conflict (RC) scale to the various occupational levels. The computed F value with 5 degrees of freedom was 2.43 with a p value of 0.04. Professional Nurses (PN's) displayed the highest level of role conflict, followed by the Chief Professional Nurses (CPN's) and the Senior Professional Nurses (SPN's). Therefore occupational level seemed to have a significant impact on the sum scale variables.

Further significant differences were determined when comparing race and the five sum scale variables. No race effect was detected for the Skills Inadequacy (SI) scale, the Resource Scarcity (RS) scale or the Constant Change (CC) scale. However with regards to the Role Ambiguity (RA) scale, White nurses tended to display higher levels of role ambiguity than nurses from the other race groups. The computed F value with 3 degrees

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of freedom was 2.68 with a p value of 0.05. A further race effect was determined for the Role Conflict (RC) scale whereby a significant difference was detected between White and Black nurses, with White nurses displaying higher levels of role conflict than Black nurses. The computed F value with 3 degrees of freedom was 2.64 with a p value of 0.05.

Correlation analysis.

The purpose of the Correlation Analysis was twofold. Firstly, it was conducted in order to determine whether any relationship existed between the five sum scales and the three outcome variables. Its second purpose was to correlate the five sum scales with each other to detect possible problems of Multicolinearity. A sample of N=119 and a significance level of $p \leq 0.05$ were utilised for the calculations. Table 5 presents the correlation matrix for the sum scales and the three absenteeism outcome variables.

Table 5.
Correlations between Sum Scales and Outcome Variables

Independent Variables			Absenteeism Variables		
	M	*SD*	ADay	AInv	AVol
RA Sum Scale	2.56	1.07	0.01	0.09	0.02
RC Sum Scale	2.97	1.04	0.10	0.15	0.04
CC Sum Scale	2.94	1.01	0.10	0.17	0.01
RS Sum Scale	3.37	1.02	-0.03	0.04	0.22*
SI Sum Scale	3.31	1.05	0.02	-0.01	-0.11

Note. *N* = 119. **Marked (*) value significant at p<0.05**

With regards to the three outcome variables namely ADay, AInvol and AVol, the voluntary absenteeism variable was found to have a significant positive correlation with the Resource Scarcity (RS) scale displaying a correlation of ($r = 0.22$, $p<0.05$). No other significant correlations were detected.

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Table 6.
Correlations among Sum Scales

Variable	*M*	*SD*	Sum Scale SI	Sum Scale RA	Sum Scale RC	Sum Scale CC	Sum Scale RS
Sum Scale SI	3.31	1.05					
Sum Scale RA	2.56	1.07	0.43				
Sum Scale RC	2.97	1.04	0.29	0.52			
Sum Scale CC	2.94	1.01	0.27	0.54	0.58		
Sum Scale RS	3.37	1.02	0.29	0.46	0.52	0.48	-

Note. **SI= Skills Inadequacy, RA=Role Ambiguity, RC=Role Conflict, CC=Constant Change, RS=Resource Scarcity.**

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Table 6 indicates that the correlations between the sum scales ranged from .27 to .58. While it is arguable that .58 is a relatively high correlation, there is no indication of serious co-linearity as there are no correlations of .8 or .9 which would be regarded as problematic.

Correlation analysis was also carried out for the two continuous variables namely age and organisational tenure to determine whether there was any significant relationship between these variables and the three outcome variables as well as between the five sum scales. No significant relationships were detected.

Section 5: Multiple Regression Analysis

Initially a separate Multiple Regression model was built using only the five sum scales (independent variables) and each of the three outcome variables, the justification being that the various control variables did not appear to be associated with the outcomes. This analysis was performed on a sample of N = 172. One significant result was detected in the model testing Absence Frequency (ADay) with the sum scales, whereby the Constant Change (CC) scale was significant with a p value of virtually 0.05.

Thereafter, to double check this, the control variables namely age, race, marital status and occupational tenure were added to the model. No significant results were detected for two of the outcome variables namely voluntary absenteeism (AVol) and Involuntary Absenteeism (AInvol). However, for Absence frequency (ADay), the result was that one of the control variables namely marital status entered the model ($\beta = 0.33$, $p<0.05$) and also resulted in the Resource Scarcity (RS) scale becoming significant at the 10% level ($\beta = -0.22$, $p<0.10$).

Therefore Constant Change (CC) was the most significant predictor of absence frequency at 5% significance and Resource Scarcity (RS) was the second most significant predictor of absence frequency (ADay) at 10% significance. The final Multiple Regression model (see table 7) has an R^2 of 0.66 and hence only explains 6.6% of the variability in absence frequency (Aday). This indicates that Constant Change and Resource Scarcity are small, yet significant predictors of absence frequency amongst public sector nurses, explaining 6.6% of the variability in the frequency of nurse absenteeism.

Table 7.
Multiple regression model: Absence frequency

	Beta	Std.Err.	B	Std.Err.	t(165)	p-level
Predictor						
MarSts2	0.16	0.08	0.33	0.16	2.08	0.04
Sum. Scale CC	0.19	0.09	0.30	0.14	2.03	0.04
Sum. Scale RS	-0.15	0.09	-0.22	0.13	-1.68	0.09
$R^2 =$ .66						
F = 1.93						

Note: N = 172. MarSts refers to marital status. CC=Constant Change, RS=Resource Scarcity.

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Section 6: Thematic Analysis

Responses to the open-ended question were obtained from a total of 102 out of the 230 completed surveys. Thematic analysis was utilised to extract the predominant themes that emerged from the data (Taylor & Bogdan, 1989). Nine central themes were detected and further analysis indicated that the work overload theme was the most prominent, with 57% of comments pertaining to it (Smith, 1995). The least prominent theme was that of skills inadequacy which only received attention from six respondents.

The nine themes which emerged from the data were as follows: Work overload and pressure (i.e. being continually understaffed, having to work overtime); Resource scarcity (lack of equipment, broken and outdated machinery), Dissatisfaction with salaries particularly taking into account the conditions under which they work; Lack of support from top management (no support or recognition) in addition to a lack of respect from the general public; Feeling unsafe in their working environments (due to diseases like HIV and AIDS and violence from public); Role Conflict (i.e. having to work outside of their scope of practice, their abilities and skills being abused as well as struggling to balance work and family life); General interest in and love for the nursing profession which is tainted by other factors.

The breakdown of themes accompanied by the total number of respondents per theme is presented in table 8. A sample of the quotations which capture the essence of each theme will be provided in the discussion chapter, when the results of the current research will be integrated into meaningful information.

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Table 8.
Thematic analysis of open-ended question

Themes	Number of Comments Made	Percentage of responses
Work overload	58	57%
Role conflict	14	14%
Resource scarcity (equipment/facilities)	31	30%
Dissatisfaction with salaries	53	52%
Lack of support from top management	45	44%
lack of respect from general public	26	25%
Feeling unsafe in their working environments	13	13%
Skills inadequacy	6	1%
General interest in and love for the nursing profession but tainted	26	25%
Number of Surveys with Comments	**102**	

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Chapter summary

This chapter has presented the results of the current research which were discussed in six primary sections, determined largely by the statistical analyses conducted. Initially the results of the factor analysis were presented, followed by the results of the reliability and item analysis and thereafter, the descriptive statistics were presented. The sections which followed were the data exploration which presented the results of the t-tests for independent samples, ANOVA and correlation analysis followed by the results of the multiple regression analysis. The chapter concluded with the results of the thematic analysis. The following chapter will discuss the research findings whilst integrating them with relevant literature.

Chapter 5
Discussion

Introduction

This chapter provides a detailed discussion and analysis of the research findings. This will be achieved by analysing the findings using relevant literature and previous studies that have been undertaken in the area of public sector nurse absenteeism. The researcher set out to explore the possible association between role stress and the frequency and nature of absenteeism among nurses in the South African public health sector. Two weak associations were found which will be examined and discussed in detail. In addition even though the role stress constructs were not found to be strongly associated with the absenteeism outcome variables, role stress amongst public sector nurses will still be discussed. Important differences moderated by certain demographic factors were found in terms of how the nurses experienced role stress. While not directly linked to absenteeism these differences are noteworthy as they may be meaningful to the organisation in terms of developing a comprehensive understanding of nurses experiences of role stress at work.

This chapter will commence with a discussion pertaining to possible explanations for the absence of truly significant findings. Issues pertaining to the measurement of absenteeism using self-report data in addition to an alternative theoretical dimension are highlighted as two possible reasons which could account for weak findings. The next section will discuss predictors of public sector nurse absenteeism and the theoretical relationship between role stress and absenteeism constructs as identified in the literature. The discussion shall then progress to examining the implications of the study's findings for the organisation in question followed by recommendations for nurse management within the organisation. The chapter will conclude by highlighting the limitations of this research in addition to making recommendations for future research.

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In certain cases where the nurses have responded to the open-ended question, selected responses have been incorporated into the discussion in the form of direct quotations. The quotations that have been chosen illustrate the nurse's feelings and emotions which shed further light on the research findings.

Possible Explanations for Weak Findings

In analysing the results one can propose that there are two possible reasons for insignificant findings. The first could relate to the difficulties surrounding measurement of the absenteeism construct (Breaugh, 1981). Secondly, insignificant results may be attributed to a further underlying theoretical dimension which was not included in the theoretical model on which the research question was based. Furnham and Walsh (1991) emphasised however, that unusual findings are not uncommon when studying a construct such as absenteeism, which seems to stem from a variety of causes.

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Difficulties Surrounding Measurement of the Absenteeism Construct

As illustrated in the literature review, measurement of the absenteeism construct is an area surrounded by a large amount of controversy and debate. Much of this debate can be attributed to a lack of a precise and accurate definition of absenteeism (Goodman et al., 1984; Chaudhury & Ignace, 1992; Buchan & Seccombe, 1995; Tauton et al., 1995; Nel et al., 2004; Bates, 2004; Dolezalek, 2005; Melchior et al., 2005; Cockburn, 2005).

From an organisational standpoint, keeping comprehensive and organised records of absenteeism is one of the most accurate ways for an organisation to conceptualise and measure the extent of absenteeism within its workforce (Harter, 2001). From a researchers perspective the use of such records is beneficial however, there is substantial research which suggests that the self-report technique of measuring absenteeism can be a useful if these records are unavailable (Johns, 1994; Cohen, 1998). With regard to the current research, although access to the organisation's absenteeism records was possible, these records had not been uniformly recorded and they were as such unreliable and

unusable as they differed across the various facilities. Thus the self-report measure of data collection was selected. There are both positive and negative aspects related to the use of the self-report instrument.

The limitations associated with self report data include the fact that although anonymous and confidential, self-report measures may not provide accurate data, particularly when dealing with a sensitive subject such as an employee's frequency of absenteeism. Respondents may not trust in the assurance of anonymity and confidentiality. Furthermore the results may be biased due to respondents over or under reporting of absence. Therefore while absenteeism was identified by the organisation as a fundamental problem amongst its nurses, it is possible that the nurses were less likely to admit to voluntary absenteeism in a self-report measure. This is seen by 77% of the nursing sample denying engagement in any form of absent behaviour. It is thus possible that the majority of the nurses provided socially desirable responses as opposed to true responses.

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The findings of this research may therefore support the arguments of Johns (1994) and Shiu (1998) who emphasised potential draw backs related to the use of self-report measures. In line with the argument of Johns (1994), the nurses may have tended to underestimate their own absenteeism and overestimate the absenteeism of their co-workers.

Having said this however, there is research which indicates that the self-report measure is a useful method of data collection, despite its limitations. Johns (1994) found that the self-report measure could be a reasonably valid measure of actual absenteeism. Similarly Cohen (1998) who relied predominantly on self-report measures in his research, found the self-report measure provided useful findings with regards to predicting work outcomes in the nursing profession.

In light of the research question and respondent characteristics, the self-report measure was selected for the current research. Furthermore the choice of the self-report measure

was informed by the researchers' inability to access accurate and standardised absenteeism records from the organisation. The self-report measure was therefore considered to be the best option to utilise for the current research. The questions included in the instrument adequately covered the full complexities of the absenteeism construct and the scales included in the measure were statistically proven to be reliable.

The second possible reason for weak results was the possibility that the scales in the survey did not tap into an additional theoretical dimension which could account for absenteeism amongst public sector nurses in South Africa. This idea will now be explored in greater detail.

An Additional Theoretical Dimension

Much empirical research has been conducted into the theoretical relationship between role stress and absenteeism in the nursing context (Benne & Bennis, 1959; Corwin, 1961; McLemore & Hill, 1965; Luthans, 1992; Newstrom & Davis, 1993; Rees, 1995; Dyer & Quine, 1998; Newman & Maylor, 2002; Ledgister, 2003; Elloker, 2003 Kirpal, 2004). The current research focused on six primary role stress constructs which emerged from previous literature, in addition to those which the organisation felt were likely contributing factors to absenteeism amongst its nurses.

Having accounted for possible measurement problems, the second probable reason for weak findings is that the role stress construct is embedded in another underlying theoretical dimension which the survey questionnaire did not explore.

The absence of a theoretical relationship between role stress and absenteeism is highly improbable. This association has received much attention in previous empirical research and literature and has been empirically proven to exist (Rees, 1995; Dyer & Quine, 1998; Newman & Maylor, 2002; Ledgister, 2003; Elloker, 2003; Kirpal, 2004). Role stress with all its composite factors and dimensions has therefore been theoretically linked to absenteeism. This premise, in addition to that of the members of the organisation who felt

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strongly that the two constructs were linked, formed the basis of this research endeavour. However apart from measurement error, it is possible that the scales employed did not tap into an additional underlying dimension which could account for absenteeism amongst public sector nurses in South Africa.

It was the researcher's feeling that insight into this additional theoretical dimension could be obtained from an examination of the nurse's responses to the open-ended question in the survey. Their responses included issues of concern which they experienced at work, many of which went beyond the areas covered in the questionnaire. An examination of the additional issues highlighted by the nurses provided an indication of the dimensions which were of importance to the nurses but which were not covered in the research questionnaire.

In addition to the six role stress constructs covered, a further theme pertaining to job dissatisfaction emerged from the open-ended responses. Five areas of concern were highlighted by respondents. These included dissatisfaction with salaries; dissatisfaction with regard to working conditions; lack of support and recognition received from top management; lack of respect shown by the general public; concerns about safety and security in the working environment due to diseases like HIV and AIDS as well as violence.

All five of these issues contain an element of dissatisfaction with their job whether it is as a result of poor working conditions or inadequate supervisory support. This is of importance as there is extensive research which makes mention of the relationship between role stress and job satisfaction (Bacharach et al. 1991; Matrunola, 1996; Benson & Leona, 2002; Newman & Maylor, 2002; Farrell & Cubit, 2005). Siu (2002) for example, concluded from her research that psychological distress could be an antecedent of job dissatisfaction and job dissatisfaction could be an antecedent of absenteeism. Furthermore, in their research on factors influencing turnover and absence of nurses, Borda and Norman (1997) determined that job satisfaction had a likely influence on nurse absence and intention to remain in the organisation.

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By including a scale that measured job satisfaction as an additional role stress construct, a more coherent relationship could have been found. It is therefore recommended that in future research, prior to finalising the survey, input is obtained from the nurses with regard to the relevance of this theoretical dimension. While further exploration into this potential relationship between absenteeism and job satisfaction was beyond the scope of this research, it is an area to explore in future research. Addition of this construct may strengthen the research tool, thereby impacting on the accuracy of the results obtained.

Predictors of Public Sector Nurse Absenteeism

The research findings indicate that out of all of the predictor variables included in the questionnaire, constant change and resource scarcity were the only two weak, yet significant predictors of the frequency of nurse absenteeism. In contrast to the majority of previous research in the area of public sector nurse absenteeism, the current research findings do not support the initial assumption that the increase in unscheduled absenteeism amongst nurses in the organisation could be attributed to the aforementioned role stress constructs.

The multiple regression model in its entirety only explained 6.6% of the variability in the frequency of nurse absence. Hence the predictive value of these two role stress constructs on the frequency of public sector nurse absenteeism was not practically significant. The constant change and resource scarcity constructs could not therefore be regarded as strong evidence explaining the frequency of nurse absenteeism in the public sector. These results may indicate that either a further underlying dimension exists in which the role stress construct is rooted, or the manner in which absenteeism was measured in the survey could be improved upon in future research. The two findings will nevertheless be explored in detail in relation to previous literature and research.

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Resource Scarcity

While not a practically significant predictor of public sector nurse absenteeism, resource scarcity displayed a significant positive correlation with voluntary absenteeism. Although it was expected that this correlation would be stronger, the direction of the correlate was anticipated. This is due to the fact that in previous studies of nurses, a lack of adequate resources to do one's job has been correlated with a desire to be absent from work (Ootim, 2002; Eriksen et al., 2003; Johnson et al., 2003; Verhaeghe et al., 2003).

Moreover resource scarcity seemed to be the most meaningful topic to the nurses as it was the only scale to which nearly the entire sample of nurses expressed agreement. Furthermore it explained five times as much of the variance in the scores than the rest of the role stress constructs. This supports the writings of Banda and Simuknoda (1994); Edgington, (2000), Ootim, (2002); Eriksen et al., (2003); Johnson et al., (2003); Verhaeghe et al., (2003), Farrell and Cubit (2005) and Gooding (2005) all of whom emphasised the importance and the consequences of resource scarcity in the nursing profession.

As expected, resource scarcity was raised as an issue of concern amongst the nurses in the sample. Comments from the nurses which encapsulate this concern included: ***"We are working with life and death but our equipment is old and malfunctioning".*** Another nurse commented: ***"Inadequate resources are another major problem because it makes me unable to do my job well".*** The 2004 report from the South African nurses union, DENOSA further illustrated this point as it was emphasised in the report that the facilities and equipment in public sector hospitals, particularly in the rural areas were often insufficient, out of order, or in short supply.

These findings corroborate the research findings of Masilela et al. (2004) in terms of the inadequacy of resources in these institutions which affect the way in which nurses conduct their jobs. In addition while the findings of Masilela et al. (2004) focused on inadequacy of equipment, staff shortages as well as inadequate transport systems, the

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findings of the current research point to the actual working conditions of the nurses as illustrated by a further selected quotation ***"There are no instruments and materials to work with. Equipment and machines break and take very long to be repaired. There are no forms or folders and our lockers and cupboards are falling apart. The hospital smells because there is no disinfectant and there are cockroaches, flies and rats running around".***

Constant Change

As was the case with resource scarcity, constant change was not a practically significant predictor of public sector nurse absenteeism in the current research. However the fact that constant change emerged as a weak yet significant predictor of public sector nurse absenteeism is of importance given the organisational context highlighted at the onset of the research. Considering the wide spread change occurring in this organisation and within the Department of Health as a whole, the researcher did however expect constant change to have far more predictive value with regard to absenteeism amongst nurses in the various day clinics than determined by this research.

These findings, while significantly weaker, corroborate the research of Apker (2004) who determined that inconsistency and turbulence in a nurses working environment contributed to increased anxiety and stress prompting them to leave their jobs or engage in absenteeism as a means of coping. This is precisely the situation which is occurring within the facilities that comprise the organisation in question in the current research as is evident by the following quotation: ***"The organisation has many new rules and changes every day and we nurses don't know which rules to now follow".***

Furthermore, the members of the organisation in the current research admitted that the communication strategies around these changes were poor which could be exacerbating the nurse's resistance to the changes. The new rules and organisational changes to which the aforementioned quotation refers continue to be imposed on the nurses without any input from the nurses and without their approval. If comfort zones are challenged and

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employees are not involved in the organisational change process, the result is a feeling of a loss of control and a sense of not being understood or heard (Van Loon, 2001; Stanley et al., 2005). As a result nurses may be inclined to engage in absence behaviour as this is an area over which they feel they have direct control (Apker, 2004). While this was not captured in this current study, the theoretical link between organisational change and absenteeism has been theoretically established.

These findings highlight the importance of communication in managing organisational change. Communication is an important tool which, if utilised correctly, can assist an organisation in managing change effectively (Laframboise, Nelson & Schmaltz, 2003; Kuchi, 2006). The use of effective, varied and ongoing communication tools is a primary means of managing change effectively (Laframboise et. al., 2003; Elving, 2005). Through continuous communication, employee resistance can be eroded and the psychological ramifications of change can be effectively handled and minimised (Elving, 2005). Communication both in terms of the proposed changes and the nurse's feelings regarding these changes is therefore a primary area in which the organisation in question can improve.

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The findings of the current research support those of Siu (2002) who determined that organisational climate had a significant impact on nurse absenteeism, particularly when constant change was involved. As previously stated, the organisation in question in the current research is characterised by large scale change. The findings of Siu (2002) are particularly relevant to the current research as the research was conducted in two hospital settings which were characterised by large scale change. These changes were as a result of extensive amendments to the country's health care system, as is the case in the current research.

Furthermore these findings also corroborate those of Apker (2004) who determined that nurses whose work environments are turbulent and inconsistent may experience overwhelming levels of anxiety and stress prompting them to leave their jobs or engage in counterproductive work behaviour such as absenteeism. These findings are pertinent to

the current research as a result of the large scale change occurring in the South African Health Care Delivery System.

While both constant change and resource scarcity were expected to be stronger predictors of absence frequency amongst public sector nurses, they could still be considered important factors in understanding the problem of absenteeism facing the organisation.

The researcher chose to examine the data in greater detail to determine whether any additional relationships between the variables were evident. The following section presents some noteworthy differences which were found in relation to the impact of various demographic variables on the degree of role stress experienced by the nurses in the sample.

Factors which Influence the Degree of Role Stress Experienced

Interesting differences were detected in terms of the impact of certain demographic factors on the degree of role stress experienced by the nurses. However none of the demographic variables included in the research had any noteworthy influence on the prediction of the absenteeism outcome variables. While not directly associated with absenteeism these differences are noteworthy as they may be of use to the organisation in terms of developing a comprehensive understanding of nurses experiences of role stress at work. Such insight could assist the organisation to establish appropriate interventions to address these issues. This section will therefore report on the important differences in the demographic and role stress data that stood out as significant in the results chapter.

Occupational Level and Role Stress

As was expected, occupational level was found to play a role in the degree of role stress experienced by the nurses in the sample. Professional Nurses displayed higher amounts of resource scarcity concern in addition to greater concern about skills inadequacy than the nurses at other occupational levels. In addition, Professional Nurses displayed the highest

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level of role conflict, followed by Chief Professional Nurses and Senior Professional Nurses.

This result was expected as Chief Professional Nurses, Senior Professional Nurses and Professional Nurses can be considered more senior staff who take on greater levels of responsibility while the nursing assistants deal with the provision of basic care (Furnham & Walsh, 1991). It is therefore not surprising that the more senior nurses displayed greater frustration with resource scarcity and skills inadequacy, both of which directly impact on the degree to which they can do their job successfully. Furnham and Walsh (1991) determined that nurses with higher job grades experienced greater incongruence and more frustration than nurses in the lower job grades. This was confirmed in the current research.

Previous research such as that of Brief, Van Sell, Aldag and Melone (1979) focused on the role of the Registered Nurse and the stressors incumbent in such a position. However, no research was located that explored the differing degrees of role stress amongst the newly emerging categories of nurses in the South African context. It is noteworthy that role stress can be experienced as a result of job inexperience in the case of junior nurses or as a result of stress incumbent in a senior nursing position. The fact that differences in perceived role stress between different nursing occupational levels have been established in the current research suggests that future research should be encouraged to explore this area in more detail.

Organisational Tenure and Role Stress

An unexpected finding was that organisational tenure had no effect on the frequency of nurse absence. This is in direct contrast to the research findings of Chan and Morrison (2000) as well as Buchan and Seccombe (1995) and Chaudhury and Ignace (1992) who determined that those with longer years of nursing experience were less likely to be absent from work.

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The researcher expected to find that nurses with long standing organisational service records would display significantly lowered absenteeism levels and be less likely to engage in voluntary absenteeism. However it is interesting to note that the mean length of service at the organisation was 10.14 years (SD = 8.7). This indicates that the nurses did not seem pressed to alter their work environments by leaving the organisation and finding work elsewhere.

Marital Status and Role Stress

As expected, the degree of role stress experienced by the nurses was impacted by their marital status. Nurses who were single displayed significantly higher degrees of role ambiguity than those who were married. Furthermore nurses who were single reported significantly higher perceptions of constant change than their married colleagues. These findings are in line with a large body of literature that describes greater difficulty and role stress at work amongst single people juggling a variety of roles, compared to those who are married (Bekker et al., 2005; Boyar, 2005).

The following quotation is an example of an extreme case in which one nurse emphasised the impact of work-related stress on her family life. She indicated that due to the stressors she experiences in her job, particularly in relation to overlapping of the scope of practice, this detracted from the amount of time she had for her family and marriage, resulting in divorce. She stated ***"We are being overloaded with work which is overlapping our scope of practice. This along with the staff shortages makes you forget about the important people in your life (your family) and some are divorced because they don't have enough time to spend with their families".***

On of the themes that emanated from the research was the nurses need for assistance in coping with psychological stress and development of personal coping mechanisms. This theme has emerged in other research projects where nurses experienced difficulty which they attributed to a lack of support in their working environments (Kirpal, 2004). "***Even if you feel burned out you think of your family, especially if you are the only one in the***

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family who is working... nurses like me need psychological help, we are very much neglected!"

Differential Experiences of Role Stress as Influenced by Race

Race was found to play a role in nurses' experience of role ambiguity in that White nurses tended to display higher levels of role ambiguity compared to nurses from the other race groups. Furthermore White nurses displayed higher levels of role conflict than Black nurses.

No previous research was located on the differences in nurse's experience of role stress in relation to race. However there have been studies which have examined cultural differences in relation to role stress amongst nurses in different countries (Bussing & Glasser, 1999; Shiu, 1998). The underlying issue of cultural diversity playing a role in nurse's perceptions of stress is of significance in the South African context. The multi-cultural nature of South African society and the variety of fundamental cultural differences between its citizens appears to be the reason for this finding. As such, it is not surprising that differences were detected amongst two prominent yet fundamentally different cultural groups of nurses. While further research is required to determine the exact nature of the differences in perception of nursing roles and their related stressors, this could prove a rich area to explore in future research on nurses in the South African public sector.

Implications and Recommendations for Nurse Management

This section attempts to link the findings of this study with organisational psychology concepts by highlighting the implications thereof for nurse management. It is important for the organisation in question to be aware of the aforementioned factors which influenced the degree of role stress experienced by the nurses. This information is valuable in that it can assist the organisation to understand the root causes of role stress

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amongst employees and can inform the development of appropriate interventions to address these issues.

By responding to the needs of nurses for example by implementing family friendly policies which would reduce the effects of work and role juggling, health care organisations can maintain a more satisfied workforce, retain nurses and decrease counterproductive workplace behaviour (Shiu, 1998). Management of nurse absence should include a proactive approach by identifying the underlying causes of absenteeism and implementing the appropriate intervention where necessary (Buchan & Seccombe, 1995; Reece, 2005). By working together with the nurses and developing jointly agreed upon procedures, the intervention is more likely to be effective. Ootim (2002) cautioned that a punitive, disciplinary approach may be more detrimental than effective.

The organisation could look towards implementing support systems for nurses to assist them in coping with the changes in their working environments. While there is an Employee Assistance Programme (EAP) in place in Plumstead's Lady Michaelis Office, it is difficult for nurses who are in district clinics far from the city for example in Khayalitsha and Mitchells Plain to access the EAP service due to travel constraints. Counsellors or a clinical psychologist who specialises in change management as well as stress management should be on hand and readily available for each facility.

This is reflected in the following quotation ***"The nurses are people with feelings and problems. We need someone we can talk to that will help relieve us from our work stress".*** Cooper, Sadri, Allison and Reynolds (1992) have shown in their research how the provision of a counselling service at work can dramatically reduce the amount of time lost as a result of sickness absence and improve self-reported psychological health of employees. The clinics and facilities which comprise the organisation in question could implement support systems to foster and develop the nurse's inherent love for their profession to promote higher levels of job satisfaction.

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Rees (1995) determined that despite the nurses in his research working under very high levels of pressure, they nevertheless derived the most job satisfaction from their work. The results of the thematic analysis of the open-ended question were in contrast to the aforementioned findings of Rees (1995) in that 25% of those nurses who commented, expressed a general interest in and love for the nursing profession however their job satisfaction was tainted by the working conditions and pressures under which they were operating. One nurse stated ***"I absolutely love working at the day clinic if it were not for the critical staff shortages, lack of equipment, negative staff attitudes and absent Facility Managers"***. There was however evidence of dedication and job satisfaction as embodied in the following quote: ***"I need to practice my profession with dignity. I will go on with the positive aspects and I hope to gain much more knowledge and experience. I want to grow emotionally and professionally in my profession"***.

A related topic which emerged from the results of the research was the nurse's feelings around the perceived low status of the nursing profession amongst the public as well as within the medical field. This corroborates the findings of Kirpal (2004) who found that the conflict that nurses' experienced between the immense responsibilities required in their job and the perceived lack of recognition for their work was a major factor which negatively affected the nurse's self esteem and occupational identity.

In accordance with the findings of Kirpal (2004), the nurses in the current research felt unappreciated by management and subordinated to doctors. In addition they felt that their comparatively low rate of remuneration perpetuated this feeling of subordination. This is highlighted in the following quote: ***"It will be appreciated by the nurses if the employer would show gratitude and appreciation for our hard work under difficult circumstances. The nursing profession is not recognised as a profession and no one understands the hardships we go through"***.

One nurse strongly emphasised the humiliation she felt as she stated that ***"The profession is not recognised by the government. We nurses can't even go on strike as we can't leave the patients alone. It is also humiliating working so hard for so little money"***.

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Many of the nurses in the current research associated this perceived lack of recognition and the related lowered remuneration as a primary reason behind nurses leaving the country. According to the respondents, nurses are searching for better paid nursing jobs in countries such as Hong Kong, the Middle East and France where the nursing profession is of an elevated status and receives financial rewards far in excess of South African nurses remuneration.

Furthermore, the nurses in the current research also felt unappreciated and often disrespected by the patients they treated. This finding parallels the findings of Verghaege et al. (2003) as well as Farrell and Cubit (2005) who determined that nurses were increasingly being exposed to assault and patient abuse in their daily work relations. ***"Patients tend to be verbally abusive and we have to just take it because the patient is always right".*** A further comment illustrates the nurses sense of being alone in this battle ***"We are being harassed and abused by the community and supervisors. The head of our department is always on their side and we have nobody to shield us".*** In accordance with the findings of Rowe and Sherlock (2005) the nurses in the current research expressed upset at the verbal abuse they experience by patients as well as their supervisors. This abuse impacts on their job satisfaction, leading to occupational burnout, which in turn results in increased levels of absenteeism.

Therefore efforts need to be made to raise the status of the nursing profession which, if not attended to, may have serious negative ramifications for the future attraction and retention of nursing personnel.

The following section will present the possible limitations to the research with specific reference to the cross sectional research design, sampling method, questionnaire design, self-report data, identification of role stress constructs in addition to the factor analyses conducted. Thereafter the focus will shift to recommendations for future research in the area of absenteeism amongst public sector nurses. In summation, the author will draw on key findings and recommendations to present the overall conclusion of the current research endeavour.

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Limitations of the Research

Cross Sectional Research

The study made use of a cross sectional research design that looked at the problem of absenteeism amongst nurses in the public sector at a particular point in time. Arguably a longitudinal study which measured the extent of absenteeism in relation to nurse's role stress over an extended period may have displayed findings which were more meaningful (Siu, 2002). Due to the time constraints of the current research, however, a longitudinal research design was not possible.

Sample Method

Non-probability sampling methods have the inherent limitation that sampling methods may be open to researcher subjectivity, thus limiting the sample from being representative. However, this study made use of convenience sampling as the total population of nurses in the Western Cape was not accessible to allow for a true random sampling method to be used.

A researcher must weigh up the advantages of convenience sampling against its disadvantages. Such disadvantages can include possible sampling bias, a less representative sample of the population, and limited generalizability of the results (Trochim, 2000). It can however be used provided its limitations are clearly understood and stated.

By selecting the sample from the population based on ease of availability or accessibility, the representativeness of the sample may be compromised (Mendenhall, 1998). However convenience samples can still provide useful information. Caution must however be taken when interpreting the findings from a convenience sample. The researcher must characterize how the sample would differ from an ideal sample that was randomly selected. In particular attention must be given to who might be left out of the sample or

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who might be underrepresented in the sample (Berg, 1998). Future research in this area can possibly look towards using a larger, random sample of nurses to produce generalisable results. Convenience sampling is however, often the only feasible one particularly for students who have restricted time and resources (Scheaffer, Mendenhall & Ott, 1995).

Questionnaire Design

The instructions on the questionnaire were in English, which may have disadvantaged certain groups of nurses whose first languages were Afrikaans and isiXhosa. English is however widely accepted as the first language in many health care establishments. Furthermore due to the time constraints of this research, translating the questionnaire would not have been feasible.

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Self-Report Data

While the use of self-report data is a popular method of obtaining information on employee absenteeism, the limitation inherent in self-report data is the tendency for respondents to give socially desirable responses and not be completely truthful in their responses (Kosslyn & Rosenberg, 2005). Therefore, the information on absenteeism levels obtained from respondents may be positively skewed. In particular, social desirability effects may have influenced the self-reported absenteeism data.

Identification of Role Stress Constructs

The choice of the role stress constructs included in the survey was informed by the literature and they were identified by the members of the organisation in question. However input on these constructs should possibly have been obtained from the staff themselves i.e. through the use of focus groups or in depth interviews. It is therefore possible that a role stress construct could have been overlooked, which may be an explanation for the weak results obtained in the research.

Factor Analyses and Proportion of Variance Explained

The results of the factor analyses revealed that very little of the total variance within the measurement models was explained, ranging between 1.8% and 3.3%. This is a fundamental limitation of this study and may explain the relatively small correlation coefficients that were obtained (all of which were below .4). The implications are that while weak relationships were detected, their practical usefulness for health care organisations is limited and interpretations of their practical significance must highlight this.

Recommendations for Future Research

Access to Organisational Absenteeism Records

It is recommended that future research into absenteeism amongst public sector nurses makes use of organisational absenteeism records that have been adequately recorded and accurately entered. This would enable the researcher to compare the data obtained from the self-report measure to the actual absenteeism records maintained by the organisation. In this manner a more accurate picture of the phenomenon can be determined.

Questionnaire Design

In terms of questionnaire design, it is recommended that the role overload scale is reconstructed and additional items are included which adequately measure the role overload dimension. Furthermore it would possibly be beneficial to have additional scales that measure other role stress dimensions in future research. Lastly in terms of the questionnaire design, the questionnaire should be translated into appropriate languages to cater for those respondents for whom English is not their first language.

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Empirical Research on Cultural Differences of South African Nurses

The findings of this research suggest that a need exists for additional empirical research into cultural differences amongst South African nurses and its impact on role stress. This research could focus on both role theory in general in addition to the nursing profession in particular.

Qualitative Approach

The rich qualitative data obtained from the open-ended question indicates that possibly a qualitative approach to this research would yield valuable in-depth results on the nurses perceptions and experiences of role stress and their inclination to be absent from work. Semi-structured interviews and focus groups may provide the appropriate platform for obtaining such results.

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Conclusion

After reviewing the latest literature around absenteeism and role stress amongst nurses who work in the public sector, the primary aim of this research was to examine the extent to which these constructs were related in the South African context. At the onset of the research, the organisation indicated that unscheduled absenteeism amongst the nursing staff was a primary concern for the majority of their affiliated public sector hospitals and clinics. The members of the organisation felt that the progressive increase in unscheduled absenteeism amongst the nursing staff was primarily attributable to six role stress constructs namely role overload, role conflict, role ambiguity, resource scarcity, skills inadequacy and constant change. The association between these constructs had been theoretically established in previous literature.

Despite empirical perceptions to the contrary, the findings from the current research indicated that the association between the aforementioned role stress constructs and absenteeism amongst public sector nurses was weak. Two of the role stress constructs namely constant change and resource scarcity were found to be weak yet significant

predictors of the frequency of nurse absenteeism. The remaining role stress constructs had no impact on absence frequency, voluntary or involuntary absence amongst nurses in the South African public sector. The researcher argued that there were two possible reasons for insignificant findings, namely that measurement error may have played a role in terms of using the self-report measurement tool to measure a sensitive topic like absenteeism. The second possible reason was that perhaps the scales employed did not tap into an additional underlying dimension which could account for absenteeism amongst public sector nurses in South Africa.

While the initial aims of the research were not achieved, the research findings did however point to some significant differences in the factors which influenced the nurse's perceptions and experiences of role stress. This information could prove valuable to the organisation in question in terms of developing appropriate interventions geared towards decreasing nurse absenteeism levels and improving the management of nurse absenteeism. By adopting a proactive approach and responding to the needs of nurses, the organisation can develop an effective support system which will act as a buffer to the role stress experienced by nurses. Furthermore by attempting to understand the stressors and addressing these through accessible and effective employee assistance programmes and interventions tailored specifically towards nurses, the nurse's desire to be absent and the need to engage in absenteeism as a means of coping is likely to diminish.

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References

Adams, A. & Bond, S. (2003). Staffing in acute hospital wards: the relationship between number of nurse and ward organizational environment. *Journal of Nursing Management, 11*, 287-292.

Aiken, L.H. & Sloane, D.M. (1997). Effects of organizational innovations in AIDS care on burnout among urban hospital nurses. *Work and Occupations, 24(4),* 453-477.

Alexopoulos, E. (2006). A comparative analysis of musculoskeletal disorders between Greek and Dutch nursing personnel. *International Archives of Occupational & Environmental Health, 79 (1),* 82-88.

Alexander, J.A. & Spradley, B.W. (2001). *Community health nursing: concepts and practice* (5th ed.). Philadelphia, PA: Williams and Wilkins.

Almost, J. (2006). Conflict within nursing work environments: concept analysis. *Journal of Advanced Nursing, 53(4),* 444-453.

Anderson, T. (2005). Employers miss standard measure for absences. *Employee Benefit News, 19(13),* 12-82.

Apker, J. (2004). Sensemaking of change in the managed care era: a case of hospital based- nurses. *Journal of Organizational Change Management, 17(2)*, 211-227.

Bacharach, S.B., Bamberger, P. & Conley, S. (1991). Work-home conflict among nurses and engineers: mediating the impact of role stress on burnout and satisfaction at work. *Journal of Organizational Behrvior, 12,* 39-53.

Backstrom, C.H. & Hursh-Cesar, G. (1981). *Survey research* (2nd ed.). New York: Wiley.

Bagraim, J.J. (2005). New measures of workplace attitudes: Scale development and construct validation. *Unpublished manuscript*. School of Management Studies, University of Cape Town.

University of Cape Town

Banda, E. & Simuknoda, H. (1994). The public private mix in the health care system in Malawi. *Health Policy and Planning, 9(1)*, 63-71.

Bates, S. (2004). Incidental absence not handled well. *HR Magazine, 49,* 129-132.

Baumgart, A.J. & Larsen, J. (1992). *Canadian nursing faces the future.* Canada: Mosby Year Book Inc.

Bekker, M.H.J., Croon, M.A. & Bressers, B. (2005). Childcare involvement, job characteristics, gender and work attitudes as predictors of emotional exhaustion and sickness absence. *Work and Stress, 19(3),* 221-237.

Bendix, S. (1989). Industrial relations in the new South Africa (3rd ed.). Cape Town: Juta and Co Ltd.

Benne, K.D. & Bennis, W. (1959). Role confusion and conflict in nursing: the role of the professional nurse. *American Journal of Nursing, 59,* 196.

Benson, Z. & Leona, R. (2002). Why nurses are calling in sick: The impact of health care restructuring. *Canadian Journal of Nursing Research, 33(4),* 89-107.

Berg, W. (1998). *Qualitative research methods for the social sciences.* Boston: Allyn and Bacon.

Booysen, F. (2005). Factors affecting absenteeism among nurses in public hospitals. *Unpublished manuscript.* University of the Freestate.

Borda, R.G. & Norman, I.J. (1997). Testing a model of absence and intent to stay in employment: a study of registered nurses in Malta. *International Journal of Nursing Studies, 34(5),* 375-384.

Bourque, L.B. & Fiedler, E.P. (1995). *How to conduct self-administered and mail surveys.* Thousand Oaks: Sage Publications

Boyar, S.L. (2005). The effects of work-family conflict and family work-conflict on non-attendance behaviours. *Journal of Business Research, 58(7),* 919-925.

University of Cape Town

Brannen, J. (1992). *Combining qualitative and quantitative approaches: an overview.* Brookfield: Ashgate.

Breaugh, J.A. (1981). Relationships between recruiting sources and employee performance. *Academy of Management Journal, 24*, 142-147.

Brief, A., Aldag, R., Van Sell, M., & Melone, N. (1979). Anticipatory Socialization and role stress among registered Nurses. *Journal of Health and Social Behavior,* 20, 161-166.

Brooke, P.P. & Price, J.L. (1989). The determinants of employee absenteeism: An empirical test of the causal model. *Journal of Occupational Psychology, 62,* 1-19.

Buchan, J. & Seccombe, I. (1995). Managing nurse absence. *Health Manpower Management, 21(2)*, 3-12.

Burgio, L.D., Fisher, S.E., Fairchild, J.K., Scilley, K & Hardin, J.M. (2004). Quality of care in the nursing home: effects of staff assignment and work shifts. *Gerontologist, 44(3),* 368-377.

Bussing, A. & Glasser, J. (1999). Work stressors in nursing in the course of re-design: implications of burnout and interactional stress. *European Journal of Work and Organizational Psychology, 8,* 401-426.

Caplan, R.D., Cobb, S., French, F.R.P., Harrison, R. & Pinneau, S.R. (1975). *Job demands and worker health: main effects and occupational differences.* Department of Health, Education and Welfare, Washington, D.C: U.S. Government Printing Office.

Cavanagh, S.J. & Coffin, D.A. (1992). Staff turnover among hospital nurses. *Journal of Advanced Nursing, 17*, 1369- 1376.

Chan, E. & Morrison, P. (2000). Factors influencing the retention and turnover intentions of registered nurses in a Singapore hospital. *Unpublished manuscript.* Queensland University of Technology.

Chaudhury, M. & Ignace, N.G. (1992) Absenteeism predictors: least squares, rank regression and model selection results. *Canadian Journal of Economics, 25(3),* 615-635.

University of Cape Town

Chiarella, M. (2002). *Legal and professional status of nursing*. Edinburgh: Churchill Livingstone.

Churchill, G.A. (1995). *Marketing research: methodological foundations* (6th ed.). Florida,USA: The Dryden Press, Harcourt Brace College Publishers.

Cockburn, B. (2005). UK work absences shorter but costlier. *Business Insurance, 39(29),* 57-58.

Cohen, A. (1998). An examination of the relationship between work commitment and work outcomes among hospital nurses. *Scandinavian Journal of Management, 14*, 1-17.

Cohen, A. & Kirchmeyer, C. (2005). A cross-cultural study of the work/non-work interface among Israeli nurses. *Applied Psychology: An International Review, 54(4),* 537-567.

Cooper, C.L., Sadri, G., Allison, T. & Reynolds, P. (1992). Stress counselling in the post office. *Counselling Psychology Quarterly, 3(1),* 3-11.

Corwin, R.G. (1961). The professional employee: a study of conflict in nursing roles. *The American Journal of Sociology, 66(6),* 604-615.

Coughlan, A. (2005). *A guide to managing absence*. Irish Business and Employer's Confederation.

Curtis, J.F. & Rubenfeld, G.D. (2001). *Managing death in the intensive care unit, the transition from cure to comfort.* New York: Oxford University Press.

Daniel, T. (2005, October 30). Sick public services leave the private sector standing. *Personnel Today*, p. 4.

Diraz, T., Ortlepp, K. & Greyling, M. (2003). The relationship between inter-role conflict, life satisfaction and sense of coherence in a sample of working mothers. *South African Journal of Psychology, 33(3),* 191-194.

Dolezalek, H. (2005). Sick day or just sick and tired? *Training, 42(12),* 8.

DENOSA (2004). Taking the plight of nurses to the public. *Health Systems Trust Health Review.*

University of Cape Town

DENOSA (2005). Presentation of the comments on the nursing bill to the portfolio health committee. Retrieved on September 16, 2006 from http://www.denosa.org.za/Submissions/www.info.gov.za/gazette/bills/2005/b26-05.pdf

Dyer, S. & Quine, L. (1998). Predictors of job satisfaction and burnout among the direct care staff of a community learning disability service. *Journal of Applied Research in Intellectual Disability, 11(4),* 320-332.

Edgington, M. (2000, December 15). Tuberculosis in South Africa. *Health Systems Trust*, p.56.

Elloker, S. (2003). The coping skills of registered nurses in the city health clinics in Cape Town. *Unpublished manuscript*. University of South Africa.

Elving, W. J. L. (2005). The role of communication in organisational change. *Corporate Communications: An International Journal. 10(2),* 129-138.

Eriksen, W., Bruusgaard, D., & Knardahl, S. (2003). Work factors as predictors of sickness absence: a three month prospective study of nurse's aides. *Occupational and Environmental* Medicine, *60(4),* 271-278.

Farrell, G. & Cubit, K. (2005). Nurses under threat: a comparison of content of 28 aggression management programs. *International Journal of Mental Health Nursing, 14(1),* 44-53.

Fink, A. (1995). *How to ask survey questions*. Thousand Oaks, CA: Sage Publications.

Frans, J.N. (1999). The Job Demands-Job Control Model and absence behaviour: results of a three-year longitudinal study. *Work & Stress, 13(2*), 115-131.

Furnham, A. & Walsh, J. (1991). Consequences of person-environment incongruence: absenteeism, frustration and stress. *Journal of Social Psychology, 131(2),* pages unknown.

Gibson, J.L., Ivancevich, J.M. & Donnelly, J.H. (2000). *Organisations: behaviour, structure, processes*. Boston: The McGraw –Hill Book Company Pty Ltd.

Gillham, B. (2000). *Case study research methods*. Continuum: New York.

University of Cape Town

Gilson, L. (1998). Poverty and health in South Africa. Briefing paper, centre for Health Policy. University of the Witwatersrand

Gooding, L. (2005). Stress poses dire threat to NHS. *Nursing Standard, 19(21)*, 4.

Goodman, P.S. Atkin, R.S. & Associates (1984). *Absenteeism*. San Francisco: Jossey -Bass Publishers.

Haccoun, R. & Desgent, C. (1993). Perceived reasons and consequences of work absence. *International Journal of Psychology, 28(1)*, 97.

Hackett, R. D. & Bycio, P. (1996). An evaluation of employee absenteeism as a coping mechanism among hospital nurses. *Journal of Occupational and Organizational Psychology, 69(4)*, 327-338.

Hair, J.F., Babin, B., Money, A.H. & Samouel, P. (2003). *Essentials of business research methods*. Hoboken, NJ: Wiley

Hale, B. (2005, April 20). The stress epidemic. *Daily Mail*, p.4

Hall, W. (2002). *Summary Bulletin 5 - DHS-LG Discussion List*. Durban: Health Systems Trust

Hall, W. Haynes, R. & McCoy, D. (2002). *The long road to the District Health System. Legislation and structures for the District Health System in South Africa: an appraisal as at August 2002*. Durban: The Press Gang

Harter, T. (2001). Minimizing absenteeism in the workplace: strategies for nurse managers. *Nursing Economic$, 19*, 53.

Hemmingway, M.A. & Smith, C.S. (1999). Organizational climate and occupational stressors as predictors of withdrawal behaviours and injuries in nurses. *Journal of Occupational and Organizational Psychology, 72*, 1-10.

Howell, D.C. (1995). *Fundamental statistics for the behavioural sciences* (3rd ed.). New York: Wadsworth Publishing Company.

University of Cape Town

Ilgen, D.R. (1977). Attendance behaviour: a re-evaluation of Latham and Pursell's conclusions. *Journal of Applied Psychology, 62(2),* 230-233.

Jackson, D. (2006). South African labour guide. Retrieved on September 12, 2006 from http://www.advice@labourguide.co.za

Jackson, S.E, & Schuler, R.S (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organizational Behavior and Human Decision Processes*, 36, 16-78.

Johns, G. (1994). Absenteeism estimates by employees and managers: divergent perspectives and self-serving perceptions. *Journal of Applied Psychology, 79*, 229-239.

Johns, G. & Xie, J.L. (1998). Perceptions of absence from work: People's Republic of China versus Canada. *Journal of Applied Psychology, 83,* 515-530.

Johnson, C.J., Croghan, E. & Crawford, J. (2003). The problem and management of sickness absence in the NHS: considerations for nurse managers. *Journal of Nursing Management, 11(5)*, 336.

Kennedy, M.A. (2004). Workplace violence: An exploratory study into nurses' interpretations and responses to violence and abuse in trauma and emergency department. *Unpublished manuscript.* University of the Western Cape

Kirpal, S. (2004). Work identities of nurses: between caring and efficiency demands. *Career Development International, 9(3),* 274-304.

Kosslyn, S.M. & Rosenberg, R.S. (2005). *Fundamentals of psychology: the brain, the person, the world* (2nd ed.). Needham Heights, MA: Allyn & Bacon.

Kuchi, T. (2006). Constant change and the strategic role of communication: A selective annotated bibliography. *Library Management, 27(4/5),* 218-235.

Laframboise, D., Nelson, R.L. & Schmaltz, J. (2003). Managing resistance to change in workplace accommodation projects. *Journal of Facilities Management, 1(4),* 306-321.

University of Cape Town

Landy, F. J., & Conte, J. M. (2004). *Work in the 21st Century: An Introduction to Industrial and Organizational Psychology.* Boston: McGraw-Hill.

Latham, G.P. & Pursell, E.D. (1978). Measuring absenteeism from the opposite side of the coin. *Journal of Applied Psychology, 60(3),* 369-371.

Lavoie-Tremblay, M., Viens, C., Bourbonnais, R., Vezina, M., Durland, P., & Rochette. (2005). Improving the psychosocial work environment. *Journal of Advanced Nursing, 49 (6),* 655-664.

Ledgister, M. (2003). The nursing shortage crisis: a familiar problem dressed in new clothes, part 1. *International Journal of Health Care Quality Assurance Incorporating Leadership in Health Services, 16(1),* 11-18.

Leininger, M.M. (1985). Ethnography and ethnonursing: models and modes of qualitative data analysis. In: M.M. Leininger (Ed.). *Qualitative research methods in nursing* (pp.33-72). Orlando: Grune & Stratton.

Levert, T., Lucas, M. & Ortlepp, K. (2000). Burnout in psychiatric nurses: contributions of the work environment and a sense of coherence. *South African Journal of Psychology, 30(2),* 36-43.

Levy, M.M. (2004). Caring for the caregiver. *Critical Care Clinics, 20,* 541-547.

Luthans, F. (1992). *Organizational behaviour* (6th ed.). New York: Mc-Graw Hill

Masilela,T., Molefakgotla, P. & Visser, R. (2004). Voices of district managers. *South African Health Review.* Durban: Health Systems Trust (volume and page numbers unavailable)

Matrunola, P. (1996). Is there a relationship between job satisfaction and absenteeism? *Journal of Advanced Nursing, 23(4),* 827-834.

May, T. (1993). *Social research: issues, methods and processes.* Buckingham: Open University Press.

McHugh, M. (2001). An impediment to organisational health in local government. *The International Journal of Public Sector Management, 14(1),* 1-11.

University of Cape Town

McLemore, S.D. & Hill, R.J. (1965). Role change and socialization in nursing. *The Pacific Sociological Review, 8(1),* 21-27.

McNeely, S. (1996). Stress and coping strategies in nurses from palliative, psychiatric and general nursing areas. *Health Manpower Management, 22(3),* 10-12.

Melchior, M., Krieger, N., Kawachi, I., Berkman, L., Niedhammer, I., & Goldberg, M. (2005). Work factors and occupational class disparities in sickness absence. *American Journal of Public Health, 95,* 1206.

Mendenhall, W. (1998). *Introduction to probability and statistics.* Pacific Grove: Brooks/Cole.

Meyer, J.P., Allen, N.J., & Smith, C.A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology, 78,* 538-551.

Miller, K.I., Joseph, L. & Apker, J. (2000). Strategic ambiguity in the role development process. *Journal of Applied Communication Research, 28(3),* 193-214.

Mirabile, M.L. & Carrera, F. (1995). Ill-health and workplace absenteeism in Italy: initiatives for prevention. European Foundation for the Improvement of Living and Working Conditions: Dublin (Working Paper).

Muller, M. (1997). Change management in health services: the South African experience. *Curationis, 20(2),* 27-31.

Murphy, C., Cross, C. & McGuire, D. (2006). The motivation of nurses to participate in continuing professional education in Ireland. *Journal of European Industrial Training, 30(5)*, 365-384.

Nel, P.S., van Dyk, P.S., Haasbroek, G.D., Schultz, H.B., Sono, T.J., & Werner, A. (2004). *Human Resource Management* (6th ed). Oxford: Oxford University Press.

University of Cape Town

Neuman, W.L. (1997). *Social research methods: qualitative and quantitative approaches.* Boston: Allyn and Bacon.

Newman, K. & Maylor, U. (2002). Empirical evidence for "the nurse satisfaction, quality of care and patient satisfaction chain". *International Journal of Health Care Quality Assurance, 15(2),* 80-88.

Newstrom, J.W. & Davis, K. (1993). *Organizational behaviour: human behaviour at work* (9th ed.). New York: Mc-Graw Hill

Northcott, N. (1990). Student stay away days. The factors influencing the absence from duty of student nurses. *Senior Nurse, 10(8),* 20-22.

Ntsaluba, A. & Pillay, Y. (1998). Reconstructing and developing the health system--the first 1,000 days. *South African Medical Journal 88(1),* 33-6.

Ntshona, M. (2000). Nurse Training. *South African Health Review.* Durban: Health Systems Trust (volume and page numbers unavailable)

Ootim, B. (2002) Sickness among nurses. *Nursing Management-UK, 9(6),* 26.

Oppenheim, A.N. (1992). *Questionnaire design, interviewing and attitude measurement* (new ed.). London, England: Printer Publishers Ltd.

Ose. S.O. (2005). Working conditions, compensation and absenteeism. *Journal of Health Economics, 24(1),* 161-188.

Paton, N. (2005). Nursing ward staff top public sector's sickness absence list. *Occupational Health, 57(8),* 5.

Peiro, J.M., Gonzalez-Roma, V., Lloret, S., Bravo, M.J., & Zurriaga, R. (1999). Predictors of absenteeism among public health service employees. *Organizational Psychology and Health Care: European contributions, 14,* 85-100.

University of Cape Town

Pillay, Y. (1995). The problems and promises of decentralisation of health services--a commentary. *South African Medical Journal 85(9),* 932-933.

Pillay, Y. (2001). The impact of South Africa's new constitution on the organization of health services in the post-apartheid era. *Journal of Health Politics, Policy and Law (26)4,* 747-766.

Pinder, C. (2005). The root of absence. *People Management, 11(17),* 8-9.

Reece, R.M. (2005). Managing employee absenteeism requires vigilance. *Nation's Restaurant News, 39(40)*, 32-41.

Rees, D.W. (1995). Work-related stress in health service employees. *Journal of Managerial Psychology, 10(3)*, 4-11.

Rizzo, J.R, House, R.J, & Lirtzman, S.I. (1970). Role conflict and ambiguity in complex organizations, *Administrative Science Quarterly, 15*, 150-63.

Rowe, M. & Sherlock, H. (2005). Stress and verbal abuse in nursing: Do burned out nurses eat their young? *Journal of Nursing Management, 13(3),* 242-248.

SA faces nursing crisis. (2000, September 9). *The Citizen*. Retrieved 5 May, 2006 from http://www.hst.org.za/news

Sarudi, D. (2000). Inbox: Who's minding the hospital? Absenteeism soars. *Hospital-and-Health-Networks, 74(4),* 14.

Schaay, N., Heywood, A. & Lehmann, U. (1998). A review of health management training in the public health sector in South Africa. *South African Health Review.* Durban: Health Systems Trust (volume and page numbers unavailable)

Scheaffer, R., W. Mendenhall, & L. Ott. (1995). *Elementary Survey Sampling.* Boston: PWS.

Seidel, G. (1996). Confidentiality and HIV status in KwaZulu-Natal, South Africa: implications, resistances and challenges. *Health Policy and Planning, 11(4),* 418-427.

University of Cape Town

Shamian, J. (2003). Nurse absenteeism, stress and workplace injury: what are the contributing factors and what can/should be done about it? *International Journal of Sociology and Social Policy, 28(8)*, 125-132.

Shisana, O., Hall, E. & Maluleke, K. (2003). The Impact of HIV/AIDS on the Health Sector. National Survey of Health Personnel, Ambulatory and Hospitalised Patients and Health Facilities, 2002. HSRC, Medunsa and MRC South Africa.

Shiu, A. (1998). Work and family role juggling and mood states of Hong Kong public health nurses with children. *Journal of Advanced Nursing, 28(1),* 203-211.

Silcox, S. (2005). Corporation of London tackles long-term absence. *IRS Employment Review, 834,* 19-21.

Siu, S. (2002). Predictors of job satisfaction and absenteeism in two samples of Hong Kong nurses. *Journal of Advanced Nursing, 40(2)*, 218-229.

Smith, J.A. (1995). *Semi-structured interviewing and qualitative analysis.* London: Sage.

Smythe, E.M. (1994). *Surviving nursing.* South Easton: Western Schools Press.

Stanley, D.J., Meyer, J.P. & Topolnytsky, L. (2005). Employee cynicism and resistance to organisational change. *Journal of Business & Psychology, 19(4),* 429-459.

Stern, P. & Kalof, L. (1996). Evaluating social science research. New York: Oxford University Press.

Taunton, R.L., Hope, K, Woods, C & Bott, M. (1995). Predictors of absenteeism among hospital staff nurses. *Nursing Economic$, 13(4),* 217-229.

Taunton, R.L., Perkins, S., Oetker-Black, S. & Heaton, R. (1995). Absenteeism in acute care hospitals. *Nurse Management, 26(9),* 80-82.

University of Cape Town

Twafiq, L. & Kinoti, S. (2003). Impact of HIV/AIDS on Health Systems and the Health Workforce in Sub-Saharan Africa. Support for Analysis and Research in Africa (SARA) Project. Washington. USAID, Bureau for Africa, Office of Sustainable Development.

Taylor, S.J. & Bogdan, R. (1989). *Introduction to qualitative research methods: the search for meanings.* New York: John Wiley & Sons.

Terre Blanche, M. & Durrheim, K. (1999). *Research in practices: applied methods for the social sciences.* Cape Town: University of Cape Town Press.

Timmins, F. & Kaliszer, M. (2002). Absenteeism among nursing students – fact or fiction? *Journal of Nursing Management, 10(5),* 251-264.

Traynor, M. (1993). Health visitor's perceptions of their role. *Health Visitor, 66(1),* 14-16.

Trochim, W.M. (2000). The research methods knowledge base. (2nd ed.). [On-line]. Available: http://trochim.human.corneil.edu/kb/index.htm [2006, May 1].

Van Loon, R. (2001). Organisational change: a case study. *Innovative Higher Education, 25 (4),* 285.

Verhaeghe, R., Mak, R., Van-Maele, G., Kornitzer, M., & De-Backer, G. (2003). *Stress and health: Journal of the International Society for the Investigation of Stress, 19(5),* 265-274.

Watson, J. (1985). *Nursing, the philosophy and science of caring.* USA: University Press of Colorado.

Weinberg, A., & Creed, F. (2000). Stress and psychiatric disorder in healthcare professionals and hospital staff. *Lancet, 355,* 533-537.

Wicks, D. (1998). *Nurses and doctors at work: rethinking professional boundaries.* Philadelphia: Open University Press.

Woo, M., Yap, A.K., Oh, T.G. & Long, F.Y. (1999). The relationship between stress and absenteeism. *Singapore Medical Journal, 40(9),* 298-306.

University of Cape Town

Legislation

Basic Conditions of Employment Act No. 75 (1997).
Retrieved on October 12, 2006 from
http://www.capegateway.gov.za/eng/pubs/acts/prov/1995/21463

Employment Equity Act No. 55 (1998)
Retrieved on October 12, 2006 from
http://www.capegateway.gov.za/eng/pubs/acts/prov/1995/21463

Labour Relations Act No. 6 (1995). Retrieved on October 12, 2006 from
http://www.capegateway.gov.za/eng/pubs/acts/prov/1995/21463

Occupational Health and Safety Act No. 85 (1993)
Retrieved on October 12, 2006 from
http://www.capegateway.gov.za/eng/pubs/acts/prov/1995/21463

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APPENDIX 1: List of scale items included in the research survey

Responses to the role stress questions were answered on a five point Likert Scale from "Strongly disagree" to "Strongly agree", whilst fixed responses were provided for the absenteeism questions.

ROLE STRESS

Resource Scarcity

1. I do not have enough of the supplies that I need to do my job
2. I do not have enough technological resources to do my job
3. I do not have enough administrative support to do my job
4. I receive assignments without adequate resources and materials to complete it
5. I receive assignments without sufficient help from others to complete it

Skills Inadequacy

1. I have received insufficient training for the tasks I am expected to do
2. I need to acquire new skills to do my work satisfactorily
3. I do not feel adequately trained in certain aspects of my job
4. There is insufficient opportunity to get the training I require

Role Ambiguity

1. My job responsibilities are not clearly defined
2. I am not certain about how much authority I have
3. I do not know exactly what is expected of me in my job
4. I do not know what my responsibilities are
5. Explanation is not clear of what has to be done

Role Conflict

1. I work under conflicting policies or guidelines

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2. I have to "bend the rules" to carry out some assignments
3. I receive incompatible requests from two or more people
4. My time is often spent on "unnecessary work" not central to my job
5. I have additional responsibilities that take me away from my primary tasks

Role Overload

1. I do not have enough time to complete my work
2. I have to work very fast in my job (just to keep up with the workload)
3. I have a very heavy workload, perhaps too heavy
4. I have too much responsibility in my job
5. I often have to work extra hours to complete my tasks

Constant Change

1. The tasks in my work seem to change too often
2. The responsibilities in my work seem to change too often
3. The person I report to at work seems to change too often
4. I often have to adjust to changes at work
5. I often have to learn new sets of skills to keep up with changes at work

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ABSENTEEISM

From 1st January until 31st May 2006 (5 months), how many different ***times*** were you off from regularly scheduled work (excluding vacation days)?

How many working ***days*** were you absent from your work from 1st January until 31st May 2006 (5 months) (excluding vacation days)?

On how many of the days was your absence **involuntary** (i.e. certified illness)?

On how many of the days was your absence **voluntary** (i.e. didn't feel like going to work)?