A STRUCTURED MODEL OF TALENT MANAGEMENT FOR NURSES IN THE NORTH-WEST PROVINCE HOSPITALS

Molefakgotla Alex Molefi, M.Com.
16059522

Thesis submitted in fulfilment of the requirements for the degree Philosophiae Doctor in Industrial Psychology at the Mafikeng Campus of the North-West University

Promoter: Prof N. Barkhuizen
Mafikeng
2735
DECLARATION

I Molefakgotla Alex Molefi declare that the thesis submitted in fulfilment of the requirements the degree Philosophiae Doctor in Human Resource Management titled 'A structured model of Talent Management for Nurses in the North-West Province Hospitals' has not previously been submitted by me for the degree at this or any other institutions. I further declare that this is my own work and that all material used herein is acknowledged.

The reference and the editorial style are as prescribed by the Publication Manual (6th edition) of the American Psychological Association (APA) were followed in this thesis.

This thesis is submitted in the format of five research articles.

Signature

Date: 29.01.2015.
DEDICATION

This work is dedicated to all those who helped and supervised its completion. Hopefully it will contribute to the body of knowledge. To God Almighty, my family, the supervisor, the editor and scholars through their scholarly work, many thanks.

Romans 5:3-4 More than that, we rejoice in our sufferings, knowing that suffering produces endurance, and endurance produces character, and character produces hope,

The price of success is hard work, dedication to the job at hand, and the determination that whether we win or lose, we have applied the best of ourselves to the task at hand.

Vince Lombardi
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If we knew what it was we were doing, it would not be called research, would it?

Albert Einstein
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ABSTRACT

South Africa is currently facing a significant problem in attracting and retaining quality professional nurses in provincial hospitals. Some research in South Africa has showed that nurses leave for a variety of reasons such as an inadequate salary, staff shortages, and insufficient personnel to handle the workload, frequent interruptions, fellow workers not doing their jobs and poorly motivated co-workers. Insufficient work support has negative consequences for the well-being of nurses and their subsequent ability to deliver a quality service for the public. The main objective of this research was to develop a structured model for the talent management of professional nurses in North-West Provincial hospitals.

A cross-sectional research design was followed with questionnaires distributed to a purposive convenience sample of professional nurses in the North-West Province. An adapted version of the Talent Management Measure, Psychological contract inventory, the Maslach-Burnout Inventory, the Utrecht Work Engagement Scale, General Health Questionnaire and Dispositional Employability Measure were administered. Statistical analyses were done with the aid of SPSS and included descriptive statistics (i.e. frequencies, means, skewness and kurtosis), exploratory factor analyses, reliability analyses, Pearson correlation analyses, linear and multiple regression analyses and Manova analyses.

From the results it is clear that the respondents perceived that talent management practices are applied poorly in public hospitals. Some of the most problematic issues include lack of talent commitment, proper staffing levels and retention strategies. The results also indicate poor performance management systems and workforce planning. The results of the Manova analyses showed that nurses working for more than 51 hours a work week experienced poorer performance management and talent retention practices compared to those working between 21 to 30 hours and 31 to 40 hours in a work week.

From the mean scores it was evident that nurses felt that they had an average level of psychological obligation towards their workplace. From the scores, however, one could deduce that nurses do not have a short-term orientation towards their employment and felt they have an obligation to remain within the hospital. From the average scores it is was further evident that nurses do not have high expectations of their employers.
As regards work wellness of nurses, the mean scores showed an average to high level of burnout, work engagement and levels of work engagement and ill-health. The exhaustion and mental distance components of burnout were significant positive predictors of the physical and psychological ill-health of nurses. Work engagement was a significant positive predictor of physical ill-health of nurses.

The results further showed that nurses experience average levels of dispositional employability relating to openness to change, resilience and career proactivity. The results of the Manova analyses showed that employees working between 41 to 50 hours a week were more proactive in their work compared to those working 11 to 20 hours in a week. Furthermore, nurses with fewer opportunities for promotion were less open to change compared to those with more chances for promotion.

The final results showed that a structured model of talent management for nurses can be developed based on the mediation and cause effects between talent management, dispositional employability and ill-health, talent management, work wellness and ill-health and talent management, psychological contract and ill-health. In this study dispositional employability, work wellness and psychological contract mediated the interactive relationship between talent management and ill-health.

The results of this study highlight the problematic nature of the application of talent management practices for nurses in public sector hospitals. Public sector managers should take cognizance of these results as poor talent management practices can increase turnover intentions of nurses. A psychological contract of nurses between them and the employer amplifies the extent to which their relationship has become formalized. However, formal procedures are often deficient and ineffective in explaining this relationship of employments. The findings furthermore provide a valuable insight into the current status of burnout and engagement of nurses in the public sector and what interventions can be used in dealing with the problem.

Recommendations were that employees and employers should be more aware of the implications of poor management of talent that may lead to psychological contract breach, low dispositional employability, and poor work wellness conditions and might lead to both psychological and physical ill-health outcomes when left unchecked.

**Keywords:** Talent Management, Psychological Contract, Dispositional Employability and Ill-Health
Chapter 1: INTRODUCTION TO THE STUDY

A STRUCTURED MODEL OF TALENT MANAGEMENT FOR THE RETENTION OF NURSES IN THE NORTH WEST PROVINCIAL HOSPITALS

1.1 INTRODUCTION

Helping people who experience major life problems constitutes a major challenge to many health-care professions. The nursing profession makes the largest group of health workers in South Africa (Largarde, Blaauw & Cairns, 2012). While operating at primary, secondary and tertiary levels of care, nurses have amongst hospital staff the most one-to-one contact with patients, thereby playing a central role in the management and administration of care for hospital patients (Largarde & Cairns, 2012). This underlines the essential service they provide and the tremendous responsibility nurses have for people's lives in an era of constant pressure, conflict and change (Eley, Eley, Bertello & Rogers-Clark, 2012).

The shortage of well-qualified nurses has been widely documented by Derycke et al. (2011). Some research in South Africa showed that nurses leave for a variety of reasons. One of the reasons includes the stressful environment in which South African nurses operate. Van der Colff and Rathmann (2009) found that professional nurses are nurses who are experiencing stressors with regard to a lack of organisational support and job demands. Lack of organisational support included aspects such as inadequate salaries, staff shortages, insufficient personnel to handle the workload, frequent interruptions, fellow workers not doing their job and poorly motivated co-workers. Job demands in turn referred to excessive administrative duties and health risks posed by contact with patients. In the same study, nurses in the enrolled category also indicated that inadequate salaries, shortages of staff and excessive paperwork are stressors relatively severe in their working environments. With regard to health risks it is important to note that the incidence of the HIV-AIDS epidemic in South Africa is likely to contribute to nurses experiencing emotional and physical stress (Scott, Mathews & Gilson 2012). The emotional stress of AIDS caregiving includes aspects such as witnessing suffering, experiencing unresolved grief, accepting diversity, being
emotionally connected and declining in team spirit. Physical stress related to AIDS nursing resulted from their exposure to parents with copious diarrhoea or draining wounds.

Unsuccessful attempts to cope with a variety of stressful conditions can have a negative effect on the overall well-being of nurses. Several researchers, for example, indicated that nurses are likely to become victims of this burnout phenomenon due to the stressful and emotionally demanding nature of the nursing profession (Carson, Bartlett & Croucher, 1991; Coffey & Coleman, 2001; Dolan, 1987; Fagin, Brown, Bartlett, Leary, & Carson, 1995; Moores & Grant, 1977; Snelgrove, 1998; Sullivan, 1993). The burnout experience can impair both personal and social functioning and affect the nurse's ability to provide optimal patient care (Levert, Lucas & Ortlepp, 2000; Maslach, 1993). This in turn can also lead to higher turnover intentions among nurses.

As a result researchers are also paying more attention to positive states and human strengths in the workplace which can lead to the optimal functioning of individuals, rather than weaknesses and malfunctioning (Brunetto, Shacklock, Bartman, Laggat, Farr-Wharton, Stanton & Casimir, 2012). According to Schreuder and Coetzee (2011) empirical evidence has revealed that some employees, regardless of high job demands and long working hours, seemed to find pleasure in hard work and dealing with job demands in contrast with others who are likely to develop burnout under these circumstances. In this context some employees seem to be more engaged in their jobs than others.

Engagement is a persistent, positive, affective-motivational, state of fulfilment in employees that is characterised by vigour, dedication and absorption (Maslach et al., 2001; Schaufeli et al., 2001; Schaufeli & Bakker, 2002). Research conducted by the Gallup organisation has found that employee engagement is a more useful indicator of predicting the nurse's commitment to quality patient care, turnover and productivity (Blizzard, 2002). Engaged employees are believed to be loyal and physically committed to their organisation, are more productive, are more likely to stay with their organisation and are less likely to have accidents in their jobs. Thus engaged individuals who view themselves as capable to deal with the complex demands of the job are likely to increase their productivity (Bakker et al., 2008).
In addition to positive behaviours displayed by employees who are work-engaged, the changing way of work also necessitates employees to reposition themselves in their careers in order to remain attractive hires for their companies. Fugate and Kinicki (2008) coined the term dispositional employability which refers to

"a constellation of individual differences that predispose employees to be (pro)actively adapt to their work and career environments. Employability facilitates the identification and realisation of job and career opportunities both within and between organisations. Conceived this way, employability is a disposition that captures individual characteristics that foster adaptive behaviours and positive employment outcomes."

Dispositional Employability consists of six dimensions, namely: Openness to Change, Work and Career Resilience, Work and Career Pro-activity, Work Identity, and Optimism. No research could be found using the concept of dispositional employability among nurses.

Since it is the employer's responsibility to address the problem of workplace stress, most organisations still has to be convinced of the positive financial benefits that can be gained from maintaining a healthy workplace. Ironically, it is the employer organisations that worry about the competitive positions of national industry (Geurts & Grundemann, 1999). Although they support government policies regarding workplace absenteeism, a cause of workplace stress, ill-health and demands, employers are against too many financial responsibilities resting on their company with regard to employee health. Trade unions in turn are opposed to increasing financial responsibilities for employees whereas social partners stress the relation between ill health and aspects of work, arguing that employers are responsible for the working conditions.

This leaves us with a main challenge, especially in the South African context, to convince employer organisation and trade unions that stress prevention can be mutually beneficial.
Worldwide practitioners and managers are encouraged to see the need of creating healthy work environments where employees and organizations can flourish and grow. This can be accomplished by the psychological contract which is an unwritten agreement between the employee and the organisation (Brown & Harvey 2011). Botha and Moalusi (2010) define the psychological contract as a set of beliefs or perceptions of what one party (the employee or employer) expects to receive from and is obliged to provide to the other party. The psychological contract in essence is thus based on a set of mutual expectations or promises by the employee and the employer to one another. Violations and breaches of employer obligations and promises such as opportunities for promotions and a good working environment can lead to a breakdown in the employer-employee relationship and employees resigning from the organisation (Botha & Moalusi, 2010).

1.2 BACKGROUND

1.2.1 TALENT MANAGEMENT OF NURSES

The first research problem is concerned with the talent management of professional nurses. Talent management is a construct that is increasingly on the minds of practitioners and academics, yet difficult to define and understand. According to Kontogiorges and Frangou, (2009) talent management is a process that involves the implementation of integrated human resource strategies to attract, develop, retain and productively utilize employees “with the required skills and abilities to meet current and future business needs” Effective talent management requires an understanding of what core talent means, and how to leverage the talent in a manner that allows management to act decisively to drive competitive advantage as well as to secure the future success and sustainability of organisations (Stanz, Barkhuizen & Welby-Cooke, 2012). Yet it appears as if talent management practices are neither strategic, nor an operational priority in many South African organizations, including the health-care sector.

Schuler et al. (2011) state that failure to attract and retain top talent ranks as the seventh highest risk in business today. Thus, creating transformation that is real and sustainable will continue to be driven by skills development and talent management. Ashton and Morton (2005) said that although the benefits of developing leadership potential are widely accepted,
many companies struggle to identify the right individuals with talent. Furthermore, in order to achieve high performance, business will need to continually refine market focus and position and develop distinctive capabilities of your talent that can adapt to shifting sources of competitive advantage.

Lewis and Heckman (2006) said an advanced job design and analysis will contribute to the creation of an integrated HR system and ensure that the organization has the necessary human capital to function effectively. According to Gregory, Way, Lefort, Barrett and Parfrey (2007) the development and implementation of policies and interventions aimed at creating more supportive work environments and greater trust in employers and job satisfaction have merit. The most obvious benefit from such strategic interventions is the potential for improving RNs' organizational commitment and reducing turnover intentions.

According to Hayhurst, Saylor and Stuenkel (2005) and Colosi (2002) Moos' Work Environment Scale suggests that a supportive work environment enables nurses to provide quality patient care, enhance their own self-esteem, increase job satisfaction, and provide cost savings to their employers. Such an environment promotes retention of skilled, caring, knowledgeable, and experienced nurses who provide better patient care with fewer complications, and reduces the economic and social costs of healthcare for both providers and consumers.

If health systems want to retain high-quality nursing staff, management should listen to concerns of nurses and provide flexible scheduling, adequate staffing levels, and appropriate rewards and recognition (Strachota, Normandin, O'Brien, Clary & Krukow, 2003 and Tallman & Bruning, 2005). In light of the cost of hiring and training new nurses, a few steps taken toward retention will heighten job satisfaction and result in higher levels of quality care for patients. The retention of new employees is an important (Zucker, Goss, Williams, Bloodworth, Lynn, Denker, Gibbs & Janice, 2006), challenging, and inclusive use of specialized skills and knowledge of all team members. This improves the foundation on which new employees are developed and retained. The Navigator Program developed by
Norton Healthcare is the type of program that organizations can use to retain not only nurse employees but also employees in other disciplines where retention is a problem.

Limited empirical research currently exists on talent management in South Africa and no study on the talent management of nurses could be found in the South African context. The few studies that have been conducted were unanimous in their results indicating that talent management practices such as Strategic Commitment Talent Development, Talent Acquisition, Talent Deployment, Talent Culture, Talent Resource and Performance Management were only to some extent applied in South African Organisations (Barkhuizen & Stanz, 2010; Barkhuizen & Veldsman, 2012). Applied further within the South African context some research found that talent management is a significant predictor of organizational energy, psychological contract, vigour and employee retention (Barkhuizen & Veldsman, 2012; Du Plessis, Stanz & Barkhuizen, 2010). No studies currently exist in South Africa relating Talent Management to Burnout, Work Engagement and Dispositional Employability. Furthermore no studies in South Africa currently exist relating talent management to the psychological contract, work wellness (burnout and work engagement), dispositional employability and employee retention in the nursing profession of South Africa.

1.2.2 PSYCHOLOGICAL CONTRACT OF NURSES

The second research problem in this research relates to the psychological contract in the nursing profession. As early as 1995 Cavanagh stated that changes within the health services are raising a number of employment issues for nurses. The idea that a professional qualification and a job will lead to security of employment and career development is rapidly changing. These assumptions, the ‘old’ psychological contract, is giving way to new expectations from employers and employees; the emergence of a ‘new’ psychological contract. A psychological contract is an implicit agreement between employer and employee that each party will treat the other fairly (Bal, De Lange, Jansen & Van Der Velde, 2008). Such contracts are maintained by virtue of all parties wanting to seek agreement on issues where possible and to maintain trust. While such a contract is not a legally binding agreement it is nonetheless a binding understanding between people. Changes to this psychological
contract can have important implications for individuals and their employer in terms of work and organizational commitment.

According to Guest (2004) there has been growing interest in the impact of flexible employment contracts on workers affected by them. In the light of assumptions that such workers are significantly disadvantaged, European-wide legislation has been introduced to ensure that they are treated similarly to permanent employees. The evidence on the impact of flexible employment contracts on employees’ attitudes and behaviour is reviewed within the framework of the psychological contract. Rousseau (2001) said that understanding the dynamics of the psychological contract in employment is difficult without research into its formation. Unfortunately, far less research exists on the antecedents and formation of the psychological contract than on the consequences associated with it. Three concepts frequently studied in psychology are particularly important to advancing research on psychological contract formation: schemas, promises, and mutuality.

According to Conway and Briner (2002), analyses also show that the relationship between psychological contract fulfilment and outcomes were rarely moderated by work status suggesting that part-time employees will respond in a similar way as full-time employees to adjustments in their psychological contract. The main issues concern the extent to which the psychological contract between employee and employer is mutual, the importance or otherwise of the promissory element, the distinction between transactional and relational contracts, and the detection of, and response to, contract violation (Arnold, 1996). Zhao, Wayne, Glibkowski, and Bravo (2007) indicated that the meta-analysis supports the important role the psychological contract breach has in predicting employee attitude and individual effectiveness. It is clear that breach has a strong and significant effect on a number of organizationally relevant outcomes. Meta-analysis has shown that age plays an important role as moderator in the relationship between psychological contract and job attitude (Bal, De Lange, Jansen & Van Der Velde, 2008). Furthermore, employment is no longer centred on a single, primary employer and employees operate in a boundary-less workplace and a new psychological contract, in which expectations of job security and promotional opportunities have been replaced by expectations of employability, training, human capital development
and networking opportunities. Psychological contract breach contributes to employee experience of job strain (Gakovic & Tetric, 2003).

According to Purvis and Cropley (2003) Q-analysis yielded four contract profiles among the nurses sampled: 'self-development and achievement'; 'belonging and development'; 'competence and collegiality' and 'autonomy and development'. Correlation analysis demonstrated that leaving intentions were associated with a need for personal autonomy and development, and the violation of expectations for being appreciated, valued, recognized and rewarded for effort, loyalty, hard-work and achievement, negative endorsement of a relational contract, positive endorsement of a transactional contract, and job and organizational dissatisfaction.

### 1.2.3 WORK WELLNESS OF NURSES

The vision of the Department of Health is that of healthy self-reliant communities in the North West Province of South Africa. The department aims to render accessible, equitable and integrated quality health and developmental social services hence the importance of talent retention of nurses in the province. According to Schreuder and Coetzee (2011) the well-being of employees can be explained from two models, namely the disease model and positive psychology model. Shreuder further suggests that three approaches to well-being of employees should be distinguished, namely subjective, psychological and eudaimonic well-being. Furthermore, healthy people have a positive outlook on life, and are able to cope well with life's demands, even if they encounter or experience hardships. Employee and organizational well-being should be the main aim to ensure the best work performance and business outcomes.

For purposes of this research, the COBE model of to explain work wellness among nurses. According to Schaufeli (2003), within this model burnout and engagement are two concepts covering the entire spectrum of employee wellness. Burnout is often used to describe occupational stress in person-centred professions such as nurses (Blix, Cruise, Mitchell & Blix, 1994). Burnout is a prolonged response to chronic emotional and interpersonal stressors.
on the job and is characterized as a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment (Maslach & Florian, 1988; Maslach, Schaufeli & Leiter, 2001). Emotional exhaustion is the central quality of burnout and refers to feelings of being overextended and exhausted. This is primarily a response to demand stressors placed upon individuals especially work overload, interpersonal interactions, role conflict and high levels of personal and organisational expectations (Cordes & Dougherty, 1993). Depersonalization is characterized by a detached and cynical response towards co-workers and clients, treating them as objects rather than as people (Demerouti, Bakker, Nachreiner & Schaufeli, 2001). Reduced personal accomplishment results primarily from depersonalization and refers to the self-evaluation that one is ineffective and incompetent in working with the recipients of one's service and fulfilling job responsibilities (Maslach, Jackson & Leiter, 1996).

Factors such as qualitative work overload, role ambiguity, low performance levels, contingency awards and unmet organisational and achievement expectations contribute to these experiences of diminished personal accomplishment. Research with nurses indicated that emotional exhaustion leads to a loss of concern for others and eventually progresses to feelings of inadequacy and failure; depersonalization occurs when nurses treat patients as objects and develop unfavourable attitudes towards them; and a lack of personal accomplishment develops with regard to helping others (Cordes & Dougherty, 1993; Maslach, 1993).

According to Schaufeli (2003) burnout consists of (emotional and cognitive) exhaustion and mental distancing (cynicism or depersonalisation). Exhaustion refers to an employee's *incapability* of performing because all energy has been drained, whereas mental distancing involves an employee's *unwillingness* to perform because of an increased intolerance of making any effort. Mental distancing, or psychological withdrawal from the task can be seen as an adaptive mechanism for coping with excessive job demands and the resulting feelings of exhaustion (Maslach, Schaufeli, & Leiter, 2001). This coping strategy can disrupts adequate task performance and employees can become dysfunctional when becoming habitual. Professional efficacy, often referred to as the "weakest", "least specific" or
"unnecessary" dimension of burnout, encompasses both social and non-social aspects of occupational accomplishment (Bakker et al., 2003; Lee & Ashforth, 1996).

Engagement is defined as an energetic state in which the employee is dedicated to give excellent work performance and is confident in his or her effectiveness (Schutte, Toppinen, Kalimo, & Schaufeli, 2000). More specifically, work engagement is characterized by three dimensions namely, vigour, dedication and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). "Vigour is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work and persistence, even in the face of difficulties. Dedication is characterized by a sense of significance, enthusiasm, inspiration, pride and challenge". Finally, "absorption is characterized by being totally and happily immersed in one's work, to the extent that it is difficult to detach oneself from it". Absorption most likely plays a less central role in the engagement concept. According to Schaufeli, Salanova, González-Romá and Bakker (2001), engagement is theoretically viewed as the opposite end of the continuum from burnout and is effectively measured with its own survey, the Utrecht Work Engagement Scale (UWES). The energetic, involved and effective state of engagement stands in contrast with the exhaustion, cynicism and ineffective components of burnout (Maslach, 2003). In testing the so-called Comprehensive Burnout and Engagement (COBE) model, Bakker et al. (2003) found that burnout and engagement have different predictors and different possible consequences, thereby confirming that burnout and engagement are indeed negatively related.

Nel, Werner, Poisant, Sono, Du Plessis, and Ngalo (2011) state that for employees to be productive, managers have the responsibility to ensure that employee safety, health, and wellness are attended to in the workplace. Nel et al. further state that stress and other negative emotions generated by work might cause employees not to be productive and doing emotional labour may mean that employees do not admit to their stress or they are not conscious of their stress. Tylor, Carroll and Cunningham (1991) state that nurses in public and private sectors were compared with regard to occupational stress and its sources and self-reported health and well-being. Both groups reported high levels of stress arising from high workloads and the experience of death and dying. Levels of self-reported mental and physical
health symptomatology did not differ among groups. Workload was the best independent predictor of health and well-being status (Tylor & Cushway, 1992). Extended working days have been found to aggravate some problems associated with shift work of nurses, especially when the work is mentally and emotionally demanding (Iskera-golec, Folkard, Marek & Noword, 1996).

Arafa, Nazal, Ibrahim and Attia (2003) state that nursing has been previously identified as a stressful occupation and sources of job stress. A total sample of 412 nurses represented nurses working in five different health organizations in Alexandria. Fewer years of experience, negative family and friend support, and negative total work satisfaction were found to be significant predictors of psychological ill-health among nurses in a descending rank order. Begat, Ellefsen and Severinsson (2005) stated that ethical conflicts in nursing are a source of job-related stress and anxiety. The outcome of supporting nurses by clinical nursing supervision may have a positive influence on their perceptions of well-being. Clinical nursing supervision has a positive effect on nurses’ physical symptoms and their feeling of anxiety as well as having a sense of being in control of the situation. Psychosocial work has an influence on nurses’ experience of having or not having control and their engagement and motivation. According to Ablett and Jones (2007) the nurses showed high levels of commitment, and imputed a sense of meaning and purpose to their work. An area of divergence was their response to change, and this is discussed in relation to hardiness and sense of coherence, which impact on staff well-being, staff training and support, which, in turn, may impact on the quality of patient care.

A comprehensive health promotion programme can lower the rate of health-care cost increases and produce a positive return on investment (ROI) (Naydeck et al., 2008). Fitness and wellness reduce health-care costs, absenteeism, and turnover (Gebhardt & Crump, 1990). Lategan, Lourens and Lombard (2011) point out that a corporate wellness programme has long-term beneficial effects on coronary artery disease (CAD) risk in men and that the reduction in CAD risk is mainly attributed to the beneficial effects of regular exercise and lifestyle modifications. According to Wu and Olson (2009) financial stress has emerged as a major factor in employee wellness, affecting productivity and the bottom line in South
African companies and such employees can be disruptive in the work place as they exert more energy on their financial crisis and lose focus on work. According to Bakker, Killmer, Siegrist and Schaufeli (2000) an imbalance of high extrinsic efforts spent, i.e. job demands and low extrinsic rewards obtained, e.g. poor promotion prospects, are associated with the burnout syndrome: the depletion of nurses’ emotional resources. The results of a series of analyses of variances confirmed this hypothesis, by showing that those nurses who experienced an effort–reward imbalance (ERI) reported higher levels on two of the three core dimensions of burnout i.e. emotional exhaustion and depersonalization than those who did not experience such an imbalance. Moreover, as additionally hypothesized, significant interaction effects indicated that burnout was particularly prevalent among those nurses who experienced ERI and put relatively high intrinsic effort into their jobs, as reflected by their strong tendency to be personally in control of job conditions.

1.3 PROBLEM STATEMENT

To summarise from the above background it is evident that stressors within the nursing profession are many and varied. The changing nature of the work itself as well as the organisation, demands from employees to adjust and accommodate work than never before. These changes place stress on the human system. Unsuccessful attempts to cope with stressors have negative consequences for both the individual and organisations and in the long run, the national economy. Therefore there is a need to investigate the talent management practices in provincial hospitals and the impact thereof on the psychological contract, well-being and turnover intentions of nurses. As a stable and productive health service is of vital importance to a country such as South Africa, the aim of this research is to develop a Talent Management Model which can, by incorporating the elements of the psychological contract and employee well-being, contribute to the retention of nurses in South African Provincial hospitals.

The specific research problems that will be addressed in this study are as follows:
The first research problem deals with the talent management of nurses in North West provincial hospitals. The available research in South Africa shows that talent management practices are in general poorly applied government institutions. Talent management practices that are poorly applied have a negative impact on both the individual and the organisation. More seriously, poor talent management practices increase the turnover intentions of quality nurses which in turn result in the poor service delivery that public service hospitals are currently exposed to.

The second research problem investigates the current level of psychological contract of nurses in North West provincial hospitals. The psychological contract involves a reciprocal relationship between management and employees that are crucial for sound employment relations in the workplace. Such contracts are maintained by virtue of all parties wanting to seek agreement on issues where possible and to maintain trust. Changes to this psychological contract can have important implications for individuals and their employer in terms of work and organizational commitment.

The third research problem deals with the work wellness of nurses in North West provincial hospitals. Nurses are currently functioning in a highly stressful environment as a result of factors such as inadequate salary, staff shortage, insufficient personnel to handle the workload, frequent interruptions, fellow workers not doing their job and poorly motivated co-workers. Nurses who are exposed to stressors for too long have the potential to develop burnout and subsequent physical and ill-health problems.

The fourth research problem relates to the dispositional employability of nurses in North-West Provincial hospitals. As the work environment changes and careers become increasingly fragmented in contemporary society, employees need to ensure that they remain attractive hires to current and future employees. Career advancement and the development of the ‘new’ nursing career are thus individually determined. This research problem focuses on the extent to which nurses in the South African context takes responsibility for their own career and assess factors such as career motivation, career proactivity, career resilience and work identity.
The fifth and final research problem focuses on the testing of a structured talent management model for professional nurses in North West provincial hospitals. No model currently exists that can guide the talent management of professional nurses in the North West province. This model will test the interactive relationships between talent management, psychological contract, burnout, work engagement, dispositional employability, physical and psychological ill-health.

1.4 RESEARCH QUESTIONS

To what extent can a Talent Management Model be developed to retain nurses in the provincial hospitals?

Specific questions are as follows:

- What are the nurses' perceptions of the application of talent management practices in their profession?
- What is the current level of the psychological contract of nurses in the North West Province?
- What are the interrelationships between the work wellness (burnout, work engagement) and ill-health of nurses in the North West Province?
- What is the level of dispositional employability of professional nurses in the North West Province?
- To what extent can a Talent Management Model be developed that incorporates talent management practices, the psychological contract, work wellness, dispositional employability and employee retention for nurses in provincial hospitals in the North West Province?
1.5 EXPECTED CONTRIBUTION OF THE STUDY

This research makes a contribution at the theoretical, methodological and practical levels.

1.5.1 THEORETICAL CONTRIBUTION

This research contributed to the field of Human Resource Management and Industrial Psychology in the following ways:

- It resulted in the design of a Talent Management Model and its impact on the psychological contract of nurses.
- It resulted in a valid and reliable measuring instrument for well-being and ill-health of registered nurses in South Africa.
- Information regarding the relationship between burnout, well-being and ill-health of nurses was received.
- Knowledge regarding psychological contract that enables talent retention and management was gained and may thus be used to predict circumstances that may lead to job dissatisfaction that may lead to any form of early termination.

1.5.2 METHODOLOGICAL CONTRIBUTION

Interrelationships among various variables will be tested that have not been done before. A new empirical model for the retention of nurses will exist.

1.5.3 PRACTICAL CONTRIBUTION

Talent management is a concept that is increasingly on the mind of practitioner and academics. However, in many organisations talent management and its practices are still not well understood and a strategic priority. This research identifies the talent management practices needed for effectively attracting, developing and retaining nurses in South African hospitals. In addition, this study also developed a model for the implementation of effective talent management practices for nurses. This research will assist the Department of Health in addressing critical talent management practices. In addition this research can also assist the
Department of Health in addressing issues such as the Psychological contract, positive and negative work related states that can have an impact on nurses’ intention to leave the profession.

1.6 RESEARCH OBJECTIVES AND HYPOTHESES

The research objectives are divided into a general objective and specific objectives.

1.6.1 GENERAL OBJECTIVE

The general objective of this research is to develop a Talent Management Model for the retention of nurses in the North West Province.

1.6.1.1 Specific objectives

The specific objectives of this research are:

• To determine nurses’ perceptions of the application of talent management practices in their hospitals;

• To determine the current level of the psychological contract of nurses in the North West Province.

• To determine the interrelationships between the work wellness (burnout, work engagement) and ill-health of nurses in the North West Province.

• To determine the current level of dispositional employability of professional nurses in the North West Province.

• To determine the extent to which a Talent Management Model can be developed incorporating talent management practices, the psychological contract, work wellness, dispositional employability and employee retention for nurses in provincial hospitals in the North West Province?
1.7 TOWARDS A HYPOTHESESIED MODEL FOR THE RESEARCH

In the light of the preceding problem statement and research objectives, the reader is led to the following hypothesised model for this research:

Figure 1: Hypothesised model for the study

H 1: Talent management is positively related to the psychological contract of nurses
H 2: Talent Management is negatively related to ill-health (physical and psychological)
H 3: Psychological Contract is negatively related to ill-health
H 4: Psychological contract mediates the relationship between talent management and ill-health
H 5: Work wellness mediates the relationship between talent management and ill-health
H 6: Talent management is positively related to the dispositional employability of nurses
H 7: Dispositional employability is negatively related to the ill-health of nurses
H 8: Dispositional employability mediates the relationship between talent management and ill-health
1.8 RESEARCH DESIGN

1.8.1 RESEARCH APPROACH

A cross-sectional survey design was utilized to describe the information on the population collected at that time. Cross-sectional designs are used to examine groups of subjects at various stages of development simultaneously, while the survey describes a technique of data collection in which questionnaires are used to gather data about an identified population (Babbie, 2001). This design is well-suited to the descriptive and predictive functions associated with correlational research, whereby relationships between variables are examined (Cooper & Schindler, 2013). Data is collected at the same time and this design attempts to understand the topic by collecting a cross-section information relevant to the topic (Bless, Higson-Smith & Sithole, 2013).

1.8.2 RESEARCH METHOD

1.8.2.1 Literature review

The literature review focused on previous research and books on employee well-being, psychological contract, dispositional employability, retention of talent, talent management, human capital management and the investigation of these constructs. An overview of the conceptualization of these constructs in literature as well as the findings in terms of investigating employee well-being, retention of talent, talent management, and human capital is provided.

1.8.2.2 Sample

The target population for this study was registered professional nurses in public hospitals in the North West Province. A stratified random sample was taken from the total population of professional nurses which in this case was seven thousand. A thousand questionnaires were distributed to the nurses with 433 questionnaires returned. This represented a response rate of 43.3%. The demographic characteristics of the respondents are presented in Table 1 below.
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Table 1 indicates that the respondents in this research are primarily female (88.2%), married (55.4%), have Setswana as their home language (75.5%), are representative of the African ethnic group (96.5%) and are aged between 40 years and 49 years (41.8%). Most of the respondents were in possession of a Diploma (54.5%), permanently employed (92.4%) and employed at the lower management level (51.3%). The respondents in this study had more than 63% of work experience, did not have any opportunities for promotion during the past five years (79.9%) and were working between 31-40 hours in a work week (64.9%).

1.8.3 DATA COLLECTION

The Human Capital Index for the Assessment of Talent Management Practices, The Psychological Contract Inventory, Maslach Burnout Inventory – General Survey, the Utrecht Work Engagement Scale, General Health Questionnaire, Orientation towards Your Work Questionnaire and Employee Retention Questionnaire were administered.

1.8.3.1 Talent management

An adapted version of the Human Capital Index was used to measure the nurses’ perceptions of the applications of the talent management practices. The questionnaire consists of 35 items and measures eight Talent Management Practices: Management Commitment, Talent Review Process, Workforce Planning, Staffing, Talent Acquisition, Talent Development, Performance Management and Talent Retention. Respondents are first asked to rate the current level of Talent Management Practices on a 5-point Likert Scale from Poor (1) to Excellent (5). Second respondents are asked to indicate the importance of the Talent Management Practices on a 5-point Likert Scale from Not (1) to Critical (5). The reliability of this instrument has been confirmed in several South African studies (Barkhuizen & Veldsman, 2012).

1.8.3.2 Psychological contract

An adapted version of The Psychological Contract Inventory was used to measure the psychological contract. The inventory consisted of 56 items and two measures: Employee Obligations and Employer Obligations. The inventory measures constructs such as Insecurity,
Performance Support, Career Stability, Employee Service Value, Employee Security, Employee Development and Freedom to leave. Responses are measured on a five-point Likert scale ranging from not at all (1) to a great extent (5). The validity of this measurement has been confirmed in the South African context (Combrinck, Stanz & Barkhuizen, 2012). The Psychological Contract Inventory was used and it is designed to serve two basic purposes: 1) as a psychometrically sound tool for assessing the generalizable content of the psychological contract for use in organizational research, and 2) as a self-scoring assessment to support executive and professional education (Rousseau, 2000).

1.8.3.3 Burnout

The Maslach Burnout Inventory – General Survey (MBI-GS) was used to measure the Exhaustion (5 items), Cynicism (5 items) and Professional Efficacy (6 items) dimensions of burnout. The Depersonalisation (5 items) dimension of the Maslach Burnout Inventory Educator Survey (MBI-ES) was also included in the questionnaire. Responses, to 21 items, are made on a six-point scale varying from 0 (never occurs) to 6 (occurs every day). High scores on Exhaustion and Cynicism/Depersonalisation, and low scores on Professional Efficacy are indicative of burnout. The adapted version of the MBI-GS has been validated in several South African studies (Barkhuizen & Rothmann, 2008).

1.8.3.4 Work engagement

The Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002) was used to measure the levels of engagement. Four items in which the language was simplified were added to the 17-item UWES. Three dimensions of engagement can be distinguished, namely Vigour (6 items; i.e., "I am bursting with energy in my work"), Dedication (5 items; i.e., "I find my work full of meaning and purpose") and Absorption (6 items; i.e., "When I am working, I forget everything else around me"). Engaged individuals are characterised by high levels of Vigour and Dedication and also elevated levels of Absorption. The validity of the UWES has been confirmed in various South African studies (Barkhuizen & Rothmann, 2006).
1.8.3.5 **Dispositional employability**

A dispositional approach to employability represents an alternative conceptualization to those previously found in the literature (Fugate & Kinicki, 2008). They conducted three independent studies to establish construct validity, using exploratory factor analysis (Study 1) and confirmatory factor analysis (Study 2), a 25-item DME instrument was confirmed. Study 2 supported the hypothesized second-order latent multidimensional factor structure of the DME. Study 3 confirmed the stability of the DME and provided support for its construct validity by longitudinally showing that dispositional employability was significantly related to employees’ positive emotions and affective commitment related to organizational changes. It was shown by researchers that these effects were above and beyond those found for tolerance for ambiguity, work locus of control, self-esteem, and optimism. A questionnaire in this regard was distributed.

1.8.3.6 **Ill-health**

General Health Questionnaire: The General Health Questionnaire was used to measure 19 items on two sub-scales. The sub-scales are physical health and psychological well-being. Each item is scored from 1 where the ill-health symptom or change of behaviour is never experienced over the last three months to 4 where the ill-health symptom or change of behaviour is often experienced over the past three months.

1.8.4 **RECORDING OF DATA**

The quantitative data was captured in an Excel spreadsheet and exported to the SPSS programme for data analyses. The data will be stored at a safe place and kept for at least ten years.

1.8.5 **DATA ANALYSES**

Data analysis was carried out using the SPSS Programme (SPSS Inc., 2012), M-Plus (M-Plus, 2012). Descriptive statistics (i.e., means, standard deviations, skewness and kurtosis) were used to analyse the data. Confirmatory and Exploratory factor analyses were used to determine the factor structure of the measurements. The reliability and validity of the measurements were determined by means of Cronbach Alpha Coefficients (Field, 2009).
Multiple regression analyses were applied to test for the interactive relationships between the variables. Multivariate analysis of variance (MANOVA) was used to determine the significance of differences between the levels of the different measurements and early career academics based on their demographic characteristics.

1.9 ETHICAL CONSIDERATIONS

According to Bless, Higson-Smith and Kagee (2006) ethical consideration is concerned with such matters as plagiarism and honesty in reporting the results. Therefore the researcher must pay attention to the following:

- Involvement of the researcher: guard against manipulating the respondents or treating them as objects rather than individual human beings.
- Informed consent: obtain necessary permission from the respondents after being fully and truthfully informed about the purpose of the research.
- Protection from harm: the respondents should be given assurance that they will be indemnified against any physical and emotional harm.
- Rights to privacy: respondents should be informed that their identity will remain anonymous.

1.10 CHAPTER DIVISIONS

The chapters in this thesis are presented as follows:

Chapter 1: Introduction
Chapter 2: Article 1: Talent management of nurses in North West Province public hospitals
Chapter 3: Article 2: Psychological contract of nurses in public hospitals
Chapter 4: Article 3: The impact of work wellness of the ill-health of professional nurses in North West Province provincial hospitals
Chapter 5: Article 4: Dispositional employability of nurses in public hospitals
Chapter 6: Article 5: A structured Model for Talent Management for professional nurses in the North West Province
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TALENT MANAGEMENT OF NURSES IN NORTH-WEST PROVINCE PUBLIC HOSPITALS

ABSTRACT

Orientation: After democracy in 1994, South Africa experienced an outflow of professional nurses due to global acceptance. The situation worsened due to a lack of proper talent management strategies such as workforce planning, coaching and mentoring.

Research purpose: This research examines nurses’ perceptions of the current application of talent management practices in public hospitals in the North West Province. In addition this research also investigated whether significant differences exist in the talent management perceptions of nurses based on their demographic characteristics.

Motivation for the study: Qualified nurses are becoming a scarce commodity in the South African context. The effective talent management of nurses can counteract their turnover intentions.

Research approach, design and method: A quantitative research approach was followed by administering an adapted version of a Talent Management Questionnaire among nurses in North West provincial hospitals (N=433)

Main findings: The results showed that talent management practices are poorly applied among nurses. Large significant gaps existed between the current versus the importance of talent management practices such as staffing, performance management, workforce planning and retention. Significant differences exist between the nurses’ perceptions of talent management practices based on their hours of work.

Practical/managerial implications: The results of this study highlight the problematic nature of the application of talent management practices for nurses in public sector hospitals. Public sector managers should take cognizance of these results as poor talent management practices can increase turnover intentions of nurses.

Contribution/value-add: The results provide new knowledge on the effective talent management of nurses and the subsequent importance thereof for reduced turnover intentions and service quality in public sector hospitals.

Keywords: Talent management, public hospitals, talent management practices, retention and talent acquisition.
INTRODUCTION

Talent management is fast becoming a top priority for government institutions including public hospitals and institutions across the world (Bhatnagar, 2011). This is a result of several global challenges relating to talent flow; the managing of two generations of employees, viz., older or mature workers and younger workers; and a shortage of needed competencies (Tarique & Schuler, 2010). Organizations or public hospitals worldwide have come to realize that knowledge, skills and abilities of their talented employees represent a major source of their competitive or quality health-care advantage (Hartman, Feisel & Schober, 2011). Consequently the task of finding and managing talent has become more complex, turbulent and contradictory than ever before, and is creating great challenges for both managers and leaders of large and small organizations including public hospitals (Cheese, Thomas & Craig, 2008).

Ngozwana and Rugimbana (2011) indicate that skills shortages have become a feature of many African countries including especially the public institutions environment. As such, competition to attract and retain human capital in the form of talented individuals and ability to retain them has become a major competitive consideration. Farndale, Scullion and Sparrow (2010) suggest that talent management should be explored from two perspectives: increasing global competition for talent, and new forms of international mobility. In the interaction with the Department of Health, South African nurses have been scouted from Saudi Arabia and the United Kingdom, thus making them internationally mobile. The main causes of nursing shortages are highlighted: inadequate workforce planning and allocation mechanisms, resource constrained undersupply of new staff, poor recruitment, retention and ‘return’ policies, and ineffective use of available nursing resources through inappropriate skill mix and utilisation, poor incentive structures and inadequate career support (Buchan & Aiken, 2008). In addition health-care administration and the general lack of sustained investment in talent management as compared to other industries are a sample of talent management challenges currently facing public hospitals in South Africa (Macmillan, 2008).

Talent management thus has become an imperative in the face of today’s business challenges and should be more strategic, connected and broad-based. Joyce and Slocum (2012) suggest that managers who argue that people, in this case nurses, are their most important assets also
offer a compelling rationale for winning the war on talent, and investment made in talent is in
the form of new leadership development programmes and programmes that emphasize
becoming an employer of choice. Human resources should further act as a vehicle to achieve
objectives of retaining talented nurses in public sector hospitals. D’Anunzo-Green (2008),
for example, maintains that clear commitment to talent management should be enforced by
fully developing policy areas since approaches to talent management are organizational or
hospital specific, and driven by internal expertise and available resources.

The main objective of this research was to explore nurses’ perceptions on the current
application of talent management practices in the workplace. This research further aimed to
determine whether significant differences exist between the perceived applications of talent
management based on their demographic characteristics. Despite a growing interest in the
field of talent management, empirical research on this phenomenon within the South African
context remains scant. Moreover, Lavelle (2010) states the extent to which talent
management represents a new and discrete management activity as opposed to the latest
human resource management (HRM) exhortation remains largely unknown. This research
will add to the limited empirical information currently available on the extent to which talent
management is applied in the sub-Saharan African context.

The next section of the article will highlight some of the limited literature available on talent
management in public hospitals. Thereafter, a discussion of the research approach and
method is provided, followed by the results of the research. Finally, the article concludes with
a discussion of the research results, as well as recommendations for further research.
LITERATURE REVIEW

Talent management defined

Despite a significant degree of academic and practitioner interest the topic of talent management remains under-developed. A key limitation is the fact that talent management lacks consistent definition and clear conceptual boundaries (Lewis & Heckman, 2006). Talent, for example, is one of those concepts that are intuitively understood but difficult to define (Truss, Mankin & Kelliher, 2012). Truss et al. (2012) further said that talent has been defined in the field of human resource development as the innate, genetically coded predispositions that create natural strengths and abilities within any individual and is different from skills, which are tools, techniques, and procedures that can be learned through instruction or experience.

Furthermore Meyskens, Von Glinow, Werther and Clarke (2009) state that the management of international human resources confronts a paradox: experienced talent will grow in value as globalization accelerates, and, at the same time, internationally mobile talent is more difficult to attract, motivate, and retain, which is the case with the nurses in South Africa. Exacerbating this paradox are demographic trends that find experienced international personnel are both in scarce supply in Europe and the U.S. and rapidly reaching retirement age, while the well-established, on-going pattern of dual-career families makes international replacements more difficult to arrange. At the same time, increased use of globalization strategies and rapid economic growth among developing nations increase the demand for expatriates – often in hardship posts located in less advanced economies.

Cannon and McGee (2011) define talent management as a process by which an organization or public hospital identifies, manages and develops its nurses into professional stream or people now and for the future. These authors further maintain that talent management is concerned with developing a strategy to determine which the organization or hospital needs to meet the current and future demands of the business plan, establishing processes to measure competence required and available, creating a range of developmental tools and processes to provide tailored approaches depending on individual needs of employees and nurses, identifying ways to obtain and retain those who are critical to success, establishing
suitable approaches to deal with those who no longer fit the organization or hospital requirements, and measuring an impact these strategies have so that policy can be continually updated and refined to deliver high performance, now and years to come.

Hughes and Rog (2008) maintain that talent management is an espoused and enacted commitment to implementing an integrated, strategic and technology-enabled approach to human resource management. The benefits of an effective implemented talent management strategy include improved employee recruitment and retention rates, and enhanced nurse engagement. These outcomes in turn have been associated with improved operational or healthcare and financial performance (Hughes & Rog, 2008). Getting the right people or nurses in pivotal roles at the right time should be nothing new to Human Resource professionals, but done effectively, talent management can create long term organizational or public hospital success (Ashton & Morton, 2005). The traditional service-oriented human resource focus must be extended to a decision science called talentship that enhances decisions about human capital. Human Resources, Public and Business leaders increasingly define organizational or governmental effectiveness beyond traditional financial or healthcare outcomes to encompass sustainability by achieving success today without compromising the needs of the future. A common strategic human capital decision science can reveal pivotal talent under both traditional and sustainability based definitions and thus uncovers important insights about talent implications of the shifting definition of strategic success (Boudreau & Ramstad, 2005).

Ingham (2006) suggests that an organization or public hospital’s relationship with talented employees or nurses needs to be fundamentally different from that of other employees if the strategy gap is to be closed. Cappelli (2008) said the decisions made about talent management will shape the public hospital or organization’s competencies and its ultimate success; from the perspective of the nurses or people who work for you, these decisions determine the path of their careers. Failure in talent management may be more recognizable than the concept itself. Those failures include mismatches between supply and demand of labour.
Talent management practices

Currently there is no consensus on the use of talent management practices in South African workplaces. The most prominent talent management practices that were identified through research include management commitment towards talent, workforce planning, staffing, recruitment and selection, retention, performance management and training and development. In what follows next a brief description is presented on each of the relevant talent management practices and how it applies to the nursing context.

Management commitment towards talent

Nursing managers are internal stakeholders who play essential roles in managing change, cultural integration, talent retention, and direction of staff attitudes toward changing healthcare structures. They frequently assume expanded roles and responsibilities without adequate education, resources, or support (Mathena, 2002). Talent management should be adopted as a complementary HRM practice to achieve Public Service objectives (Kock & Burke, 2008). This is necessary in the context of a shortage of skills and the need to redress past racial biases in the Public Service. In general, leaders lack a talent mind-set and reciprocity towards talent strategies, talent acquisition practices and talent retention practices as well as leadership commitment towards talent management (Barkhuizen, 2014; Barkhuizen, Welby-Cooke, Schutte & Stanz, 2014). There is proof that the implementation of a structured talent management programme can contribute to overcoming factors that contribute to nurse practitioners’ intention to quit and line managers can be equipped to formulate processes and programmes that can contribute to the retention of a scarce skill of nurses, and importantly, also minimise the impact of a worldwide crisis on the healthcare sector (Smuts, 2011). The results of the study by Smuts (2011) further indicated that the operationalization by managers of the talent management competencies failed.

Workforce planning

Workforce planning remains an underutilized and appreciated process in the HR armamentarium, and yet the need for strategic workforce planning and execution of workforce plans has never been greater as organizations, be they public or private, operate in
more turbulent environments and confront the twin challenges of competing for key skills and talents and of containing payroll costs (Lavelle, 2007). The rapid change in many aspects of the nursing profession, and the changing boundaries of work between doctors and nurses, has produced a challenge. Often poor quality of workforce planning, its lack of coherence or relation to other plans, and changes in workload have been contributory factors (Buchan & Edwards, 2000). The information necessary to support nurse workforce planning is fragmented and incomplete in many countries. One problem is that many health systems lack adequate methods for standardizing and aggregating local workforce data, which makes it difficult to plan at a regional or national level (Ma, 2000).

According to Duckett (2003) future workforce planning should not be based on providing more of the same but rather, the roles of health professionals will need to change and workforce planning needs to place a stronger emphasis on issues of workforce substitution, that is, a different mix of responsibilities. A recent analyses of global human resources for health conclude that all countries can accelerate health gains through more strategic investments in and management of their nursing workforces (Sermeus et al., 2011). Sermeus et al. (2011), however, further point out that nursing workforce planning and forecasting efforts have a poor record both of accurately predicting future nursing workforce needs and of informing policy interventions that avoid cyclical shortages.

**Staffing**

Adequate nurse staffing and organizational/managerial support for nursing are key to improving the quality of patient care and, ultimately, to improving the nurse retention problem in hospital settings (Aiken, Clarke & Sloane, 2002). Inadequate staffing has been associated with back injuries among nurses; however, few studies have examined the association between nursing staff levels and other injuries and illnesses (Lipscomb et al., 2004). Studies suggest that nurse staffing changes affect patient and organizational outcomes (Sasichay-Akkadechanunt, Scalzi et al., 2003). Lankshear, Sheldon and Maynard (2005) strongly suggest that higher nurse staffing and a richer skills mix (especially of registered nurses) are associated with improved patient outcomes, although the effect size cannot be estimated reliably. Mark, Harless, McCue and Xu (2004) indicated that improving registered
nurse staffing unconditionally improves quality of care. Cross-sectional studies of hospital-level administrative data have shown an association between lower levels of staffing of registered nurses and increased patient mortality (Needleman et al., 2011). Better hospital nurse staffing, more educated nurses, and improved nurse work environments have been shown to be associated with lower hospital mortality (Aiken, Cimiotti et al., 2011).

**Talent acquisition and deployment**

According Santhoshkumar and Rajasekar (2012) talent management implies recognizing a person’s inherent skills, traits and personality, and offering them a matching job. Furthermore, every person has a unique talent that suits a particular job profile and any other position may cause discomfort. Hence it is the job of the management, particularly the Human Resource (HR) department, to place candidates with prudence and caution. A wrong fit will result in further hiring, re-training and other wasteful activities. It is a systematic approach to managing talent in an organization. Sharda (2012) maintains that an organization or public entity needs to put in place some systems to tide over talent acquisition issues such as competitive entry-level salaries, summer internships, and direct recruitment through campus interviews. According to Hartman (2013) it was indicated that it is crucial for the human resource department to recognise the value of finding the right talent for hospitals. Hartman (2013) further maintains that the people or nurses represent the hospital or company’s image and its ability to adequately deliver its service or product hence the need for proper recruitment and placement.

**Retention Practices**

According to Latham, Hogan, and Rinjli (2008) the hospital’s workforce environment has been recognised as an important factor for nurse retention and patient safety, yet there is evidence that inadequate communication, intra-professional oppression, and lack of collaboration and conflict resolution continue to disempower nurses and hinder improvement of workforce conditions. Forecasts are not made for labour shortages as well as for those who are going on retirement of which this weakens the workforce planning within hospitals. There is no identification of some new skills required in nursing to enable nurses to continuously improve their skills. For workforce and successful planning to succeed, human resources
management professionals must become strategic partners with managers and develop new skills and competencies (Pynes, 2004). Goodman et al. (2014) said governments that recognize the importance of training and development, information management, managing diversity, unions, and management forms of government are more progressive in their implementation of workforce planning initiatives. The available research shows that talent retention practices remain among the most poorly applied practices in the public sector (see Mpofu & Barkhuizen, 2013; Theron, Barkhuizen & Du Plessis, 2014).

**Performance management**

Den Hartog and Boselie (2004) said the process of performance management involves managing employee or nurse efforts based on measured performance outcomes. DeNisi and Pritchard (2006) further said the ultimate goal of performance appraisal should be to provide information that will best enable managers to improve employee performance as well as managing their talent. Thus, ideally, the performance appraisal provides information to help managers manage in such a way that employee performance improves and talent is well managed. Gleeson and Husbands (2003) indicates that the proposed trade-off for teachers or nurses, in managing their talent, is improved pay for improved standards. Furthermore, advocates of such reform point to the benefits derived from greater devolution of market principles to frontline professionals who, it is argued, enhance performance, remuneration, and motivation. Critics, on the other hand, have criticized the de-professionalizing tendency of tying performance management to government targets, which fail to connect with the contextual realities of teaching, learning and nursing in the classroom or education workplace or public hospital (Gleeson et al., 2003).

**Training and development**

According to Mehra and Mookerjee (2012), an indication that advanced skills are better learned in open source projects is documented in the final report of a 2006 study sponsored by the European Union and conducted by the United Nations University UNU-MERIT in The Netherlands. Mehra and Mookerjee (2012) further said that the skills learning by doing open source projects may be richer than the skill learning by doing closed source projects within the firm. The reason is that the nature of the job content significantly determines the extent of
learning (Berg & Chyung 2008). Garavan (as cited by Mehra & Mookerjee, 2012) suggests that this may be a limitation since the job content may not provide sufficient challenge, variation, and opportunities for learning which suggests that job content of nurses needs to be reviewed. According to Hiltrop (1999) promotion is becoming the motivational currency of the old era. What matters now is job enrichment, employability and providing the opportunity for employees to develop the skills and perspective to take care of themselves (Noer as cited by Hiltrop, 1999). So the careers of managers and professionals cannot be managed the way they used to be. Instead, training and development systems must be designed so that people are no longer promoted on the basis of their level, position or status, but instead on their actual or potential contribution to the firm.

MacCauley and Wakefield (2006) indicated that Human Resource departments can set the stage for success by hiring and training capable employees since attraction and retention of employees have become increasingly significant aspect of contemporary human resource management. Thus, processes that should be included, in this case for nurses, are workforce planning, talent gap analysis, recruiting, staffing, education and development by opening up all closed nursing colleges, retention of nurses, talent reviews, succession planning and evaluation. Furthermore, if we are to concentrate on the development of nurses, a range of organizational practices should be encompassed such as career development, organizational knowledge and lifelong learning. The South African Qualification Authority Act,1995; Skills Development Act 97 of 1998, and the Skills Development Levies Act, 1999 brings more challenges for public managers to manage training and development of nurses in public hospitals effectively by availing finances for training and retaining talent. These challenges are also escalated by the fact that hospitals require a stable, highly trained and fully engaged nursing staff to provide effective levels of patient care and yet there is growing shortage of professional nurses. There is a growing need for more creative human resource practices that will attract and retain talented professional nurses.

The preceding paragraph leads to the following hypotheses for this study:

H 1: Talent management practices are poorly applied in South African provincial hospitals;

H 2: Nurses perceive that all talent management practices are important;
H 3: Significant gaps exist between the current versus the importance of talent management practices for nurses.

Talent and biographical variables

Given the significance of talent management for the nursing profession it is also necessary to investigate the impact of this phenomenon on the demographic characteristics of nurses. Talent management appears to have a profound impact on individual level variables such as age, years of work experience, educational qualification, years of work experience, promotion opportunities and hours’ work in a typical work week (see Barkhuizen, 2014; Barkhuizen, Roodt & Schutte, 2014). A study by Barkhuizen among public sector employees showed that younger generation employees aged between 20 and 29 years’ experience a higher level of talent retention strategies directed to them compared with those aged between 30 and 39 years of age. In a similar vein those who were employed for a shorter period of time in the organisation experienced more management commitment towards talent management and talent retention practices than those employed for 30 years or more. Barkhuizen (2014) further found that talent management practices are more effectively applied to those employed in higher level positions in the organisation and in possession of post-graduate qualifications.

H 4: Significant differences exist between the nurses’ perceptions of the application of talent management practices based on their demographic characteristics

RESEARCH DESIGN

A cross-sectional research design with a questionnaire as a method of data collection was used in this study. This design collects a cross-section of information relevant to the topic at one point in time (Bless, Higson-Smith & Sithole, 2013). Cross-sectional research is useful to determine the interactive relationships between variables.
Respondents

The target population for this study consisted of registered professional nurses in public hospitals in the North West Province. A stratified random sample was taken from the total population of professional nurses which in this case was seven thousand. One thousand questionnaires were distributed to the nurses with 433 questionnaires returned. This represented a response rate of 43.3%. The demographic characteristics of the respondents are presented in Table 1 below.

Table 1: Demographic characteristics of the sample

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>51</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>382</td>
<td>88.2</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>121</td>
<td>27.9</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>240</td>
<td>55.4</td>
</tr>
<tr>
<td>Marital status</td>
<td>Divorced</td>
<td>45</td>
<td>10.4</td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>27</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td>Setswana</td>
<td>327</td>
<td>75.5</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>30</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>Afrikaans</td>
<td>8</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Sesotho</td>
<td>41</td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td>Zulu</td>
<td>14</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>13</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>African</td>
<td>418</td>
<td>96.5</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>6</td>
<td>1.4</td>
</tr>
<tr>
<td>Race</td>
<td>Coloured</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>20-29yrs</td>
<td>28</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>30-39yrs</td>
<td>88</td>
<td>20.3</td>
</tr>
<tr>
<td>Age</td>
<td>40-49yrs</td>
<td>181</td>
<td>41.8</td>
</tr>
<tr>
<td></td>
<td>50-59yrs</td>
<td>128</td>
<td>29.6</td>
</tr>
<tr>
<td></td>
<td>60 and above</td>
<td>8</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Certificate</td>
<td>35</td>
<td>8.1</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>236</td>
<td>54.5</td>
</tr>
<tr>
<td>Highest Level of Education</td>
<td>Bachelor’s degree</td>
<td>133</td>
<td>30.7</td>
</tr>
<tr>
<td></td>
<td>Honours</td>
<td>24</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>Master’s degree</td>
<td>5</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Doctorate</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Temporary</td>
<td>10</td>
<td>2.3</td>
</tr>
<tr>
<td>Nature of Employment</td>
<td>Contract</td>
<td>15</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Fixed-term</td>
<td>8</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Permanent</td>
<td>400</td>
<td>92.4</td>
</tr>
<tr>
<td></td>
<td>Subordinate</td>
<td>119</td>
<td>27.5</td>
</tr>
<tr>
<td></td>
<td>Lower management</td>
<td>222</td>
<td>51.3</td>
</tr>
<tr>
<td>Job Level</td>
<td>Middle management</td>
<td>71</td>
<td>16.4</td>
</tr>
<tr>
<td></td>
<td>Senior management</td>
<td>18</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td>Working experience</td>
<td>0-5yrs</td>
<td>34</td>
<td>7.9</td>
</tr>
</tbody>
</table>
Table 1 indicates that the respondents in this research are primarily female (88.2%), married (55.4%), has Setswana as their home language (75.5%), are representative of the African ethnic group (96.5%) and aged between 40 years and 49 years (41.8%). Most of the respondents were in possession of a Diploma (54.5%), permanently employed (92.4%) and employed at the lower management level (51.3%). The respondents in this study had more than 63% of work experience, did not have any opportunities for promotion during the past five years (79.9%) and were working between 31-40 hours in a work week (64.9%).

**Research procedure**

Permission was obtained from the Director of Research at departmental level, approved by the Deputy Director-General. After several presentations the purpose of the research was explained to all members of the research unit. The questionnaires were distributed manually to the research participants. The purpose of the research was explained to all participants and participation was voluntary. Confidentiality and anonymity of participants were respected at all times. Ethical clearance was obtained prior to the administration of the questionnaires.

**Measuring instrument**

An adapted version of the Human Capital Index was used to measure the nurses' perceptions of the applications of the Talent Management Practices. The questionnaire consists of 29 items and measured seven Talent Management Practices: Management Commitment, Talent
Review Process, Workforce Planning, Staffing, Talent Acquisition, Performance Management and Talent Retention. Respondents are first asked to rate the current level of Talent Management Practices on a 5-point Likert Scale from Poor (1) to Excellent (5). Second respondents are asked to indicate the importance of the Talent Management Practices on a 5-point Likert Scale from Not (1) to Critical (5). The reliability of this instrument has been confirmed in several South African studies (see Barkhuizen, 2014).

**Statistical analysis**

Data analysis was carried out using the SPSS Program (SPSS Inc., 2014). Descriptive statistics (i.e., means, standard deviations, skewness and kurtosis) were used to analyse the data. Exploratory factor analyses were used to determine the factor structure of the HCI. The reliability and validity of the measurements were determined by means of Cronbach Alpha Coefficients (Field, 2005). Multivariate analysis of variance (MANOVA) was used to determine the significance of differences between the levels of the different measurements and early career of nurses based on their demographic characteristics.

**RESULTS**

The metric properties of the Human Capital Measure were first examined. These include the Kaiser-Meyer-Olkin (KMO) to determine the sample adequacy and sphericity of the item-correlation matrix, exploratory factor analysis to discover and identify the dimensions of the measurements and reliability analysis using Cronbach alpha coefficients to give the measure of accuracy of the instruments and determine how repeatable the results are. The HCI obtained a Measure of Sampling Adequacy of 0.912 which according to the guidelines of higher than 0.6 is adequate for factor analysis (Hair, Black, Babin & Anderson, 2010). Exploratory factor analysis using the Principal Component method was performed on the HCI. The results revealed five underlying factors for HCI which explained 72.933 of the variance. These factors were labelled Talent Commitment (Factor 1), Staffing (Factor 2), Performance Management (Factor 3), Workforce Planning (Factor 4) and Retention (Factor 5). Five items were deleted due to problematic loadings. The results of the rotated component matrix and items per factor are reported in Table 2 below. Each item showed acceptable loadings.
<table>
<thead>
<tr>
<th></th>
<th>Talent Commitment</th>
<th>Staffing</th>
<th>Performance Management</th>
<th>Workforce Planning</th>
<th>Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCI 1</td>
<td>.680</td>
<td>.382</td>
<td>.146</td>
<td>.074</td>
<td>.282</td>
</tr>
<tr>
<td>HCI 2</td>
<td>.707</td>
<td>.414</td>
<td>.214</td>
<td>-.021</td>
<td>.121</td>
</tr>
<tr>
<td>HCI 3</td>
<td>.768</td>
<td>.385</td>
<td>.209</td>
<td>.093</td>
<td>.066</td>
</tr>
<tr>
<td>HCI 5</td>
<td>.754</td>
<td>.141</td>
<td>.128</td>
<td>.313</td>
<td>.126</td>
</tr>
<tr>
<td>HCI 6</td>
<td>.681</td>
<td>-.092</td>
<td>.352</td>
<td>.408</td>
<td>.091</td>
</tr>
<tr>
<td>HCI 7</td>
<td>.595</td>
<td>.011</td>
<td>.301</td>
<td>.553</td>
<td>.078</td>
</tr>
<tr>
<td>HCI 9</td>
<td>.602</td>
<td>.348</td>
<td>.109</td>
<td>.388</td>
<td>.054</td>
</tr>
<tr>
<td>HCI 12</td>
<td>.245</td>
<td>.167</td>
<td>.178</td>
<td>.787</td>
<td>.117</td>
</tr>
<tr>
<td>HCI 13</td>
<td>.197</td>
<td>.140</td>
<td>.266</td>
<td>.843</td>
<td>.130</td>
</tr>
<tr>
<td>HCI 14</td>
<td>.119</td>
<td>.405</td>
<td>.219</td>
<td>.679</td>
<td>-.011</td>
</tr>
<tr>
<td>HCI 16</td>
<td>.240</td>
<td>.794</td>
<td>.207</td>
<td>.082</td>
<td>.137</td>
</tr>
<tr>
<td>HCI 17</td>
<td>.290</td>
<td>.715</td>
<td>-.089</td>
<td>.170</td>
<td>.275</td>
</tr>
<tr>
<td>HCI 19</td>
<td>.224</td>
<td>.626</td>
<td>.224</td>
<td>.240</td>
<td>.196</td>
</tr>
<tr>
<td>HCI 20</td>
<td>.288</td>
<td>.688</td>
<td>.303</td>
<td>.237</td>
<td>-.032</td>
</tr>
<tr>
<td>HCI 22</td>
<td>.133</td>
<td>.283</td>
<td>.779</td>
<td>.085</td>
<td>.056</td>
</tr>
<tr>
<td>HCI 23</td>
<td>.199</td>
<td>.260</td>
<td>.712</td>
<td>.327</td>
<td>.017</td>
</tr>
<tr>
<td>HCI 24</td>
<td>.265</td>
<td>.120</td>
<td>.730</td>
<td>.366</td>
<td>.117</td>
</tr>
<tr>
<td>HCI 25</td>
<td>.315</td>
<td>-.073</td>
<td>.637</td>
<td>.238</td>
<td>.217</td>
</tr>
<tr>
<td>HCI 26</td>
<td>.154</td>
<td>.190</td>
<td>.102</td>
<td>.160</td>
<td>.869</td>
</tr>
<tr>
<td>HCI 27</td>
<td>.131</td>
<td>.303</td>
<td>.501</td>
<td>.018</td>
<td>.576</td>
</tr>
</tbody>
</table>

The descriptive statistics and reliability of the HCI are reported in Table 3 below. The results showed acceptable to good reliabilities for all the factors (see Field, 2009). From the results it is clear that the respondents perceived that talent management practices were applied poorly in public hospitals. Some of the most problematic include lack of talent commitment, proper staffing levels and retention strategies. The results also indicate poor performance management systems and workforce planning.
Table 3: Descriptive statistics and reliabilities of measures

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talent commitment</td>
<td>2.3946</td>
<td>.98450</td>
<td>.566</td>
<td>.925</td>
</tr>
<tr>
<td>Staffing</td>
<td>2.5254</td>
<td>1.03606</td>
<td>.239</td>
<td>.763</td>
</tr>
<tr>
<td>Performance management</td>
<td>2.3089</td>
<td>.97924</td>
<td>.732</td>
<td>.844</td>
</tr>
<tr>
<td>Workforce planning</td>
<td>2.5096</td>
<td>1.01606</td>
<td>.266</td>
<td>.853</td>
</tr>
<tr>
<td>Retention</td>
<td>2.2263</td>
<td>1.09060</td>
<td>.743</td>
<td>.668</td>
</tr>
</tbody>
</table>

T-Tests were done to determine whether any significant differences existed between the respondents' perceptions of the current application versus the importance of talent management practices in public hospitals. The results in Table 4 below indicated that large gaps exist between current applications of talent management practices compared with the importance thereof for the respondents. The results were significant with a large effect.

Table 4: Gap Analysis: Current application versus importance of talent management practices

<table>
<thead>
<tr>
<th></th>
<th>Talent Current</th>
<th>Talent Importance</th>
<th>Gap</th>
<th>P</th>
<th>Eta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talent commitment</td>
<td>2.3946</td>
<td>2.5012</td>
<td>-0.1065</td>
<td>.000</td>
<td>.700</td>
</tr>
<tr>
<td>Staffing</td>
<td>2.5254</td>
<td>2.5416</td>
<td>-0.0162</td>
<td>.000</td>
<td>.133</td>
</tr>
<tr>
<td>Performance management</td>
<td>2.3089</td>
<td>2.5595</td>
<td>-0.2506</td>
<td>.000</td>
<td>.125</td>
</tr>
<tr>
<td>Workforce planning</td>
<td>2.5096</td>
<td>2.6513</td>
<td>-0.1416</td>
<td>.000</td>
<td>.218</td>
</tr>
<tr>
<td>Retention</td>
<td>2.2263</td>
<td>2.3776</td>
<td>-0.1513</td>
<td>.000</td>
<td>.193</td>
</tr>
</tbody>
</table>

MANOVA analysis was done to assess the relationship between the talent management dimensions and demographic variables such as gender, language, age education, job level, work experience, promotion and working hours. The results in Table 5 below showed that significant difference exist in the employee perceptions of the current application of talent management practices based on their demographic characteristics such as education, work experience, promotion and working hours.
experience and hours of work. Further post hoc tests revealed no significant differences for education and work experiences. Further post hoc analyses revealed significant differences in terms of hours of work of talent management practices.

Table 5: Manova Analysis: Talent management and demographic variables

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>p</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.996</td>
<td>.355&lt;sup&gt;b&lt;/sup&gt;</td>
<td>5.000</td>
<td>427.000</td>
<td>.879</td>
<td>.004</td>
</tr>
<tr>
<td>Language</td>
<td>.980</td>
<td>1.701&lt;sup&gt;b&lt;/sup&gt;</td>
<td>5.000</td>
<td>427.000</td>
<td>.133</td>
<td>.020</td>
</tr>
<tr>
<td>Age</td>
<td>.933</td>
<td>1.486</td>
<td>20.000</td>
<td>1407.199</td>
<td>.077</td>
<td>.017</td>
</tr>
<tr>
<td>Education</td>
<td>.942</td>
<td>1.718</td>
<td>15.000</td>
<td>1173.639</td>
<td>.042</td>
<td>.020</td>
</tr>
<tr>
<td>Job Level</td>
<td>.970</td>
<td>.881</td>
<td>15.000</td>
<td>1173.639</td>
<td>.586</td>
<td>.010</td>
</tr>
<tr>
<td>Work Experience</td>
<td>.910</td>
<td>1.618</td>
<td>25.000</td>
<td>1572.877</td>
<td>.028</td>
<td>.019</td>
</tr>
<tr>
<td>Promotion</td>
<td>.962</td>
<td>1.098</td>
<td>15.000</td>
<td>1173.639</td>
<td>.353</td>
<td>.013</td>
</tr>
<tr>
<td>Working Hours</td>
<td>.894</td>
<td>1.925</td>
<td>25.000</td>
<td>1572.877</td>
<td>.004</td>
<td>.022</td>
</tr>
</tbody>
</table>

The Wilks’ Lambda for hours of work is equal to 0.894 [F (25, 1572.877) = 1.925, p ≤ 0.05]. Analysis of each dependent variable, using a Bonferroni adjusted alpha level of 0.025, showed that the respondents differed in terms of performance management practices (F(5,433) = 2.529, p ≤0.05, partial n2 = .029) and retention practices (F(5,433) = 2.463, p ≤0.05, partial n2 = .032) based on their hours of work. Nurses working for more than 51 hours a work week experienced poorer performance management and talent retention practices compared to those working between 21 to 30 hours and 31 to 40 hours in a work week.

Based on the above results hypotheses 4 is partially accepted.
DISCUSSION

The main objective of this research was to examine nurses’ perceptions of the current application of talent management practices in public hospitals in the North West Province. In addition, this research also investigated whether significant differences exist in the talent management perceptions of nurses based on their demographic characteristics.

The results showed that that the nurses perceived that talent management practices are applied poorly in public hospitals. Some of the most problematic of these aspects include lack of talent commitment, proper staffing levels and retention strategies. The results are line with previous studies which indicate the lack of talent management in South African government institutions (see Barkhuizen, 2014; Theron et al., 2014). The results of the study by Smuts (2011) also indicated that the operationalization by managers of the talent management competencies failed. The results of the study by Smuts (2011) further indicated that the operationalization by managers of the talent management competencies failed. Kock and Burke (2008) recommended that talent management should be adopted as a complementary HRM practice to achieve Public Service objectives.

From the results one can conclude that public sector hospitals do not have talent management systems in place to identify top performers. Furthermore, staff are not provided with opportunities to perform. Hospitals also do not a succession strategy to ensure continuity that will ensure effective service delivery. Sellgren et al. (2008) said that the relationship between a creative work climate and job satisfaction was strong. A manager’s ability to lead has a major effect on work climate. Leadership succession planning is a key business strategy to help organizational leaders deal effectively with the future (Richard, 2006). Also, identification of top performers will provide information that will best enable managers to improve employee performance as well as managing their talent (DeNisi & Pritchard, 2006).

The results showed that lack of training and development for nurses. Forecasts are not made for labour shortages as well as for those who are going on retirement of which this weakens the workforce planning within hospitals. There is no identification of some new skills
required in nursing to enable nurses to continuously improve their skills. For workforce and successful planning to succeed, human resources management professionals must become strategic partners with managers and develop new skills and competencies (Pynes, 2004). Goodman et al. (2014) said governments that recognize the importance of training and development, information management, managing diversity, unions, and management forms of government are more progressive in their implementation of workforce planning initiatives.

Staffing practices also emerged as a problematic area in the talent management of nurses.

Staffing is at lower levels because the hospitals are failing to attract top talented nurses due to ineffective hiring practices. Furthermore, there are no induction programmes which can help with the retention of talent. Staffing decisions are a final step in the selection process, before induction (Stone cited by Nel et al., 2014). Nel further said managers must calculate the costs of hiring a new employee who will possibly bring new ideas and enthusiasm into the organization.

Top performers are not challenged to improve their skills and there are coaching and mentoring programs for nurses. Also, managers are not held accountable for developing nurses. The nursing shortage is a challenge for managers all over the world (Sellgren et al., 2008). Thus leadership is a core element of management and it is important to elucidate leadership behaviour in order to increase knowledge about attracting and retaining talented staff.

The results furthermore showed that performance management and retention practices are not adequately applied in public hospitals. In performance management, jobs are not linked to strategic objectives of hospitals which could really help in achieving organizational goals. Nurses are not given challenging assignments nor do hospital use nonfinancial rewards to reinforce performance. A final reason that the talent program should be tied to organizational strategy is that the attainment of strategic goals will dictate the pace of employees' development (Garrow & Hirsh, 2008). Pynes (2004) suggests that human resources
management professionals must become strategic partners with managers and develop new skills and competencies to enable successful workforce and succession planning.

Hospitals are failing to retain their best performers. Managers are not held accountable for losing top performers. Reasons for top performers living are not recorded through an effective exit interview system. Armstrong (2014) says retention strategies aim to ensure that key people stay with the organization and that wasteful and expensive levels of employee turnover are reduced. This will be based on an analysis of why people stay and why they leave.

The findings also indicated that there was a significant difference between performance management practices and long hours - that is, 51 hours and more per week. Employees working for 51 or more hours perceived poorer performance management practices. These can be detrimental to the performance of the organization, in this case hospital, since performance management is a critical aspect of organizational effectiveness. Many contemporary organizations are placing a greater emphasis on their performance management systems as a means of generating higher levels of job performance (Gruman & Saks, 2011). Perceptions were also that there are no retention strategies for nurses working 51 or more hours per week. These confirms Ritter (2011) that there is a link between healthy work environments and the retention of nurses in a hospital and implications for management are to implement changes now to create a healthy work environment that will recruit and retain nurses to secure their position in the future.

This research makes important theoretical and practical contributions. Theoretically, this research adds to the limited empirical knowledge that currently exists on the talent management of nurses in Southern Africa. From a practical point of view this research indicated the problematic areas such as performance management and retention strategies in managing talent of nurses in South Africa. Management of public hospitals can use these findings to manage talent of nurses that is in shortage and achieve high retention as well as good job performance.
This research had some limitations. First a cross-sectional survey design was used which limits the research in terms of making cause and effect inferences over the long term. Furthermore this research was conducted in one province. Longitudinal studies can be used in future where inference regarding cause and effect of poor talent management could be made. As a result the results of this research cannot be generalised to other provinces in South Africa. Future research can be expanded to include other provinces in South Africa as well.

In conclusion, findings were made concerning poor talent management in public hospitals which confirms why professional nurses are taking offers as far as UK, Australia, Saudi Arabia and other parts of the world. Based on the discussion and literature review, it is therefore recommended that the department uses the global practices in managing the talent they have in the form of the best well trained nurses they possess. Nurses have a major role to play in enhancing the well-being of citizens thus contributing to the economic growth of any country because healthy workers will reduce absenteeism and increase productivity. It is also recommended that talent management should be adopted as a complementary HRM practice to achieve Public Service objectives. This is necessary in the context of a shortage of skills and the need to redress past racial biases in the Public Service. Further recommendations are what DeNisi et al. (2006) said that the ultimate goal of performance appraisal should be to provide information that will best enable managers to improve employee performance as well as managing their talent.
REFERENCES


Chapter 3:

MANUSCRIPT 2
PSYCHOLOGICAL CONTRACT OF NURSES IN PUBLIC HOSPITALS

ABSTRACT

Orientation: There is a serious shortage of nurses globally, and South Africa is experiencing an outflow of professional nurses due to global acceptance. The psychological contract of nurses might explain their turnover intentions in public sector hospitals.

Research purpose: The main objective of this research was to investigate the psychological contract of professional nurses in public sector hospitals in the North West Province.

Motivation for the study: Psychological contracting of nurses results in a gap between employee obligation and employer obligation, and solutions are needed.

Research approach, design and method: A cross-sectional survey research design and Psychological Contract Inventory (PCI) was followed with a convenience sample taken from employees (N=433) in a South African public hospital, North West Province.

Main findings: The results showed that a large gap exists between Employee Obligation and Employer Obligation to a Psychological Contract. Significant gaps were observed between performance support, development and external marketability where employees feel that there is no performance support and development whereas the employer feels it is sufficient. Employees are more concerned with their marketability and understandable the employer is less interested with employee marketability.

Practical/managerial implications: A psychological contract of nurses between them and the employer amplifies the extent to which their relationship has become formalized. However, formal procedures are often deficient and ineffective in explaining this relationship of employments.

Contribution/value-add: The results add to the body of knowledge in the issues of Psychological contract of nurses and how it can be improved to enable health facilities to be competitive. This research can serve as the basis for the development of proper psychological contracts that are appropriate and relevant to public hospitals.

Keywords: Psychology contract, employee obligation and employer obligation
INTRODUCTION

The implications of globalization, organizational restructuring and downsizing on employment relations have renewed interest in the concept of the psychological contract (Coyle-Shapiro & Kessler, 2000). The intensified pressures as a result of change have generated major challenges for organisations in managing employment relationships (Noer, 2010). Trybou, Pourcq, Paeshuyse and Gemmel (2014) said that managers should recognize the importance of psychological contract within their organisations to build trust, satisfy and retain scarce nurses as the likelihood of nurses leaving their employment settings is increasing due to a positive relationship between psychological contracts with the intention to leave. As human capital plays an important role in organization's success, more and more nurses are aware of the fact that it is of great importance for hospital management to keep the implied terms of a psychological contract (Chen, 2014).

Maguire (2003) indicated that organisations and their employees face on-going challenges in the form of new strategic initiatives designed to keep pace in an increasingly complex business environment. In order for these challenges to be successfully met, new behaviours are required on the part of employees (Sims & Felton, 2006). Defining these new behaviours is initiated through the organization’s human resource practices (Rousseau & Wade-Benzoni, 1994). However, actual changes in individual employees’ behaviour are determined by interpreting their employers’ HR practices. Such interpretation affects employee behaviour by altering perceptions of the terms of the individually held psychological contract (O’Donohue, Sheehan, Hecker & Holland, 2007).

Consequently the psychological contract has been put forward as a framework for understanding the changes occurring in the exchange relationship between employees and employers. According to Turnley, Bolino, Lester, and Bloodgood (2003) psychological contracts consist of the beliefs employees hold regarding the terms and conditions of the exchange agreement between themselves and their organizations (Rousseau, 2003). Specifically, psychological contracts comprise the obligations that employees believe their organization owes them and the obligations the employees believe they owe their organization in return. It is important to note that people are different and do not necessarily experience the same needs at specific times (Nel et al., 2011). The psychological
contract, once established, is relatively stable over time, and reduces uncertainty measurably by creating a set of obligations, responsibilities, and conditions over and above the usual formal contract of employment.

Psychological contract breach arises when an employee perceives that his or her organization has failed to fulfil one or more of the obligations comprising the psychological contract (Morrison & Robinson, 2004). Zhao, Wayne, Glibkowski, and Bravo (2007) maintain that psychological contract breach is a significant workplace event that triggers employee affective reactions. Psychological contract violation captures a focal person's emotional responses including frustration and anger that follow breach (Zhao et al., 2007). Although there are moderators of this relationship such as employee attributions for the breach and fairness judgments (Robinson & Morrison, 2000), breach is generally assumed to increase feelings of violation (Raja, Johns, & Ntalianis, 2004).

One such affective reaction is mistrust. McAllister et al. (2014) contend that trust has an affective component, and nurses make emotional investments in trust-based relationships. These relationships are characterized by the two parties' genuine care and concern for the welfare of each other. Raja et al. (2004) explicitly defined mistrust as an emotional response to breach. When breach occurs, employees question the integrity of the organization and become overwhelmingly sceptical, cynical, or hostile toward the organization's initiatives, all of which are indicators of mistrust.

The main objective of this research was to investigate the psychological contract of nurses in the North West provincial hospitals. More specifically, we explored nurses' perceptions of their obligations towards hospitals versus employer obligations. Furthermore, we also investigated whether significant differences exist in the psychological contract of nurses based on their demographic characteristics.
The next section of the article will highlight some of the literature available on psychological contract. Thereafter, a discussion of the research approach and method is provided, followed by the results of the research. Finally the article concludes with a discussion of the research results, as well as recommendations for further research.

**LITERATURE REVIEW**

**Psychological contract defined**

A psychological contract is best understood by reference to an ideological currency and the organization is perceived as obligated to provide credible support for that professional contribution, and the perceived lack of such support has significant impacts (O’Donohue & Nelson, 2007). Bingham (2005) said, premised on Blau’s (1964) seminal work on exchange relationships and the underlying norm of reciprocity, that research has often alluded to the idea that different behavioural outcomes are likely to result from psychological contracts premised on either transactional or relational obligations of employment exchange (Emerson, 2013). Indeed, central to psychological contract research is the recognition that the content of the perceived obligations contained within the psychological contract impacts on employees’ reactions to them (Rousseau & McLean Parks, 1992). Differences in the nature of perceived obligations within such contracts result in distinct emergent properties that subsequently influence employee behaviour (Emerson, 1990). Unlike the formal employment contract that sets out explicit terms and conditions, the psychological contract is ‘cognitive-perceptual’ in nature (O’Donohue, Donohue & Grimmer, 2007). In other words, it is implicit and reflects on the individual’s perceptions that promises have been made, and considerations offered in exchange, which bind the employee and the organization to a set of reciprocal obligations (Rousseau & Tijoriwala, 1999).

The roots of the psychological contract can be found in social exchange theory. Matthijs, De Lange, Jansen and Van Der Velde (2008) allude to the social exchange theory, where people engage in interactions with other people because they are motivated by the expectations of receiving inducements in return from the other party. Social exchange involves series of interactions, such as incentives from the employer and contributions from the employee, between two parties (Cropanzano & Mitchell, 2005). Each party acts according to the expected norm that the other party...
will reciprocate such actions, creating mutual obligations over time. If one party does not reciprocate, an imbalance is created between the contributions of the two parties (Cropanzano & Mitchell, 2005). If employees perceive that their employer has not reciprocated their contributions, they will respond with emotional reactions such as anger and frustration, in line with affective events theory. Furthermore, they may restore the balance in social exchanges by lowering their trust, job satisfaction, and commitment (Taylor & Tekleab, 2004).

According to Taylor and Tekleab (2004) social exchanges and reciprocity play a critical role in the psychological contract because mutual obligations, as social exchanges, form a psychological contract. Shore and Barksdale (1998) found that imbalances between employee and employer obligations resulted in a lower affective commitment than in a balanced situation, especially when it involved mutually high obligations. Matthijs, Jansen, Van Den Velde, De Lange and Rousseau (2010) indicate that theoretically work on resource exchange in social interactions provides insights into how employer psychological contract obligations might be classified.

According to Van Dyne and Ang (1998), social exchange theory predictions predict that contingent workers engage in less organizational citizenship, expect less of their employers in their psychological contracts, and have lower affective commitment than regular employees. A review of the international literature (Ward & Cowman 2007) highlights many variables influencing nurses' job satisfaction, including organizational change. One impact of such change is that nurses' employment prospects and expectations are changed. Increasingly, changing expectations among psychiatric nurses is viewed as a two-way process between employers and employees, involving the recognition of both formal and informal contracts of employment. Furthermore, the informal aspect of an employment contract is acknowledged as a psychological contract constituting unwritten beliefs of both employees and employers as to their mutual obligations in the employment relationship. Furthermore, breaches or perceived breaches of psychological contracts have been associated with a loss of organizational commitment. Lack of organizational commitment manifests itself in poor individual accomplishment; low levels of job satisfaction and attitudes towards the organization can also decline. Alternatively, job satisfaction has been reported to relate positively to organizational commitment.
Psychological contracts consist of the beliefs employees hold regarding the terms of the informal exchange agreement between themselves and their organizations (Turnley & Feldman, 1999). Psychological contract violations do not necessarily correspond to “objective reality,” because psychological contracts, by definition, are in the minds of employees’ (Morrison & Robinson, 2004).

Again interest in psychological contracts has been growing within the management literature.

**Dimensions of psychological contract**

In what follows next we discuss the employee and employer obligations of the psychological contract.

**Employee obligations**

According to Aselage and Eisenberger (2003) employees come to perceive that they owed less to their employers while seeing their employers as owing them more. These authors further maintained that an employer's failure to fulfil its commitments was found to be significantly associated with decline in some types of employee obligations. Morrison and Robinson (2004) indicated that the psychological contract held by an employee consists of beliefs about the reciprocal obligations between that employee and his or her organization. Freese and Schaik (2008) concluded that, despite the level of agreement between the employer and employee regarding the elements of the psychological contract, they were in danger of holding different perceptions of its balance; and that organizations should only expect employee commitment if they themselves have fulfilled their side of the contract.

*H 1: Nurses show a low level of psychological contract towards public sector hospitals*

**Employer obligations**

Employer obligations are prospective focuses on promises made and provide a way of viewing an exchange relationship as a sequence of contingent transactions that include reciprocal promises about what will be exchanged (Chambel & Alcover, 2011).
Chambel and Alcover (2011) further distinguished four categories of psychological contract that included different employer obligations: relational (obligation to employees’ concerns, well-being and employment security); balanced (obligation to provide internal and external job opportunities and more challenging goals); transactional (obligation to fixed or limited employment and restricted commitment/involvement); transitional (reflecting a breakdown or absence of an agreement in which commitments between the parties are eroded or do not exist, and consequently do not include organizational obligations – a category not included in previous studies).

According to Gakovic and Tetrick (2003), when obligations associated with the psychological contract are not fulfilled, employees may experience reduced predictability and control, consequently leading to stress for the individual. Sutton and Griffin (2004) argued that the cognitive perception of a breach in a psychological contract will not necessarily result in the intense emotional reaction associated with the term psychological contract violation, and that explanations of the root causes of breach of contract may reduce the intensity of the emotional response. Furthermore, violations may result in employee withdrawal or engagement in anti-role behaviours such as negativism, theft, harassment, sabotage and vandalism. In the absence of a legal remedy, an individual who perceives a breach of their psychological contract withdraws or withholds from the relationship in an attempt to enforce the contract.

**H 2: Nurses perceive that public sector hospitals show a low level of obligation towards them**

**Employer - Employee expectations**

According to Dabos and Rousseau (2004) joint perceptions of the two sides of the psychological contract can provide important insights into the outcomes on exchange relationship yields. These authors further maintain that when parties develop shared understandings and reliance on their reciprocal commitments, psychological contract can become construed as self-fulfilling prophecies reflecting anticipated future exchanges, making both individuals and organizations more productive and their interactions more mutually supportive and constructive.
Prior studies of psychological contract development have found consistently that newly-hired people's perceptions of their obligations to the organization tend to decrease over time in the job, while their perceptions of the organization's obligations to them tend to increase (Tekleab & Taylor, 2003). Tekleab and Taylor (2003) further indicate that this effect is referred to as the instrumental perspective, in which one party overestimates its own contributions to a relationship and underestimates that of the other.

Lester, Turnley, Bloodgood and Bolino (2002) suggest that supervisor and subordinate perceptions are most likely to differ on the extent to which the organization violated its obligations to provide fair pay, advancement opportunities, and a good employment relationship. Lester et al. (2002) further indicate that the greater the degree of psychological contract breach reported by subordinates, the less committed they are to the organization and the lower their job performance (as rated by their supervisor). Moreover, when psychological contract breach is perceived, supervisors' and subordinates' attributions regarding the reasons for the breach are likely to differ, and subordinates are more likely to attribute breach to the organization's intentional disregard for the commitments that it had made to the employee, while supervisors are more inclined to attribute breach to situations beyond the organization's direct control.

Cullinane and Dundon (2006) indicate that more often than not, management fails to live up to their side of the bargain. Also, conventional psychological contract literature explains this as a result of managerial failure and, to some extent, market pressures. Such explanations are limited in so far as they fail to comprehend that these are merely surface level issues that arise from a deeper explanation of political and economic power. Godard (2004) has taken a similar approach towards high-performance work systems, suggesting not only managerial failure but locating a paradigm weakness because of the institutional breakdown arising out of the liberal market economic model. Godard's argument for high-performance work system failure has a strong resonance in how the extant literature is equally misguided in its treatment of the psychological contract as a paradigm shift that seeks to explain contemporary (or new) employment relationships. The core of this argument is that the management of employment is characterized as a relationship of subordination under conditions of interest conflict. When an individual employee enters into an employment
relationship with an employer, he/she becomes legally subordinated to the exercise of employer authority. Coyle-Shapiro and Conway (2005) said that perceived organizational support and the components of psychological contract fulfilment are more important in predicting organizational citizenship behaviour than psychological contract fulfilment.

Applied within the nursing context, Purvis and Cropley (2003) found four contract profiles among the nurses sampled: ‘self-development and achievement’; ‘belonging and development’; ‘competence and collegiality’ and ‘autonomy and development’. Correlation analysis demonstrated that leaving intentions were associated with a need for personal autonomy and development, and the violation of expectations for being appreciated, valued, recognized and rewarded for effort, loyalty, hard-work and achievement, negative endorsement of a relational contract, positive endorsement of a transactional contract, and job and organizational dissatisfaction. The key findings of research suggest that the majority of employees have experienced contract breach (Coyle-Shapiro & Kessler, 2000). This view is also supported by managers, as representatives of the employer, who further indicate that the organization, given its external pressures, is not fulfilling its obligations to employees to the extent that it could.

H 3: Significant gaps exist between employer and employee expectations of the psychological contract

Psychological contract and biographical variables

Camerino, Conway, van der Heijden, Estryn-Behor, Costa and Hasselhorn (2008) said that in the relationship between low perceived work ability and intended or actual exit, a significant part is explained by age itself, but also by the age-related differences in occupational and life opportunities. This contribution concludes with some age-related policies aimed at boosting nurses' retention. Camerino, Conway, van der Heijden, Estryn-Behor, Consonni, Gould, and Hasselhorn (2006) indicate that their findings corroborate earlier work, which demonstrated an association between ‘age’ and low ‘perceived work ability’ among healthcare workers.
Previous studies indicated that age might be a predictor of nurses’ turnover intention. Like older employees in general, older nurses often appear to be more satisfied with their jobs and less frequently consider turnover compared with younger ones (van Dam & van der Heijden, 2013). The findings were supported by career theory which states that employees will change jobs until they have found a job with a good fit. Based on these arguments, van Dam et al. expected a negative relationship between age and turnover intention, although an impact on work pressure was not foreseen. Decreasing emotional and physical demands and increasing nurses’ development opportunities are some of the measures hospitals can take to create a work environment that better accommodates the needs of their intensive care nursing staff.

Barron and West (2005) suggest that individual characteristics associated with shorter tenure in the profession include being male, being younger, having a degree, and having been born in the UK. Many nurses leave to care for their families, which suggests the possibility of returning to the profession at a later date. A number of job characteristics are also related to leaving, including low pay, managerial responsibility, full-time work and lack of opportunities to use initiative. Nurses seem to be particularly vulnerable to leaving early in their careers, but those who survive the first few years are likely to remain in the profession for the rest of their working lives. It is particularly important in policy terms that ability to use initiative is related to leaving nursing for another form of full-time employment and, in particular, to leaving for a better job.

\( H_4: \) Significant differences exist between the perceived employee obligations of nurses of nurses based on their demographic characteristics

\( H_5: \) Significant differences exist between the perceived employer obligations of nurses of nurses based on their demographic characteristics
RESEARCH DESIGN

A cross-sectional research design with a questionnaire as a method of data collection was used. Data is collected at the same time and this design attempts to understand the topic by collecting a cross-section information relevant to the topic (Bless, Higson-Smith & Sithole, 2013).

Sample

The target population for this study consisted of registered professional nurses in public hospitals in the North West Province. A stratified random sample was taken from the total population of professional nurses which in this case was seven thousand. A thousand questionnaires were distributed to the nurses with 433 questionnaires returned. This represented a response rate of 43.3%. The respondents in this research are primarily female (88.2%), married (55.4%), with Setswana as their home language (75.5%), representative of the African ethnic group (96.5%) and aged between 40 years and 49 years (41.8%). Most of the respondents were in possession of a Diploma (54.5%), permanently employed (92.4%) and employed at the lower management level (51.3%). The respondents in this study had more than 63% of work experience, did not have any opportunities for promotion during the past five years (79.9%) and had been working between 31-40 hours in a work week (64.9%)

Measuring instrument

An adapted version of The Psychological Contract Inventory was used to measure the psychological contract. The inventory consisted of 56 items and two measures: Employee Obligations and Employer Obligations. The inventory measures constructs such as Insecurity, Performance Support, Career Stability, Employee Service Value, Employee Security, Employee Development and Freedom to leave. Responses are measured on a five point Likert scale ranging from not all (1) to a great extent (5). The validity of this measurement has been confirmed in the South African context (Combrinck, Stanz & Barkhuizen, 2012). The Psychological Contract Inventory was used and it is designed to serve two basic purposes: 1) as a psychometrically sound tool for assessing the generalizable content of the psychological contract for use in organizational research, and 2) as a self-scoring assessment to support executive and professional education (Rousseau, 2000).
Procedure

Permission was obtained from the Director of Research at the departmental level, approved by the Deputy Director-General. After several presentations the purpose of research was explained to all members of the research unit. The questionnaires were distributed manually to the research participants. The purpose of the research was explained to all participants and participation was voluntary. Confidentiality and anonymity of participants were respected at all times. Ethical clearance was obtained prior to the administration of the questionnaires.

Statistical analysis

Data analysis was carried out using the SPSS Programme (SPSS Inc., 2014). Descriptive statistics (i.e., means, standard deviations, skewness and kurtosis) were used to analyse the data. Exploratory factor analyses will be used to determine the factor structure of the cross sectional questionnaire. The reliability and validity of the measurements was determined by means of Cronbach Alpha Coefficients (Field, 2005). Multivariate analysis of variance (MANOVA) was used to determine the significance of differences between the levels of employee expectations and employer obligations in psychological contract based on their demographic characteristics.

RESULTS

Prior to the testing of the hypotheses, the psychometric properties of the Employee Expectations Questionnaire were examined. These included the Kaiser-Meyer-Olkin (KMO) to determine the sample adequacy and sphericity of the item-correlation matrix, exploratory factor analysis to discover and identify the dimensions of the measurements and reliability analysis using Cronbach alpha coefficients to give the measure of accuracy of the instruments and to determine how repeatable the results are. The following Measure of Sampling Adequacy of .667 (Employee Obligations) and .742 (Employer Obligations) was obtained which according to the guideline of higher that 0.6 is adequate for factor analysis was obtained (Hair, Black, Babin & Anderson, 2010).
Factor Analyses – Employee Obligations Questionnaire

An exploratory factor analysis using the Principle Component Factoring extraction method was performed on 28 items of the Employer Expectation Questionnaire. Loadings less than 0.4 were suppressed. The principal Component Factor Analysis initially resulted in seven factors. Two items were excluded due to low and problematic factor loadings. The seven factors were labelled (Factor 1, narrow), (Factor 2, stability), (Factor 3 short-term), (Factor 4, performance), (Factor 5, loyalty), (Factor 6, development) and (Factor 7, marketability). The seven explained 65.662% of the variance. The rotated component Matrix is shown below in Table 1. The item loadings were acceptable for the seven specified factors.

Table 1: Rotation employee obligations questionnaire

<table>
<thead>
<tr>
<th></th>
<th>Narrow</th>
<th>Stability</th>
<th>Short-term</th>
<th>Performance</th>
<th>Loyalty</th>
<th>Development</th>
<th>Marketability</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES1</td>
<td>.228</td>
<td>-.239</td>
<td>.655</td>
<td>.155</td>
<td>-.203</td>
<td>-.107</td>
<td>.146</td>
</tr>
<tr>
<td>EES2</td>
<td>.097</td>
<td>.103</td>
<td>.808</td>
<td>.165</td>
<td>.052</td>
<td>.067</td>
<td>-.016</td>
</tr>
<tr>
<td>EES3</td>
<td>.098</td>
<td>-.099</td>
<td>.808</td>
<td>.014</td>
<td>-.041</td>
<td>-.030</td>
<td>-.073</td>
</tr>
<tr>
<td>EES4</td>
<td>.002</td>
<td>.118</td>
<td>.728</td>
<td>-.088</td>
<td>.379</td>
<td>.099</td>
<td>-.052</td>
</tr>
<tr>
<td>EEL1</td>
<td>-.102</td>
<td>.204</td>
<td>.134</td>
<td>.132</td>
<td>.828</td>
<td>.138</td>
<td>-.104</td>
</tr>
<tr>
<td>EEL2</td>
<td>.080</td>
<td>-.062</td>
<td>-.057</td>
<td>-.038</td>
<td>.817</td>
<td>-.018</td>
<td>.121</td>
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<td>.080</td>
<td>.388</td>
<td>.506</td>
<td>.077</td>
<td>.148</td>
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<td>.169</td>
<td>.085</td>
<td>.145</td>
<td>.101</td>
<td>.045</td>
<td>-.011</td>
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<td>.151</td>
<td>-.046</td>
<td>-.232</td>
<td>.047</td>
<td>.109</td>
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<td>EEN3</td>
<td>.805</td>
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<td>.078</td>
<td>.111</td>
<td>.060</td>
<td>.064</td>
<td>.025</td>
</tr>
<tr>
<td>EEN4</td>
<td>.688</td>
<td>.128</td>
<td>.040</td>
<td>.011</td>
<td>.174</td>
<td>-.043</td>
<td>-.122</td>
</tr>
<tr>
<td>EEP1</td>
<td>.193</td>
<td>.144</td>
<td>.013</td>
<td>.760</td>
<td>.128</td>
<td>-.072</td>
<td>-.010</td>
</tr>
<tr>
<td>EEP2</td>
<td>.000</td>
<td>.007</td>
<td>.144</td>
<td>.855</td>
<td>-.039</td>
<td>.054</td>
<td>.134</td>
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<td>EEP3</td>
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<td>.144</td>
<td>.033</td>
<td>.779</td>
<td>.079</td>
<td>.159</td>
<td>.037</td>
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<td>EED1</td>
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<td>.127</td>
<td>.046</td>
<td>.323</td>
<td>.394</td>
<td>.440</td>
<td>.091</td>
</tr>
<tr>
<td>EED2</td>
<td>.084</td>
<td>-.035</td>
<td>.138</td>
<td>-.034</td>
<td>-.022</td>
<td>.769</td>
<td>.056</td>
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<td>EED3</td>
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<td>-.051</td>
<td>.100</td>
<td>.281</td>
<td>.667</td>
<td>-.135</td>
</tr>
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<td>.159</td>
<td>-.112</td>
<td>.094</td>
<td>-.034</td>
<td>.769</td>
<td>-.002</td>
</tr>
<tr>
<td>EEM2</td>
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<td>.070</td>
<td>-.044</td>
<td>.027</td>
<td>.442</td>
<td>.507</td>
</tr>
<tr>
<td>EEM3</td>
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<td>.145</td>
<td>.000</td>
<td>.107</td>
<td>.110</td>
<td>-.025</td>
<td>.858</td>
</tr>
<tr>
<td>EEM4</td>
<td>-.114</td>
<td>.033</td>
<td>-.066</td>
<td>.086</td>
<td>-.021</td>
<td>-.047</td>
<td>.838</td>
</tr>
<tr>
<td>EEST1</td>
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<td>-.019</td>
<td>.093</td>
<td>.240</td>
<td>-.030</td>
<td>.248</td>
</tr>
<tr>
<td>EEST2</td>
<td>.138</td>
<td>.791</td>
<td>.058</td>
<td>.195</td>
<td>.114</td>
<td>.000</td>
<td>.082</td>
</tr>
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<td>-.004</td>
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<td>-.015</td>
</tr>
<tr>
<td>EEST4</td>
<td>.194</td>
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<td>-.017</td>
<td>.043</td>
<td>-.170</td>
<td>.309</td>
<td>-.168</td>
</tr>
</tbody>
</table>
Factor Analyses – Employer Obligation Questionnaire

An exploratory factor analysis using the Principal Component Factoring extraction method was performed on the 28 items of the Employer obligations questionnaire. The Principal Component Factor Analysis initially resulted in seven factors. A Principal Factor Analysis was done by using the Varimax rotation to specify the seven factors. Eight items were excluded due to low and problematic factor loadings. The seven factors were labelled (Factor 1, short term), (Factor 2, loyalty), (Factor 3, narrow), (Factor 4, performance support), (Factor 5, development), (Factor 6, external marketability) and (Factor 7, stability). The seven factors explained 69.336 of the variance. The rotated component matrix is shown below in Table 2. The item loading was acceptable for the seven specified factors.

Table 2: Rotation employer obligation questionnaire

<table>
<thead>
<tr>
<th></th>
<th>Narrow</th>
<th>Development</th>
<th>Marketing</th>
<th>Loyalty</th>
<th>Short-Term</th>
<th>Stability</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERS3</td>
<td>-1.12</td>
<td>.215</td>
<td>.017</td>
<td>-1.030</td>
<td>.835</td>
<td>-1.046</td>
<td>.145</td>
</tr>
<tr>
<td>ERS4</td>
<td>.123</td>
<td>-.086</td>
<td>.058</td>
<td>.087</td>
<td>.877</td>
<td>-.099</td>
<td>.024</td>
</tr>
<tr>
<td>ERL2</td>
<td>.224</td>
<td>.003</td>
<td>.235</td>
<td>.663</td>
<td>.045</td>
<td>.110</td>
<td>.003</td>
</tr>
<tr>
<td>ERL3</td>
<td>.266</td>
<td>.029</td>
<td>.124</td>
<td>.795</td>
<td>.122</td>
<td>.009</td>
<td>.116</td>
</tr>
<tr>
<td>ERL4</td>
<td>.305</td>
<td>.161</td>
<td>-.104</td>
<td>.750</td>
<td>-.092</td>
<td>.064</td>
<td>.138</td>
</tr>
<tr>
<td>ERN1</td>
<td>.649</td>
<td>.146</td>
<td>.206</td>
<td>.192</td>
<td>.019</td>
<td>.022</td>
<td>.140</td>
</tr>
<tr>
<td>ERN2</td>
<td>.731</td>
<td>.080</td>
<td>.257</td>
<td>.168</td>
<td>-.058</td>
<td>.070</td>
<td>.112</td>
</tr>
<tr>
<td>ERN3</td>
<td>.828</td>
<td>.108</td>
<td>-.013</td>
<td>.147</td>
<td>.053</td>
<td>.029</td>
<td>-.026</td>
</tr>
<tr>
<td>ERN4</td>
<td>.704</td>
<td>.071</td>
<td>-.141</td>
<td>.321</td>
<td>.029</td>
<td>.010</td>
<td>.064</td>
</tr>
<tr>
<td>ERP1</td>
<td>.463</td>
<td>.065</td>
<td>-.063</td>
<td>.122</td>
<td>.372</td>
<td>-.018</td>
<td>.637</td>
</tr>
<tr>
<td>ERP2</td>
<td>.070</td>
<td>.097</td>
<td>.060</td>
<td>.131</td>
<td>.041</td>
<td>.090</td>
<td>.877</td>
</tr>
<tr>
<td>ERD1</td>
<td>-.050</td>
<td>.634</td>
<td>.159</td>
<td>.247</td>
<td>.113</td>
<td>.002</td>
<td>.347</td>
</tr>
<tr>
<td>ERD2</td>
<td>.177</td>
<td>.732</td>
<td>.147</td>
<td>-.030</td>
<td>.124</td>
<td>.056</td>
<td>-.008</td>
</tr>
<tr>
<td>ERD3</td>
<td>.289</td>
<td>.787</td>
<td>.180</td>
<td>-.107</td>
<td>.096</td>
<td>.111</td>
<td>.036</td>
</tr>
<tr>
<td>ERD4</td>
<td>.054</td>
<td>.806</td>
<td>.101</td>
<td>-.084</td>
<td>.054</td>
<td>-.025</td>
<td>.228</td>
</tr>
<tr>
<td>ERM1</td>
<td>-.025</td>
<td>.389</td>
<td>.682</td>
<td>.023</td>
<td>-.173</td>
<td>.028</td>
<td>.190</td>
</tr>
<tr>
<td>ERM2</td>
<td>.148</td>
<td>.356</td>
<td>.742</td>
<td>-.084</td>
<td>.054</td>
<td>-.025</td>
<td>.228</td>
</tr>
<tr>
<td>ERM3</td>
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<td>.762</td>
<td>.156</td>
<td>.024</td>
<td>.088</td>
<td>-.051</td>
</tr>
<tr>
<td>ERM4</td>
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<td>.092</td>
<td>.706</td>
<td>.217</td>
<td>.237</td>
<td>.159</td>
<td>-.291</td>
</tr>
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<td>ERST1</td>
<td>-.068</td>
<td>.117</td>
<td>.302</td>
<td>.116</td>
<td>-.017</td>
<td>.703</td>
<td>-.016</td>
</tr>
<tr>
<td>ERST2</td>
<td>.166</td>
<td>-.106</td>
<td>.049</td>
<td>.007</td>
<td>-.015</td>
<td>.798</td>
<td>.024</td>
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<tr>
<td>ERST3</td>
<td>-.012</td>
<td>.318</td>
<td>-.155</td>
<td>.054</td>
<td>-.155</td>
<td>.621</td>
<td>.089</td>
</tr>
</tbody>
</table>

The descriptive statistics of the Employee obligation questionnaire are reported in Table 3 below. The results showed acceptable reliabilities for all dimensions except for External Marketing (see Chapter 3 Page 73).
Field, 2009). From the mean scores it was evident that nurses felt that they had an average level of psychological obligation towards their workplace. From the scores however one could deduct that nurses do not have a short-term orientation towards their employment and felt they have an obligation to remain within the hospital.

Table 3: Descriptive statistics of employee obligation

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>2.5092</td>
<td>1.12945</td>
<td>.548</td>
<td>0.736</td>
</tr>
<tr>
<td>Loyalty</td>
<td>3.1782</td>
<td>1.16840</td>
<td>-.460</td>
<td>0.751</td>
</tr>
<tr>
<td>Narrow</td>
<td>3.2546</td>
<td>1.13625</td>
<td>-.293</td>
<td>0.766</td>
</tr>
<tr>
<td>Performance</td>
<td>3.3279</td>
<td>1.15346</td>
<td>-.416</td>
<td>0.743</td>
</tr>
<tr>
<td>Development</td>
<td>3.3372</td>
<td>1.01439</td>
<td>-.307</td>
<td>0.698</td>
</tr>
<tr>
<td>Marketing</td>
<td>3.0747</td>
<td>1.10079</td>
<td>.069</td>
<td>0.549</td>
</tr>
<tr>
<td>Short-term</td>
<td>2.9682</td>
<td>1.12436</td>
<td>-.028</td>
<td>0.755</td>
</tr>
</tbody>
</table>

The descriptive statistics and reliabilities of the employer obligation in psychological contracting are reported in Table 4 below. Acceptable reliabilities were obtained for all the scales except for external marketability (see Field, 2009). From the average scored it is evident that nurses do not have high expectations from their employer.

Table 4: Descriptive statistics of employer obligation

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>2.6956</td>
<td>1.22779</td>
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<td>0.682</td>
</tr>
<tr>
<td>Loyalty</td>
<td>2.9877</td>
<td>1.18801</td>
<td>.000</td>
<td>0.751</td>
</tr>
<tr>
<td>Narrow</td>
<td>3.0503</td>
<td>1.15688</td>
<td>-.105</td>
<td>0.793</td>
</tr>
<tr>
<td>Performance</td>
<td>3.0647</td>
<td>1.54836</td>
<td>2.450</td>
<td>0.743</td>
</tr>
<tr>
<td>Development</td>
<td>2.8834</td>
<td>1.11867</td>
<td>.113</td>
<td>0.698</td>
</tr>
<tr>
<td>Marketing</td>
<td>2.7500</td>
<td>1.13039</td>
<td>.191</td>
<td>0.549</td>
</tr>
<tr>
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<td>3.0285</td>
<td>1.01656</td>
<td>-.055</td>
<td>0.736</td>
</tr>
</tbody>
</table>

A further analysis was done to determine whether any significant differences exist between the respondents’ perceptions of any current violation of the Psychological contract by the employer. The results on Table 5 below showed that p < 0.001 in all factors, which is significantly different and has
large effects. The results confirm hypothesis 1 in that nurses display a low level of psychological obligation towards hospitals. Hypothesis 2 is accepted based on the fact that employers display a low level of obligation towards its nurse employees. The results furthermore confirm hypothesis 3 in that significant differences exist between employee obligations versus employer obligation.

Table 5: Gap analysis between employee and employer obligation

<table>
<thead>
<tr>
<th></th>
<th>Employee Mean</th>
<th>Employer Mean</th>
<th>Gap</th>
<th>P</th>
<th>Eta</th>
</tr>
</thead>
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<td>2.5092</td>
<td>2.6956</td>
<td>-0.1864</td>
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<td>.134</td>
</tr>
<tr>
<td>Loyalty</td>
<td>3.1782</td>
<td>2.9877</td>
<td>0.1906</td>
<td>.000</td>
<td>.338</td>
</tr>
<tr>
<td>Narrow</td>
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<td>3.0503</td>
<td>0.2043</td>
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<td>.213</td>
</tr>
<tr>
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<td>3.0647</td>
<td>0.2633</td>
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<td>.100</td>
</tr>
<tr>
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<td>2.8834</td>
<td>0.4538</td>
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<td>2.7500</td>
<td>0.3247</td>
<td>.000</td>
<td>.172</td>
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</tbody>
</table>

A MANOVA analysis was done to assess the relationship between the psychological contract dimensions and demographic variables, such as gender, language, age, education, job level, work experience, promotion and hours of work. The results in Table 6 below showed that significant differences exist in the employee perception of the current implementation of psychological contract in three demographic characteristics such as education, work experience and hours of work. Further post-hoc analysis showed no further differences between hours of work in psychological contract. The post-hoc analyses are reported below.

Table 6: Manova Analysis: Employee obligation and demographic variables

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
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<td>.030</td>
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</table>
The Wilks' Lambda for stability is equal to 0.043 \( [F (35, 420.000) = 1.686, p \leq 0.05] \). Analysis of each dependent variable, using a Bonferroni adjusted alpha level of 0.025, showed that nurses differ in terms of work experience \( F (5,433) = 5.897, p \leq 0.05, \text{partial } \eta^2 = 0.035 \). Employees with six to eleven years of work experience have higher work stability than those with thirty years and above.

The Wilks' Lambda for marketability is equal to 0.913 \( [F (21, 1212.306) = 1.868, p \leq 0.05] \). Analysis of each dependent variable, using a Bonferroni adjusted alpha level of 0.025, showed that nurses differ in terms qualification \( F (5,433) = 3.499, p \leq 0.05, \text{partial } \eta^2 = 0.030 \). Employees with bachelor's degree are more capable of enhancing their external marketability than those with a diploma.

Based on the above results Hypothesis 4 is partially accepted.

The results of Manova analyses between perceived employer obligations and nursing demographics are reported in Table 7 below. The results in Table 7 below showed that significant differences do not exist in the employer perception of the current implementation of psychological contract. Based on the results hypothesis 5 is rejected.

Table 7: Manova Analysis: Employer obligation and demographic variables

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Value</th>
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<th>Error df</th>
<th>p</th>
<th>Partial Eta Squared</th>
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<tr>
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<td>.016</td>
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<tr>
<td>Hours’ work</td>
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<td>1682.000</td>
<td>.164</td>
<td>.018</td>
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</table>
DISCUSSION

The main objective of this research was to determine the perceived employee and employer obligations of nurses in South African provincial hospitals and whether significant differences exist between the psychological contracts of nurses based on the demographic characteristics. The results are reported per hypotheses set for this study.

H 1: Nurses show a low level of psychological contract towards public sector hospitals

The results confirm the hypothesis that nurses display a low level of psychological obligation towards hospitals. Turnley and Feldman (1999) investigated the moderating effects that factors such as the availability of attractive employment alternatives have on the relationships between psychological contract violations and employees and in these instance nurses' behaviours. The results suggested that these factors moderate the relationship between psychological contract violations and exit. Currently nurses have wider opportunities in the global world and as show low level of psychological contract; there are high possibilities of selling their labour elsewhere. Hospitals management will have to take cognisance of these and ensure that part of their bargain in the contract is fulfilled. Both mutuality and reciprocity in a psychological contract ensure that employees will have high levels of psychological obligation (Dabos, & Rousseau, 2004). Hospital management is therefore encouraged to adhere to the fulfilment of the psychological contract.

H 2: Nurses perceive that public sector hospitals show a low level of obligation towards them

The hypothesis was accepted based on the fact that employers display a low level of obligation towards its nurse employees. Kickul and Lester (2001) said both public and private organisations must find creative and innovative ways to increase levels of efficiency, lower costs and improved processes. As a result, strategies must also be formulated that are flexible and allow for the continual redesign and reconfiguration of the organization as it grows and matures. As these strategies are formulated, they affect the internal structure of organizations by not only modifying work arrangements, but also changing the nature of the psychological contract between the employee and employer hence lower level of obligation to employees or nurses. It is imperative for nurses to be aware of these changes in a psychological contract to enable them to adjust their expectation of the employer obligation.
H 3: Significant gaps exist between employer and employee expectations of the psychological contract

The results confirmed the hypothesis in that significant differences exist between employee obligations versus employer obligation. This has been confirmed by Rousseau (2001) findings suggesting that the majority of employees have experienced contract breach and this view is also supported by managers, as representatives of the employer, who further indicated that the organization, given its external pressures, is not fulfilling its obligations to employees to the extent that it should. Nurses expect the hospital management to be obligated to them whereas management feels obligated to the organization or hospitals as opposed to nurses.

H 4: Significant differences exist between the perceived employee obligations of nurses of nurses based on their demographic characteristics

The results partially showed that there is a significant difference between employee and employer obligation. Population demographics make relational issues increasingly important in that employee fulfilment of obligations is positively associated with perceived employer obligations (Coyle-Shapiro & Kessler, 2002). This finding is confirmed by the findings of Bordia et al. (2008) that there is a significant difference across all demographic characteristics such as age, gender, and tenure between employee and employer obligations. Careful consideration should be given to the influence that demographic variable can contribute towards the fulfilment or violation of a psychological contract by the nurses in public hospitals.

H 5: Significant differences exist between the perceived employer obligations of nurses based on their demographic characteristics

The results showed that a significant difference does not exist in the employer perception of the current implementation of psychological contract. Based on the results the hypothesis was rejected. There are no studies to date that have confirmed this hypothesis as most studies are based on employee views on psychological contract violation. The results of the research confirm the results of previous studies (Chaudhry et al., 2014 & Boyd et al., 2014). The results indicated that there is high belief from the employee that they always fulfil their obligation towards the psychological contract. Employees go an extra mile in fulfilling their psychological contract to ensure that they
become more marketable. The department will do well to note that highly skilled knowledge workers are thought to show greater loyalty to their profession or occupation than to a single employing organization or department (Scholarios et al., 2008).

Furthermore, there had been a shift in these workers’ psychological contract in the last few years, moving from a relational contract, based on trust and loyalty to the company, to a transactional relationship of limited duration, focused on economic exchange and limited worker involvement in the organization. It can be said that this in line with Boyd et al. (2014) that individuals seek membership into these collectives for a variety of reasons including the desire to obtain resources, gain influence, attain a sense of belonging and affiliation, find and develop positive relationships with others, to have an impact on something of importance, and/or to conform to standards of what is expected and acceptable.

Significant gaps were observed in terms of all factors which indicate highest disagreement between employee and employer obligations. On the Manova-Employee analysis significant differences or gaps exist in stability, loyalty, marketability, performance, narrow and development and perceptual gaps involving employees’ perceptions that the organization owed them more than the organization’s managers believed was owed to the employees are found to be negatively related to employee satisfaction (Aselage & Eisenberger, 2003). On employer obligation, the significance difference is on less interest on the retention of nurses and their research

Purvis and Cropley (2003) indicated that leaving intentions were associated with a need for personal autonomy and development, and the violation of expectations for being appreciated, valued, recognized and rewarded for effort, loyalty, hard work and achievement, negative endorsement of a relational contract, positive endorsement of a transactional contract, and job and organizational dissatisfaction. Furthermore, that these findings illustrate the diagnostic utility of the term psychological contract for understanding the expectations of nurses and the potential significance of these findings for managing nurse retention was highlighted. Chaudhry et al. (2014) feel that it is vital for organizations to gain a better understanding of how to lead in situations where trust perceptions diverge. A great deal of the literature finds that, more often than not, management fail to live up to their side of the bargain (Cullinane et al., 2006).
The finding indicated that employees with six to eleven years of work experience have higher stability than those with thirty years and above. These calls are intended for the hospitals to provide structural signals such as formal compensation systems and benefits, performance reviews, and organizational literature, including handbooks and missions statements that all play a role in the creation of the employees’ psychological contract as indicated by Aselage et al. These might help those employees with thirty years and above of experience that management still cares for them, thus ensuring stability. The findings also indicated that employees with bachelor’s degree are more marketable than those with a diploma and this confirms the previous study by Martin et al. (2005) that a positive relationship between the lifelong learning programme and employee perceptions of careers, fairness, and certain key outcomes of psychological contracts exists, even when the company reduced its previous commitment to job security. They further said the finding allows us to speculate on the positive relationship between HRD and trust relations and the importance of this relationship for future organizational change.

This research makes a contribution at the theoretical level which in return adds to the limited empirical knowledge that currently exist on psychological contract in Southern Africa. As indicated above, for obligation to reciprocate, aspects indicated should be taken seriously. This research also contributes to the validation of Psychological contract in public hospitals in South Africa. The finding can be used to improve retention strategies and improvement of trust between management and nurses.

The research had some limitations since out of nine provinces; the sample was restricted to nurses in the North West Province public hospitals only. The results of the research cannot therefore be generalized to all public and private hospitals in South Africa. Further studies can be conducted in all the provinces to ascertain whether the same finding will persist. A cross-sectional survey design was used which limits the research in terms of making cause and effect inferences over the long terms. An unequal distribution of the population in the sample regarding language groups, where one would have preferred to include a larger portion of English and Afrikaans speaking nurses, was a limitation. One would also like to see a better distribution between professional nurses working in private hospitals compared to those working in public hospitals.
In conclusion, this research highlighted the beliefs and important aspects such as performance support, development, education and work experience, of nurses when it comes to their obligation to the employer. Prior studies of psychological contract development have found consistently that newly-hired nurses’ perceptions of their obligations to the organization tend to decrease over time in the job, while their perceptions of the organization’s obligations to them tend to increase (Tekleab & Taylor, 2003).
REFERENCES


Chapter 4:

MANUSCRIPT 3
THE IMPACT OF WORK WELLNESS ON THE ILL-HEALTH OF PROFESSIONAL NURSES IN NORTH-WEST PROVINCIAL HOSPITALS

ABSTRACT

Orientation: This article focuses on the impact of work wellness of the ill-health of nurses since work can contribute to health and wellbeing of employees or can be a source of psychological distress and ill-health.

Research Purpose: The main objective of this research was to determine the impact of work wellness (i.e. burnout and work engagement) on the ill-health of nurses in provincial hospitals in the North West Province.

Motivation for the study: Scientific knowledge is needed regarding the factors that are associated with incidences of wellness (i.e. burnout and work engagement) and its impact on ill-health of nurses in South Africa.

Research design/approach method: A cross-sectional survey research design and Maslach Burnout Inventory (MBI) was followed with a convenience sample taken from employees (N=433) in a South African public hospital, North West Province.

Main finding: Mental distance and exhaustion were significant positive predictors of both psychological and physical ill-health. Work engagement was a positive predictor of physical ill-health. Mental distance, exhaustion and professional efficacy and were positively related to work engagement.

Practical/managerial implications: The study supports the claim of increased productivity if the well-being of nurses is managed well.

Contribution/value-add: The findings provide a valuable insight into the current status of burnout and engagement of nurses in the public sector and what interventions can be used in dealing with the problem.

Key words: Burnout, ill-health, wellness, nurses and work engagement,
INTRODUCTION

Researchers in the area of occupational health psychology and related fields have put much effort into examining the antecedents of employee health over the past two decades (Nielsen, Taris & Cox, 2010). According to International Labour Organisation (2014), every 15 seconds, a worker dies from a work-related accident or disease. In addition more than 160 million people suffered from occupational and work-related diseases which in turn have a negative impact on any country’s GDP (ILO, 2014).

Currently there is a growing interest in the psychosocial work environment of health care staff since they are at high risk for burnout, role conflict and job dissatisfaction. According to Demerouti, Bakker, Nachreiner and Schaufeli (2000) nursing is considered to be inherently stressful. The occupation is plagued by a wide variety of stressors, such as demanding patient contacts, time pressure, and work overload. Moreover, nurses are confronted with increasing job demands due to the introduction of sophisticated technologies and budget cuts.

According to Garrosa, Moreno-Jimenez, Liang and González (2008) burnout affects approximately 25% of all nurses. Burnout, a type of prolonged response to chronic job-related stressors, has a special significance in health care where staff experience both psychological-emotional and physical stress (Piko, 2006). Work-related stressors associated with nursing include exposure to death and dying and frustrated ideals in this area of care, as well as noise pollution, interpersonal conflicts, lack of knowledge and insufficient social support. Furthermore reported health problems include sleep disturbances, fatigue, digestive problems, emotional problems and stress-related illnesses, as well as increases in general morbidity, and in sickness absence.

As a result, the well-being of the well-being of individuals at work has become an important focus area for researchers as well as practitioners. Work-related well-being of employees is emphasized, because it is related to lower accident rates, turnover intention and absenteeism; positive attitudes; productivity; profitability and safety; commitment; and job satisfaction (Brand-Labuschagne, Mostert, Rothmann & Rothmann, 2013). Employee well-being is hypothesized to improve when psychosocial work environment improves (Mattila, Elo & Kuosma, 2006). Consequently assessing
burnout among nurses is important because their well-being has implications for stability in the healthcare workforce and for the quality of care provided (Wu, Zhu, Wang, Wang & Lan, 2007).

The main objective of this research was to determine the impact of work wellness (i.e. burnout and work engagement) on the ill-health of nurses in provincial hospitals in the North West Province. The next section of the article highlights literature available on work wellness (i.e. burnout and work engagement) on the ill-health of nurses in South Africa. Thereafter, a discussion of the research approach and method is provided, followed by the results of the research. Finally the article concludes with a discussion of the research results, as well as recommendations for further research.

LITERATURE REVIEW

Work wellness

According to Rothmann and Rothmann (2006) employee health and wellness can be defined as a state in which employees are energetic, motivated, healthy, productive and committed to the organization and its goals. Schaufeli and Bakker (2006) classify wellness in terms of two dimensions namely burnout and work engagement. These authors developed the Comprehensive Burnout and Engagement (COBE) model which assumes that burnout occurs when excessive job demands lead to exhaustion. In addition disengagement occurs as a result of a lack of job resources. Research to date shows that employees in most occupations in the South African context experience continuous increase in demands without corresponding job resources (Jorgensen, Nel & Roux, 2014).

Burnout

Burnout is defined as a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that occurs among individuals who work with other people, in particular in conflicting or otherwise critical situations (Bakker, Killmer, Siegrist & Schaufeli, 2000). The three key components of burnout are (1) emotional exhaustion (EE, the feeling of being overextended and depleted of resources, representing the basic individual stress dimension of burnout), (2) depersonalization (DP, a cynical and distant attitude towards one's work and the people one works with, representing the interpersonal context in which burnout occurs), and (3) reduced personal accomplishment (PA, the tendency to evaluate one's achievements at work negatively, thus referring to the self-evaluation dimension of burnout). According to Bakker et al. (2008) nurses are
considered to be particularly susceptible to burnout as a result of their continuous exposure with people’s needs, problems and suffering. Bakker further said that several studies have shown that burnout is positively correlated with the amount of time nurses spend with their patients, with the intensity of the emotional demands made by their patients, and with exposure to patients with a poor prognosis.

Demir, Ulusoy and Ulusoy (2003) further found that higher education levels, work experience and higher status decrease burnout for nurses while working night shifts increases it. In addition, nurses who have problems in relations with the other team members and are not satisfied with their work conditions have higher levels of burnout. Thus, having difficulty in childcare and in doing house chores, health problems of the nurse herself or her children, economic hardships and difficulties encountered in transportation are other factors increasing burnout.

Ilhan, Duruken, Taner, Maral and Bumin (2008) indicate that it is necessary to consider nurses having the characteristics such as age and gender, shown as the correlates of burnout in any study as a target group, to screen periodically the burnout status and improve their working conditions, especially relationships with colleagues. It is necessary to consider nurses having the characteristics shown as the correlates of burnout in this study as a target group, to screen periodically the burnout status and improve their working conditions, especially relationships with colleagues.

Work engagement

Schaufeli and Bakker (2006) have said increased attention has been paid to what has been coined positive psychology: the scientific study of human strength and optimal functioning. This approach is considered to supplement the traditional focus of psychology on disease, damage, disorder, and disability. The recent trend to concentrate on optimal functioning also has aroused attention in organizational psychology to effectively manage for performance improvement in today’s workplace (Luthans, 2002).

Schaufeli et al. (2006) said one of these positive states is work engagement, which is considered to be the antipode of burnout. Contrary to those who suffer from burnout, engaged employees have a
sense of energetic and effective connection with their work activities, and they see themselves as able to deal well with the demands of their jobs. Work engagement is defined as a positive, fulfilling work-related state of mind that is characterized by vigour, dedication, and absorption (Schaufeli & Salanova 2007) as well as Schaufeli, Salanova, Gonzalez-Romá, & Bakker (2002). Schaufeli further explains vigour as characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence also in the face of difficulties. Dedication is characterized by a sense of significance, enthusiasm, inspiration, pride and challenge. The third defining characteristic of engagement is called absorption, which is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work.

Ill-health

Psychological health refers to clinical symptoms indicative of stress, thus mental ill-health, e.g. constant tiredness and irritability, while physical health refers to physical symptoms often associated with stress, e.g. insomnia/sleep loss and headaches (Viljoen & Rothmann, 2009). Furthermore, if untreated, psychological distress can cause more serious health problems such as psychosomatic illness, arterial hypertension, several depression and alcoholism. It can also lead to irreversible damage such as permanent disability, premature death, suicide, cardiovascular and neuropsychiatric diseases.

Dysfunctional mental health represents a serious cost for the industry in terms of both human and financial maladaptive consequences. For instance, depression, loss of self-esteem, hypertension, alcoholism and drug consumption have all been shown to be related to dysfunctional mental health (Buys et al., 2010). Depression creates a huge economic burden for organisations and up to 69% of the costs brought about by depression can be described as indirect costs which include lost productivity resulting from absenteeism, disability, premature mortality, and lost wages (Welthagen & Els, 2012). Mayer and Bones (2011) maintain that occupational health should aim at the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations, the protection of workers, in their employment situation and the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological needs and capabilities.
Relating work wellness and ill-health

The concepts of burnout and work engagement are relevant when the effectiveness and efficiency of organizations are considered (Rothmann & Pieterse, 2007). These two concepts provide indications of employees’ energy at work and identification with work. Exhaustion and cynicism as dimensions of work-related well-being of employees are stress reactions, which might lead to less effective performance (Warr, 2002). Vigour and dedication represent positive work-related feelings, which might result in more effective performance. These dimensions of work-related well-being could be predicted by personal factors and situational factors. These factors can be combined in a model of work-related well-being.

According to Mayer and Bones (2011) global changes and new managerial challenges require new concepts of health and well-being in organizational contexts. In the South African context, health and well-being of managers have gained relevance in organizations and in management sciences. International organizations, in particular, attempt to address the increasing demand for health care and the delivery of health services to their managers. Mayer et al. (2011) have further said that the managerial concepts of health and strategies mainly refer to not only physical but also mental and spiritual aspects, with a priority on physical health and well-being. Mayer and Bones (2011) further say that occupational health should aim at the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers, in their employment situation, from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological needs and capabilities; and, to summarize, the adaptation of work to man and of each man to his job.

Burnout and ill-health

The underlying presumption throughout seems to be that burnout has negative consequences and thus is something to be lessened, prevented, or ameliorated in some way (Maslach et al., 2001). Several researchers have found evidence that ill health is a critical outcome of burnout (Montgomery, Mostert & Jackson, 2005; Schaufeli & Buunk, 2002). Rothmann, Barkhuizen and Tytherleigh (2008) have hypothesised that burnout, as a result of the presence of particular demands
and absence of particular resources, can lead to various negative outcomes such as physical illness, staff turnover and absenteeism. Burnout, in turn, mediated the effects of job demands and a lack of job resources on ill health (Rothmann & Essenko, 2007). Melamed et al. (2006) presented evidence supporting several potential mechanisms linking burnout with ill health, including the metabolic syndrome, sleep disturbances, systemic inflammation, impaired immunity functions, blood coagulation and fibrinolysis, and poor health behaviours.

H1: Burnout has a significant negative impact on ill-health of nurses

Work engagement and ill-health

Field and Buitendach (2011) indicated that in engagement, people employ and express themselves physically, cognitively, emotionally and mentally during role performances. Schaufeli et al. (2008) allude to studies (Schaufeli et al., 2002, Schaufeli & Bakker, 2006; Hakanen, Bakker, & Schaufeli, 2006) where the vigour and dedication dimensions of work engagement were weak to moderately related to the health of employees and where engaged employees enjoy good mental health. Schaufeli et al. (2008) said that employee engagement is related to positive emotions and good health and alleviates negative health issues such as depression, distress and psychosomatic complaints and by implication even burnout.

H2: Work engagement has a significant positive impact of ill-health of nurses

Burnout and work engagement

According to Maslach, Schaufeli and Leiter (2001) work engagement is a concept that emerged from burnout research to denote an entire spectrum evolving from employees being unwell (burnout) to employees’ being well. Burnout is characterized by exhaustion, cynicism and reduced professional efficacy (Maslach et al., 2001). In contrast to burnout, work engagement is defined as a positive, fulfilling, work-related state of mind, characterized by vigour, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). According to Schaufeli and Bakker (2001), two dimensions of work engagement are logically related to burnout, namely vigour to exhaustion and dedication to cynicism. Vigour refers to the activation dimension of well-being, while dedication...
refers to identification with work. According to this framework, burnout is characterised by a combination of exhaustion (low activation) and cynicism (low identification), whereas work engagement is characterised by vigour (high activation) and dedication (high identification).

Hypothesis 3: Burnout has a significant negative impact on work engagement

RESEARCH DESIGN

A cross-sectional survey design was utilized to describe the information on the population collected at that time. Cross-sectional designs are used to examine groups of subjects at various stages of development simultaneously, while the survey describes a technique of data collection in which questionnaires are used to gather data about an identified population (Babbie, 2001). This design is well-suited to the descriptive and predictive functions associated with correlational research, whereby relationships between variables are examined (Cooper & Schindler, 2003).

Sample

A convenience sample of registered nurses (N=433) in public hospitals of the North West Province of South Africa was taken. Descriptive information of the sample is provided in Table 1.

Table 1: Demographic characteristics of the respondents

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<th>Item</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
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<td>Master’s degree</td>
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<td>0</td>
<td></td>
</tr>
<tr>
<td>Temporary</td>
<td>10</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Contract</td>
<td>10</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Fixed-term</td>
<td>8</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Permanent</td>
<td>400</td>
<td>92.4</td>
<td></td>
</tr>
<tr>
<td>Subordinate</td>
<td>119</td>
<td>27.5</td>
<td></td>
</tr>
<tr>
<td><strong>Nature of employment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower management</td>
<td>222</td>
<td>51.3</td>
<td></td>
</tr>
<tr>
<td>Middle management</td>
<td>71</td>
<td>16.4</td>
<td></td>
</tr>
<tr>
<td>Senior management</td>
<td>18</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>0-5yrs</td>
<td>34</td>
<td>7.9</td>
<td></td>
</tr>
<tr>
<td>6-11yrs</td>
<td>74</td>
<td>17.1</td>
<td></td>
</tr>
<tr>
<td>12-17yrs</td>
<td>52</td>
<td>12.0</td>
<td></td>
</tr>
<tr>
<td>18-23yrs</td>
<td>124</td>
<td>28.6</td>
<td></td>
</tr>
<tr>
<td>14-29yrs</td>
<td>110</td>
<td>25.4</td>
<td></td>
</tr>
<tr>
<td>30 and above</td>
<td>39</td>
<td>9.0</td>
<td></td>
</tr>
<tr>
<td>1-3</td>
<td>65</td>
<td>15.0</td>
<td></td>
</tr>
<tr>
<td>4-6</td>
<td>10</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>7-9</td>
<td>13</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>345</td>
<td>79.7</td>
<td></td>
</tr>
<tr>
<td>10hrs</td>
<td>24</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>11-20hrs</td>
<td>22</td>
<td>5.1</td>
<td></td>
</tr>
<tr>
<td>21-30hrs</td>
<td>15</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>31-40hrs</td>
<td>281</td>
<td>64.9</td>
<td></td>
</tr>
<tr>
<td>41-50hrs</td>
<td>72</td>
<td>16.6</td>
<td></td>
</tr>
<tr>
<td>51 or more</td>
<td>19</td>
<td>4.4</td>
<td></td>
</tr>
</tbody>
</table>

The respondents in this research are primarily female (88.2%), married (55.4%), have Setswana as their home language (75.5%), are representative of the African ethnic group (96.5%) and aged 40 years and 49 years (41.8%). Most of the respondents were in possession of a Diploma (54.5%), permanently employed (92.4%) and employed at the lower management level (51.3%). The respondents in this study had more than 63% of work experience, did not have any opportunities for promotion during the past five years (79.9%) and were working between 31-40 hours in a work week (64.9%).
Procedure

Permission was obtained from the Director of Research at departmental level, approved by the Deputy Director-General. After several presentations the purpose of research was explained to all members of the research unit. They distributed the questionnaires manually to the research participants and collected the completed questionnaires. The purpose of the research was explained to all participants and participation was voluntary and confidentiality as well as anonymity of participants was respected at times.

Measuring instruments

Three measuring instruments were used in this study namely: Maslach Burnout Inventory-General Survey, Utrecht Work Engagement Scale and General Health Questionnaire.

The **Maslach Burnout Inventory – General Survey (MBI-GS)** is used to measure the Exhaustion (5 items), Cynicism (5 items) and Professional Efficacy (6 items) dimensions of burnout. The Depersonalisation (5 items) dimension of the Maslach Burnout Inventory Educator Survey (MBI-ES) was also included in the questionnaire. Responses to 21 items are made on a six-point scale varying from 0 (*never occurs*) to 6 (*occurs every day*). High scores on Exhaustion and Cynicism/Depersonalisation, and low scores on Professional Efficacy are indicative of burnout. The adapted version of the MBI-GS has been validated in several South African studies (see Barkhuizen & Rothmann, 2008).

The **Utrecht Work Engagement Scale (UWES)** (Schaufeli et al., 2002) is used to measure the levels of engagement. Four items in which the language was simplified were added to the 17-item UWES. Three dimensions of engagement can be distinguished, namely Vigour (6 items; i.e., "I am bursting with energy in my work"), Dedication (5 items; i.e., "I find my work full of meaning and purpose") and Absorption (6 items; i.e., "When I am working, I forget everything else around me"). Engaged individuals are characterised by high levels of Vigour and Dedication and also elevated levels of Absorption. The validity of the UWES has been confirmed in various South African studies (see Barkhuizen & Rothmann, 2006).
**General Health Questionnaire:** The General Health Questionnaire is used to measure 19 items on two sub-scales. The sub-scales are physical health and psychological well-being. Each item is scored from 1 where the ill-health symptom or change of behaviour is never experienced over the last three months to 4 where the ill-health symptom or change of behaviour is often experienced over the past three months. The questionnaire has been validated in the South African context (Barkhuizen et al., 2005).

**Statistical analysis**

Statistical analysis was carried out using the SPSS Programme (SPSS Inc., 2012). Statistics utilised included the Kaiser-Meyer-Olkin (KMO) and Bartlett’s Test of Sphericity to determine the sample adequacy and sphericity of the item-correlation matrix; exploratory factor analysis to discover and identify the dimensions of the MBI, Utrecht Work Engagement Scale (UWES) and General Health questionnaire, descriptive statistics (i.e. mean, standard deviation, skewness, kurtosis) and reliability analyses. Linear regression analyses were applied to test for the relationships among the variables.

**RESULTS**

Prior to the testing of the hypotheses, the psychometric properties of the Maslach Burnout Inventory - General Survey and Your Health Questionnaire were examined. These included the Kaiser-Meyer-Olkin (KMO) to determine the sample adequacy and sphericity of the item-correlation matrix, exploratory factor analysis to discover and identify the dimensions of the measurements and reliability analysis using Cronbach alpha coefficients to give the measure of accuracy of the instruments and to determine how repeatable the results are. The MBI, UWES and Health Questionnaire obtained a Measure of Sampling Adequacy of 0.670, 0.716 and 0.881 respectively which according to the guideline of higher than 0.6 is adequate for factor analysis (Hair, Anderson, Tatham & Black, 1998). Sampling adequacy above .06, according to Hair et al., indicates that the scale has a good validity, thus producing evidence that the MBI and Health questionnaire are valid scales measure burnout and ill-health.

Exploratory factor analysis using Principal Component Factoring extraction method was performed on the MBI-GS. The results revealed three underlying factors for the MBI-GS. A principal
component analysis using varimax rotation was used to specify the three factors. Seven items were deleted because of problematic loadings. Factor 1 was labelled Mental Distance (Depersonalisation and Cynicism), Factor 2 – Exhaustion and Factor 3 – Professional Efficacy. The three factors explained 51.746% of the variance.

Exploratory factor analysis using the Principal Component Factoring extraction method was performed on the UWES. The results revealed one underlying factor for the UWES. A principal component analysis was used to specify one factor. One item was deleted because of problematic loadings. The factor was labelled work engagement and explained 27.101% of the variance.

Exploratory factor analysis using the Principal Component Factoring extraction method was performed on the General Health Questionnaire. The results revealed two underlying factors for the General Health Questionnaire. A principal component analysis using varimax rotation was used to specify the two factors. Two items were deleted because of problematic loadings. The factors were labelled as follows: Psychological Ill-Health (Factor 1) and Physical Ill-Health (Factor 2). The two factors explained 57.036% of the variance.

The descriptive statistics and reliabilities of the one factor of the MBI-GS, UWES and health questionnaire as well as the sub-scales are reported in Table 2 below.

**Table 2: Descriptive statistics and reliabilities of the measurements**

<table>
<thead>
<tr>
<th>Scales</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MBI-GS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-scales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental distance</td>
<td>3.0383</td>
<td>1.47877</td>
<td>-.236</td>
<td>-.292</td>
<td>.723</td>
</tr>
<tr>
<td>Exhaustion</td>
<td>3.4380</td>
<td>1.42586</td>
<td>-.369</td>
<td>-.517</td>
<td>.713</td>
</tr>
<tr>
<td>Professional efficacy</td>
<td>4.1247</td>
<td>1.30682</td>
<td>-.468</td>
<td>-.243</td>
<td>.626</td>
</tr>
<tr>
<td>2. UWES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work engagement</td>
<td>3.8751</td>
<td>.98640</td>
<td>-.383</td>
<td>.294</td>
<td>.818</td>
</tr>
<tr>
<td>3. General health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological ill-health</td>
<td>2.1400</td>
<td>.82871</td>
<td>.254</td>
<td>-.745</td>
<td>.896</td>
</tr>
<tr>
<td>Physical ill-health</td>
<td>2.4680</td>
<td>.92690</td>
<td>.263</td>
<td>-.490</td>
<td>.856</td>
</tr>
</tbody>
</table>
Table 2 shows that the Maslach Burnout Inventory, the Utrecht Work Engagement Scale and Health questionnaire as well as the dimensions thereof are normally distributed in the sample, with low skewness and kurtosis as indicated in the above table. The Cronbach alpha coefficients compare well with the guideline of 0.60, demonstrating that a large portion of variance is explained by the dimension (internal consistency of the dimensions) (Field, 2009). From the mean scores of the MBI it is clear that the participants demonstrated an average to high level of burnout, work engagement and levels of work engagement and ill-health.

**Testing of hypotheses**

Linear Regression Analysis was performed to test for the interactive relationship between the variables. The results of regression analyses between burnout and ill-health are reported in Table 3 below.

**Table 3: Regression analyses between burnout and ill-health**

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficient</th>
<th>Standardized</th>
<th>T</th>
<th>P</th>
<th>R</th>
<th>R²</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental distance and psychological ill-health</td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td>.198</td>
<td>.037</td>
<td>.037</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.814</td>
<td>.090</td>
<td>20.270</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental distance</td>
<td>.107</td>
<td>.026</td>
<td>.191</td>
<td>4.045</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental distance and physical ill-health</td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td>.256</td>
<td>.065</td>
<td>.063</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.982</td>
<td>.099</td>
<td>20.085</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental distance</td>
<td>.160</td>
<td>.029</td>
<td>.256</td>
<td>5.479</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaustion and psychological ill-health</td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td>.396</td>
<td>.157</td>
<td>.155</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.346</td>
<td>.096</td>
<td>14.048</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaustion</td>
<td>.231</td>
<td>.026</td>
<td>.396</td>
<td>8.952</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaustion and physical ill-health</td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td>.338</td>
<td>.114</td>
<td>.112</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.712</td>
<td>.110</td>
<td>15.603</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaustion</td>
<td>.219</td>
<td>.030</td>
<td>.338</td>
<td>7.433</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional efficacy and psychological ill-health</td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td>.018</td>
<td>.000</td>
<td>.002</td>
<td></td>
</tr>
</tbody>
</table>
The results in Table 3 show statistically significant relationships between the burnout dimensions of mental distance and exhaustion and psychological and physical ill-health. No significant results were observed for professional efficacy and ill-health.

The prediction model for mental distance and psychological ill-health was statistically significant, $F(1,431) = 16.359$, and accounted for approximately 19.8% of the variance psychological ill-health ($R^2 = .037$, Adjusted $R^2 = .034$). The relationship implies that the higher the nurses' mental distance the higher their levels of psychological ill-health. The effect was small.

The prediction model for mental distance and physical ill-health was statistically significant, $F(1,429) = 30.015$, and accounted for approximately 25.6% of the variance physical ill-health ($R^2 = .065$, Adjusted $R^2 = .063$). The relationship is positive which implies that the higher the nurses level of mental distance the higher their psychological ill-health. The effect was small.

The prediction model for exhaustion and psychological ill-health was statistically significant, $F(1,431) = 16.359$, and accounted for approximately 39.6% of the variance psychological ill-health ($R^2 = .037$, Adjusted $R^2 = .034$). The relationship is negative which implies that the higher the levels of professional efficacy the lower the levels of psychological ill-health. The effect was small.

The prediction model for exhaustion and physical ill-health was statistically significant, $F(1,430) = 80.147$, and accounted for approximately 39.6% of the variance physical ill-health ($R^2 = .157$, Adjusted $R^2 = .154$).
Adjusted $R^2 = .155$). The relationship is positive which implies that the more the nurses feel exhausted the higher the psychological ill-health. The effect was small.

Based on the above results Hypothesis 1 is partially accepted.

The results of the linear regression analyses between work engagement and ill-health are reported in Table 4 below.

### Table 4: Regression analyses between work engagement and ill-health

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>T</th>
<th>P</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work engagement and psychological ill-health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.034</td>
<td>.001</td>
<td>-.001</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.030</td>
<td>.162</td>
<td>12.552</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>.028</td>
<td>.040</td>
<td>.034</td>
<td>.703</td>
<td>.483</td>
<td>.053</td>
<td>.051</td>
</tr>
<tr>
<td>Work engagement and physical ill-health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.230</td>
<td>.053</td>
<td>.051</td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.631</td>
<td>.176</td>
<td>9.258</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>.216</td>
<td>.044</td>
<td>.230</td>
<td>4.901</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in table 4 showed that work engagement is a significant predictor of physical ill-health. No significant relationship exists between work engagement and psychological ill-health.

The prediction model for engagement and physical ill-health was statistically significant, $F(1.429) = 24.025$, and accounted for approximately 23% of the variance in physical ill-health ($R^2 = .053$, Adjusted $R^2 = .051$). The relationship is positive which implies that the higher the engagement the better the physical health of nurses health. The effect was small.

Based on the above results Hypothesis 2 is partially accepted.
The results of the linear regression analyses between burnout and work engagement are reported in Table 5 below.

**Table 5: Regression analysis between burnout and engagement**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized</th>
<th>Standardized</th>
<th>T</th>
<th>P</th>
<th>R</th>
<th>R²</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental distance and engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.955</td>
<td>.093</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental distance</td>
<td>.303</td>
<td>.029</td>
<td>.454</td>
<td>10.572</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaustion and engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>3.100</td>
<td>.118</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhaustion</td>
<td>.225</td>
<td>.032</td>
<td>-.325</td>
<td>7.133</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional efficacy and engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.820</td>
<td>.118</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Efficacy</td>
<td>.498</td>
<td>.027</td>
<td>.660</td>
<td>18.242</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in Table 5 show that mental distance is a significant predictor of work engagement. The prediction model for mental distance and engagement was statistically significant, $F (1.431) = 111.765$, and accounted for approximately $45.4\%$ of the variance in engagement ($R^2 = .206$, Adjusted $R^2 = .204$). The relationship is positive which implies that the more highly the nurses perceive their mental distance to be taken care of, the higher the engagement. The positive relationship can further be explained due to the fact that nurses displayed average levels of burnout and work engagement. The effect was small.

The prediction model for exhaustion and engagement was statistically significant, $F (1.430) = 50.882$, and accounted for approximately $32.5\%$ of the variance in engagement ($R^2 = .106$, Adjusted $R^2$
The relationship is positive which and can be explained by the fact that nurses reported average levels of exhaustion and work engagement. The effect was small.

The prediction model for professional efficacy and engagement was statistically significant, \( F(1.431) = 332.754 \), and accounted for approximately 66% of the variance engagement \( (R^2 = .436, \text{Adjusted } R^2 = .434) \). The relationship is positive which means that the higher the level of professional efficacy of nurses, the higher their levels of work engagement. The effect was small.

Based on the above results Hypothesis 3 is rejected.

DISCUSSION

The main objective of this research was to determine the impact of work wellness (i.e. burnout and work engagement) on the ill-health of nurses in provincial hospitals in the North West Province. The results are further discussed according to the hypotheses set for this research:

**H 1: Burnout has a negative impact on ill-health of nurses**

The results showed that the mental distance and exhaustion dimensions are both significantly positive predictors of psychological and physical ill-health. Mental distance was significantly positively related to both physical and psychological ill-health. This implies that the higher the levels of mental distance of nurses the higher the levels of ill-health (both psychological and physical) of nurses. Exhaustion was significantly positively related to both physical and psychological ill-health. This implies that the higher the levels of mental distance of nurses the higher the levels of ill-health (both psychological and physical) of nurses. More seriously, emotional exhaustion evokes negative attitudes towards patient (depersonalization) and towards oneself in relation to the job (reduced personal accomplishment) (Bakker, Schaufeli & Sixma et al., 2000). The results confirm previous studies that burnout has a negative impact on the health of nurses (see Montgomery et al., 2005; Schaufeli & Buunk, 2002). Furthermore as opposed to other health-related problems, such as depression, burnout has turned out to be linked to one’s work situation since the explanations to the syndrome can be found in work relationships rather than internal predispositions.
H 2: Work engagement has a positive impact on ill-health

The results showed that work engagement is a positive predictor of physical health of nurses. This implies that the higher the work engagement of employees, the more their work-related actions will improve. The results are in line with Schaufeli et al. (2001) who indicated that employees who are engaged in their work are healthier.

H 3: Burnout has a negative impact on work engagement

The results showed that the mental distance and exhaustion dimensions of burnout are positively related to the work engagement of nurses. A negative relationship was expected here which would confirm the theory that burnout is the negative antipode of work engagement (see Schaufeli & Bakker, 2004). One possible explanation can be that nurses displayed average levels of both burnout and work engagement. Therefore one can assume that average levels of burnout in this case will contribute to average levels of work engagement. Professional efficacy was positively related to work engagement. High levels of professional efficacy will enhance the work engagement of employees. This again raises the question of whether professional efficacy should form part of burnout or work engagement.

This research makes important theoretical and practical contributions. From a theoretical point of view this research advances knowledge of the interactive relationship between burnout, work engagement and ill-health. Thus, the current results emphasize the potential benefits of social-psychological interventions at the departmental and organizational level. Practically this research adds to the awareness and importance of managing all factors that can cause burnout of nurses, thus improving on provision of health care in South Africa.

However, the research has some limitations since the sample was limited to the provincial hospitals of North West instead of the whole of South Africa. The results of the research can therefore not be generalized to other public or private hospitals. An unequal distribution of the population in the sample regarding language groups, where one would have preferred to include a larger portion of English and Afrikaans-speaking nurses, was a limitation. One would also like to see a better distribution between professional nurses working in private hospitals compared to those working in
public hospitals. The other limitation of the current study is its cross-sectional nature - thus we cannot draw any conclusions about causality and this can be resolved by future studies. More longitudinal studies are needed to make cause and effect conclusions over a longer period of time.

In conclusion this study provided evidence that burnout is prevalent among professional nurses and has a subsequent impact on their ill-health. Health-care managers should take cognizance of the factors that contribute to the burnout of nurses and develop suitable interventions. Also, burnout in turn contributes to the ill-health of nurses. Managers and supervisors should therefore outline the boundaries and expectations of the nursing role.
REFERENCES


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Chapter 4

Page 110


DISPOSITIONAL EMPLOYABILITY OF NURSES IN PUBLIC HOSPITALS

ABSTRACT

Orientation: Globally, the shortage of in public hospitals is expected to increase as some studies have indicated. South Africa is experiencing an outflow of professional nurses due to global acceptance of their quality. The situation has worsened due to a lack of proper openness to changes at work, work and career resilience, work and career proactivity, career motivation and work identity.

Research purpose: The main objective of this research was to investigate the dispositional employability of nurses in public hospitals in the North West Province of South Africa.

Motivation for the study: Few studies concerning dispositional employability of nurses in South Africa exist, hence the importance of this study.

Research approach, design and method: Quantitative research was conducted in provincial hospitals through administering a cross-sectional survey questionnaire (N=433).

Main findings: Results of the frequency analysis suggested twenty-five interpretable items for the Dispositional Measure of Employability (DME). The information obtained shows that all participants slightly agree, agree or strongly agree. Employees are also willing to participate in their career development to enhance their employability.

Practical/managerial implications: The main highlights of the research were management commitment towards dispositional employability by being open to change and career resilience of nurses.

Contribution/value-add: The results add to the body of knowledge in the issues of dispositional employability of nurses and how it can be improved to enable health facilities to be competitive.

Keywords: Employability and dispositional employability
INTRODUCTION

The impact of the changing nature of work on individuals, their careers and their work-related attitudes has been at the forefront of research in human resources, organizational behaviour and work psychology since the late 1980s (Rothwell & Arnold, 2007). Policy-makers and scientists have expressed great interest in the individual's ability to get and retain a job or to obtain a desired job in the current era of globalisation (De Cuyper, Van der Heijden & De Witte, 2011). Historically, employment after qualifying has been almost assured, with sufficient vacancies available for newly qualified nurses (Dray et al., 2011). Recently, however, for a number of reasons, primarily related to economic conditions and global mobility of nurses, it is more difficult for newly-qualified nurses to gain employment after finishing their qualifications. As a result, it is imperative for newly-qualified nurses to further develop the skills required to apply for posts and improve their interview technique in order to ensure their dispositional employability. Van Schoot (2003) indicates that nurses need to cope with an increasing diversity and complexity of care situations in health-care organisations such as public hospitals. For this reason, nurses need to improve their employability as factors such as the individual characteristics of nurses, the recruitment policies of health-care organisations and labour market factors also influence the position of nurses in the labour market.

According to Silla, De Cuyper, Gracia, Peiro and De Witte (2009) nurses are expected to seek employment security rather than job stability, meaning that nurses establish employment stability by moving across organizational or hospital boundaries and from one job to the next, rather than staying within a single hospital or job. In this regard, employment security is conditioned by employees' employability, which is defined as the available alternatives in the labour market. De Cuyper, Bernhard-Oettel, De Witte and Alarco (2008) concluded that employability may be a means to secure one's labour market position, rather than a means to cope with job insecurity. Therefore, being capable of getting new employment may enable an employee or a nurse to cope with turbulent situations or deteriorating job conditions.

The main objective of this research was to investigate the dispositional employability of nurses in North West provincial hospitals. Fugate and Kinicki (2008) define dispositional employability as "a constellation of individual differences that predispose employees to proactively adapt to their work and career environments". If conceived this way, employability is a disposition that captures
individual characteristics that foster adaptive behaviours and positive employment outcomes. Fugate et al. (2008) further say that there are key reasons for investigating employability as a disposition. First, today’s turbulent work environments make a dispositional approach more relevant. Therefore, the frequency and intensity of change inherent in the workplace is symptomatic of high levels of uncertainty and employers and employees are confronted with ever-changing and often unknown demands. Mischel (2013), for example, notes that individual dispositions are more likely to come to the fore and significantly influence behaviours and performance in weak situations. It thus makes sense to develop a dispositional perspective and measure of employees’ adaptability towards their work environments and careers. In response, organizations have modified processes, structures and practices to be more malleable.

The next section of the article will highlight some of the limited literature available on dispositional employability of nurses in public hospitals. Thereafter, a discussion of the research approach and method is provided, followed by the results of the research. Finally the article concludes with a discussion of the research results, as well as recommendations for further research.

**Literature review**

*Employability defined*

More than two decades ago Verhaar and Smulders (1999) referred to employability as merely “the latest buzz-word”. However, employability appears to be a good concept for the new millennium. If employers are not able to offer job security then clearly employees will need to find other ways to navigate career paths and to ensure an on-going employability. Baruch, (2004) indicated that rather than being seen as an abrogation of employer responsibility, employability may be seen as a pragmatic response to the transactional nature of employment contracts in the twenty-first century. Guest (2004) and Inkson and Arthur (2001) suggest that employees but not employers have been the instigators of employability by pushing for greater self-control over careers in an attempt to redefine the employment relationship into one which offers greater flexibility, autonomy and independence as opposed to paternalism and security.
De Battisti, Gilardi, Siletti and Solari (2011) focused on the perceived employability with the belief that individual actions are often more driven by the perception of a situation than by the actual reality. As suggested by Forrier et al. (2009) workers find job opportunities also in relation to the structural characteristics of the working world “i.e. number of offers, ease of match between supply and demand, mechanisms for selection of organizations”. Furthermore, it follows that personal employability resources and contextual factors of risk and opportunities both help in forming career paths. Berntson and Marklund (2007), Rothwell and Arnold (2007) in their contribution analysed the external employability through the construct of perceived employability and defined it as the perception of an individual to have chance to get a new job and then to have a skill spendable. Furthermore, the relationship between personal employability resources and perceived employability is still poorly understood.

De Vos, De Hauw and Van der Heijden (2011) and Heijde and Van der Heijden (2006) defined employability as “the continuous fulfilling, acquiring or creating of work through the optimal use of competences”. The competences referred to are an individual's knowledge, skills, and abilities needed to adequately perform various tasks and carry responsibilities within a job. Furthermore, how do they adapt to changes in the internal and external labour market (De Cuyper, Bernhard-Oettel, Berntson, DeWitte, & Alarco, 2008; Fugate et al., 2004; Van Dam, 2004; Heijde & Van der Heijden, 2006).

Scholarios et al. (2008) conceive employability “as a psycho-social construct, including both subjective and objective elements and depends on continuous learning, being adaptable to new job demands or shifts in expertise, and the ability to acquire skills through lateral rather than upward career moves in varied organizational contexts”. Most studies have used an individual difference framework in studying employability but to date, employability scholars underscore the importance of competency development. Furthermore, Scholarios et al. (2008) define competency development as activities that are carried out by the organization and the employee in maintenance or enhancement of the employee's functional, learning and career competencies. Competency development encompasses an integrative approach of developmental activities, involving both the organization and the employee (Heijde & Van der Heijden, 2006). Following this conceptualization,
individuals' participation and an organizational climate supporting competency development will be positively associated with employability perceptions.

Few studies have tested the determinants of employability empirically though many employability models have been developed (Wittekind, Raeder & Grote, 2010). Furthermore, education, support for career and skill development, current level of job-related skills, and willingness to change jobs were significant predictors of perceived employability. Therefore, willingness to develop new competencies, opportunity awareness, and self-presentation skill failed to predict perceived employability. In their model Fugate and Kinicki (2008) theorize that workers with high adaptability are most active, tend to look around and find information and contacts as a result it is possible that these behaviours contribute to increasing the visibility of external resources, promotes the encounter with opportunities for development or reconfiguration of professional identity and increase the perception of having possibility to find new job opportunities. On this basis, dispositional employability should positively influence perceived employability.

**Dimensions of dispositional employability**

**Openness to change**

Less attention has been given to the daily work context within which changes take place. However, the daily context may be crucial for the success of change efforts because this is ultimately where the implementation of change programmes takes place and where leaders, as change agents, face their followers. Context characteristics, such as leadership and organizational climate, are likely to affect how change is implemented, and consequently, how employees react to change. Nauta, van Vianen, van der Heijen, van Dam and Willemsen (2009) indicated that an employability culture is positively related to employability orientation, but is negatively related to turnover intention but pushes the motives of those who aim to leave. Thus, pull motives of employees who want to leave are explained by individual factors such as career dissatisfaction and role breadth self-efficacy, but not by employability culture.

Nauta et al. (2009) further said these findings suggest that organizations that need to adapt to changing environments should implement a strong employability culture, since such a culture...
stimulates employability orientations among employees at the same time decreasing turnover intentions. Research has shown that employees react more positively to organizational changes when they perceive the culture to be development oriented. However, organizations face a dilemma between stimulating workers' employability orientation on the one hand, and retaining their employees on the other hand. McQuaid and Lindsay (2005) indicated that employability-oriented workers may easily identify and anticipate career opportunities, inside and outside the organization. Stimulating employability orientation may thus result in increased turnover, thereby threatening the organization or hospital's flexibility and continuity. Efforts to prevent such turnover through attractive human resources practices may at the same time lower employees' employability orientation.

The public sectors in many developing countries have undergone major restructurings over the past decades (Baraldi, Kalyal, Berntson, Naswall & Sverke, 2010). Furthermore, earlier research suggests that such restructuring is inherently linked to feelings of ambiguity and insecurity among employees, undermining behavioural support for change, and thus, chances of change success. Baraldi et al. (2010) indicated that role ambiguity and job insecurity were negatively related to both commitment to change and behavioural support for change. Furthermore, the notion that the negative effects of role ambiguity and job insecurity on behavioural support for change are fully mediated by individuals' commitment to change, is fully supported. They further emphasized the importance of mobilizing commitment to change whenever restructuring. Therefore, the efficient functioning of government machinery is imperative for the maintenance of the social and economic order of a country.

Portoghese et al. (2012) indicated that nurses' expectations about change are strongly linked to commitment to change. Furthermore, the enhancement of communication and relationship with leader contributed to the development of positive and negative expectations. Van Dam, Oreg et al. (2008) said understanding employees' reactions to a planned organizational change are an important concern for many organizations. As a result, if there are swift environmental and technological changes, a need arises for organizations or hospitals to continually engage in adaptation processes and organizational changes. Van Dam et al. (2008) further said that to realize intended changes; organizations must rely on the cooperation of their employees. Furthermore, any resistance to change
can severely hamper the change process and is associated with negative outcomes such as decreased satisfaction, productivity, and psychological well-being, and increased theft, absenteeism, and turnover.

Over the last decade, there has been a growing interest in the psychological processes that are involved in employees’ experiences of organizational change. Some studies tie employees’ reactions to change to characteristics of the change process, such as management's provision of information concerning change, and the extent to which employee participation is enabled (Van Dam et al., 2008).

**Career proactively**

Halfer (2011) says that understanding job factors and career development support that lead to retention of nurses may guide nursing leaders and staff development educators in investing in focused retention and career development plans. Verbruggen (2012) indicated that the careers literature of the past few decades emphasizes the changing nature of careers. Traditionally, most careers unfolded within one or two organizations and progressed along a pre-defined, upward career path. Hence, changing employers and professions is no longer considered a rarity. As a result among the numerous new career constructs that try to grasp this new and changing reality, the boundary-less career is by far the most influential. Furthermore, a boundary-less career refers to a career that transcends boundaries. Sadly, empirical research on the boundary-less career has largely ignored psychological mobility. Verbruggen (2012) explains that psychological mobility has an impact on career success, but that this impact is not unilaterally positive, not even within a sample of young, highly educated people. In that way, Verbruggen's findings support the claim that the boundary-less career may have a potential downside, even for more privileged groups. In addition, a need exists to further conceptualize and operationalize psychological mobility.

Camps and Rodríguez (2011) indicated that “empirical evidence was found to show that: there is a positive relationship between worker-perceived organizational learning capability in a firm and his/her own employability perception; the worker-perceived transformational leadership of his/her leader, and his/her own employability perception; the worker-perceived organizational learning
capability of a firm and his/her performance; the worker's perception of his/her own employability, and his/her performance; transformational leadership and individual performance have a significant influence on the group, while employability can be considered only as an individual phenomenon; and at group level, the effects of transformational leadership on performance are mediated by organizational learning capability. Camps et al. (2011) further said academics and professionals are unanimous in their consideration of organizational learning capability as a basic element for economic growth and for improving competitiveness in increasingly global markets. Organizational learning capability is defined as the organizational and managerial characteristics or factors that facilitate the organizational learning process or allow an organization to learn (Hult & Ferrell, 1997). Furthermore, organizational learning culture is based on a learning culture that promotes the acquisition, creation, and transfer of knowledge as fundamental values.

Motivation

Toode et al. (2011) said nursing research has neither a clear understanding nor consensus about the concept of work motivation but five categories of factors affecting work motivation were identified as follows: “(1) work-place characteristics, (2) working conditions, (3) personal characteristics, (4) individual priorities, and (5) internal psychological states”. Van Emmerik, Schreurs, de Cuyper, Jawahar and Peeters (2012) said that given the significance of employability for both the employee and the employing organization, it is critical to understand the factors that promote employability. Thus far, this question has mostly been addressed from the labour market (i.e. supply, demand) perspectives and studies have focused upon workers’ characteristics (e.g. in terms of demographics related to human capital) and characteristics of the internal and the external labour market, respectively (Berntson et al., 2007; Berntson et al., 2010; Marks & Scholarios, 2008). In addition, studies focused on potentially important antecedents, such as resources embedded in the job itself and the opportunities that arise from it or the moderating role of employability (Bakker et al., 2008, Berntson et al., 2010; Kalyal et al., 2010).

Consistent with the job-demands resources model (JD-R model) (Bakker & Demerouti, 2008), asserted that job resources are an important category of antecedents to employability as such resources have motivational potential and provide workers with a number of opportunities that are also critical to employability. As per van Emmerik et al. (2012), the pattern of results was as follows:
"resources were indeed associated with more intrinsic and extrinsic job opportunities corroborating the motivational potential of job resources asserted by the JD-R model. Extrinsic job opportunities, but not intrinsic job opportunities were positively related to perceived employability and extrinsic job opportunities fully mediated the relationship between resources and perceived employability. The latter is perhaps the most important conclusion: Employees whose jobs provided more resources perceived more extrinsic job opportunities and subsequently, perceived more employability”.

This stresses the argument that extrinsic job opportunities consist of activities done in order to attain some separable outcome; in the present study, achieving better employability (Ryan & Deci, 2002). Furthermore, the intrinsic motivation process accentuates work activities that are done for the enjoyment of the work itself, whereas extrinsic motivation refers to a motivation through instrumental value of the outcomes (i.e. better employability).

De Cuyper et al. (2011) believe that this tension between costs and benefits associated with employability may be false. They argued that the management paradox is grounded in an overly general view on employability, e.g. dominant in the boundary-less career literature that focuses mostly on employment opportunities on the external labour market. They suggested a more complete account of the management paradox or employability that embraces the internal versus the external labour market and opportunities for jobs versus for desired jobs. Furthermore, factors associated with the internal labour market have the potential to tie the individual to the organization, if they ultimately land in jobs aligning with their preferences.

**Optimism**

De Battisti, Gilardi, Siletti and Solari (2013) chose to adopt the construct of personal employability to refer to the worker’s ability to identify career opportunities and realize occupational transitions. Luthans et al. (2008) suggested that developing optimism within health-care professionals may lead to desirable performance outcomes. Inspired by the studies of Ashford and Taylor (1990) and by the psycho-social model of Fugate and colleagues (2008), de Battisti et al. (2013) considered personal employability as derived from internal and external resources that foster adaptive behaviour and the readiness to cope with the changes at work. They identified the following criteria to define the
components of personal employability: as adaptability is conceptualized as “the readiness for change at work”, different from a mere accommodating attitude, aspects of employability refers to individuals’ resources to prepare in advance likely changes and proactively create opportunities. Therefore, coping resources can be both internal (e.g. self-efficacy; career and work proactively) and situational (e.g. social capital) and are contextualized in work setting. As a result, they are malleable and can change over time as a consequence of training, social contacts and self-reflection experience.

Furthermore, analysing variables most commonly associated with career transitions in a mobility context, we focused on three component dimensions that can influence an active adaptability to work changes during involuntary transitions and impact on well-being: social capital; work and career proactivity; self-efficacy in managing work changes. De Battisti et al. (2013) further said that the social capital is the set of resources derived by the worker’s professional and familiar relations. Such resources can be actively kept and put in use to face job changes. Different meta-analyses confirmed that social capital, and its components (e.g. social support), are coping resources in stressful situations: it may mitigate perception of stressors and contribute to mental health.

Optimism is therefore a positive, motivating force resulting from believing that positive outcomes will occur in the future and bad things will be minimal (Rego, Sousa, Marques & Pina e Cunha, 2012). Thus, optimism has both a trait and a state component and trait optimism represents stable individual differences in the level of this psychological strength generally experienced. Hence, state optimism represents the optimism that may change according to the situation or contextual factors. Rego et al. (2012) treat optimism as state-like, not as a “pure” state. They consider that optimism is not as stable and is more open to change and development compared with “trait-like” constructs, and also that it is not a momentary state (Luthans, Avolio et al., 2008). For similar reasons, Luthans et al. also consider our measure of positive and negative affect as state-like.

Rego et al. (2012) hypothesized that optimism predicts creativity because optimists are more motivated to work towards future goals and they continue to strive, work hard, and cope actively with the problems they encounter for seeking desirable outcomes. Thus, creativity performance may be one of the routes through which goals and desirable outcomes are pursued. Furthermore, the relationship between optimism and creativity may be partially mediated by positive affect and the
positivity ratio because optimism involves not just cognitive and motivational components, but also an affective one. Thus, its affective component helps to explain why optimism correlates with affect (Kluemper et al., 2009).

Some authors argue that the relationship between optimism and several job and health-related outcomes may be due in part to affect. Avey, Wernsing, and Luthans (2008) found that positive affect mediates the relationship between psychological capital (a core construct including optimism) and several attitudes and behaviours. Rego et al. (2012) also suggested that the relationship between the positivity ratio and creativity has an inverted U-shaped pattern. This curvilinear relationship is advanced because an extremely low level of negative affect may lead employees to “lose their credibility as connected to reality” and be less able to bring new and useful ideas to the more pertinent working problems and opportunities.

Work identity

McArdle, Waters, Briscoe and Hall (2007) said career identity represents the way individuals define themselves in the career context, and can be conceptualized as a ‘cognitive compass’ used to navigate career opportunities. ‘Knowing-why’ competencies encompass attributes such as career motivation, personal meaning and individual values is important. Given that career trajectories are less externally defined in the new career environment, the use of an ‘internal career compass’ has become critically important in providing direction, especially when the individual finds him/herself outside of the boundaries of an employing organization (McGreevy, 2003). In today’s turbulent career environment, identity needs to be decoupled from a specific job or organization, instead representing an individual’s personal values, motivations and broader career interests. In support of this, Anakwe, Hall, and Schor (2000) found that teaching MBA students to reflect on their career-related values, needs and motivations (assisting the formation or consolidation of career identity) facilitated effective goal-setting and decision-making.

In periods of career transition, such as unemployment, the ability to harness one’s career identity as a guide when establishing goals and making decisions may be crucial in identifying career opportunities which can also be crucial for nurses. Defillippi et al. (1994) said that human capital
refers to the personal variables that may affect one's career advancement, including education, work experience, training, skills, and knowledge. Human capital encompasses the 'knowing-how' competencies outlined by Defillippi and Arthur (1994).

Furthermore, 'Knowing-how' competencies refer to career-related knowledge and skills built via occupational learning and professional development activities. Thus, by investing in continuous learning, individuals can develop their human capital, thereby building employability. Furthermore, social capital reflects the interpersonal aspect of employability, incorporating 'knowing-whom' competencies concerning formal and informal career-related networks. Seibert, Kraimer and Liden, (2001) further said empirical work has demonstrated that interpersonal connections (who one knows) are crucial in shaping individuals’ self-perceptions and providing access to career-related information and resources. Thus, social networks can also be a source of social support, serving to ameliorate the destructive consequences of stressful events, such as unemployment.

Kirpal (2004) said that the professional identity of nurses remains strong, but it is important for policy makers to be aware of the potential negative effects of the current state of the health care sector that exist in terms of staff turnover, mobility and job dissatisfaction. Fugate and Kinicki (2008) said that dispositional employability is conceptualized as a latent multidimensional construct with a higher order abstraction underlying its dimensions. Therefore, dispositional employability is reflected in its dimensions and represents the conceptual or empirical space that is common to its component dimensions and relates to active adaptability at work and manifests in openness to change, work and career resilience, work and career pro-activity, career motivation and work identity. If it is framed this way, employability is conceptually more abstract and has meaning and influence in the work and career domains above and beyond that of any particular dimension. Furthermore, work identity is one's self-definition in the career context. As such, it provides a strong cognitive and affective foundation for dispositional employability. People who define themselves as employable enact behaviours consistent with this self-view.
RESEARCH DESIGN

A cross-sectional survey design was utilized to describe the information on the population collected at that time. Cross-sectional designs are used to examine groups of subjects at various stages of development simultaneously, while the survey describes a technique of data collection in which questionnaires are used to gather data about an identified population (Babbie, 2001). This design is well-suited to the descriptive and predictive functions associated with correlational research, whereby relationships among variables are examined (Cooper & Schindler, 2003).

Participants

The target population for this study was registered professional nurses in public hospitals in the North West Province. A stratified random sample was taken from the total population of professional nurses which in this case was seven thousand. A thousand questionnaires were distributed to the nurses with 433 questionnaires returned. This represented a response rate of 43.3%. The demographic characteristics of the respondents are presented in Table 1 below.

Table 1: Demographic characteristics of the respondents

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>382</td>
<td>88.2</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>51</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>121</td>
<td>27.9</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>240</td>
<td>55.4</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>45</td>
<td>10.4</td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>27</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td>Setswana</td>
<td>327</td>
<td>75.5</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>30</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>Afrikaans</td>
<td>8</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Sesotho</td>
<td>41</td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td>Zulu</td>
<td>14</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>13</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>African</td>
<td>418</td>
<td>96.5</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>6</td>
<td>1.4</td>
</tr>
<tr>
<td>Race</td>
<td>Coloured</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>20-29yrs</td>
<td>28</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td>30-39yrs</td>
<td>88</td>
<td>20.3</td>
</tr>
<tr>
<td></td>
<td>40-49yrs</td>
<td>181</td>
<td>41.8</td>
</tr>
<tr>
<td></td>
<td>50-59yrs</td>
<td>128</td>
<td>29.6</td>
</tr>
<tr>
<td></td>
<td>60 and above</td>
<td>8</td>
<td>1.8</td>
</tr>
<tr>
<td>Highest level of education</td>
<td>Certificate</td>
<td>35</td>
<td>8.1</td>
</tr>
</tbody>
</table>
Table 1 indicates that the respondents in this research are primarily female (88.2%), married (55.4%), have Setswana as their home language (75.5%), are representative of the African ethnic group (96.5%) and are aged between 40 years and 49 years (41.8%). Most of the respondents were in possession of a Diploma (54.5%), permanently employed (92.4%) and employed at the lower management level (51.3%). The respondents in this study had more than 63% of work experience, did not had any opportunities for promotion during the past five years (79.9%) and were working between 31-40 hours in a work week (64.9%).

**Measuring instrument**

A dispositional employability measure developed by Fugate and Kinicki (2008) was used to measure the respondents’ orientation towards their work and their employability. This questionnaire measures six dimensions: Openness to Change, Career Proactivity, Work Identity, Career Resilience, Career Motivation and Optimism. Responses are measured on a six-point Likert scale ranging from 0 to 5.
Strongly Disagree (1) and Strongly Agree (6). This questionnaire has been validated in the South African context (Barkhuizen & Botha, 2011). This questionnaire also indicates the ability of early career academics to progress through their careers.

**Procedure**

Permission was obtained from the Director of Research at departmental level, approved by the Deputy Director-General. After several presentations the purpose of research was explained to all members of the research unit. The distributed the questionnaires manual to the research participants and collected the completed questionnaires. The purpose of the research was explained to all participants and participation was voluntary and confidentiality as well as anonymity of participants were respected at times.

**Statistical analysis**

The statistical analysis was conducted by means of the SPSS programme (SPSS Inc., 2003). Bless et al. (2013) said the quantitative approach relies extensively on numbers and statistics in the analysis and interpretation of findings that are generalized from the sample population. Exploratory factor analyses were used to determine the factor structure of the cross-sectional questionnaire. The reliability and validity of the measurements was determined by means of Cronbach Alpha Coefficients (Field, 2005). Multivariate analysis of variance (MANOVA) was used to determine the significance of differences between the levels of employee expectations and employer obligations in psychological contract based on their demographic characteristics.

**RESULTS**

The Kaiser-Meyer-Olkin (KMO) determining of the sample adequacy of dispositional employability was used. A Measure of Sampling Adequacy of 0.850 for Dispositional Employability was reached and according to guidelines if it is higher than 0.6 is adequate for factor analysis (Hair, Black, Babin & Anderson, 2010). A principal component analysis was done on the 25 items of the dispositional employability measure. The initial results showed that four factors could be extracted based on the eighteen values. However, closer inspection showed that three factors can be specified. A subsequent principal components analysis was done using varimax rotation to specify three factors. The three
factors explained 57.652% of the variance and were labelled Change Identity (Factor 1). Eleven items were deleted due to problematic loadings. The rotated component matrix is reported in Table 2 below:

**Table 2: Rotated component matrix for dispositional employability measure**

<table>
<thead>
<tr>
<th></th>
<th>Change Identity</th>
<th>Resilience</th>
<th>Optimism</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEM4</td>
<td>.835</td>
<td>.201</td>
<td>.017</td>
</tr>
<tr>
<td>DEM5</td>
<td>.858</td>
<td>.136</td>
<td>.096</td>
</tr>
<tr>
<td>DEM9</td>
<td>.823</td>
<td>.178</td>
<td>.140</td>
</tr>
<tr>
<td>DEM10</td>
<td>.784</td>
<td>.043</td>
<td>.154</td>
</tr>
<tr>
<td>DEM11</td>
<td>.791</td>
<td>.231</td>
<td>.145</td>
</tr>
<tr>
<td>DEM12</td>
<td>-.127</td>
<td>.211</td>
<td>.655</td>
</tr>
<tr>
<td>DEM13</td>
<td>.324</td>
<td>.118</td>
<td>.799</td>
</tr>
<tr>
<td>DEM15</td>
<td>.121</td>
<td>.259</td>
<td>.714</td>
</tr>
<tr>
<td>DEM16</td>
<td>.192</td>
<td>.166</td>
<td>.792</td>
</tr>
<tr>
<td>DEM18</td>
<td>.187</td>
<td>.638</td>
<td>.401</td>
</tr>
<tr>
<td>DEM19</td>
<td>.186</td>
<td>.637</td>
<td>.122</td>
</tr>
<tr>
<td>DEM21</td>
<td>.055</td>
<td>.650</td>
<td>.319</td>
</tr>
<tr>
<td>DEM22</td>
<td>.112</td>
<td>.810</td>
<td>.137</td>
</tr>
<tr>
<td>DEM23</td>
<td>.111</td>
<td>.803</td>
<td>.135</td>
</tr>
<tr>
<td>DEM24</td>
<td>.302</td>
<td>.682</td>
<td>.018</td>
</tr>
</tbody>
</table>

The descriptive statistics are reported in Table 3 below. The results show good reliabilities for the three factors of the Dispositional Employability Measure. The results further show that the measure is not normally distributed based on the standard deviation and skewness. The results show that nurses experience average levels of dispositional employability.
Table 3: Descriptive statistics of dispositional employability

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Identity</td>
<td>4.5529</td>
<td>1.17914</td>
<td>-.843</td>
<td>.146</td>
<td>.899</td>
</tr>
<tr>
<td>Resilience</td>
<td>4.4238</td>
<td>1.00191</td>
<td>-.978</td>
<td>.755</td>
<td>.802</td>
</tr>
<tr>
<td>Proactivity</td>
<td>4.5566</td>
<td>1.00705</td>
<td>-1.000</td>
<td>.711</td>
<td>.848</td>
</tr>
</tbody>
</table>

Next Manova analyses were done to determine whether any significant differences existed based on the three dimensions of dispositional employability and demographic characteristics of the respondents. The results in Table 4 showed that nurses differed significantly in terms of hours of work, promotion opportunities and job level. The results of the post-hoc analyses are reported next.

Table 4: MANOVA - Dispositional employability and demographic variables

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours of work</td>
<td>.936</td>
<td>1.909</td>
<td>15.000</td>
<td>1173.639</td>
<td>.019</td>
<td>.022</td>
</tr>
<tr>
<td>Promotion</td>
<td>.960</td>
<td>1.935</td>
<td>9.000</td>
<td>1039.356</td>
<td>.044</td>
<td>.013</td>
</tr>
<tr>
<td>Job level</td>
<td>.962</td>
<td>1.874</td>
<td>9.000</td>
<td>1039.356</td>
<td>.052</td>
<td>.013</td>
</tr>
<tr>
<td>Education</td>
<td>.967</td>
<td>1.599</td>
<td>9.000</td>
<td>1039.356</td>
<td>.111</td>
<td>.011</td>
</tr>
<tr>
<td>Age</td>
<td>.963</td>
<td>1.335</td>
<td>12.000</td>
<td>1127.382</td>
<td>.192</td>
<td>.012</td>
</tr>
<tr>
<td>Gender</td>
<td>.987</td>
<td>1.930b</td>
<td>3.000</td>
<td>429.000</td>
<td>.124</td>
<td>.013</td>
</tr>
</tbody>
</table>

Note: The Wilks’ Lambda for hours of work is equal to 0.936 [F (15, 1173.639) = 1.909, p ≤ 0.05]. Analysis of each dependent variable, using a Bonferroni adjusted alpha level of 0.025, showed that the hours of work differ in terms of proactivity (F(5, 433) = 2.052, p ≤0.05, partial n2 = 0.070). Employees working between 41 to 50 hours a week were more proactive in their work compared to those working 11 to 20 hours in a week. The effects are small.

The Wilks’ Lambda for promotion is equal to 0.960 [F (9, 1039.356) = 1.935, p ≤ 0.05]. Analysis of each dependent variable, using a Bonferroni adjusted alpha level of 0.025, showed that promotion
differs in terms of change ($F(3,433) = 2.394$, $p < 0.05$, partial $\eta^2 = .068$). Nurses with fewer opportunities for promotion were less open to change compared to those with more chances for promotion.

**DISCUSSION**

The main objective of this research was to investigate the dispositional employability of nurses in public hospitals. Results of the frequency analysis suggested twenty-five interpretable items for the Dispositional Measure of Employability (DME). The results obtained shows that all participants slightly agree, agree or strongly agree. Employability is conceptualized as a multidimensional form of work specific active adaptability that enables workers to identify and realize career opportunities (Fugate & Ashforth, 2003). Furthermore, individuals who possess high levels of employability are predicted to reap the benefits of active adaptability. In addition to fostering active adaptability, employability also predisposes individuals to adapt or change proactively. They further said personal adaptability contributes to both organizational performance and career success as it enables people to remain productive and attractive to employers in continually changing work domains.

The findings from the Manova analyses indicated that employees working 51 hours or more per week are willing to adapt to change. Fugate and Kinicki (2010) confirm that dispositional employability is significantly related to employees' positive emotions and affective commitment related to organizational changes. Employees are also willing to participate in their career and be positive at work. De Vos et al. (2011) indicated that employee participation in competency development initiatives as well as perceived support for competency development is positively associated with workers' perceptions of employability. Moreover, self-perceived employability appears to be positively related with career satisfaction and perceived marketability.

The results show that nurses experience average levels of dispositional employability in the area of proactivity. Manova findings further showed that nurses working between 41 to 50 hours a week were more proactive in their work compared to those working 11 to 20 hours in a week. This confirms other studies that individuals set clear and measurable career goals to meet the challenges of the labour market and to remain employable thus become proactive (Oosthuizen et al., 2014; Van
der Vaart et al., 2014; Barkhuizen, 2014). Halfer (2011) indicated that it is important to understand job factors and career development support that lead to retention of nurses and which may guide nursing leaders and staff development educators in investing in focused retention and career development plans. Nursing managers can then ensure that even those nurses that are not proactive can be engaged in the process. Hospital managers will have to be aware that careers like nursing increasingly become boundary-less, and as a result, contemporary careers are often depicted as ones wherein workers are employable, proactive, and self-regulative (van der Heijde, 2014). Thus one will have to act swiftly to ensure the retention of nurses.

The results show that nurses experience average levels of dispositional employability in resilience. This confirms other results that individuals with higher levels of resilience are confident that they possess the skills and abilities to perform well in their future jobs and are confident of being employed, and these beliefs may translate into higher levels of perceived employability (Huang, 2014; Van Dyk, 2015; Cuff & Barkhuizen, 2014). De Battisti et al. (2013) said that personal employability is the worker's ability to identify career opportunities and realize occupational transitions. Thus, resilient nurses are in a position of ensuring their employability.

The Manova findings showed that nurses with fewer opportunities for promotion were less open to change compared to those with more chances for promotion. The results confirm the other findings that the current level of job-related skills predicted perceived employability and creates proactive attitudes that are central to the dispositional approach hence the feeling of openness to change (Vanhercke et al., 2014; Maslij Seršić et al., 2014 & Bell & Barkhuizen, 2011). Hospital management will have to be mindful of how they effect change more especially for those with less chances of promotion since Nauta et al. (2009) indicated that leadership and organizational climate are likely to affect how change is implemented, and how employees react to that change. They further said that organizations or hospitals that need to adapt to changing environments should implement a strong employability culture, since such a culture stimulates employability orientations among employees at the same time decreasing turnover intentions. Portoghese et al. (2012) indicated that nurses' expectations about change are strongly linked to commitment to change.
The research had some limitations due to the fact that it was done for public hospitals in the North West Province only. The results cannot therefore be generalised to all public or private hospitals in South Africa. The other limitation was the unequal distribution of the population in the sample regarding language group where the majority was Tswana-speaking and Afrikaans was not even represented. One would like to see the comparison between nurses working in public hospitals as opposed to those working in private hospitals.

Recommendations for the management of hospitals are to take cognisance that it is important to invest in the career of nurses in the form of on the job training, courses or any other form of development. This investment involves both the creation of a supportive environment for developing skills and stimulating individual nurses to actively make use of the opportunities for skills development present within the department or hospitals. The benefit for the department relates to enhanced skills that are, generally, considered as critical for sustainable competitive advantage. A nurse participating in skills development that is embraced by the Skills Development Act, offered by their department, is important for enhancing their employability perceptions, and through this also for their feelings of career satisfaction and beliefs in their own marketability which is also in line with Psychological contract.

In conclusion the results confirm both hypotheses that positive emotions are related to nurses in their jobs and affective commitment to changes within public hospitals by nurses. As Fugate et al. (2003) indicated, it will be easy for nurses to adapt to any new changes as long as it enhances prospects of career growth and this might lead to high service delivery in public hospitals enabling the employer to change work domains. Therefore we recommend management to take serious note of the abovementioned indications.
REFERENCES


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Chapter 5

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A STRUCTURED MODEL FOR TALENT MANAGEMENT FOR PROFESSIONAL NURSES IN THE NORTH WEST PROVINCE

ABSTRACT

Orientation: There is a serious shortage of nurses globally, and South Africa is experiencing the outflow of professional nurses due to global acceptance and those remaining needs to be retained. Proper Talent management may lead to positive psychological contract, dispositional employability, work wellness and ill-health may lead to high retention.

Research purpose: The main objective of this research was to determine the consequences of talent management for nurses in public sector hospitals. More specifically this research aimed at determining the interactive relationship between the variables of talent management, dispositional employability, psychological contract, work wellness and ill-health.

Research approach, design and method: Quantitative research was conducted in Provincial Hospital administering an adapted version of the a cross-sectional research a questionnaire, Maslach Burnout Inventory (MBI), Utrecht Work Engagement Scale (UWES), Human Capital Institute (HCI) and Health questionnaire (N=433).

Main findings: The results showed significant relationships between the variables. Furthermore dispositional employability, work wellness and psychological contract mediated the relationship between talent management and ill-health

Practical/managerial implications: Proper talent management will ensure that employees are employable, have a positive perception that the employer is not breaching the psychological contract thus improving their health status and contributing positively to nurse retention.

Contribution/value-add: The results add to the body of knowledge in the issues of Talent management of nurses and how it can be improved to enable health facilities to be competitive in retaining highly skilled nurses. This research can serve as the basis for the development of proper talent management strategies that are appropriate and relevant to public hospitals.

Keywords: Talent management, psychological contract, dispositional employability and ill-health
INTRODUCTION

The ability to attract and retain top talent is rapidly becoming a key issue for human resource management. In particular, the availability of health workers is an indicator of a nation's capacity to meet its citizen's needs (van den Brink et al., 2014). It is therefore imperative that talent management practices in the health-care industry be studied for improved talent retention since effective talent management can vastly improve health-care models (Dhanabhakyam & Kokilambal, 2012). Talent management strategies can facilitate the development of nurses, enhance service delivery and also can give the public hospitals an enhanced corporate image (Karemu et al., 2014). Failing to retain key nurses in the public hospitals is costly for any government due to the costs associated with employee turnover. Employers therefore have to be to be aware that "the value of human capital is inherently dependent upon its potential to contribute to the competitive advantage or core competence of the firm" hence the importance of managing one's talent (Cappelli & Keller, 2014).

The main objective of this research is to develop an integrated model incorporating talent management, work wellness (burnout and work engagement), dispositional employability and ill-health. According to Zhang et al. (2014) burnout is a psychological symptom of individual experience in the service industry and medical field. With the development of society and economy, people's life and work pressure are increasing, when employees lack of organizational support, and cannot be timely distracted from their own negative emotions, job burnout may occur. Most of the results of South African research showed that the dimensions of work-related well-being of personnel in different occupations in South Africa are commonly affected by high job demands and insufficient resources (Asiwe et al., 2015). Furthermore, dysfunctional mental health represents a serious cost for the industry in terms of both human and financial maladaptive consequences. Consequently, global changes and new managerial challenges require new concepts of health and well-being in organizational contexts.

The next section of the article highlights some of the limited literature available on talent management, psychological contract, work wellness of nurses, dispositional employability and hypothesised model of nurses in public hospitals. Thereafter, a discussion of the research approach and method will be provided, followed by the results of the research. Finally, the article concludes with a discussion of the research results, as well as recommendations for further research.
LITERATURE REVIEW

Talent management

Cooke et al. (2014) define talent management as a way of identifying what the talents are through pre-defined criteria within an organization or hospital and then managing them effectively through a set of tightly coupled Human Resource Management tools, activities, and processes. Cooke further highlights the pitfall in practice of following this definition as a selective or exclusive approach to talent management that over-emphasizes individual star performers and may create a kind of organizational culture that discourages teamwork and collaborative spirit. Talent management is defined as the management of those employees considered by an organization to be talented (Sonnenberg et al., 2014). Furthermore, an organization can differentiate itself by having more talent management practices than other organizations and such practices can be centred around developmental opportunities. Nijs et al. (2014) proposed the following definition “Talent refers to systematically developed innate abilities of individuals that are deployed in activities they like, find important, and in which they want to invest energy. It enables individuals to perform excellently in one or more domains of human functioning, operationalized as performing better than other individuals of the same age or experience, or as performing consistently at their personal best”. Furthermore, human resource practices are aimed at attracting, developing, and retaining those individuals with high levels of human capital aligned with the organization's strategic intent.

Psychological contract

Employee perceptions of the rules of the exchange relationship they have with their employer, and of the resources that are exchanged, are typically referred to as “psychological contracts” (Dries and Gieter, 2014). Psychological contracts thus express employees' inferred interpretations of explicit and implicit promises made by their organizations. Psychological contract is defined as a concept describing the mutual expectation between employee and organization (Jin & Li, 2015). This concept highlights the relation of mutual expectation not explicitly expressed apart from the formal contract or other material documents signed between employer and employee.

The ideological psychological contract describes perceived obligations related to an organization’s mission, values, and principles (Vantiborgh et al., 2014). In the case of ideological psychological
contract breach, work effort increases in situations of under- and over-fulfilment. Changes in the work environment can influence employees' perception of the employment relationship, their psychological contracts, and consequently, their work-related attitudes and behaviour (van der Vaart et al., 2013). Nurses and nurse managers are governed by relational psychological contracts, underpinned by an affective and to a lesser extent normative commitment towards the nursing profession (McCabe & Sambrook, 2013). They emphasize ‘professional values’, and professional commitment, as the basis for positive psychological contracts amongst nursing professionals. Developmental HR configurations could strengthen employees' organizational behaviours that benefit the organization in general by simultaneously shaping their relational and balanced psychological contracts (Chien & Lin, 2013).

**Burnout**

The role of nurses in the health-care delivery system cannot be over-emphasized. Nurses are needed at all levels of health-care and the profession requires a lot of dedication, time and energy with regards to patient management and service delivery, and as such prevalence of burnout and psychological distress is high among them (Okwaraji & En, 2014). Burnout has been reported commonly among health-care workers, especially in nurses and in multiple studies, nurse burnout has been evaluated worldwide including America, Europe, Australia and Asia (Lee et al., 2013).

Burnout is usually thought of as an individual’s response to prolonged work-related stress, which in turn, impacts on job satisfaction and thereafter, can often affect productivity, performance, turnover and wellbeing among health care professionals and other kinds of workers (Khamisa et al. 2013). Thus, nurses have been found to experience higher levels of stress-related burnout compared to other health care professionals. Burnout consist of three dimensions namely exhaustion, mental distance (depersonalization and cynicism) and professional efficacy. Emotional exhaustion is the central quality of burnout and refers to feelings of being overextended and exhausted. Mental Distance is defined as indifference or a distant attitude towards one’s job or people around them (Schaufeli, Taris & van Rhenen, 2008). Reduced personal accomplishment results primarily from depersonalisation and refers to the self-evaluation that one is ineffective and incompetent in working with the recipients of one's service and fulfilling job responsibilities (Maslach, Jackson & Leiter, 1996). The three dimensions of job burnout have an interaction relationship: inefficacy is the pre-
influence factor of cynicism and exhaustion, and the cynicism and exhaustion influence each other (Zhang, 2012).

**Work engagement**

Work engagement is an optimal redefinition of the emerging individual-organisation relationship, which, while fostering individual loyalty and satisfaction, also contributes to the firm's performance (Agarwal, 2014). Furthermore, engagement significantly influences nurses' innovative work behaviour. Work engagement is defined as an energetic state in which the employee is dedicated to render an excellent work performance and is confident in his or her effectiveness (Schutte, Toppinen, Kalimo, & Schaufeli, 2000; Barkhuizen, Rothmann & Vijver, 2014).

Work engagement is characterized by three dimensions, namely vigour, dedication and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Vigour is characterised by high levels of energy and mental resilience while working, the willingness to invest effort in one's work and persistence, even in the face of difficulties. Dedication is characterised by a sense of significance, enthusiasm, inspiration, pride and challenge. Finally, absorption is characterised by being totally and happily immersed in one's work, to the extent that it is difficult to detach oneself from it. Absorption most likely plays a less central role in the engagement concept.

**Dispositional employability**

Employability concerns the ability to be employed (Vanherche et al., 2014). An often agreed upon definition of employability is being able to gain and maintain work, both within and across organizations (van der Heijde, 2014). Thus, the employability concept is characterized for its shifts in meaning throughout time, depending on changing labour market conditions and government policies. Maslić Seršić et al. (2014) in their findings indicated which psycho-social characteristics make people employable in different economic contexts and supported the concept of dispositional employability. According to the dispositional model of employability, employability is defined as a multidimensional person-centred construct which subsumes five dimensions (openness to changes at work, work and career resilience, work and career proactivity, career motivation and work identity) which promote proactive adaptability in a work context (Maslić Seršić and Tomas, 2014).
As Van der Heijde and Van der Heijden (2005) argued, employability can only be enhanced by absorbing up-to-date professional knowledge, planning professional development, and acquiring transferrable skills in this fast-growing and -changing economy (Wang & Tsai, 2014). In other words, employability requires not only the competencies demanded by the job market but also effective career planning and advancement.

Hunter et al. (2014) said nurses have identified the importance of a strong sense of professional identity for building career resilience that will improve their dispositional employability. To improve their public image and to obtain a stronger position in healthcare organizations and improvement in dispositional employability, nurses need to increase their visibility and their work identity (Hoeve et al., 2014). Building positive relationships, maintaining positivity, developing emotional insight, creating work-life balance, and reflecting on successes and challenges are effective strategies for career resilience building in nursing for improving one’s dispositional employability (Cline, 2015).

**Ill-health**

Ill-health is an important determinant for entering and maintaining paid employment and there is ample evidence that ill-health may cause exits from the labour force (Schuring et al., 2013). Polvinen et al. (2013) suggested that preventing ill-health and improving working conditions, especially among the lower socioeconomic classes, would help reduce socioeconomic differences in disability retirement. There is a consistent shift in the presentation of ill-health from a physical to a psychological perspective, although changes in hazards, prevention measures and physician awareness should also be considered as explanations (Carder et al., 2013).

Psychological health refers to clinical symptoms indicative of stress-induced mental ill-health (for example, constant tiredness and irritability), while physical health refers to physical symptoms often associated with stress (for example, insomnia/sleep loss and headaches) (Viljoen & Rothmann, 2009). The most common causes of death are often treatable effects of physical ill health and yet there is agreement internationally that health-care systems neglect the physical health of nurses (Happell et al., 2012).
Psychological ill-health includes anxiety/panic attacks, irritability, difficulty in decision-making, loss of sense of humour, becoming easily angered, constant tiredness, feeling unable to cope, avoiding contact with other people, mood swings and inability to listen to others (Jackson & Rothmann, 2006). Eight major workplace sources of stress that lead to psychological ill-health have been identified within nursing: death and dying, conflict with doctors, lack of support, inadequate preparation, conflict with other nurses, work load, shift work and uncertainty over treatment (Arafat et al., 2003).

**Talent management, psychological contract and ill-health**

Prompted by changes, many individuals have begun a new search for meaning in their work and to reassess their purpose in the workplace (O’Donohue et al., 2007). As a consequence, many individuals are seeking a close alignment between themselves, their work, and their organizational and broader societal contexts (O’Donohue & Nelson, 2009). One implication of the expansion of the individual’s search for meaning is that the psychological contract as perceived by the individual may reflect more explicitly a broader social contract.

Incongruence occurs where the organization's management perceives an individual as ‘talent’, but the individual is unaware of this, and also the other way around: management do not consider an individual as ‘talent’ while the individuals might believe that they do (Sonnenberg et al., 2014). Although the increased use of talent management practices is related to higher psychological-contract fulfilment, this relationship is negatively affected by incongruent talent perceptions, thus the importance of clearly defining talent and communicating this clearly to all employees. Furthermore, in health care there is a general assumption that staff turnover (the opposite of stability), will negatively affect both access to care, and the level and quality of healthcare being provided.

“Perceived psychological contract fulfilment had both motivational (psychological contract → work engagement → affective commitment → reduced turnover intentions) and health-enhancing (psychological contract → work engagement → mental health) effects” (Parzefall & Hakanen, 2010). Furthermore, job resources are assumed to boost positive motivational outcomes whereas high job demands are associated with both physiological and psychological costs leading to employee ill health.
Michie and Williams (2003) said key work factors associated with psychological ill-health and sickness absence in staff were long hours worked, work overload and pressure, and the effects of these on personal lives; lack of control over work; lack of participation in decision making; poor social support; and unclear management and work role. Bingham (2006) said seminal work on exchange relationships and the underlying norm of reciprocity. Research has often alluded to the idea that different behavioural outcomes are likely to result from psychological contracts premised on either transactional or relational obligations of employment exchange (Emerson, 2013). Health-care administration and the general lack of sustained investment in talent management as compared to other industries are a sample of talent management challenges currently facing public hospitals in South Africa.

H 1: Talent management is positively related to the psychological contract of nurses
H 2: Talent management is negatively related to ill-health (physical and psychological)
H 3: Psychological contract is negatively related to ill-health
H 4: Psychological contract mediates the relationship between talent management and ill-health
H 5: Talent management mediates the relationship between work wellness and ill-health

**Talent management, work wellness and ill-health**

The talent management approach, defined as the integrated system of strategies, policies, and programmes designed to identify, develop, deploy and retain professional nurses talent in order to achieve departmental strategic objectives enabling them to meet future health needs, ensures public hospitals systems of a sufficient supply of capable nurses to achieve government’s strategic objectives (DeLong, 2009). Employee well-being is hypothesized to improve when psychosocial work environment improves (Mattila, Elo & Kuosma, 2006).

High levels of psychological well-being will help in the attraction of new talent and the retention of existing workforce in which focus is the full range of talent management issues thus delivering some of the important outcomes that are associated with successful, high performing organizations (Robertson & Cooper, 2010). Maintaining a stable and healthy workforce is a key element in
effective talent management strategy for reduced employee turnover, with a focus on the role that balances work and family (Deery et al., 2008).

The authentic behaviour of nursing leaders was important to nurses’ perceptions of structurally empowering conditions in their work environments, regardless of experience level, and ultimately contributed to lower levels of emotional exhaustion and cynicism (Laschinger et al., 2013). Bogaert et al. (2013) indicated that nurse-physician relationship and other organizational dimensions such as nursing and hospital management were closely associated with perceptions of workload and with burnout and job satisfaction, turnover intentions, and nurse-reported quality of care.

Bishop (2013) said work engagement can be enhanced through building work environments where there is a sense of belonging and teamwork, where staff is allowed time to decompress as well as build positive work relationships. Bamford et al. (2013) suggest that nurses who work for managers demonstrating higher levels of authentic leadership report a greater overall person-job match in the six areas of work life and greater work engagement. Both organizational and personal factors were found to be significantly associated with work engagement and in their study Fiabane et al (2013) concluded that physiotherapists had the highest levels of occupational stress and disengagement from their work, while nurse aides were the most work-engaged and job-satisfied professional category, with positive perceptions of the work environment. Othman and Nasurdin (2013) in their findings indicated that supervisor support was positively related to work engagement. Co-worker support was found to have no effect on work engagement.

Talent management, dispositional employability and ill-health

Truss, Mankin and Kelliher (2012) further said talent has been defined in the field of human resource development as the innate, genetically coded predispositions that create natural strengths and abilities within any individual and is different from skills, which are tools, techniques, and procedures that can be learned through instruction or experience. Talent management practices that demonstrate commitment to manage the human resources result in more employable employees and organizations that can fully ensure their employees’ dispositional employability through effective talent management practice will clearly have a competitive advantage (Alias, Noor and Hassan, 2014). A study by Barkhuizen et al. (2014) showed that job resources such as training and...
development opportunities, adequate compensation and support for management enhances the career proactivity, optimism, motivation and resilience components of dispositional employability. According to De Braine and Roodt, (2011) work identification and work engagement levels can be improved by managing job resources and job demands.

H 6: Talent management is positively related to the dispositional employability of nurses
H 7: Dispositional employability is negatively related to the ill-health of nurses
H 8: Talent management mediates the relationship between dispositional employability and ill-health

HYPOTHESES MODEL FOR THIS STUDY

The hypothesized model for this study is presented in Graph 1 below.

Figure 1: Hypothesised model for the study

H 1: Talent management is positively related to the psychological contract of nurses
H 2: Talent management is negatively related to ill-health (physical and psychological)
H 3: Psychological contract is negatively related to ill-health

H 4: Psychological contract mediates the relationship between talent management and ill-health

H 5: Talent management mediates the relationship between work wellness and ill-health

H 6: Talent management is positively related to the dispositional employability of nurses

H 7: Dispositional employability is negatively related to the ill-health of nurses

H 8: Talent management mediates the relationship between dispositional employability and ill-health

The above hypnotized model indicates that if talent of nurses is managed well, it will lead to the fulfilment of the psychological contract that will lead to healthy employees. If not managed well, employees will, like the employer, have bridged the psychological contract and this will lead to ill-health. Therefore, psychological contract is negatively related to ill-health. Given this hypothesis, then it can be said that psychological contract mediates the relationship between talent management and ill-health. Talent management will also lead to the wellness of employees who will remain healthy. Work wellness is negatively related to ill-health. Work wellness mediates the relationship between talent management and ill-health. Therefore, if talent management is not managed, the wellness of nurses will be impacted negatively thus leading to ill-health. Talent management is negatively related to ill-health (physical and psychological). Finally, proper talent management will lead to dispositional employability and employable employees lead a healthy life. Talent management is positively related to the dispositional employability of nurses and Dispositional employability is negatively related to the ill-health of nurses. If talent is managed well and since employability enhances alternatives, and facilitates personal change and job changes, nurses' will remain intact. Dispositional employability mediates the relationship between talent management and ill-health.

RESEARCH DESIGN

A cross-sectional survey design was utilized to describe the information on the population collected at that time. Cross-sectional designs are used to examine groups of subjects at various stages of development simultaneously, while the survey describes a technique of data collection in which
questionnaires are used to gather data about an identified population (Babbie, 2001). This design is well-suited to the descriptive and predictive functions associated with correlational research, whereby relationships between variables are examined (Cooper & Schindler, 2003). Data is collected at the same time and this design attempts to understand the topic by collecting a cross-section information relevant to the topic (Bless, Higson-Smith & Sithole, 2013).

Sample
The target population for this study was registered professional nurses in public hospitals in the North West Province. A stratified random sample was taken from the total population of professional nurses which in this case was seven thousand. A thousand questionnaires were distributed to the nurses with 433 questionnaires returned. This represented a response rate of 43.3%. The respondents in this research are primarily female (88.2%), married (55.4%), have Setswana as their home language (75.5%), are representative of the African ethnic group (96.5%) and are aged between 40 years and 49 years (41.8%). Most of the respondents were in possession of a Diploma (54.5%), permanently employed (92.4%) and employed at the lower management level (51.3%). The respondents in this study had more than 63% of work experience, did not have any opportunities for promotion during the past five years (79.9%) and were working between 31-40 hours in a work week (64.9%).

Research procedure
Permission was obtained from the Director of Research at departmental level, approved by the Deputy Director-General. After several presentations the purpose of research was explained to all members of the research unit. The questionnaires were distributed manually to the research participants. The purpose of the research was explained to all participants and participation was voluntary. Confidentiality and anonymity of participants were respected at all times. Ethical clearance was obtained prior to the administration of the questionnaires.
Measuring instruments

Talent management

An adapted version of the Human Capital Index is used to measure the nurses’ perceptions of the applications of the Talent Management Practices. The questionnaire consists of 35 items and measured eight Talent Management Practices: Management Commitment, Talent Review Process, Workforce Planning, Staffing, Talent Acquisition, Talent Development, Performance Management and Talent Retention. Respondents are first asked to rate the current level of Talent Management Practices on a 5-point Likert Scale from Poor (1) to Excellent (5). Secondly respondents are asked to indicate the importance of the Talent Management Practices on a 5-point Likert Scale from Not (1) to Critical (5). The reliability of this instrument has been confirmed in several South African studies (see Barkhuizen & Veldsman, 2012).

Psychological contract

An adapted version of The Psychological Contract Inventory was used to measure the psychological contract. The inventory consisted of 56 items and two measures: Employee Obligations and Employer Obligations. The inventory measures constructs such as Insecurity, Performance Support, Career Stability, Employee Service Value, Employee Security, Employee Development and Freedom to leave. Responses are measured on a five-point Likert scale ranging from not at all (1) to a great extent (5). The validity of this measurement has been confirmed in the South African context (Janse van Rensburg et al., 2012). The Psychological Contract Inventory was used and it is designed to serve two basic purposes: 1) as a psychometrically sound tool for assessing the generalizable content of the psychological contract for use in organizational research, and 2) as a self-scoring assessment to support executive and professional education (Rousseau, 2001).

Burnout

The Maslach Burnout Inventory – General Survey (MBI-GS) is used to measure the Exhaustion (5 items), Cynicism (5 items) and Professional Efficacy (6 items) dimensions of burnout. The Depersonalisation (5 items) dimension of the Maslach Burnout Inventory Educator Survey (MBI-ES) was also included in the questionnaire. Responses to 21 items are made on a six-point scale varying from 0 (never occurs) to 6 (occurs every day). High scores on Exhaustion and
Cynicism/Depersonalisation, and low scores on Professional Efficacy are indicative of burnout. The adapted version of the MBI-GS has been validated in several South African studies (Barkhuizen & Rathmann, 2008).

**Work engagement**

The Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002) is used to measure the levels of engagement. Four items in which the language was simplified were added to the 17-item UWES. Three dimensions of engagement can be distinguished, namely Vigour (6 items; i.e., "I am bursting with energy in my work"), Dedication (5 items; i.e., "I find my work full of meaning and purpose") and Absorption (6 items; i.e., "When I am working, I forget everything else around me"). Engaged individuals are characterised by high levels of Vigour and Dedication and also elevated levels of Absorption. The validity of the UWES have been confirmed in various South African studies (Barkuizen & Rothmann, 2006).

**Dispositional employability**

A dispositional approach to employability represents an alternative conceptualization to those previously found in the literature (Fugate & Kinicki, 2008). They conducted three independent studies to establish construct validity, using exploratory factor analysis (Study 1) and confirmatory factor analysis (Study 2), a 25-item DME instrument was confirmed. Study 2 supported the hypothesized second-order latent multidimensional factor structure of the DME. Study 3 confirmed the stability of the DME and provided support for its construct validity by longitudinally showing that dispositional employability was significantly related to employees' positive emotions and affective commitment related to organizational changes. It was shown by researchers that these effects were above and beyond those found for tolerance for ambiguity, work locus of control, self-esteem, and optimism. A questionnaire in this regard was distributed.

**Ill-health**

General Health Questionnaire: The General Health Questionnaire is used to measure 19 items on two sub-scales. The sub-scales are physical health and psychological well-being. Each item is scored from 1 where the ill-health symptom or change of behaviour is never experienced over the last three
months to 4 where the ill-health symptom or change of behaviour has often been experienced over the past three months.

Statistical analyses

Data analysis was carried out using the SPSS Programme (SPSS, 2014). Exploratory factor analyses were used to determine the underlying factor structure of the variables. Pearson product-moment correlation coefficients were used to specify the relationship between the variables. Multiple regression analysis was performed to test for the mediation/moderation relationships between the variables in this research.

RESULTS

Factor analyses

Talent Management: Exploratory factor analysis using the Principal Component method was performed on the HCI. The results revealed five underlying factors for HCI which explained 72.933 of the variance. These factors were labelled Talent Commitment (Factor 1), Staffing (Factor 2), Performance Management (Factor 3), Workforce Planning (Factor 4) and Retention (Factor 5). Five items were deleted due to problematic loadings. A second order factor analysis was done on the five factors of the Talent Management measure. The factor analysis resulted in one underlying factor that and was labelled Talent Management. The factor explained 60.294% of the variance of the measure.

Psychological Contract: Employee Obligations Questionnaire: An exploratory factor analysis using the Principal Component Factoring extraction method was performed on 28 items of the Employer Expectation Questionnaire. Loadings less than 0.4 have been suppressed. The Principal Component Factor Analysis initially resulted in seven factors. Two items were excluded due to low and problematic factor loadings. The seven factors were labelled (Factor 1, narrow), (Factor 2, stability), (Factor 3 short-term), (Factor 4, performance), (Factor 5, loyalty), (Factor 6, development) and (Factor 7, marketability). The seven explained 65.662% of the variance. The item loadings were acceptable for the seven specified factors. A second-order factor analysis was done on the seven factors of the employee obligations questionnaire. The factor was labelled psychological contract and explained 33.148% of the variance.
Work wellness

Burnout: Exploratory factor analysis using the Principal Component Factoring extraction method was performed on the MBI-GS. The results revealed three underlying factors for the MBI-GS. A Principal component analysis using varimax rotation was used to specify the three factors. Seven items were deleted because of problematic loadings. Factor 1 was labelled Mental Distance (Depersonalisation and Cynicism), Factor 2 – Exhaustion and Factor 3 – Professional Efficacy. The three factors explained 51.746% of the variance.

Work engagement: Exploratory factor analysis using Principal Component Factoring extraction method was performed on the UWES. The results revealed one underlying factor for the UWES. A Principal Component Analysis was used to specify one factor. One item was deleted because of problematic loadings. The factor was labelled work engagement and explained 27.101% of the variance. A second order factor analysis was done on the burnout dimensions and work engagement dimensions. The professional efficacy dimension was excluded from the analyses due to problematic loadings. The factor explained 73.766% of the variance and was labelled work wellness.

Dispositional Employability: A Principal Components Analysis was done on the 25 items of the dispositional employability measure. The initial results showed that four factors could be extracted based on the eighteen values. However, closer inspection showed that three factors can be specified. A subsequent Principal Components Analysis was done using varimax rotation to specify three factors. The three factors explained 57.652% of the variance and were labelled Change Identity (Factor 1). Eleven items were deleted due to problematic loadings. A second order factor analysis was done on the three factors of the dispositional employability measure. The analysis resulted in one factor which explained 52.999% of the variance and was labelled dispositional employability.

Ill-Health: Exploratory factor analysis using the Principal Component Factoring extraction method was performed on the General Health Questionnaire. The results revealed two underlying factors for the General Health Questionnaire. A Principal Component Analysis using varimax rotation was used to specify the two factors. Two items were deleted because of problematic loadings. The factors were labelled as follows: Psychological Ill-Health (Factor 1) and Physical Ill-Health (Factor 2). The two factors explained 57.036% of the variance. A second order factor analysis was done on the two factors.
factors of the general health questionnaire. The analysis resulted in one factor which explained
80.867% of the variance and was labelled ill-health.

Next, a Pearson correlation analysis was done to determine the interactive relationship between the
variables. The results are reported in Table 1 below.

Table 1: Correlation analyses between the variables

<table>
<thead>
<tr>
<th></th>
<th>Talent Management</th>
<th>Psychological Contract</th>
<th>Dispositional Employability</th>
<th>Work Wellness</th>
<th>Ill-health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talent</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological</td>
<td>.131**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>contract</td>
<td>.006</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dispositional</td>
<td>-.147**</td>
<td>.192**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>employability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work wellness</td>
<td>-.062</td>
<td>-.030</td>
<td>.169**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ill-health</td>
<td>.002</td>
<td></td>
<td>-.143**</td>
<td>.282**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>.963</td>
<td>.003</td>
<td>.100</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

The results in table 1 show that talent management is significantly positively related to the
psychological contract ($r (df = 443; p < 0.001) = .131$) and significantly negatively to dispositional
employability ($r (df = 443; p < 0.001) = -.147$). Psychological contract is significantly positively related to
dispositional employability ($r (df = 443; p < 0.001) = .192$) and significantly negatively related to ill-health
($r (df = 443; p < 0.001) = -.143$). Dispositional Employability is positively significantly related to work
wellness ($r (df = 443; p < 0.001) = .169$). Ill-health is positively significant related to work-wellness ($r (df =
443; p < 0.001) = .282$).

The above results confirm hypotheses 1 and 3.

The results of the multiple regression analyses are reported next.
Regression analyses: Talent management, psychological contract and ill-health

Standard Multiple Regression was performed to determine whether talent management mediates the relationship between psychological contract and ill-health. The results of the multiple regression analysis with talent management and psychological contract as independent variables, and the interaction between these variables (to test for mediating effects), and ill-health reported in Table 2 (note: All the independent variables were centred). In models 1 and 2, the effects of the independent variables were entered, while in the third model the interaction term was also entered.

Table 2: Regression analyses: Talent management, psychological contract and ill-health

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>T</th>
<th>P</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td>(Sig)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent management and ill-health</td>
<td>0.002 a</td>
<td>0.000</td>
<td>-0.002</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.299</td>
<td>0.122</td>
<td>18.897</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent management</td>
<td>.002</td>
<td>0.048</td>
<td>.002</td>
<td>.046</td>
<td>0.963</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent management and psychological contract</td>
<td>0.144 a</td>
<td>0.021</td>
<td>0.016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.829</td>
<td>.213</td>
<td>13.279</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent management</td>
<td>.021</td>
<td>0.048</td>
<td>.021</td>
<td>.431</td>
<td>0.667</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological contract</td>
<td>-.181</td>
<td>0.060</td>
<td>-.146</td>
<td>-3.014</td>
<td>0.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent management, psychological contract, TMXPSY and ill-health</td>
<td>0.208 a</td>
<td>0.043</td>
<td>0.037</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(Constant)</td>
<td>.977</td>
<td>.621</td>
<td>1.572</td>
<td>0.117</td>
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<tr>
<td>Talent management</td>
<td>.834</td>
<td>.261</td>
<td>.834</td>
<td>3.196</td>
<td>0.001</td>
<td></td>
<td></td>
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<tr>
<td>Psychological contract</td>
<td>.404</td>
<td>.194</td>
<td>.326</td>
<td>2.085</td>
<td>0.038</td>
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<tr>
<td>TMXPSY</td>
<td>-.254</td>
<td>.080</td>
<td>-1.005</td>
<td>-3.170</td>
<td>0.002</td>
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</tr>
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</table>

From Table 2 it is evident that talent management explains the significant value of 0.963 of the variance in the ill-health and significant value 0.003 of the variance in the psychological contract,
while the talent management and psychological contract combined explains 0.002 significance of the variance Ill-Health. Therefore, talent management mediates the relationship between psychological contract and ill-health. Positive talent management will lead to a positive psychological contract that will lead to positive health and vice versa.

The above results confirm hypothesis 4.

**Regression analysis: Talent management, work wellness and ill-health**

Standard Multiple Regression was performed to determine whether talent Management mediates the relationship between work wellness and ill-health. The results of the multiple regression analysis with talent management and work wellness as independent variables, and the interaction between these variables (to test for mediating effects), and ill-health reported in Table 3 (note: All the independent variables were centred). In models 1 and 2, the effects of the independent variables were entered, while in the third model the interaction term was also entered.

**Table 3: Regression analysis - talent management, work wellness and ill-health**

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>T</th>
<th>P</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talent management and ill-health</td>
<td>-0.002a</td>
<td>-0.002</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.002</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.299</td>
<td>0.122</td>
<td>18.897</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Talent</td>
<td>.002</td>
<td>.048</td>
<td>.002</td>
<td>.046</td>
<td>.963</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent management and work wellness</td>
<td>0.283a</td>
<td>0.080</td>
<td>0.076</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.350</td>
<td>.193</td>
<td>6.985</td>
<td>0.000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Talent</td>
<td>.024</td>
<td>.047</td>
<td>.024</td>
<td>.514</td>
<td>.607</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work wellness</td>
<td>0.163</td>
<td>0.027</td>
<td>0.284</td>
<td>6.101</td>
<td>0.000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Talent management and work wellness and, TMXWW and ill-health</td>
<td>0.339a</td>
<td>0.115</td>
<td>0.109</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.408</td>
<td>.470</td>
<td>-.868</td>
<td>0.386</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Talent</td>
<td>.783</td>
<td>.191</td>
<td>.782</td>
<td>4.095</td>
<td>0.000</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
From Table 3 above it is evident that talent management explains the significant value of 0.963 of the variance in the ill-health and significant value 0.000 of the variance in the work wellness, while the talent management and work wellness combined explains 0.000 significance of the variant ill-health. Thus talent management mediates the relationship between work wellness and ill-health. Positive talent management will lead to positive work wellness that will lead to positive health and vice versa.

The above results confirm hypothesis 5.

**Regression analysis: Talent management, dispositional employability and ill-health**

Standard Multiple Regression was performed to determine whether talent management mediates the relationship between dispositional employability and ill-health. The results of the multiple regression analysis with talent management and dispositional employability as independent variables, and the interaction between these variables (to test for mediating effects), and ill-health reported in Table 4 (note: All the independent variables were centred). In models 1 and 2, the effects of the independent variables were entered, while in the third model the interaction term was also entered.

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>T</th>
<th>P (Sig)</th>
<th>R</th>
<th>R^2</th>
<th>ΔR^2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent management and ill-health</td>
<td>0.002</td>
<td>0.000</td>
<td>-0.002</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.299</td>
<td>0.122</td>
<td>18.897</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talent management</td>
<td>0.002</td>
<td>0.048</td>
<td>0.002</td>
<td>0.963</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Chapter 6
Talent management, dispositional employability and ill-health

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.699</td>
<td>.270</td>
<td>9.994</td>
<td>0.000</td>
</tr>
<tr>
<td>Talent management</td>
<td>-.010</td>
<td>0.049</td>
<td>-.198</td>
<td>0.843</td>
</tr>
<tr>
<td>Dispositional employability</td>
<td>-.082</td>
<td>0.049</td>
<td>-1.659</td>
<td>0.098</td>
</tr>
</tbody>
</table>

Table 4 above evidenced that talent management explains the significant value of 0.963 of the variance in the ill-health and significant value 0.098 of the variance in the dispositional employability, while the talent management and dispositional employability combined explains the 0.050 significance of the variant ill-health. Therefore, Talent management mediates the relationship between dispositional employability and ill-health. Positive talent management will lead to positive dispositional employability that will lead to positive health and vice versa.

The above results confirm hypothesis 8.

**DISCUSSION**

The main objective of this research was to determine the consequences of talent management for nurses in public sector hospitals. More specifically this research aimed at determining the interactive relationship between the variables of talent management, dispositional employability, psychological contract, work wellness and ill-health. The results are discussed per research hypotheses set.

**H 1: Talent management is positively related to the psychological contract of nurses**
The findings of the correlation analysis showed that talent management is significantly positively related to the psychological contract of nurses thus confirming hypothesis one. This confirms other findings, viz. that usage of talents creates a sense of accomplishment and enhances commitment that leads to a feeling of psychological contract fulfilment, thus leading to a positive relationship between talent management and psychological contract (Hiltrop, 1996; De Vos et al., 2008). Sonnenberg et al. (2014) said that if the organization's management perceives an unaware individual as talented and also management does not consider an individual as talented while the individual believes so, that creates incongruence. Even though the increased usage of talent management practices is related to higher psychological-contract fulfilment, this relationship is negatively affected by incongruent talent perceptions. Management of hospitals should therefore ensure that talent management practices are positively enforced to avoid any situation that can lead to a negative relationship between talent management and psychological contract.

**H 2: Talent management is negatively related to ill-health (physical and psychological)**

Correlation analyses of variables did not show any relationship between talent management and ill-health. Thus, there is no any significant value between talent management and ill-health; therefore the hypothesis could not be confirmed. Barkhuizen et al. (2014) indicated that if talent is not well managed, it will have a negative impact on the health and well-being of employees. Talent that is under-employed can experience high levels of frustration, display low levels of commitment and experience ill health (Rodriguez & Scurry, 2014). Talent management models advocate the organization defining what talent it requires, in turn, this develops the nation's talent potential, motivates individuals to achieve, reduces ill health and combats the organizational struggle (Foster, 2015).

**H 3: Psychological contract is negatively related to ill-health**

Correlation analysis showed that psychological contract has a negative significant relationship with ill-health thus confirming the hypothesis. This confirms other studies by Dries and Gieter (2014 as well as Bhatnagar, 2014). Parzefall and Hakanen (2010) indicated that perceived psychological contract fulfilment had both motivational effects such as work engagement, affective commitment and reduced turnover intentions as well as health-enhancing effects such as work engagement and mental health. Levels of employee wellness can be viewed as reciprocation for the exchange content.
provided by the psychological contract (Rayton & Yalabik, 2014). Perceived violation of the psychological contract has shown to be negatively related to several work-related outcomes, among which job satisfaction and employee ill-health (van den Tooren & de Jong, 2014). Furthermore, breach of psychological contract will generally have detrimental effects on employee health and well-being. Management of hospitals should be able to ensure that their bargain of psychological contract should be fulfilled.

H 4: Psychological contract mediates the relationship between talent management and ill-health

The findings of this research indicate that talent management mediates the relationship between Psychological contract and ill-health. The findings confirm the previous studies that there is a significantly direct relationship between talent management, psychological contract and ill-health (Makri & Ntalianis, 2015; Mpofu & Barkhuizen 2013; Magolego, Barkhuizen & Lesenyeho, 2013). The drivers behind health and wellbeing of employees are to manage absence and rising health-care costs; to support worker productivity; and a desire to be seen as a responsible employer by managing talent and adhering to the psychological contract (Haymes, 2013). Talent management principles should be developed and adapted to best ensure organizational development and success through the fulfilment of psychological contract that ensures the wellness of employees (Al Aliss, Cascio & Paauwe, 2014). It is therefore, imperative for employers, in this instance hospital management, to ensure that talent is well managed in fulfilment of the psychological contract, thus maintaining the health of nurses.

H 5: Talent management mediates the relationship between work wellness and ill-health

Regression analysis showed that Talent management mediates the relationship between work wellness and ill-health and thus confirms the above hypothesis. This confirms other findings that, having recruited outstanding talent, mediates the relation between wellness and perceived physical health (Renee Baptiste, 2008; Steele & Fullagar, 2009). According to Robertson and Cooper (2010) high levels of psychological well-being will help in the attraction of new talent and the retention of existing workforce in which focus is the full range of talent management issues thus delivering some of the important outcomes that are associated with successful, high performing organizations in this
case hospitals. Sound talent management practices play a major role in the well-being and health of nurses in public hospitals.

**H 6: Talent management is positively related to the dispositional employability of nurses**

There is a negative significant relationship between talent management and dispositional employability and the finding disputes the hypothesis. The logic of talent management meets individuals’ expectations about where they are being placed in order to develop their skills, rather than simply selecting them for employment and does not constitute the foundation of their employability, thus this negative relationship in no way is acceptable in terms of having a positive relationship (Cerdin & Brewster, 2014). Furthermore, developing the key talent in the organization is usually managed by a different set of HR specialists to ensure dispositional employability of employees thus creating a positive relationship between talent management and dispositional employability.

**H 7: Dispositional employability is negatively related to the ill-health of nurses**

Correlation analysis showed that dispositional employability is positively significantly related to work wellness, thus the above hypothesis is not confirmed. Previous studies have indicated that employability is negatively related to ill-health (De, 2013; Mtila, Barkhuizen, & Mokgele, 2013). Kirves, Kinnunen and De Cuyper (2014) indicated that having job insecurity where effective skills development cannot take place has a strong negative effect on employability and health-related well-being. There is evidence that poor dispositional employability has general negative effects on workers, such as lower levels of organizational commitment, poorer performance, higher job dissatisfaction, or decreased health and well-being (Giorgi, Arcangeli, Mucci & Cupelli, 2014). Research shows that continuous training and skills up-dating improve nurses' dispositional employability; this, in turn, might alleviate their ill-health and improve well-being (Ruokolainen, Mauno & Cheng, 2014).

**H 8: Talent management mediates the relationship between dispositional employability and ill-health**
Talent management mediates the relationship between Dispositional employability and Ill-health. Positive talent management will lead to positive dispositional employability that will lead to positive health. Previous studies have confirmed this relationship (Barkhuizen, Welby-Cooke, Schutte & Stanz, 2014; Barkhuizen, Rothmann & Vijver, 2014). Employee perceptions of management efforts to maintain employment security are based on past up-skilling that enhances dispositional employability thus raising the potential that continued training will increase job security and therefore, will increase both employee desire to participate in decision-making as well as employee wellness programmes that improve health and commitment to the organisation (Tshabalala, 2004). It is important for management of hospitals to take note that managing talented employees and ensuring their skill development, will improve their dispositional employability thus improving their health status.

Organizations should not be hesitant about assisting their employees in enhancing their employability resources (Dries, Forrier, De Vos & Pepermans, 2014). In addition, they should engage in deliberate psychological contract building with their high-potential employees so as to align their perceived psychological contract obligations with the organizational agenda. Organizations have must be aware of the dynamics in talent retention. Strategic jobs can be filled internally or externally, and there has been substantially more work on identifying and retaining internal talent than there has on identifying and selecting external talent (Cappelli & Keller, 2014). Strydom, Schultz and Bezuidenhout (2014) indicated that trust, the psychological contract, equity and fairness in any organization are of the utmost importance in ensuring labour peace and should be included in human resource practices such as talent management and retention. The effects of employability on employees' reactions to organizational changes were analysed and it is confirmed that employees with higher dispositional employability faced their organizations' changes with more equanimity, positive emotions related to the organizational change and commitment (De Battisti, Gilardi, Siletti, & Solari, 2014). Public hospitals are a stressful work environment and shift work places an additional strain on nurses (Phiri, Draper, Lambert & Kolbe-Alexander, 2014). Poor talent management, shortages in nursing staff, unreliable and lack of equipment and also inadequate remuneration are some of the occupational-related challenges that can lead to ill-health.

This research makes important contributions at the theoretical, methodological and practical levels. The major theoretical contribution of this study is the addition of sound empirical evidence for talent management’s relationship to psychological contract and ill-health as well as dispositional
employability and ill-health, dispositional employability and ill-health and psychological contract and ill-health could either encourage nurses to leave for oversee assignments or stay in South African public hospitals. From a methodological point of view, the research provides evidence that talent management mediates the relationship between dispositional employability and Ill-health, talent management mediates the relationship between psychological contract and ill-health, psychological contract has a negative significant relationship with ill-health, and dispositional employability has a negative significant relationship with ill-health of nurses and these constructs are diagnostic tools that are valid and reliable measures to be used in research.

Limitations: This study was cross-sectional by nature and this gave rise to certain causality issues; i.e. does talent management really improve retention of employees, or does it lead to dispositional employability: psychological contract, work wellness or ill-health, or, more likely, are relationships reciprocal? Moreover, there may have been participants who had been subjective or biased in responding to the questionnaire. The research was also limited to public hospitals of a province out of nine provinces in South Africa. It is recommended that employees and employers should be more aware of the implications of poor management of talent that may lead to psychological contract breach, low dispositional employability, and poor work wellness conditions and might lead to both psychological and physical ill-health outcomes when left unchecked.

In conclusion, nurses are among the most important assets of public hospitals and thus in the current globalized health economy the focus is more on nurses as talent that will give the public hospitals thrust towards excellent service delivery. Moreover, as a transforming institutions, the public hospitals must position itself to have the ability to respond quickly to the continuously changing demands of their respective communities and influx of foreign nationals who have the right to medical care. This research highlighted the importance of psychological contract ill-health and dispositional employability in managing talent in public hospitals. It is also a step towards recognizing the unique contribution that nurses make towards the effectiveness and competitiveness of public hospitals in service delivery.

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Chapter 7:

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Following research objectives, conclusions are drawn from the five articles that formed part of the study. Limitations of the study are discussed and recommendations for hospitals are made in order to either manage talent as well as psychological contract and manage or prevent ill-health and burnout. A model encompassing all these constructs was developed as a recommendation as well. The chapter ends with recommendations regarding future research opportunities that have become evident during this research.

7.1 CONCLUSIONS

The following conclusions are made:

7.1.1 TALENT MANAGEMENT OF NURSES IN NORTH WEST PROVINCE PUBLIC HOSPITALS

The first objective of this study was to investigate whether talent management practices are poorly applied in South African provincial hospitals. An adapted version of the Human Capital Index was used to measure the nurses’ perceptions of the applications of the talent management practices. In their findings, Barkhuizen, Welby-Cooke et al. (2014) indicated that leaders in general are not committed to talent management practices.

In terms of the finding of the descriptive statistics and reliability of the HCI showed acceptable to good reliabilities for all the factors. From the results it is clear that the respondents perceived that talent management practices are applied poorly in public hospitals. Some of the most problematic areas include lack of talent commitment, proper staffing levels and retention strategies. The results also indicate poor performance management systems and workforce planning.

T-Tests were done to determine whether any significant differences exist between the respondents’ perceptions of the current application versus the importance of talent management practices in public hospitals. The results indicated that large gaps exist between current applications of talent
management practices compared with the importance thereof for the respondents. The results were significant with a large effect.

MANOVA analysis was done to assess the relationship between the talent management dimensions and demographic variables such as gender, language, age education, job level, work experience, promotion and working hours. The results showed that significant differences exist in the employee perceptions of the current application of talent management practices based on their demographic characteristics such as education, work experience and hours of work. Further post hoc tests revealed no significant differences for education and work experiences. Further post hoc analyses revealed significant difference in hours of work of talent management practices.

The results showed that talent management practices are poorly applied among nurses. Large significant gaps existed between the current versus the importance of talent management practices such as staffing, performance management, workforce planning and retention. Significant differences exist between the nurses perceptions of talent management practices based on their hours work.

These findings are in agreement with other studies by Luna-Arocas and Morley (2015) that if we develop and institutionalize a comprehensive talent system, this can affect both job satisfaction directly and job performance indirectly. Furusawa and Brewster (2015) also found out that HRM practices are not appropriate to attract and use talent in the global talent management programs. Morley et al. (2015) said talent identification, development and deployment, along with the national and organizational systems and structures necessary for its effective engagement, management and retention have become a critical focus. Collings’ (2015) central argument is that not only has research failed to establish a relationship between talent management and organizational performance, but that management practice has unfolded based on some flawed assumptions around the relationship.

### 7.1.2 Psychological Contract of Nurses in Public Hospitals

The forth objective was that there is a significant differences existing between the psychological contracts of nurses based on their demographic characteristics. Camerino, Conway, van der Heijden,
Estryn-Behor, Costa and Hasselhorn (2008) said that in the relationship between low perceived work ability and intended or actual exit, a significant part is explained by age itself, but also by the age-related differences in occupational and life opportunities. This contribution concludes with some age-related policies aimed at boosting nurses' retention.

The descriptive statistics of the employee obligation questionnaire showed acceptable reliabilities for all dimensions except for external marketing. From the mean scores it was evident that nurses felt that they had an average level of psychological obligation towards their workplace. From the scores however one could deduct that nurses do not have a short-term orientation towards their employment and felt they have an obligation to remain within the hospital.

The descriptive statistics and reliabilities of the employer obligation in psychological contract indicated acceptable reliabilities and were obtained for all the scales except for external marketability. From the average scores it is evident that nurses do not have high expectations from their employers.

A further analysis was done to determine whether any significant differences exist between the respondents' perceptions of any current violation of the psychological contract by the employer. The results showed that \( p < 0.001 \) in all factors which is significantly different and has large effects. The results confirm that nurses display a low level of psychological obligation towards hospitals and that employer display a low level of obligation towards its nurse employees. The results furthermore confirmed that significant differences exist between employee obligations versus employer obligation.

MANOVA analysis was done to assess the relationship between the psychological contract dimensions and demographic variables, such as gender, language, age, education, job level, work experience, promotion and hours of work. The results showed that significant differences exist in the employee perception of the current implementation of psychological contract in three demographic characteristics such as education, work experience and hours of work. Further post hoc analysis showed no further differences between hours of work in psychological contract.
The results showed that employees with six to eleven years of work experience have higher work stability than those thirty years and above. Employees with bachelor’s degrees are more capable of enhancing their external marketability than those with a diploma. The results of Manova analyses between perceived employer obligations and nursing demographics showed that significant differences do not exist in the employers’ perception of the current implementation of psychological contract.

The results showed that large gap exists between employee obligation and employer obligation to a psychological contract. Significant gaps were observed between performance support, development and external marketability where employees feel that there is no performance support and development whereas the employer feels it is sufficient. Employees are more concerned with their marketability and understandable the employer is less interested with employee marketability.

This study agrees with previous studies that psychological contract emerges when employees believe that their employer has made promises to their contributions in return for future benefits (Akhtar & Long, 2015) and these perceptions of promises, obligations, and expectations between employer and employee are based on exchange relationship. The nature of the psychological contract employed will impact upon commitment and retention (Jabeen, Behery, & Abu Elanain, 2015). Rodwell and Ellershaw (2015) said that psychological contract promises decreased organizational citizenship behaviours relating to the organization, while contract fulfilment increased commitment and reduced psychological distress. Contract breach reduced organizational commitment.

### 7.1.3 WORK-WELLNESS AND ILL-HEALTH OF NURSES

The second objective was that burnout has a significant negative impact on ill-health of nurses while work engagement has a significant positive impact on ill-health of nurses. Burnout is characterized by exhaustion (draining of mental energy), cynicism (a negative attitude towards work) and reduced professional efficacy (the belief that one is no longer effective in fulfilling one’s job responsibilities) (Maslach et al., 2001). Barkhuizen and Rothmann (2005) state that employees experience work engagement and burnout as being opposite states, of which the former has a positive quality and the latter a negative quality, and this means, at least in theory, that an employee who is not burned out
may score high or low on engagement, whereas an engaged employee may score high or low on burnout.

Based on the recommendations of Schaufeli (2003), this study used an adapted version of the MBI-GS (including the depersonalisation sub-scale of the MBI-ES) to measure burnout among nurses. Maslach Burnout Inventory, Utrecht Work Engagement Scale and Health questionnaire as well as the dimensions thereof were normally distributed in the sample, with low skewness and kurtosis. From the mean scores of the MBI it is clear that the participants demonstrated an average to high level of burnout (the close the mean score to 1, the higher the level of burnout and vice versa). In addition, participants showed average levels of work engagement.

Linear Regression Analyses were performed to test for the interactive relationship between the variables. The results showed statistically significant relationships between the burnout dimensions of mental distance and exhaustion and psychological and physical ill-health. The prediction model for mental distance and psychological ill-health was statistically significant. The relationship was positive which implied that the higher the nurses perceive that the employer was not treating them well the higher their mental ill-health. The effect was small.

This study agrees with other studies by Adriaenssens (2015) that goal orientation explains additional variance in burnout and work engagement over and above work characteristics and organizational variables. Hospital management should therefore invest in personal involvement and growth of nurses and in a rewarding organizational culture. Akhtar et al. (2015) indicated that employees differ in their tendencies to engage at work. Gabel-Shemueli, Dolan and Suárez Ceretti (2015) the interaction between job demands and job resources linked to job engagement in nurses is critical. Clarity should also be found on how organizations and the direction of nursing professionals could create a working environment that promotes job engagement.

### 7.1.4 DISPOSITIONAL EMPLOYABILITY OF NURSES

The third objective was that nurses willing to participate in the development of their careers as well as those of their colleagues will be positively associated with self-perceived employability. Camps
and Rodríguez (2011) indicated that empirical evidence was found to show that there is a positive relationship between worker-perceived organizational learning capability in a firm and his/her own employability perception; the worker-perceived transformational leadership of his/her leader, and his/her own employability perception; the worker-perceived organizational learning capability of a firm and his/her performance; the worker's perception of his/her own employability, and his/her performance; transformational leadership and individual performance have a significant influence on the group, while employability can be considered only as an individual phenomenon; and at group level, the effects of transformational leadership on performance are mediated by organizational learning capability.

The descriptive statistics results showed good reliabilities for the three factors of the Dispositional Employability Measure. The results further showed that the measure was not normally distributed based on the standard deviation and skewness. The results showed that nurses experience average levels of dispositional employability.

MANOVA analyses were done to determine whether any significant differences exist based on the three dimensions of dispositional employability and demographic characteristics of the respondents. The results showed that nurses differed significantly in terms of hours of work, promotion opportunities and job level. The results showed that employees working between 41 to 50 hours a week were more proactive in their work compared to those working 11 to 20 hours in a week. The effects are small. Nurses with fewer opportunities for promotion were less open to change compared to those with more chances for promotion.

Results of the frequency analysis suggested twenty-five interpretable items for the Dispositional Measure of Employability (DME). The information obtained shows that all participants slightly agree, agree or strongly agree. Employees are also willing to participate in their career development to enhance their employability.

This study agrees with other findings by Witte and Cuyper (2015) that antecedents of (perceived) job insecurity and (perceived) employability are concern variables at the macro, meso, and micro-levels.
Health and well-being and employee attitudes and behaviours are their potential consequences. Other findings by Fugate and Kinicki (2008) are that dispositional employability was significantly related to employees' positive emotions and affective commitment related to organizational changes. Vanhercke et al. (2014) indicated that not all psychological notions of employability are equal, though they are often treated as such and that perceived employability is tied to competences and dispositions.

7.1.5 A STRUCTURED MODEL FOR TALENT MANAGEMENT FOR PROFESSIONAL NURSES IN THE NORTH WEST PROVINCE

The fifth objective was to examine the relationships between talent management, psychological contract, dispositional employability, work wellness and ill-health and how these variables can improve the retention of nurses. Talent management is treated as a generic entity and either focuses on high performing and high potential talent or on talent in general. A performance-driven vision of talent management is very common in talent management processes (Al Ariss et al., 2014). Erkutlu and Chafra (2013) found in their research that authentic leadership is negatively and significantly correlated with organizational deviance. In addition, the results of the hierarchical multiple regression analyses support the moderating effects of employee trust and psychological contract violation with regard to the relationship between authentic leadership and organizational deviance. The findings of Oyeleye et al. (2013) demonstrated significant relationships among workplace incivility, stress, burnout, turnover intentions, total years of nursing experience, and RN education levels. Bamford et al. (2013) suggest that nurses who work for managers demonstrating higher levels of authentic leadership report a greater overall person-job match in the six areas of work life and greater work engagement. Employability consists of the words “employment” and “ability” and thus concerns the ability to be employed (Vanherche et al., 2014). Ill-health is an important determinant for entering and maintaining paid employment and there is ample evidence that ill health may cause exit from the labour force (Schuring et al., 2013).

The results of correlation analysis showed that talent management was significantly positively related to the psychological contract and significantly negatively to dispositional employability. Psychological contract was significantly positively related to dispositional employability and
significantly negatively related to ill-health. Dispositional employability was positively significantly related to work wellness. Ill-health was positively significant related to work-wellness.

Standard Multiple Regression was performed to determine whether talent management mediates the relationship between psychological contract and ill-health. The results of the multiple regression analysis with talent management and psychological contract as independent variables, and the interaction among these variables showed that talent management mediates the relationship between psychological contract and ill-health. Positive talent management will lead to positive psychological contract that will lead to positive health and vice versa.

Standard Multiple Regression was performed to determine whether talent management mediates the relationship between work wellness and ill-health. The results of the multiple regression analysis with talent management and work wellness as independent variables, and the interaction between these variables (to test for mediating effects), and ill-health showed that talent management mediates the relationship between work wellness and ill-health. Positive talent management will lead to positive work wellness that will lead to positive health and vice versa.

Standard Multiple Regression was performed to determine whether talent management mediates the relationship between dispositional employability and ill-health. The results of the multiple regression analysis with talent management and dispositional employability as independent variables, and the interaction between these variables (to test for mediating effects), and ill-health showed that talent management mediates the relationship between dispositional employability and ill-health. Positive talent management will lead to positive dispositional employability that will lead to positive health and vice versa.

Some of the consequences found in this study agree with Bosman, Rothmann and Buitendach (2005) that job insecurity as well as negative and positive affectivity had main effects on burnout and work engagement. Negative affectivity also interacted with job insecurity to influence the burnout and work engagement of employees. Employability concerns a compound phenomenon that has an effect on employment and on work in the future and is seen as the whole of interrelated components that
influence the employment perspectives of workers in the near future (Thijssen, Van der Heijden & Rocco, 2008). Sonnenberg van Zijderveld and Brinks (2014) indicated that the increased use of talent management practices is related to higher psychological-contract fulfilment, this relationship is negatively affected by incongruent talent perceptions. Their results show the importance of clearly defining talent and communicating this clearly to all employees. This is particularly important when the talent strategy is perceived as exclusive rather than inclusive.

7.2 RECOMMENDATIONS

When coming to talent management, management should implement different strategies because the benefits of an effective implemented talent management strategy, include improved employee recruitment and retention rates, and enhanced nurse engagement. These outcomes in turn have been associated with improved operational or health-care and financial performance. Getting the right people or nurses in pivotal roles at the right time should be nothing new to Human Resource professional, but done effectively, talent management can create long term organizational or public hospital success (Ashton & Morton, 2005).

Uren (2007) identified that the challenges of talent management in both hospitals and organizations are to implementation and highlights the best practices are key for achieving a culture of talent management commitment rather than compliance. These is important given the fact that changes in birth-rates, retirements trends, and job requirements are reducing the size of the workforce including that of nurses, and creating skills shortages, while eased trade barriers, communication advances, and knowledge economy are producing a highly global and virtual workforce (Tucker, Kao & Verma, 2005).

It will also be crucial for the hospitals to manage careers of nurses since Kaye and Smith (2012) said career development is ideally a collaborative partnership between the individual employee, the manager or leader and the organization or hospital. At its best it can promote job satisfaction, engagement, productivity, and discretionary effort. While the individual employee has the primary responsibility for his own career, the leader must be a supportive coach and the organization or hospital must provide the necessary resources, systems, and information. Santhoshkumar and
Rajasekar (2012) said talent management implies recognizing a person’s inherent skills, traits and personality, and offering him a matching job which is necessary for nurses. Every person has a unique talent that suits a particular job profile and any other position may cause discomfort. It is the job of the management, particularly the Human Resource (HR) department, to place candidates with prudence and caution. A wrong fit will result in further hiring, re-training and other wasteful activities. It is a systematic approach to managing talent in an organization.

Look into succession planning because Hills (2009) said that five strategies needed are designing succession planning with business or hospital strategy, assessing leadership potential, involve talent in the planning, mixing development: experience/coaching/training, and casting a wider net for succession. Performance management is also crucial since DeNisi et al. (2006) said the ultimate goal of performance appraisal should be to provide information that will best enable managers to improve employee performance as well as managing their talent. Thus, ideally, the performance appraisal provides information to help managers manage in such a way that employee performance improves and talent is well managed. Horvathova (2009) said among factors influencing talents retention in the organization or hospital there are the offers of interesting and valued work, ensuring opportunities for education and development, and professional advancement, respecting a balance between professional and private life, the offer of a flexible work role, the offer of a quality work conditions and equipment, provision of sense of recognition and respect, the offer of adequate remuneration and recently also gaining grounds for organization's social responsibility approach.

The well-being of nurses should be taken care of following Jackson, Rothmann and van de Vijver (2006) when they said both positive and negative aspects of work-related well-being (i.e. burnout, and work engagement) can be integrated into model. The Job Demand Resources (JDR) model assumes that two underlying psychological processes play a role in burnout (as one aspect of wellness at work): an effort-driven process in which excessive job demands lead to exhaustion and a motivation-driven process in which lacking resources lead to disengagement (Demerouti, Bakker, Nachreiner & Schaufeli, 2001). Burnout should also be managed following Demir, Ulusoy and Ulusoy’s (2003) findings that higher education levels, work experience and higher status decrease burnout while working at night shifts increases it. In addition, nurses who have problems in relations with the other team members and are not satisfied with their work conditions have higher levels of
burnout. Having difficulty in childcare and in doing house chores, health problems of the nurse herself or her children, economic hardships and difficulties encountered in transportation are other factors increasing burnout.

Ill-health is also key to avoid Michie and Williams (2003)'s accession that key work factors associated with psychological ill health and sickness absence in staff were long hours worked, work overload and pressure, and the effects of these on personal lives; lack of control over work; lack of participation in decision making; poor social support; and unclear management and work role.

It will beneficial to the hospitals to look into issues of employability given changes impacting on careers globally since Clarke and Patrickson (2008) said changing career patterns and the erosion of job security have led to a growing emphasis on employability as a basis for career and employment success. The written and psychological contracts between employer and employer have become more transactional and less relational, and loyalty is no longer a guarantee of on-going employment. Individuals are thus expected to take primary responsibility for their own employability rather than relying on the organization to direct and maintain their careers. Clarke et al. further said there is still an expectation that organizations will manage careers through job-specific training and development.

Employability has primarily benefited employees with highly developed or high-demand skills. De Battisti, Gilardi, Siletti and Solari (2013) chose to adopt the construct of personal employability to refer to the worker’s ability to identify career opportunities and realize occupational transitions. Inspired by the studies of Ashford and Taylor (1990) and by the psycho-social model de Battisti et al. (2013) considered personal employability as derived from internal and external resources that foster adaptive behaviour and the readiness to cope with the changes at work.

Management of psychological contract by the hospital is import since research has often alluded to the idea that different behavioural outcomes are likely to result from psychological contracts premised on either transactional or relational obligations of employment exchange (Bingham, 2005). Maguire (2003) indicated that organizations and their employees face on-going challenges in the form of new strategic initiatives designed to keep pace in an increasingly complex business environment.
Employers are to be very careful since Herriot, Manning and Kidd (1997) concluded that, despite the level of agreement between the employer and employee regarding the elements of the psychological contract, they were in danger of holding different perceptions of its balance; and that organizations should only expect employee commitment if they themselves have fulfilled their side of the contract. Employees need to be made aware that employer obligations are prospective focuses on promises made and provide a way of viewing an exchange relationship as a sequence of contingent transactions that include reciprocal promises about what will be exchanged (Chambel & Alcover, 2011).

Awareness is much needed between the employee and the employer since Lester, Turnley, Bloodgood and Bolino (2002) suggest that supervisor and subordinate perceptions are most likely to differ on the extent to which the organization violated its obligations to provide fair pay, advancement opportunities, and a good employment relationship. Lester et al further indicate that the greater the degree of psychological contract breach reported by subordinates, the less committed they are to the organization and the lower their job performance (as rated by their supervisor). Moreover, when psychological contract breach is perceived, supervisors' and subordinates' attributions regarding the reasons for the breach are likely to differ, and subordinates are more likely to attribute breach to the organization's intentional disregard for the commitments that it had made to the employee, while supervisors are more inclined to attribute breach to situations beyond the organization's direct control.

7.3 LIMITATIONS

The study included the use of a cross-sectional survey design and according to Levin (2006) such survey has disadvantages like difficult to make causal inference; only a snapshot: the situation may provide differing results if another time-frame had been chosen; and prevalence-incidence bias (also called the Neyman bias).

Also, the research had some limitations since out of nine provinces; the sample was restricted to nurses in the North West Province public hospitals only. The results of the research cannot therefore be generalized all public and private hospitals in South Africa. The other limitation was the unequal
distribution of the population in the sample regarding language group where majority was Tswana speaking and Afrikaans was not even represented. One would like to see the comparison between nurses working in public hospitals as opposed to those working in private hospitals. Further studies can be conducted in all the provinces to ascertain whether the same finding will persist. The sample size caused by low response rate, limits the research findings in such way that results cannot be generally applied to all registered nurses in the province as well as the whole of South Africa.
REFERENCES


