DETERMINANTS OF WORK ENGAGEMENT AND ORGANISATIONAL CITIZENSHIP BEHAVIOUR AMONGST NURSES

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PLAGIARISM DECLARATION

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ABSTRACT

South Africa has a population of just over 50 million people. However, there are only approximately 260 698 nurses according to the register of the South African Nursing Council. The nursing shortage is not only limited to South Africa, but is a global phenomenon, and this shortage is getting worse every day. Various factors can be blamed for the increasing nursing shortage. Every day nurses face demanding working hours, stressful work environments and a large shortage of resources. Nurses from private hospitals regard themselves as "overworked money-making machines". Nevertheless, the health care needed by the population of South Africa is rapidly increasing. The high prevalence of HIV/AIDS is also a challenging contributor, worsening the nursing shortage crisis. The current dysfunctional nursing situation in the healthcare facilities of South Africa reflects a negative image of the nursing profession. Consequently, the number of individuals considering nursing as a profession is decreasing. The nursing shortage is not only a threat to the wellbeing of nurses, but to the lives of millions of South Africans who need health care.

A common phenomenon amongst nurses is burnout, which leads to decreased quality of care and high turnover rates and contributes to the nursing shortage. Also, other nurses experience work engagement and display organisational citizenship behaviour in the same working environments than the nurses who experience burnout. Work engagement (WE) and organisational citizenship behaviour (OCB) are ideal outcomes. This study investigated distinguishing factors between nurses that allow them to experience WE and exhibit OCB.

The Job Demands-Resources model played an integral role in the study. Therefore, the specific focus of the study was job and personal resources, as well as job demands, as factors contributing to WE and OCB amongst nurses. Servant leadership (SL) as job resource, psychological capital (PsyCap) as personal resource, and IT (Illegitimate tasks) as job demand were identified as possible factors that explain the variance in WE and OCB.

A literature review was conducted in which prominent antecedents of WE and OCB were identified. A number of hypotheses were formulated and tested by means of an
ex post facto correlation design. The unit of analysis was nurses from two of the largest private hospital groups in South Africa. The nurses were employed at one hospital in Gauteng and three hospitals in the Western Cape. Data was collected from 208 nurses located within the chosen hospitals. Data collection on all five variables, namely work engagement, organisational citizenship behaviour, servant leadership, psychological capital and IT, was conducted by means of self-administered questionnaires. The measurements included in the self-administered questionnaire were selected in terms of their validity and reliability. The following measurements were included; Utrecht Work Engagement Scale (UWES), Organisational Citizenship Checklist (OCB-C), Servant Leadership Questionnaire (SLQ), Psychological Capital Questionnaire (PCQ) and the Bern Illegitimate Task Scale (BITS). The data collected was analysed by means of item analyses and structural equation modelling. A PLS path analysis was conducted to determine the model fit.

The most significant findings were that SL, as a job resource, and PsyCap, as a personal resource, were positively related to WE amongst nurses. The results also revealed that PsyCap was positively related to OCB. Lastly, it was found that IT, as a job demand, are negatively related to WE amongst nurses. These results support the assumptions of the JD-R model that specific job and personal resources lead to WE.

The results provide guidelines regarding practical managerial implications and strategies to address the challenges experienced by nurses. The results, together with the managerial implications, made it possible to provide valuable insights and recommendations for industrial psychologists, as well as for further studies.
Suid-Afrika het 'n bevolking van net oor die 50 miljoen mense. Daar is egter volgens die register van die Suid-Afrikaanse Verpleegkunderaad net omtrent 260 698 verpleërs. Die tekort aan verpleërs is nie net tot Suid-Afrika beperk nie, maar is 'n globale fenomeen, en die tekort word elke dag groter. Verskeie faktore kan vir die toenemende verpleërtekort blameer word. Verpleërs word elke dag gekonfronteer met veeleisende werksure, stresvolle werksomstandighede en 'n groot tekort aan hulpbronne. Verpleërs by privaat hospitale beskou hulleself as “oorwerkte geldmaakmasjiene”. Nietemin neem die gesondheidsorg wat deur die Suid-Afrikaanse bevolking benodig word, vinnig toe. Die hoë voorkoms van MIV/VIGS is ook 'n uitdagende bydraer wat die verpleërtekort vererger. Die huidige wanfunksionele verpleegtoestand in die gesondheidsorgfasiliteite van Suid-Afrika word weerspieël in die negatiewe beeld van die verpleegberoep. Gevolglik verminder die getal mense wat verpleging as 'n beroep oorweeg. Die verpleërtekort bedreig nie net die welstand van verpleërs nie, maar ook die lewens van miljoene Suid-Afrikaners wat gesondheidsorg benodig.

’n Algemene verskynsel onder verpleërs is uitbranding (burnout), wat lei tot 'n afname in die kwaliteit van sorg en hoë omsetkoerse en bydra tot die verpleërtekort. Ander verpleërs ervaar egter werksbetrokkenheid (work engagement) en vertoon organisatoriese burgerskapsgedrag (organisational citizenship behaviour) in dieselfde omgewing waar verpleërs uitbranding ervaar. Werksbetrokkenheid en organisatoriese burgerskapsgedrag is ideale uitkomstes. Hierdie studie het onderskeidende faktore onder verpleërs ondersoek wat hulle toelaat om werksbetrokkenheid te ervaar en organisatoriese burgerskapsgedrag te vertoon.

Dienaarleierskap en sielkundige kapitaal as werkshulpbronne, en illegitieme take as werksseis, is geïdentificeer as moontlike faktore wat die verskil in betrokkenheid en organisatoriese burgerskapsgedrag verklaar.

Dit is dieselfde as die model van werkseise en hulpbronne (Job Demands-Resources (JD-R) model) het 'n integrale rol in die studie gespeel. Die spesifieke fokus van die studie was dus op werks- en persoonlike hulpbronne, sowel as werkseise, as faktore wat bydra tot werksbetrokkenheid en organisatoriese burgerskapsgedrag onder verpleërs. Dienaarleierskap en sielkundige kapitaal as werkshulpbronne, en illegitieme take as werksseis, is geïdentificeer as moontlike faktore wat die verskil in betrokkenheid en organisatoriese burgerskapsgedrag verklaar.
'n Literatuuroorsig is onderneem waarin belangrike antecedente van betrokkenheid en organisatoriese burgerskapsgedrag geïdentifiseer is. 'n Aantal hipotese is geformuleer en deur middel van 'n ex post facto korrelasie-ontwerp getoets. Die eenheid van analyse was verpleërs werksaam by twee van die grootste privaathospitaalgroepe in Suid-Afrika. Die verpleërs was werksaam by een hospitaal in Gauteng en drie hospitale in die Wes-Kaap. Data is by 208 verpleërs in die gekose hospitale versamel. Dataversameling oor al vyf veranderlikes, naamlik werksbetrokkenheid, organisatoriese burgerskapsgedrag, dienaarleierskap, sielkundige kapitaal en illegitieme take, is deur middel van selftoepasvraelyste versamel. Die volgende metings is ingesluit: Utrecht Work Engagement Scale (UWES), Organisational Citizenship Checklist (OCB-C), Servant Leadership Questionnaire (SLQ), Psychological Capital Questionnaire (PCQ) en die Bern Illegitimate Task Scale (BITS). Die versamelde data is deur middel van item-ontleding en struktuurvergelykingsontleding geanaliseer. 'n Gedeeltelike kleinstekwadrate-baananalise (partial least squares path analysis) is onderneem om die passing van die model te bepaal.

Die belangrikste bevindinge was dat dienaarleierskap, as 'n werkshulpbron, en sielkundige kapitaal, as 'n persoonlike hulpbron, positief verband hou met werksbetrokkenheid onder verpleërs. Die resultate toon ook dat sielkundige kapitaal positief verband hou met organisatoriese burgerskapsgedrag. Laastens is bevind dat illegitieme take, as 'n werkseis, negatief verband hou met werksbetrokkenheid onder verpleërs. Hierdie resultate ondersteun die aannames van die model van werkseise en hulpbronne (J-DR) dat spesifieke werks- en persoonlike hulpbronne lei tot werksbetrokkenheid.

Die resultate verskaf riglyne vir praktiese bestuursimplikasies en strategieë om die uitdagings wat deur verpleërs ervaar word, aan te spreek. Die resultate, tesame met die bestuursimplikasies, het dit moontlik gemaak om waardevolle insigte en aanbevelings vir bedryfsielkundiges, asook vir verdere studies, te maak.
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CHAPTER 1

INTRODUCTION

1.1 Background

The environment, economy, society and human existence are all interconnected. The economy is dependent on society and the environment, while human existence and society are dependent on, and within, the environment (Giddings, Hopwood & O’Brien, 2002). An organisation is part of a larger system called the environment. Within an organisation, scarce factors of production are combined and transformed into products and services with maximum utility. Successful organisations do not simply happen by chance, but are the result of well-planned interventions in their structure, leadership and management orientations, behaviours, cultures and processes (Bagraim, Cunningham, Pieterse-Landman, Potgieter & Viedge, 2011). The main reason for the existence of an organisation is to make profit. The effectiveness of an organisation will be known through the sustainable growth and performance of the organisation in the long run (Swart, Robinson & Cohen, 2003). Organisations are formed to accomplish goals, which would be impossible if everyone acted individually. The outcomes of organisational performance will depend on a number of factors working together in harmony to produce the product or service the customer desires.

No organisation can function effectively without productive employees. The key to the economic survival of organisations, as well as our country, therefore lies in the optimal development and utilisation of South Africa’s most precious resource, namely its workers. To ensure that people are treated fairly, organisations need to establish an equitable balance between the employee’s contribution to the organisation and the organisation’s contribution to the employee. Therefore, human resource executives need to consider new and improved strategies to recruit, retain and develop the best fitted talent for their organisation.

The increasing number of job opportunities available worldwide force organisations to compete against each other to attract the best employees. Higher salaries and compensation benefits may seem like the best way to attract employees. However,
the quality of the physical environment may also have a direct influence on the ability of a company to recruit and retain talented people (Leblebici, 2012). As mentioned above, another work-related concern that employees face every day is the adjustment to a changing business environment. Hiltrop (1995) states that the economic context in which organisations operate has been changing at a remarkable rate for the past two decades. International competition, adaption to the constant change of technology, deregulation and globalisation of markets has been demanding greater flexibility and productivity in organisations. Since organisations have been changing continuously there is a need for new strategies that focus on speed, responsiveness to change in the markets, and innovation.

Organisations can achieve none of their goals without employees working together. The behaviour of a worker is a complex phenomenon and problem behaviour and its causes need to be understood in order to develop appropriate interventions. Work-related behaviour can be explained through a nomological network of constructs. The industrial psychologist is responsible for the studying, explaining and improving of the behaviour of employees. The basic human resource functions include recruitment, training, career development, job design and analysis, organisational development, personal administration, labour relations and ergonomics. The industrial psychologist is authorised to address problem issues in the work situation by optimising individual, group and organisational wellness and effectiveness (Sieberhagen, 2008). Also, strategies need to be formulated that buffer the symptoms of stress experienced by employees due to the nature of their work and work environments.

The work environment of nurses is characterised by high workloads and stress symptoms experienced by nurses (Levert, Lucas & Ortlepp, 2000). The healthcare system in general faces a worldwide shortage of 4.3 million nurses and midwives (Tshitangano, 2013). This shortage poses a threat to the delivery of health services to the population. South Africa’s healthcare system is also in no state to respond to people’s emerging health needs. In 2010, South Africa had 32 000 registered nursing vacancies, and it is estimated that South Africa will have a shortage of 20 815 nurses in 2015 (Tshitangano, 2013).
Shocking figures were revealed by the South African Nursing Council regarding the population per available qualified nurse in South Africa (Table 1.1). According to the World Health Statistics, the standard for nursing and midwifery is 105 per 1 000 population (World Health Statistics, 2012). The population per qualified nurse in South Africa falls short of this standard. Compared to international figures, South Africa may seem better off, but the country is still far from reaching the standard. According to research done by the World Bank (2014), the nurse shortage is a worldwide phenomenon. Data was collected from nurses and midwives and it was found that Brazil has a total of 7.6 nurses and midwives per 1 000 people, Japan has 11.5, the United Kingdom 8.8, China 1.9, Mozambique 0.4 and South Africa 4.9 (World Bank, 2014).

**Table 1.1**

*Population per qualified nurse in South Africa*

<table>
<thead>
<tr>
<th>Province</th>
<th>Population</th>
<th>Nurses</th>
<th>Population per qualified nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limpopo</td>
<td>5 518 000</td>
<td>25 247</td>
<td>219:1</td>
</tr>
<tr>
<td>North West</td>
<td>3 597 600</td>
<td>16 835</td>
<td>214:1</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>4 128 000</td>
<td>13 692</td>
<td>301:1</td>
</tr>
<tr>
<td>Gauteng</td>
<td>12 728 400</td>
<td>66 866</td>
<td>190:1</td>
</tr>
<tr>
<td>Free State</td>
<td>2 753 100</td>
<td>13 358</td>
<td>206:1</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>10 456 900</td>
<td>63 405</td>
<td>165:1</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>1 162 900</td>
<td>3 844</td>
<td>303:1</td>
</tr>
<tr>
<td>Western Cape</td>
<td>6 016 900</td>
<td>30 765</td>
<td>196:1</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>6 620 200</td>
<td>26 686</td>
<td>248:1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>52 982 000</td>
<td>260 698</td>
<td>203:1</td>
</tr>
</tbody>
</table>

Source: South African Nursing Council (2013)

The current South African healthcare system consists of a public and private health sector. The objective of the private healthcare sector is the same as any other profit-driven organisation, which is to make a profit. Public health care in South Africa varies from the most basic primary health care offered by the state to people free of charge, to highly specialised, hi-tech health services available particularly in the private sector. The public sector is under-resourced and is placed under pressure to provide service to almost 80% of the population who use health services. Although the state contributes approximately 40% of all expenditures on health, this is
insufficient to help the country maintain a healthy population and high-quality service. Public and private health care differ vastly, and good health care is inequitable and inaccessible to a large part of the population. Hospitals in the public sector are faced with poor management, underfunding and deteriorating infrastructures (Amado, Christofides, Pieters & Rusch, 2012).

Although circumstances within the private sector are better than circumstances within public hospitals, nurses in both sectors are faced with demanding and stressful work environments every day. Private hospital staff, especially nurses, regard themselves as "overworked money-making machines" (Fin24, 2014a). Nurses become drained and exhausted due to working overtime (Africa Health Placements, 2014). This work overload experienced by nurses results in a mentality where nurses are forced to treat individuals as numbers and not as patients. As a result, the health care provided to patients is compromised.

The employees of some of the private hospital groups are paid very poorly (Fin24, 2014b). Nurses have families to look after and the low salaries make it difficult to maintain their living standards. Mokoka, Ehlers and Oosthuizen (2011) state that a competitive salary and annual revision of salaries are very important factors that influence turnover intentions. Private hospitals are engaging in various activities to stop nurses from accepting lucrative offers overseas. Training programmes and salary incentives are only some of the efforts the hospitals are implementing in order to try to keep the nurses in South Africa (Shevel, 2003). However, South Africa can be seen as one of the five most important suppliers of nurses employed overseas, which leads to a decrease in nursing supply, met by the increased demand for healthcare services (Littlejohn, Campbell, Collins-McNeil & Khayile, 2012).

The health care needed by the population of South Africa is rapidly increasing. The high prevalence of HIV/AIDS is one of the most challenging contributors to the abovementioned. In Africa the increasing number of individuals who are infected by HIV/AIDS places a heavy burden on the various countries’ public health sectors. Since the beginning of the HIV/AIDS epidemic, almost 70 million people have been infected and over 35 million people have died worldwide. Sub-Saharan Africa is being affected most severely by the fast-growing epidemic and 70% of the world’s HIV/AIDS-infected individuals reside in this part of the world (World Health
Organization, n.d.). HIV/AIDS has a negative influence on the health system, causing an increase in the demand for healthcare services.

Nurses are “frontline” staff, and the contribution they make to society by delivering safe and effective care is essential for meeting development goals. Nursing is thus known as a very stressful profession that deals with human health and illness. Nurses need to make life-and-death decisions and many nurses need to deliver negative reports to families. Demanding and inflexible working hours, as well as overtime, are synonymous with the job description of nurses (Mokoka et al, 2011). Nurses are pushed by managers to work overtime and to perform tasks for which they are not trained. It is becoming increasingly difficult to attract young individuals to a nursing career that is recognised by high turnover and high stress levels. The stress levels are also affecting the quality of care the nurses provide to their patients (Aiken, Clarke & Sloane, 2002). High levels of burnout and illness-related absenteeism are reported globally. This state of affairs not only threatens nurses themselves, but also the well-being of patients and the effectiveness and efficiency of their employing companies. Handelsman (2012) states that various research has indicated that burnout due to continuous stress and work overload occurs across a variety of occupations, and not only in nursing. However, nurses seem to be at an increased risk for the development of burnout, given the demanding and intensely personal nature of their work. Nurses need effective environments in which they are exposed to supportive supervision, high and continuing quality training and working environments where they can flourish (Third Global Symposium on Health Systems Research, 2014).

1.2 Problem statement
Van der Colff and Rothman (2009) reported that empirical studies have revealed that some nurses, regardless of the high job demands and long working hours, do not develop burnout. Furthermore, these nurses cope better than others in highly demanding and stressful work conditions. The nurses who do not develop burnout find pleasure in hard work and in dealing with job demands. These employees thrive in demanding and stressful environments. Instead of experiencing exhaustion, stress and burnout, these nurses experience work engagement (WE) and are willing to
walk the extra mile for their hospital, in other words engage in organisational citizenship behaviour (OCB). WE can be defined as a person’s enthusiasm and involvement in his or her job (Roberts & Davenport, 2002). The degree of WE depends on the degree of physical, cognitive and emotional energy that an individual puts into his or her job (Robbins, Judge, Millett & Waters-Marsh, 2008). Individuals who are highly engaged in their work can identify themselves personally with the job and also are motivated by their job. Engaged people tend to work harder, they are more productive and satisfied, and usually bring forth the results customers and organisations want (Roberts & Davenport, 2002). Jones and Harter (2005) state that engagement leads to human benefits for individuals who experience this powerful state. WE can also be defined as the antithesis of burnout. According to this approach, job engagement can be seen as a positive, fulfilling and work-related state of mind with sub-dimensions. The sub-dimensions are vigour, dedication and absorption. People who are engaged in their work will have difficulties detaching themselves from their work and time will pass quickly for them (Schaufeli, Salanova, González-Romá & Bakker, 2002).

Hospitals need to attract and retain dedicated, creative and flourishing employees who can make the hospital thrive. Nurses who are energised and engaged by their work and who can persist in difficult circumstances are definitely needed. Engaged employees are especially needed in an industry like nursing. Nurses in some of these hospitals are guaranteed to face a lack of equipment, a stressful work environment, a lack of leadership and the burdened task of doing unreasonable and unnecessary tasks assigned by incompetent supervisors. However, engaged nurses will experience positive emotions on a regular basis (Bakker & Demerouti, 2008). Engaged nurses are happy, sensitive to opportunities at work, are more outgoing, helpful to others, more confident when interacting with others and more optimistic when taking on challenges. Not only must the body be engaged, but the mind and soul also. Most important, engagement is related to job performance, which is a vital outcome in any work environment (Bakker & Bal, 2010).

Consequently, an engaged nurse matching performance standards will tend to engage in OCB as the outcome of this motivational process (Rioux & Penner, 2001).
OCB is important, especially in nursing, and is an individual behaviour that is discretionary, is not directly or explicitly recognised by the formal reward system, and is also not part of the employee’s job description (Walumbwa, Mayer, Wang, Wang, Workman & Christensen, 2011). OCB is crucial in the healthcare sector because of the lack of human resources. If nurses do not perform these extra tasks it can lead to catastrophic consequences. In fact, the nursing code of ethics requires nurses to get involved in OCB. Matamala (2011) found that, when employees are engaged in their work, they also go above and beyond their formal job description. OCB is not rewarded, but results in the effective running of the organisation (Saradha & Patrick, 2011). The efficiency and effectiveness of organisations depend on their staff, especially in hospitals (Yaghoubi, Afshar & Javadi, 2012). Hospitals need to provide quality services and the prevalence of OCB is becoming more important, especially in hospitals where there is a lack of resources, a shortage of staff and high demands. It has been found that some nurses engage more often in OCB than others, especially in high-stress environments. Instead of developing burnout, these nurses are engaged in their work and perform organisational citizenship behaviours.

WE and OCB will not be achieved by the four D’s approach (damage, disease, disorder, and dysfunction) (Bakker & Schaufeli, 2008). This traditional approach tries to prevent outcomes such as disengagement, burnout, poor performance, ill-health and low motivation. The traditional approach focuses on the negative instead of the positive. Over the years, positive psychology has changed fundamentally and challenged the way psychologists think people should be studied. In contrast to a deficit focus, the focus of positive psychology is on an individual’s strengths. Occupational psychology has also shifted towards the positive aspects of work. Instead of focusing on dysfunction and negative aspects of work, such as stress and burnout, the focus has shifted towards positive aspects, such as WE, citizenship behaviour and employee well-being. To increase behaviour such as engagement and OCB amongst employees, organisations must make a radical shift to POB. Bakker and Schaufeli (2008) state that POB is interested in the study of human resource strengths and psychological capacities. POB focuses on relatively unique, positive, state-like constructs that have an influence on performance. Othman and Nasurdin (2011) define POB as the study and application of positively orientated human resource strengths and psychological capacities that can be measured,
developed and effectively managed for performance improvement in today’s workplace. Bakker and Schaufeli (2008) state that POB researchers are interested in peak performance in organisations and examine the conditions under which employees thrive.

Thus, to bring forth positive behaviours, such as WE and OCB, it is important to adapt a positive psychology approach by focusing on employees’ strengths and not on their weaknesses. One comprehensive model that can be utilised specifically to investigate the well-being of nurses is the Job Demands-Resources (JD-R) model of WE. This model has been applied to various occupational settings in order to determine how job and personal resources, as well as job demands, interact to determine WE. Job demands refer to those physical, psychological, social, or organisational aspects of a job that require continued physical and/or psychological effort and, for this reason, are associated with certain physiological and/or psychological costs (Bakker, Demerouti & Sanz-Vergel, 2014). Job resources, on the other hand, refer to those physical, psychological, social or organisational aspects of a job that can be seen as functional in achieving work goals and reduce job demands and associated physiological and psychological costs. A recent important extension of the original JD-R model (Demerouti & Bakker, 2011) is the inclusion of personal resources in the model. Personal resources refer to positive self-evaluations that are linked to resiliency and refer to a person’s sense of ability to control and impact their environments successfully. Resources can also stimulate personal growth, learning and development (Bakker et al., 2014). Resources play an important role in helping employees deal with job demands, especially in demanding work environments such as nursing. Meaningful variations in levels of specific job demands and resources can be found in almost every occupational group. The JD-R model will be used to better understand, explain and make predictions about employee WE and OCB amongst nurses.

1.3 Research-initiating questions

WE and OCB in employees are desired by organisations and both are the result of a motivational process in the workplace. The question is, however, why certain employees are engaged in their work and display OCB, and other not. Also, why do different workplaces differ with regard to the levels of WE of employees, and with
regard to the levels of OCBs displayed? The question may be extended to also include what factors cause employees to be engaged in their work and foster OCB? The JD-R model shows valuable insight regarding the impact of specific job and personal resources, and job demands on WE and, in addition, on OCB. Also, it shows how specific job and personal resources, and job demands, could be monitored and influenced by means of specific planned interventions.

The current study thus asks why variance in WE and OCB exists between different nurses in the same private hospital, as well as between different private hospitals. The effects of specific resources and demands on the WE and OCB of nurses will thus be investigated and tested.

1.4 Research Objectives
The main objectives of this study was to propose, based on current literature, and test a structural model that adequately explains the antecedents of variance in OCB and WE amongst nurses in private South African hospitals.

1.5 Delimitations
The JD-R model will be used as a framework for how job and personal resources, and job demands promote WE and OCB. Hypotheses related to the model will be tested. Exhaustion or burnout in the JD-R model (Bakker et al., 2014) were not included in this study. This study will adopt a positive psychology approach by focusing on employees’ strengths rather than on their weaknesses. No effort will be dedicated to improving the psychometric properties of the measures employed, for example by manipulating the data set by using item-deletion, attendant strategies and factor analysis.

1.6 Key Concepts Defined
1.6.1 Private hospitals
Hospitals exist to provide individuals with quality health care. However, private hospitals have an additional objective, which is the same as that of any other profit-driven organisation, and that is to make a profit (Amado et al., 2012).
1.6.2 Nurses
A nurse is a person trained to take care of sick or infirm people, especially in a hospital. Nursing falls into three categories: registered nurses (after completion of a four-year degree or diploma in nursing and, in some cases, a one-year diploma in a specialised area such as ICU); Enrolled nurses (individuals who have completed a two-year certificate in nursing); and Auxiliary nurses (the lowest qualification in nursing, referring to individuals who have completed a one-year certificate in nursing) (Brandt, 2007).

1.6.3 Work engagement
WE can be defined as the antithesis of burnout. According to this approach, WE can be seen as a positive, fulfilling and work-related state of mind with sub-dimensions. The sub-dimensions include vigour, dedication and absorption (Tims, Bakker & Derks, 2012).

- **Vigour** can be recognised in people who have high levels of energy and mental resilience while they are working. Vigour also refers to the willingness to invest effort in one’s work and persist when things do not go according to plan.

- **Dedication** is the experience of significance, enthusiasm, inspiration, pride and challenges by being strongly involved with one’s work.

- **Absorption** refers to being fully concentrated and happily engrossed in one’s work.

1.6.4 Organisational citizenship behaviour
Bambale, Shamsudin and Subramaniam (2011) suggest that OCB consists of five dimensions, namely: (a) altruism, (b) conscientiousness, (c) sportsmanship, (d) courtesy and (e) civic virtue.

- **Altruism** refers to discretionary behaviours directed mainly at helping specific persons in face-to-face situations with an organisationally relevant task or
problem. Currently called helping, altruism can also be seen as activities performed with the aim of enhancing the effectiveness and efficiency of an organisation (Wang & Wong, 2010).

- **Conscientiousness** refers to employees going beyond the minimal requirements in performing their assigned task.

- **Sportsmanship** can be seen as behaviours of refraining from complaining about trivial matters or filling up petty grievances. Employees behaving with sportsmanship will also maintain a positive attitude when things do not turn out as desired (Krastev & Stanoeva, 2013).

- **Courtesy** is behaviour such as consulting others before making a decision, passing along information, giving others advance notice as well as issuing reminders to others. Wang and Wong (2010) also state that communication is usually enhanced by courtesy and problems are prevented from occurring.

- **Civic virtue** is defined as a dimension of OCB that is concerned with keeping up with matters that can influence organisation, such as attending meetings, usually taking part in discussions and being involved in organisational activities in order to support and improve the organisation (Bambale et al., 2011).

### 1.6.5 Servant Leadership

The process of servant leadership (SL) explicates a focus on others’ needs in a professional, developmental and organisational manner. In other words, servant leaders will contribute to the personal and professional growth of their followers. SL can be seen as a job resource. Barbuto and Wheeler (2006a) defined eleven potential characteristics of SL: calling, listening, empathy, healing, awareness, persuasion, conceptualisation, foresight, stewardship, growth, and community building. Five characteristics were derived from the eleven, which appear to be conceptually and empirically distinct:

- **Altruistic calling** describes a leader’s deep-rooted desire to make a positive difference in others’ lives.

- **Emotional healing** refers to a leader’s commitment and skill to foster spiritual recovery from trauma or hardship.
• **Wisdom** is the combination of awareness of surroundings and the anticipation of consequences. Wisdom also enables leaders to pick up cues from the environment and understand their implications.

• **Persuasive mapping** refers to the extent to which leaders use sound reasoning and mental frameworks. These leaders are skilled in mapping issues and conceptualise greater possibilities. They also are compelling when articulating these possibilities. They encourage followers to visualise the organisation’s future, offering them compelling reasons to get things done.

• **Organisational stewardship** refers to the extent to which a leader prepares an organisation to contribute to society in terms of community development. Organisational stewardship involves taking responsibility for the well-being of the community.

1.6.6 Psychological Capital

The construct of psychological capital (PsyCap) can be seen as a personal resource. PsyCap consists of four psychological resource capacities, namely hope, optimism, self-efficacy and resilience, and focuses on the positive nature and strengths of employees:

• **Hope** can be seen as a multidimensional construct that exists of willpower and waypower (Snyder, 2002). Willpower is the individual’s agency or determination to achieve goals. Waypower is the ability of an individual to devise alternative pathways in order to achieve a goal when faced with obstacles.

• **Optimism** can be seen as a realistic, flexible and dynamic construct that is not fixed, but can be learned and developed. Simons and Buitendach (2013) define optimism as persistence and pervasiveness.

• **Resilience** is the ability to successfully manipulate one’s environment to protect oneself from negative consequences (Simons & Buitendach, 2013).

• **Self-efficacy** is a person’s conviction regarding their ability to organise and execute motivation, cognitive resources and courses of action that will lead to the accomplishment of specific tasks (Simons & Buitendach, 2013).
1.6.7 Illegitimate Tasks

Illegitimate tasks (IT) can be described in terms of two facets, namely unreasonable tasks and unnecessary tasks. Unreasonable tasks refer to tasks that are not appropriate to ask from a specific person because it is outside the scope of that person’s occupation. Unnecessary tasks can be seen as tasks that are meaningless and that should be assigned to someone else, usually someone in a more junior position (Björk, Bejerot, Jacobshagen & Harenstam, 2013). IT can be seen as a job demand and therefore also a new stressor occurring more frequently in organisations, especially in nursing.

1.6.8 The Job Demands-Resources model of occupational well-being

The JD-R model of occupational well-being is based on the job demands-resources theory, which states that job demands have been identified as the main causes of burnout, which leads to poor health and negative organisational outcomes. Job resources have been identified as main drivers of WE, which leads to an increase in well-being and positive organisational behaviour. A second proposition of the JD-R theory also states that job demands and job resources trigger two independent processes, namely a health impairment process, usually caused by job demands, and a motivational process, usually caused by job resources (Bakker et al., 2014). These patterns form the basis of the articulated model of occupational well-being, known as the Job Demands-Resources (JD-R) model of work engagement. The third proposition is that job resources and demands also have joint effects, in other words, resources and demands interact in predicting occupational wellbeing (Bakker et al., 2014).

1.6.9 Job resources

Job resources refer to the degree to which employees are given adequate resources to perform their tasks and duties at work (Bakker & Demerouti, 2008; Tims et al., 2012). Job resources also foster personal growth, learning and development, and have motivational qualities (Bakker & Schaufeli, 2008; Rothman, Mostert & Strydom, 2006).
1.6.10 Personal resources

Personal resources are positive self-evaluations that are linked to resiliency and refer to individuals’ sense of ability to control and impact their environment successfully (Bakker et al., 2014).

1.6.11 Job demands

Job demands refer to conditions in the working environment that have the potential to evoke strain when they exceed the employees’ adaptive capability (Rothmann et al., 2006). Physical and psychological effort and skills are required by the physical, psychological, social and organisational features of the job (Schaufeli & Bakker, 2004). Job demands require effort and therefore are related with physiological and psychological costs, such as fatigue.

1.7 Chapter outline for the study

In Chapter 1 the research problem, research-initiating questions and research objectives have been identified. The important constructs of the study have been defined and the delimitations of the study have been expressed. In Chapter 2 all the relevant dependant and independent variables are defined, explained and discussed. Chapter 2 also includes the interrelationships between all the variables that were explored in the literature and, based on these relationships, hypotheses were developed. Chapter 3 presents the research methodology and structural model. The research design is discussed in terms of the research approach. The research method is discussed in terms of the research respondents, sample size and method of data collection. All measuring instruments are revealed, as well as the research procedures and statistical analyses that were used. Chapter 4 includes the results of the statistical analysis and all the significant and insignificant relationships. Lastly, Chapter 5 mentions the limitations of the study, recommendations are made and practical implications of the study are suggested. The study ends off with a conclusion in which the findings of the study are summarised.
1.8 Chapter Summary
This chapter included a thorough overview of the current challenge facing nursing in South Africa. The problem statement was explained, which led to the research-initiating questions and the objectives of the study. The entire study is based on the emerging field of positive psychology, specifically focusing on positive organisational behaviour. The JD-R model was introduced and serves as the conceptual framework, playing a central part throughout the study. Unique demands and resources were selected to be investigated. All the key concepts were defined.
CHAPTER 2

LITERATURE REVIEW

2.1 Introduction
Globally, the healthcare system is facing a serious dilemma, as discussed in Chapter 1. Workloads are increasing, available resources are decreasing and the global nursing shortage is placing a heavy burden on healthcare providers. In most of the health systems, nurses are “front-line” staff, and the contribution they make to society is essential. Nurses need to deal with high amounts of stress, IT and deaths every day. The lack of effective leadership in hospitals is worsening these circumstances. This study takes a detailed look at job and personal resources, as well as job demands, and their relationship with WE and OCB. The nature of the relationships between the job and personal resources, job demands and WE and OCB will be investigated.

2.2 The Job Demands-Resources model of occupational well-being
A major challenge faced by hospital management today is to find ways to engage employees in a highly demanding work environment. A large number of research studies that include the Job Demands-Resources (JD-R) theory and model have been published in the last decade. The theory can be applied to all work environments and can be tailored depending on the nature of the study (Bakker et al., 2014). According to the JD-R theory, demands have been identified as the main predictor of burnout, which leads to poor health and negative organisational outcomes. Job resources, on the other hand, have been identified as the main driver of WE, which leads to an increase in well-being and positive organisational behaviour. Bakker, Schaufeli, Leiter and Taris (2008) state that engagement does not stem only from job resources, but from personal resources as well. The JD-R model was thus extended to include personal resources in the theory and model (Bakker et al., 2014). Personal resources are positive self-evaluations that are connected to resilience and refer to individuals’ sense of their ability to control and impact their environments successfully. Personal resources (e.g. self-efficacy, optimism and resiliency) can predict WE independently or in combination with job...
resources (Figure 2.1), especially when job demands are high (Janse van Rensburg, Boonzaier & Boonzaier, 2013).

The JD-R theory also states that job demands and resources trigger two independent processes, namely a health-impairment process, usually caused by job demands, and a motivational process, usually caused by job resources (Bakker et al., 2014). Employee engagement is fundamentally a motivational concept that represents the active allocation of personal resources to the task associated with a work role (Christian, Garza & Slaughter, 2011). Although job demands and resources initiate different processes, they also have joint effects. Another proposition of the JD-R theory is that job demands and resources interact in the prediction of occupational well-being. Studies have shown that job resources can buffer the effect of job demands on strains (Bakker et al., 2014). Thus, employees who have many job resources available to them can cope better with their daily job demands. The other interaction is where job demands amplify the impact of job resources on motivation and engagement. Research has shown that job resources become salient and have the strongest positive impact on WE when job demands are high (Bakker et al., 2014).

Accordingly, the JD-R model will serve as framework for this study. However, the JD-R model will be tailored to fit the unique nature of the current study. Job and personal resources, as well as job demands, were included in the JD-R model in order to identify the main antecedents of employee well-being. In addition, OCB will be added to the model as a positive organisational outcome of the motivational process in the model.

2.3 Positive organisational behaviour

The POB approach will be followed throughout the study. POB can be defined as the “study and application of positively orientated human resource strengths and capacities that can be measured, developed and effectively managed for performance improvements in today’s workplace” (Luthans, 2002, p.59). Harris (2012) states that the aim of POB is to develop human strengths and increasing resilience in individuals in order to grow exceptional individuals, teams and organisations. POB developed from the positive psychology approach. Seligman and
Csikszentmihalyi (2000) state that the purpose of POB is to turn the focus from the preoccupation of repairing the worst things in life to also building the positive qualities. In other words, instead of focusing on weaknesses, this approach focuses on strengths and resources and how they can be developed. Consequently, the JD-R model is viewed as a POB theory.

Figure 2.1: Job demands-resources model of occupational well-being (Bakker et al., 2014)

When POB first emerged, it was conceptualised as a set of inclusion criteria, and not as a construct. These criteria were used to identify relevant positive psychology constructs. Through studying this definition of POB, four criteria can be elicited. The first criterion is that of scientific study. Scientific study and application can be seen as a distinguishing factor; in other words, POB is a theory- and research-based approach. However, the popular self-help literature is still dominating the practice (Youssef-Morgan, 2014). POB is also distinguished from other legitimate qualitative discourses. The fact that POB has developmental potential reflects its state-like characteristics and distinguishes it from different positive but trait-based constructs. The resources that were found to meet these criteria were hope, efficacy, resilience and optimism. The impact that POB has on performance sets it within a positive,
functional paradigm, with emphasis on actual tangible results as well as quantifiable performance outcomes (Youssef-Morgan, 2014). Luthans (2002) supports the abovementioned and states that what differentiates POB from positive psychology is its application to develop and improve the performance of managers and employees. The application to develop and improve is what makes POB valuable. Harris (2012) shows that POB is steadfast in its scientific approach and provides a body of knowledge for leadership and human resource development, as well as how it can have an impact on performance. The emerging field of POB is making a huge impact on working environments worldwide. A large number of organisational research has shifted towards the positive, even in the South African context (Harris, 2012). When organisations decide to make the shift towards a positive paradigm, it is vital to reflect how positive organisational behaviour can be utilised to the benefit of businesses in South Africa.

2.4 Latent variables of interest

2.4.1 Work engagement

2.4.1.1 The origin and definition of WE
WE is currently a unique emerging concept in occupational health psychology. However, WE is not a new construct. Over the past 21 years, the concept of engagement, specific to the employee within his or her work role, has attracted the attention of organisational psychology and business literature. The concept of WE developed from the research that was done on burnout in an attempt to shift the focus from employee unwell-being to employee well-being (Kubota, Shimazu, Kawakami, Takahashi, Nakata & Schaufeli, 2010).

Instead of focusing on traditional organisational structures that rely on management control and economic principles in order to bring forth cost reduction, efficiency and cash flow, the focus in modern organisations has been shifted to the management of human capital (Bakker & Schaufeli, 2008). Currently organisations expect their employees to be proactive, to be committed to high-quality performance standards, to show initiative and to take responsibility for their own professional development. In other words, organisations need employees who are energetic and dedicated and
who are absorbed by their work. Organisations have realised that the contribution of employees is a critical business issue because, in trying to produce more output with less employee input, companies have no other choice but to try to engage the body, mind and soul of every employee. Thus, what organisations need are engaged workers.

In the past years, psychology primarily has been focused more on addressing the mental illness than the mental “wellness” of employees (Bakker et al., 2008). Currently the focus is being shifted to employee wellness. Thus, in order to get employees engaged, a radical shift was made away from the four D’s approach in the direction of POB. Through building employees’ positive qualities, strengths and psychological capacities one would start moving in a direction where WE would occur more frequently.

Although there is no general agreement on the definition of WE, there are some common aspects described in the literature (Zhu, Avolio & Walumbwa, 2009). According to Maslach and Leiter (1997), engagement is characterised by energy, involvement and also efficacy. These dimensions can be seen as the direct opposite of the three existing burnout dimensions. The above authors argued that, in the case of burnout, energy will turn into exhaustion, involvement will turn into cynicism, and efficacy will turn into ineffectiveness. Maslach, Schaufeli and Leiter (2001) also argue that burnout and engagement may be considered as prototypes of employee well-being. The prototypes may be considered as part of a more comprehensive taxonomy that exists of two dimensions, namely pleasure and activation. Thus, WE can be seen as a construct that reflects a high degree of pleasure and activation, whereas burnout reflects a low level of pleasure and activation.

According to Schaufeli et al. (2002), WE is a distinct concept that is related negatively to burnout. Engagement can be defined as a positive, fulfilling and work-related state of mind that is characterised by vigour, dedication, and absorption. Vigour can be recognised in people who have high levels of energy and mental resilience while they are working. Vigour also refers to the willingness to invest effort in one’s work and to persist when things do not go according to plan. Dedication is the experience of significance, enthusiasm, inspiration, pride and challenge by being strongly involved in one’s work. Dedication has a number of things in common with
job involvement, which is known as the amount of attachment and identification the employee has with his or her job (Hayati, Charkhabi & Naami, 2014). Lastly, WE can be categorised in terms of absorption, which refers to being fully concentrated on and happily engrossed in one’s work. The time at work will pass by quickly and employees will have difficulties detaching themselves from their work (Schaufeli et al., 2002). However, vigour and dedication are seen as direct opposites of exhaustion and cynicism respectively, the two key symptoms of burnout. The continuum spanned by exhaustion and vigour is called “energy”, and the continuum that is spanned by cynicism and dedication is labelled “identification”. Thus, WE is characterised by a high level of energy and a strong sense of identification with one’s work. Burnout is characterised by the opposite, a low level of energy and poor identification with one’s work (González-Roma, Schaufeli, Bakker & Lloret, 2006).

Absorption was included as the third dimension of WE.

WE can also be defined as a person’s enthusiasm and involvement in his or her job (Roberts & Davenport, 2002). The degree of WE depends on the degree of physical, cognitive and emotional energy that an individual puts into his or her job (Robbins & Judge, 2011). Kahn (1990) also stated that, in order for the human spirit to thrive at work, employees must be capable of engaging themselves cognitively, emotionally and physically. Shuck and Herd (2012) state that WE has three dimensions: cognitive engagement, emotional engagement and behavioural engagement. Cognitive engagement can be seen as the first step in the engagement process. This step refers to the employees’ interpretation of whether their work is meaningful, safe (physically, emotionally and psychologically) and if enough resources are available to complete the work. Emotional engagement refers to the willingness of the employee to invest personal resources in his work or her work. To be emotionally engaged usually happens after the person is cognitively engaged. The employees will be willing to give emotionally of themselves and identify themselves emotionally with a task. The employees will also feel a sense of belonging to and identification with the organisation. The last dimension, behavioural engagement, refers to the physical manifestation of the cognitive and emotional dimensions. One will be able to see a change in the behaviour of the employee. The employee will put in extra effort and be willing to perform more than his or her minimal responsibilities (Shuck & Herd, 2012).
The work of Rothbard (2001) was inspired by Kahn (1990) and took a slightly different perspective in defining WE. Rothbard (2001) defines WE as a two-dimensional motivational construct that consists of attention and absorption. Attention refers to the cognitive availability and the amount of time one spends thinking about a role, whereas absorption refers to the intensity of one’s focus on a role (Rothbard, 2001). It is important to take into consideration that the key reference for Kahn (1990) is the work role of an employee. To those who consider engagement as the positive antithesis of burnout, the key reference is the work activity of the employee, or the work itself.

Fleming and Asplund (2007) state that WE has four dimensions, namely meeting basic needs, individual contribution, team work, and organic growth. The first dimension refers to employees’ basic needs or clear expectations and the material required to do the specific job (e.g., What can I get?). The second dimension deals with whether the job fits the employee’s specific talents, skills and preferences (e.g., What do I give). The feeling of contribution will increase performance. The third dimension, teamwork, deals with the question, where do I belong? If all three dimensions are met, employees will experience a sense of safety and security within the organisation, which will result in a higher level of engagement. The last dimension deals with how we can grow. Employees who have more positive feelings toward their identification with the organisation are more likely to display a greater sense of confidence that they can grow and perform effectively. Leadership will play an important role in this positive sense of confidence and belonging to the organisation. WE is defined as follow:

a) Vigour

Salanova, Agut and Peiro (2005) stated that that vigour can be determined based on Atkinson’s motivational theory. The motivational theory states that motivation is strength of doing work or resistance keeping one from doing work. Salanova et al. (2005) propose that strength and resistance are addressed as aspects of WE and that their concepts are parallel with the popular definition of motivation. The sub-dimensions include vigour, dedication and absorption (Bakker et al., 2014; Schaufeli...
et al., 2002). Vigour can be recognised in people who have high levels of energy and mental resilience while they are working. An employee high on vigour will persist when things do not work out as planned.

b) Dedication

Dedication is the experience of significance, enthusiasm, inspiration, pride and challenge by being strongly involved with one’s work (Schaufeli et al., 2002). This aspect will be observed within someone who has great involvement in his or her job (Hayati et al., 2014).

c) Absorption

Absorption refers to being fully concentrated on and happily engrossed in one’s work. Employees who are absorbed by their work will experience time flying when at work. They would also find it difficult to detach themselves from work (Hayati et al., 2014). Employees would experience happiness and pleasure at work and would be satisfied with their work role (Othman & Nasurdi, 2011).

Now that the construct WE and its dimensions are dealt with, the focus shifts to the antecedents and consequences of the positive state of WE.

2.4.1.2 Possible antecedents and consequences of WE

As mentioned earlier, a major challenge faced by hospital management today is to find ways to engage employees. Engagement can be attributed to a large number of factors, some more likely to bring forth engagement than others. Bakker et al. (2008) state that engagement not only stems from job resources, but from personal resources as well. The abovementioned is parallel to the job demands-resources (JD-R) model of occupational well-being, that is used as the framework for this study (Bakker et al., 2014). The central focus is on personal and job resources as antecedents of WE.

a) Personal resources

As mentioned earlier, Zhu et al. (2009) argue that there are three psychological conditions, namely psychological meaningfulness, psychological safety and psychological availability. These conditions can be seen as antecedents of personal engagement. Psychological meaningfulness refers to the positive feeling individuals
get when they invest their physical, cognitive and emotional energy in work. Psychological safety represents the feeling of trust in the organisation, whether they can trust their co-workers and if they are trusted. Psychological availability refers to the belief of the individual that he or she has the resources (physical, emotional and cognitive) needed to engage themselves at work (Zhu et al., 2009). The absence of these psychological conditions will decrease the probability of employees being engaged in their work.

Lu, Siu, Chen and Wang (2011) refer to personal resources such as self-efficacy and optimism as positive predictors of WE. Naruse, Sakai, Watai, Taguchi, Kuwahara, Nagata & Murashima (2013) also reported that psychological resources, such as self-efficacy and hardiness, were a significant predictor of WE. Meaning-making was identified by Van den Heuvel, Demerouti, Bakker and Schaufeli (2010) as a cognitive personal resource that can be developed and that leads to WE. Meaning-making refers to the ability of an employee to make meaning when faced with trials and tribulations. In other words, the person makes an effort to understand why an event took place and what the impact of the event was. Although there are more personal resources that would lead to WE, empirical research on a large number of personal resources is still needed. It is important to know which personal resources lead to WE in order to develop them.

b) Job resources

Tims et al. (2012) found that job resources are the most important factor to enable employees to be engaged in their work. Job resources that can specifically be seen as resources that aid WE are “those physical, psychological, social or organisational aspects that (i) reduce job demands and the associated psychological and physiological costs, (ii) stimulate personal growth, learning and development, and (iii) are functional in achieving work goals” (Xanthopoulou, Bakker, Demerouti, Schaufeli, 2007, p.122).

Job resources can also refer to factors such as autonomy, supervisory coaching, performance feedback and opportunity for development. The higher the level of resources, the more likely it would be that employees can engage in their work. Bogaert, Clarke, Willems and Mondelaers (2012) state that favourable nursing
practice conditions are related with the dimensions of WE, and WE is associated with job satisfaction, intention to stay in the occupation and positive nurse-reported quality of care. Hakanen, Perhoniemi and Toppinen-Tanner (2008) revealed that autonomy, immediate feedback and rewards were all job resources related to WE and that increasing these resources would increase WE.

Shuck and Herd (2012) reported that, although various factors may cause the development of engagement, research suggests that leadership behaviour may be one of the factors that has the potential to influence the development of engagement to a great extent. Naruse et al. (2013) found that supervisor support was positively correlated with WE amongst home-visiting nurses. This study also revealed that only supervisor support had a significant positive association with nurses’ WE, and not colleague support, as expected. Some authors argue that employees will have a higher level of WE when leaders and the organisation take care of the employees’ basic, and especially higher-order needs (Shuck & Herd, 2012).

With regard to the consequences of WE, a large number of studies were conducted, providing empirical evidence for the relationships between WE and organisational outcomes. According to Othman and Nasurdin (2011), WE is crucial, as engaged employees experience joy, pleasure and enthusiasm, good physical and psychological health, better job performance, increased ability to create job and personal resources, and capability to transfer their engagement to others.

Demerouti and Bakker (2011) state that employees who are engaged are optimistic and self-efficacious. They exercise influence over events that can be seen as factors that can affect their lives or circumstances. Engaged employees are extremely active and create their own sense of positive feedback. The positive feedback includes appreciation, recognition and the success of their activities. Individuals who are highly engaged in their work can identify themselves personally with the job and are also motivated by their job.

Engaged people tend to work harder, they are more productive and usually bring forth the results customers and organisations want (Roberts & Davenport, 2002). One of the main reasons for the increasing attention that WE receives is because of the concepts’ predictive value of performance. Empirical support has been given by
various studies, including a comprehensive meta-analysis focusing on workforce engagement. The results from this meta-analysis show that an employee’s level of WE is positively associated with productivity (Zhu et al., 2009). Highly engaged employees will perform better than unengaged employees.

WE is positively correlated with the quality of sleep of nurses working in high-pressure environments, and this may lead to better performance (Kubota et al., 2010). Engaged employees are also more likely to engage in job crafting. Job crafting is an emerging term in the current literature that refers to changing and shaping the elements of one’s job in order to boost the meaning of the work and the social environment at work (Tims et al., 2012). Bakker and Schaufeli (2008) state that employee engagement is positively related to work behaviours such as organisational commitment and quality of service. It has also been found that WE is negatively related with employee turnover and accidents (Zhu et al., 2009). Beukes and Botha (2013) declare that employees who are engaged will be loyal to the organisation and psychologically committed. It was also found that WE has a positive relationship with job satisfaction, OCB, in-role performance, employee proactive behaviours and financial returns (Othman & Nasurordin, 2011; Salanova et al., 2005; Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009).

WE can be seen as an index describing workplace health. Nurses with a higher level of WE tend to be more willing to keep working, provide patient-centred care and report higher work efficacy (Naruse et al. 2013). When employees are disengaged they tend to distance themselves from work and withdraw cognitively from their work situation. The abovementioned is unacceptable behaviour in the work environment of nurses. However, it does happen. WE is an important factor in organisations, especially in nursing. The importance can be explained by the interaction nurses have with various social systems within the organisation, and taking into consideration that nursing is the occupation showing the lowest level of WE (Beukes & Botha, 2013). A study by De Waal and Pienaar (2013) revealed that WE facilitates the building of psychological capital. Positive work-related resources such as WE could affect the individual to empower employees to engage in the “building” of psychological capital and other personal resources.
To conclude this section regarding the above studies, the healthcare system should strive to produce more engaged employees, as this will lead to an increase in various positive outcomes. The focus of this study was to investigate the relationship that specific job and personal resources, as well as job demands, have on WE.

2.4.2 Organisational citizenship behaviour

2.4.2.1 The origin and definition of OCB

Katz (1964) states that an organisation that depends solely on its blueprints of prescribed behaviours can be seen as a fragile social system that cannot succeed without these voluntary efforts. This statement supports the one made by Organ in 1983, when he introduced the term “citizenship” to describe behaviours that lubricate the social machinery of an organisation (Dash & Pradhan, 2014). However, the concept of OCB is not new, and the existence of OCB can be traced back to the work of Barnard in 1938. According to Barnard (1938), employees should be willing to offer efforts to cooperative systems in order to achieve an organisation’s goals (Dash & Pradhan, 2014). Katz (1964) says cooperative behaviours beyond traditional job requirements play a vital role in the effective functioning of an organisation. Nearly 50 years ago, Katz (1964) identified three basic types of behaviour for an organisation to function effectively. The three behaviours are (a) people must be induced to enter as well as remain within the system, (b) specific role requirements must be carried out in a dependable fashion, and (c) there must be creative and spontaneous activity that goes beyond the employee’s role prescription. Every factory, hospital or bureau depends daily on a myriad of acts such as helpfulness, cooperation, altruism, gestures of goodwill, and other behaviours that can referred to as OCB. In 1988 the term OCB was coined by Organ and it will be defined thoroughly in the following section.

Jacobs and Roodt (2008) define OCB as a distinct concept of organisational culture. Organisational culture refers to a number of values, beliefs and behaviour patterns that not only form the core identity of an organisation, but also help shape the employee’s behaviour. OCB can be seen as the work behaviours of employees, such as helping, staying late, working weekends, performing at levels that exceed
enforceable standards, being actively involved in company affairs and tolerating impositions or inconvenience.

Walumbwa, Hartnell and Oke (2010) define OCB as an individual behaviour that is discretionary. This discretionary behaviour refers to behaviour that is not directly or explicitly recognised by the formal reward system and also is not part of the employee’s job description (Organ, 1998). Bambale et al. (2011) describe this discretionary behaviour as good soldier syndrome, as it represents the willingness of people to invest effort and energy in their social environment beyond any requirements or expectation of formal or monetary rewards. Wang (2010) states that OCB represents certain behaviours that take place on the job, which are behaviours not incorporated into the job description but serve to help maintain the internal equilibrium within an organisation. OCB is an informal behaviour freely given by employees and it is important to the company, although it is not required. It is vital to take into consideration that not all informal behaviour is necessarily beneficial to the organisation. Some informal behaviour can cause conflict between members (Chu, Lee, Hsu & Chen, 2005). Thus, only behaviour that is seen as behaviour that will increase organisational effectiveness is defined as OCB in this study. Manju and Manikandan (2013) state that OCB refers to acts happening outside the technical core of the job, supporting not only the social context of the organisation, but the psychological context as well.

Smith, Organ and Near (1983) suggest that OCB consists of five dimensions, namely: (a) altruism, (b) conscientiousness, (c) sportsmanship, (d) courtesy and (e) civic virtue. These five dimensions are widely accepted and supported in the literature. Altruism refers to discretionary behaviours directed mainly at helping specific persons in face-to-face situations with an organisationally relevant task or problem. Currently called helping, altruism can also be seen as activities performed with the aim of enhancing the effectiveness and efficiency of an organisation (Wang, 2010). Conscientiousness refers to employees going beyond the minimal requirements in performing their assigned tasks. Sportsmanship can be seen as behaviours of refraining from complaining about trivial matters or filling up petty grievances. Sportsmanship also relates to the positive working attitude of an employee who will give substantial support to the organisation. Employees behaving with sportsmanship will also maintain a positive attitude when things do not turn out
as desired (Krastev & Stanoeva, 2013). Courtesy is concerned with behaviour such as consulting others before making a decision, passing along information, giving others advance notice, as well as issuing reminders to others. Wang and Wong (2014) also state that communication is usually enhanced by courtesy and problems are prevented from occurring. Civic virtue is defined as a dimension of OCB that is concerned with keeping up with matters that can influence an organisation, such as attending meetings, usually taking part in discussions and being involved in organisational activities in order to support and improve the organisation. Civic virtue can also be seen as responsible participation in the political life of the organisation (Bambale et al., 2011).

Williams and Anderson (1991) categorise OCB in terms of two dimensions, namely organisational citizenship behaviours towards a person (OCBP) and organisational citizenship behaviours towards the organisation (OCBO). OCBP contributes indirectly to the organisation by benefitting peers and co-workers. This behaviour is directed at other individuals in the organisations, for example making extra copies of documents for your co-worker. OCBO refers to behaviour directed at the organisation as a whole, for example obeying rules or making recommendations for the future advancement of the organisation. In this study the focus will be placed on OCBP and OCBO.

2.4.2.2 Possible antecedent and consequences of OCB
Dash and Pradhan (2014) revealed that OCB has various determinants, referring to attitudinal variables, organisational commitment, perception of justice and satisfactions. Chughtai (2008) says job involvement is another work attitude that is positively related to OCB. Individual factors such as conscientiousness, positive affectivity and agreeableness are seen to bring forth OCB behaviour (Dash and Pradhan, 2014). Job resources that can be seen as antecedents of OCB amongst employees are leadership, organisational supportiveness, role clarity and task characteristics (Chahal & Mehta, 2010). Euwemal, Wendt and Emmerik (2007) found that leadership style, especially collaborative and supportive styles, led to employees performing OCB. An interesting finding was that leadership that supports workforce diversity will lead to employees displaying OCB (Wright, 2009). According to Chahal
and Mehta (2010), employees who experience WE will most likely engage in behaviour that goes beyond their job requirements. Employee loyalty can be seen as an antecedent of OCB and where nurses show loyalty, one can expect the occurrence of OCB.

Although a number of variables have been found to cause OCB, this study will explore specific job and personal resources as antecedents of OCB amongst nurses.

With regard to the consequences of OCB, it was found that OCB has positive effects on individual and organisational performance (Sofiah, Padmashantini, & Gengeswari, 2014). OCB promotes positive relationships among employees and involving employees in the organisation’s activities. OCB facilitates the attainment of a hospital’s goals and also improves a hospital’s performance (Chu et al., 2005). Organisations that consist of employees performing OCB will function more effectively (Walumbwa et al., 2010). Researchers have demonstrated that OCBs contribute to the effectiveness of an individual, a group or a team (Bambale et al., 2011; Wong, 2010). Dargahi, Alirezaie and Shaham (2012) support the abovementioned and state that team and organisational effectiveness as well as job satisfaction will be the outcome if nurses show a high level of OCB. In fact, the efficiency and effectiveness of an organisation depends mostly on the staff, especially in hospitals (Yaghoubi et al., 2012). Krastev and Stanoeva (2013) revealed in a study that OCB does not only have a major impact on the overall efficiency, satisfaction and productivity of employees, but also contributes to the overall vision of the organisation. Thus, extra-role behaviour is crucial for achieving a hospital’s vision.

High employee retention is possible in organisations where OCB is displayed by employees (Dash et al., 2011). Hospitals that consist of nurses and employees displaying OCB would create an environment in which nurses would want to remain. Commitment is an important attitude in any profession, and when nurses display OCB it shows that they are indeed committed to their hospital and the people they serve (Dargahi et al., 2012). OCB would encourage teamwork and would bring forth a decreased level of mistakes. Lastly, in a study that investigated whether OCB would lead to WE, the results were positive (Chernyak-Hai & Tziner, 2013).
The occurrence of OCB in nursing is a crucial aspect because of the lack of resources, especially human resources. Some tasks will simply not be done if nurses do not engage in OCB. However, not all nurses are willing to perform this behaviour, especially not in the hospitals where it is needed the most.

2.4.3 Servant Leadership

2.4.3.1 The origin and definition of SL

Everything rises and falls on leadership (Maxwell, 2012). If leadership in a company fails, every other area in the company will most likely also fail. Powerful leaders can have a substantial impact on the lives of their subordinates. Leaders can also determine the fate of an organisation, whether it is good or bad (Yukl, 2013). Leadership is an important key to organisational behaviour and also organisational effectiveness. There are many different leadership styles, and no single best one. However, different people and different organisations will have different preferences. Leaders should lead in a style that challenges the organisational culture, without destroying it.

Currently, the shocking conditions of hospitals can be attributed mainly to a lack of leadership. The world is crying out for effective and ethical leadership. Leaders who serve their followers, invest in their development and fulfil a shared vision are needed. Not all systems and processes are effective, but effectiveness is a result of people working together effectively. SL is an emerging issue in leadership (Quick & Nelson, 2013). SL is one of the contemporary leadership styles that have become part of the positive psychology stream (Mahembe & Engelbrecht, 2013). This leadership style is a service-orientated philosophy of/and approach to leadership that will enable a wise organisation (Barbuto & Wheeler, 2006a).

SL is not a new concept and can be traced back to historical leaders such as Martin Luther King Jr., Jesus Christ, Mother Teresa and Abraham Lincoln. This leadership style has received an increasing amount of attention over the past 50 years (Mahembe & Engelbrecht, 2014). SL was first articulated almost four decades ago by Greenleaf, in 1970. Greenleaf (1977) states that a great leader is seen as a
servant first, and that simple fact is the key to greatness. Greenleaf (1970, p. 4) describes the SL philosophy in the following way:

It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. The difference manifest itself in the care taken by the servant-first to make sure that other people’s highest priority needs are being served. The bet test is: Do those served grow as persons; do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servant?

Despite the age of SL, it may be of particular relevance in the era we currently are in. According to Polleys (2002), SL can be distinguished from three predominant leadership paradigms, namely the trait, the behavioural, and the contingency approaches. Polleys (2002) states that SL is aligned with transforming leadership, but found no similarity between charismatic and transformational leadership. However, Graham (1991) states that SL adds components of social responsibility, moral development, service and enhancement of common good to transformational leadership. Mahembe and Engelbrecht (2013) found that SL and transformational leadership are similar in as far as they are value based. However, transformational leadership focuses on the development of the followers, whereas SL focuses on the needs of the followers. SL involves serving the highest need of others in an effort to help them achieve their goals. According to Hunter, Xanthopoulou, Bakker, Demerouti, Schaufeli (2013) SL and transformational leadership share some similarities. However, there is mounting evidence that SL is distinct from transformational leadership and has incremental predictive validity. SL moves beyond transformational leadership with its alignment of the leaders’ and the followers’ motives (Bass, 2000). The servant leader will select the needs of others as the highest priority.

Regarding charismatic leadership, Graham (1991) conceptualises SL as the most moral of charismatic effects. Yukl (2013) states that SL can be seen as an early conception of ethical leadership. Over the years, research on leadership has placed a lot of emphasis on the link between ethics and leadership. Growing research on leadership shows that SL is linked to ethics, virtues and morals. Research has shown that ethical leadership is similar to SL in terms of trustworthiness, caring for people, serving the good of the whole and integrity (Mahembe & Engelbrecht, 2013).
Regarding authentic leadership, Mahembe and Engelbrecht (2013) found that humility and authenticity as characteristics of authentic leadership overlap with the characteristics of SL. Although there is some similarity, no other SL characteristics are explicitly positioned or measured as belonging to the core of authentic leadership. Altogether, SL is distinctive from other leadership styles and therefore offers the potential to have a unique influence on organisations and their stakeholders.

The fact that Greenleaf (1970) conceptualised of SL as more of a way of life, rather than a management technique, slowed the acceptance of SL theory (Parris & Peachey, 2013). The development of a SL theory has been a time-consuming process as researchers struggle to articulate an adequate theoretical infrastructure for this construct (Wallace, 2007). However, currently there is controversy about the definition, theoretical framework and dimensions of SL. The following section provides definitions and different viewpoints on this construct.

Although no conceptual framework has been developed, various scholars have provided a view on SL. According to Trastek, Hamilton and Niles (2014), servant leaders focus on the development of leaders through self-awareness and self-knowledge. Self-reflection and self-awareness enable a leader to get to know his or her purpose, beliefs and individual characteristics. The moral core of SL will take into consideration the effects of actions and the actions of the individuals that they serve – “the least privileged in the society” (Trastek et al., 2014). As the moral core develops, these internalised virtues and attitudes towards skills, behaviour and interactions will be implemented by the leader.

Hu and Liden (2011) state that SL focuses on the development of employees to reach their full potential in areas of task effectiveness, community stewardship, self-motivation and future leadership capabilities. SL will bring out the best in their followers, and relies on one-on-one communication to understand the follower’s abilities, needs, desires, goals and potential. Hu and Liden (2011) stated that servant leaders will use the knowledge of the employees’ interests and characteristics to assist them to reach their full potential. Servant leaders encourage their followers through building self-confidence, serving as a role model, inspiring trust, as well as providing their followers with information, feedback and resources. Hu and Liden
reveal that servant leaders build trust by selflessly serving their followers first. SL manifests through developing and empowering followers. A servant leader will express authenticity, interpersonal acceptance, humility and stewardship, as well as provide guidance, which will lead to the feeling of empowerment among subordinates (Mahembe & Engelbrecht, 2014). The feeling of empowerment brings forth feelings of self-confidence and a high sense of being able to positively influence the work environment. By being a servant leader one can start cultivating a culture of positive attitudes. A culture of SL can be created by transforming followers into servant leaders, serving not only their leader but also their co-workers.

Although the SL literature does not provide a consistent set of dimensions that define the concept, this has not stopped researchers giving their view on different dimensions or characteristics of SL. Russell and Stone (2002) mention nine functional characteristics of SL, namely vision, honesty, integrity, trust, service, modelling, pioneering, appreciation of others and empowerment. Liden, Wayne, Zhao and Henderson (2008) identified nine dimensions. The first dimension is known as emotional healing, which refers to the act of showing sensitivity to your followers’ personal concerns. The following dimension is creating value for the community, which can be seen as a conscious and definite concern for helping the community. Conceptual skills refer to the knowledge a leader must have about the organisation and tasks to effectively support or assist followers. Empowering encourages and facilitates others by identifying problems and solutions. Empowering also determines when and how to complete specific work. Another dimension is helping subordinates grow and succeed by demonstrating to them genuine concern for their career growth and development by providing them with mentoring and support. This also entails putting subordinates first through making it clear that their work needs are a priority. Behaving ethically can also be seen as a dimension of SL that refers to interacting with others openly, fairly and honestly. Relationship refers to making an effort to know, understand and support others in the organisation. The emphasis on the relationship is to build a long-term relationship. Lastly, servant hood is a way of being marked by one’s self-categorisation and desire to be seen by others as someone who serves first, even when that involves self-sacrifice.

Barbuto and Wheeler (2006a) define eleven potential characteristics of SL: calling, listening, empathy, healing, awareness, persuasion, conceptualisation, foresight,
stewardship, growth, and community building. The leader must fulfil a calling or conscious choice to serve others and give meaning to their lives. Leaders must listen and actively accept employees’ opinions, ideas and suggestions. Empathy needs to be shown by the leader. Thus, leaders need to put themselves in the shoes of others. When employees have hopes, dreams or relationships that fail or end up in disappointment, the leader needs to help employees recover emotionally. The leader must be aware of cues in the environment that need attention or that can influence employee attitudes. Leaders using persuasion are able to influence others without relying on formal authority or legitimate power. Creative processes are expanded and employees are encouraged to use mental models through the conceptualisation of the leaders. Another important characteristic of the servant leader is foresight. Foresight is used by leaders to anticipate the future of the organisation and its members. The vision that the leader has for the organisation and employees needs to be communicated to them regularly. Stewardship refers to a leader that prepares his members and organisation to contribute to society. One of the great outcomes of SL is growth. The followers develop in a positive direction and the leader encourages development and growth. Lastly, a servant leader is someone who can encourage community building. Organisations have the potential to be a community if people who are committed to one another engage in effective communication and address issues. The servant leader is responsible for fostering the sense of community spirit in an organisation (Barbuto & Wheeler, 2006a).

The research of Barbuto and Wheeler (2006b) culminated in a refinement of a different view on leadership as a five-dimensional construct that includes altruistic calling, emotional healing, persuasive mapping, wisdom and organisational stewardship. According to Beck (2014), altruistic calling can be seen as a deep-rooted desired to bring forth a positive difference in someone’s life. This behaviour is motivated by an empathic desire of the leader to benefit the follower. Emotional healing refers to leaders who are empathic, and who have highly developed listening skills that makes them proficient at facilitating the healing process of their followers. Followers will turn to this person when they experience personal trauma. These leaders usually create an environment in which employees are willing to voice personal and professional issues (Barbuto & Wheeler, 2006b). A leader with wisdom is someone who demonstrates a combination of awareness of their surroundings as
well as an anticipation of consequences. Servant leaders not only have the knowledge, but they also use the knowledge. An essential dimension of SL is persuasive mapping, which refers to the ability to influence others (Yukl, 2013). Barbuto and Wheeler (2006b) found that leaders who make use of persuasive mapping will influence others with sound reasoning, as well as with mental frameworks. Servant leaders conceptualise greater possibilities and encourage others to have dreams for a great future. An essential part of SL is that, by using persuasion, these leaders are able to influence their followers without relying on formal authority (Beck, 2014). Recent South African research on SL found good construct validity and reliability for the five dimensions of SL (Mahembe & Engelbrecht, 2014). This study will also view and measure SL as a five-dimensional construct.

Considerable attention has been devoted to what constitutes a servant leader and what are the consequences of SL (Liden, Panaccio, Meuser, Hu & Wayne, 2014). However, minimal attention has been paid to the antecedents and how to develop a servant leader. It is important to realise that SL does not happen in a vacuum and that the context will have an influence on whether these leader characteristics will result in the manifestation of SL (Liden et al., 2014). Van Dierendonck (2011) identified a number of factors that can be regarded as antecedents of SL. It is argued that agreeableness can be seen as a personality characteristic of servant leaders. Agreeableness refers to part of the Big Five factor model of personality, which emphasises altruism. Individuals high on agreeableness would most likely serve their followers and would be perceived as servant leaders by their followers (Van Dierendonck, 2011). A servant leader is generous and has a great willingness to help others. The motivation for leadership within these individuals comes from their interest and from empathy with other people.

Self-determination was found to be a characteristic needed to act as a servant leader (Van Dierendonck, 2011). When someone is self-determined it means that the person experiences a sense of choice in initiating and regulating his or her own actions. According Van Dierendonck (2011), cognitive complexity is positively linked to SL. Cognitive complexity is an individual characteristic that may play a role in a person’s development towards SL. Cognitive complexity will allow someone to perceive social behaviour in a differentiated fashion and also to make a more...
accurate judgement of a social situation (Bieri, as cited in Van Dierendonck, 2011). Someone with a high capacity for cognitive complexity can see beyond the present-day needs, foresee outcomes of situations, and can handle and think through conflicts. These behaviours are linked with the characteristics of SL. High senses of trust, loyalty, affect and personal respect, as well as persuasiveness, are characteristics that will cause employees to perceive a leader as a servant leader. These characteristics would lead employees to voluntarily follow the person whom they perceive as a servant leader, as they are persuaded by the leader that this is the right path to follow (Greenleaf, 1998).

The last antecedent that was found to be a significant predictor of SL and that will lead to employees’ experiencing their leader as a servant leader is the psychological climate of the work environment. According to Van Dierendonck (2011), SL is beneficial to an organisation because of the awakening, engaging and developing of its employees. In order to develop employees, an atmosphere must be created in which there is room to learn, but also room to make mistakes. Humility, authenticity and interpersonal acceptance are necessary to create such an atmosphere. A leader whose behaviour is characterised by these characteristics is essential to create such an atmosphere and would most likely be perceived by followers as a servant leader.

SL is an indicator of various outcomes. A large amount of emerging research on positive organisational behaviour has revealed that leadership can play a vital role in affecting the character development or positive well-being of an individual (Zhu et al., 2009). Servant leaders who nurture self-efficacy and self-motivation influence employees in a way that they are more committed to the organisational values, more willing to maintaining high performance levels and also most likely to model their leaders (Liden et al., 2008). Walumbwa et al. (2010) also found that SL enhances self-efficacy, a dimension of PsyCap, of followers through enhancing followers’ technical competence and their personal development, and by giving them opportunities to develop new skills and assist them in attaining career goals. Servant leaders are more likely to enable followers to be successful because of the development and improvement of their repertoire of skills, knowledge and abilities, which all contribute to increasing levels of self-efficacy.
Servant leaders contribute to the development of positive attitudes in their followers, such as organisational citizenship behaviour (Sendjaya, Sarros & Santora, 2008). The presence of OCB can increase effectiveness in managerial and co-worker productivity. There is no doubt that SL is a leadership style with a lot of potential. Hu and Liden (2011), as well as Mahembe and Engelbrecht (2014), found that SL has a positive relationship with team effectiveness. It is also evident that SL has a positive relationship with affective team commitment, and that commitment to a team will enhance team performance (Mahembe & Engelbrecht, 2013), which will increase overall performance. Higher rates of retention were found in a study on teachers when leaders engage in a SL style (Anderson, 2005).

Various studies have shown a positive relationship between SL and job satisfaction, especially in the education and ministry field. Thompson (2002) found that the perception that subordinates had of servant leaders had a positive impact on job satisfaction amongst learners at a church college. Empirical data was provided regarding the correlation between the employees’ perceptions of SL and their level of job satisfaction (Anderson, 2005). The empirical data supported the fact that, when a subordinate has a positive perception of a leader, the outcomes would be that the subordinate would experience job satisfaction. Such positive outcomes support SL as an effective leadership style. Hunter et al. (2013) state that SL may improve the ethical culture within an organisation, as SL promotes morality-centred self-reflection. SL may also improve the ethical culture of modern companies. The reason for this is that servant leaders promote more morality-centred self-reflection than other leadership styles (Hunter et al., 2013).

Effective leadership awakens hopeful thinking. It was found that servant leaders strengthen and develop the state of hope in individuals. Searle and Barbuto (2011) propose that the dimensions of SL are all compatible with fostering the development and sustainability of hope. They also state that altruistic calling may help facilitate the development of hope in followers, because this dimension of SL focuses on strengthening others, which is a vital part of developing hope.

A key challenge to the healthcare sector is to ensure that the nursing workforce in South Africa is of good quality, although an increased nurse shortage is experienced. It is crucial to understand what impacts ideal behaviour outcomes, such as WE,
performance, OCB and job satisfaction. If SL is a possible factor that can contribute to the occurrence of these behaviours it should be investigated.

2.4.4 Psychological capital

2.4.4.1 The origin and definition of PsyCap

The intangible “capital” literature has been under attack for its proliferation since 1964. Evidence supporting human capital was seen to be “circumstantial”, and Blaug (1976) stated that the human capital theory evolved without a Popperian model, which allows independent testing and falsification theories (Youssef-Morgan, 2014). A similar challenge arose with social capital, which was applied to so many different contexts and events that it lost distinct meaning. Intellectual capital and other types of capital were also seen as unique at times, but the value contributed decreased or they became subsumed under constructs such as customer, innovation, process, organisational and structural capital (Youseff-Morgan, 2014). POB was conceptualised as a set of inclusion criteria that could be used to identify, evaluate and integrate relevant positive psychological concepts into a larger evidence-based framework. The resources that were found to meet these criteria were hope, efficacy, resilience and optimism. It was found that these four states represent a single latent variable, termed psychological capital (Luthans & Avolio., 2014). When POB emerged it was natural to expect that theorists would be sceptical about this research stream. However, research evidence supports PsyCap conceptually, empirically and practically. This is one of the reasons that made PsyCap grow and gain acceptance and popularity (Youseff-Morgan, 2014).

Emphasis on valid and reliable measurement was present from the very start of POB and PsyCap research (Luthans et al., 2010). Beyond conceptualising and empirically testing PsyCap’s developmental potential, it can also be seen as a construct that helped in shaping the trait versus state debate. Traits and states are illustrated on a continuum that ranges from “pure traits” to “pure states”. The “pure traits” are genetically determined and almost impossible to change, whereas “pure states” are volatile and prone to influences. In other words, “trait-like” personality characteristics are placed near the trait end of the continuum, and PsyCap is placed at the state end of the continuum (Youseff-Morgan, 2014). The fact that PsyCap has developmental potential reflects its state-like characteristics and distinguishes it from different
positive but trait-based constructs. Various research on and applications of this construct are being done worldwide, and currently PsyCap is a mainstream topic in POB.

Luthans and Youssef (2004) state that PsyCap is a core construct of POB. PsyCap is a higher-order constellation of positive psychological components (Görgens-Ekermans & Herbert, 2013). One can refer to PsyCap as a person’s positive appraisal of circumstances and probability for success based on motivated effort and perseverance (Paterson, Luthans & Jeung, 2014). PsyCap, as an indicator of POB, can be referred to as a personal resource that would help individuals achieve goals, buffer demands and facilitate personal growth (De Waal & Pienaar, 2013). The construct of PsyCap consists of four psychological resource capacities, namely hope, optimism, self-efficacy and resilience (Luthans, Luthans & Luthans, 2004). When these four resources are combined they provide a source of motivational energy that fuels goal-striving and will enable employees to persist at work, regardless of their circumstances (Wernsing, 2014). Murthy (2014) underline the importance of PsyCap by stating that it focuses on “who you are” and “what you can become through positive development”, and can be differentiated from human capital (“what you know”), social capital (“who you know”) and financial capital (“what you have”). PsyCap focuses on the positive nature and strengths of employees. This psychological resource has a fuelling effect on an employee’s growth and performance and will be of much worth in the nursing environment. Each construct of PsyCap will be presented briefly below. However, this study will be focusing on the synergistic effect of PsyCap as a whole, as the overall construct produces higher correlations with certain outcomes than each component independently (Wernsing, 2014).

(a) Hope
Hope can be seen as a multidimensional construct that exists of willpower and waypower (Snyder, 2002). Willpower is the individual’s agency or determination to achieve goals. Waypower is the ability of an individual to devise alternative pathways in order to achieve a goal when faced with obstacles. It is hope that enables an individual to be motivated to achieve success in the task at hand by looking for the best possible pathway. Individuals who have high hopes will also redirect their paths
to their goals in order to be successful (Larson, Norman, Hughes & Avey, 2013). Both components of hope complement each other (Simons & Buitendach, 2013).

(b) Optimism
Optimism is a realistic, flexible and dynamic concept that is not fixed but can be learned and developed. Simons and Buitenbach (2013) define optimism as persistence and pervasiveness. The above mentioned are two key dimensions of how people will explain events. People with a high level of optimism will see an obstacle as a challenge that can lead to success and they will persevere in the face of obstacles.

(c) Self-efficacy
Self-efficacy is a person’s conviction regarding their ability to organise and execute motivation, cognitive resources and courses of action that will lead to the accomplishment of specific tasks (Simons & Buitenbach, 2013). Teo, Roche, Pick & Newton (2014) stated that self-efficacy refers to confidence to take on and put in the necessary effort to succeed at challenging tasks. Employees with a high self-efficacy have faith in their own capability to manage their surroundings as well as attain personal objectives (Harris, 2012).

(d) Resilience
Individuals’ who have a high level of resilience have the ability to manipulate their environment successfully to protect themselves from negative consequences. Resilient people will get up and move on after a stressful experience or event. Resilience emphasises the strength and coping resources of an individual to successfully manage difficult and testing situations (Simons & Buitendach, 2013). Youssef and Luthans (2007) state that resilience is positively related to various work outcomes.

The important role of personal resources that aid employee coping and well-being, such as PsyCap, has gained momentum over the years. Nurses need to build inner strength to cope with their daily work. In order to increase the positive states of
nurses that will help them cope with the very demanding nursing environment, they need higher levels of personal resources.

Although research on PsyCap has attracted a lot of attention, little is known about the antecedents of PsyCap. The most powerful predictor of PsyCap was found to be individual characteristics. Avey (2014) found that individual differences explained 24% of variance in PsyCap. Regression analysis reveals that the level of self-esteem, as individual difference, uniquely predicts variance in PsyCap (Avey, 2014). Supervision was also found to predict PsyCap, explaining 23% of the variance in PsyCap (Avey, 2014). Task complexity, as a job characteristic, also can be seen as an antecedent of the positive state, PsyCap (Luthans & Avolio, as cited in Avey, 2014). Thus, the way the job is designed is important and can have an influence on the level of psychological capital of nurses. McMurray, Pirola-Merlo, Sarros and Islam (2010) revealed that age played a significant role in PsyCap levels, with older employees showing a higher level of PsyCap than younger employees. As mentioned early, only a few studies have been conducted on the antecedents of PsyCap and this area is lacking in research. However, this study will not focus on the antecedents of PsyCap, but on PsyCap as an antecedent of WE and OCB.

There is evidence that shows that PsyCap as a core construct has predictive value above and beyond the first-order latent variables (i.e., hope, efficacy, resiliency and optimism). Therefore this study focuses on the effect of PsyCap as a whole (Luthans & Avolio, 2014).

PsyCap leads to various positive individual and organisational outcomes. It has been found that PsyCap is a useful predictor of various job attitudes, behaviours, as well as performance (Avey, 2014). A large amount of meta-analytical research on psychological capital has been performed over the past few decades. This research shows that PsyCap is positively associated with favourable attitudes and behaviours, but also negatively associated with unfavourable attitudes and behaviours. These unfavourable attitudes include cynicism, turnover intentions, absenteeism, job stress and anxiety, and undesirable employee behaviours such as deviance (Larson & Luthans, 2006; Memili, Welsh & Kaciak, 2014). PsyCap adds value as it helps reduce these negative work-related behaviours and attitudes amongst employees. However, PsyCap plays an even more vital role when it comes to favourable
attitudes and behaviours. Vogelgesang, Clapp-Smith and Osland (2014) revealed that PsyCap has a positive impact on job satisfaction, commitment, engagement and OCB. Thus, PsyCap will have a positive influence on an employee’s overall well-being (Vogelgesang et al., 2014). One important consequences of PsyCap, according to Wernsing (2014), is employee performance. It was found that PsyCap was a significant and unique predictor of employee performance in the workplace.

PsyCap was found to be related to a number of leadership styles. However, research on PsyCap and leadership is still lacking. PsyCap is related to authentic leadership, ethical and empowering leadership (Avey, 2014). Wernsing (2014) also revealed that PsyCap is an indication of a global mind-set and global leadership. Global leadership competencies include variables such as optimism, resiliency, efficacy and hope (Vogelgesang et al., 2014). PsyCap is a personal resource that can play an important role in protecting nurses from the increased occurrence of burnout and its detrimental health and job related effects (Laschinger & Fida, 2014). There is no doubt that employees with a high level of PsyCap will be able to cope better within demanding work environments.

In conclusion, PsyCap, as a personal resource, was integrated into the JD-R model and the effect of this resource was examined.

2.4.5 Illegitimate Tasks

2.4.5.1 The origin and definition of IT

The concept of IT are new and introduced only recently by Semmer and colleagues (Semmer, Tschan, Meier, Facchin, & Jacobshagen, 2010). According to Pereira (2014), IT was introduced on the basis of three theories, namely role theory, identity theory and justice theory. Role theory can explain what makes a task to be perceived as illegitimate by employees. Organisational roles refer to the behavioural expectations of employees (Kahn, Wolfe, Quinn, Snoek & Rosenthal, 1964); in other words, defining what legitimately may be expected from an employee in a particular role. In contrast to what may be expected of an employee, there are things that may not be expected from someone in a specific role, and this is what represents the basis for the concept of IT (Pereira, Semmer & Elfering, 2014). Professional roles
can become part of employees’ identity and therefore also part of the self. When referring to social identity theory it is clear that people found great value in their social identity. Positive evaluation and affirmation of one’s professional identity evokes pride and self-esteem. In contrast to this, negative self-evaluation or threats to the identity are stressful. In others words, if something is expected of you that is contradictory to what your role includes it can be seen as a role stressor, which is a well-established stressor (Semmer et al., 2014). Thus, IT can be seen as a construct part of stress research.

According to Stets and Burke (2000), in identity theory the self is reflexive in categorising, classifying or naming itself in particular ways in relation to other existing social categories or classifications. This process can be referred to as identification. Identity theory deals primarily with components of a structured society. In other words, individuals acting in the context of social structures name each other and themselves in the sense of recognising each other as occupants of positions or roles. This naming brings forth meaning in the form of expectations that one has about others and one’s own behaviour. The core of an identity is the categorisation of oneself as an occupant of a specific role, and with the categorisation comes the incorporation of meanings and expectations associated with that specific role and its performance. The expected behaviour and meanings thereof form a set of standards that guide behaviour (Stets & Burke, 2000). However, any expectation of employees that do not form part of their identity or the way they have been categorised can be experienced as a threat to the self, as well as a stressor. Thus, the expectation will be perceived as an illegitimate expectation or task required from someone with a specific role or identify.

Justice theory would only be applicable if IT are perceived as an outcome. The abovementioned specifically refers to distributive justice, and IT would represent distributive injustice. It may also be the case that employees feel that decisions about task distribution were made in an unfair way and perceive this behaviour as disrespectful. In this case, procedural and interactional (in)justice are relevant. According to Greenberg (2010), injustice represents a stressor. If employees are treated in an unfair way they feel disrespected, which implies a threat to their sense of self. It is important to notice that justice theories focus on the allocation of
positions, resources and rewards, and not on task assignments (Niehoff & Moorman, 1993). However, justice theories can be useful in explaining employee reactions once tasks are judged as illegitimate, although neither justice theories nor justice measures refer particularly to IT (Stets & Burke, 2000).

According to Semmer, Jacobshagen, Meier and Elfering (2007), the concept of IT grew from Stress-as-Offense-to-Self (SOS) theory. This theory focuses on the fact that people strive to maintain a positive self-image and any threat to the self-image is the core of many stressful experiences (Semmer et al., 2014). Working conditions (including task characteristics) may possibly contain social messages for an employee (Semmer et al., 2014) and, when this message is negative, the self as construct can be offended.

There is an ongoing debate on the need for new perspectives on job demands. These new job demands would specifically be useful if they can be integrated within the JD-R model of occupational well-being (Bakker et al., 2014). New job demands have recently been introduced and empirically studied. IT is one of the emerging new demands (Semmer et al., 2010). However, not much research has been done regarding IT. This study will aim to further develop the conceptual and empirical foundation of IT as new job demand within the JD-R model of occupational well-being.

IT are part of the wider domain of justice and is strongly related with the violation of the psychological contract, but this construct is also rooted in stress research (Schie, Güntert & Wehner, 2012). Although IT represents a construct in its own right, it can also be seen as a construct in the broader domain of role stress. Therefore, this study will focus on IT as demands that cause stress. IT can be seen as a new stressor occurring more frequently in organisations, especially in nursing. This stressor is specifically tied to feeling offended. As mentioned above, employees are responsible for specific tasks. If the task does not conform to the norms regarding what could be expected of the given person, it will be seen as illegitimate. In other words, the extent to which a task violates such norms will determine whether it is illegitimate or not. IT are conceived of as something that offends not only one’s professional identity, but also the self (Semmer et al., 2010). Although the concept of
IT is relevant in many organisations, the occurrence of IT in the nursing industry is problematic. Nurses are faced with various stressors and the effects of IT are only worsening this reality. There is no doubt that IT are of great practical relevance in the nursing industry.

The underlying dimensionality of IT has been an empirical chase. There are two conceptual underlying sub-dimensions of IT, namely unreasonable and unnecessary tasks (Semmer et al., 2010, 2012, 2014). However, empirical research on the dimensionality of IT has shown that a uni-dimensional, one-factor model fits the data of a number of samples better. Therefore, although IT consists of sub-dimensions, it is recommended that the construct is seen as uni-dimensional (Eatough, 2013). IT can be described in term of two facets, namely unreasonable tasks and unnecessary tasks (Semmer et al., 2014). Unreasonable tasks refer to tasks that are not appropriate to ask from a specific person because it is outside the scope of that person’s occupation. Unnecessary tasks can be seen as tasks that are meaningless and that should be assigned to someone else, usually someone in a more junior position (Björk et al., 2013). However, illegitimacy of a task can also be experienced in an upward fashion. In this case a task can be unsuited to one’s occupational status, for example when a beginner nurse is asked to perform a task that needs someone with more experience and expertise. Another example is when a nurse is put in an awkward position of having to deliver bad news to a family, a task that should have been done by the physician (Eatough, 2013). Although the abovementioned act should not take place in hospitals, it does, especially hospitals with a lack of human resources. IT can also place people in an awkward position, such as when a supervisor asks an employee to communicate a negative decision because the supervisor does not want to do it herself. The second facet of IT, unnecessary task, refers to tasks that should not be carried out at all. These tasks are unnecessary because they do not make sense, they could have been avoided or they could be carried out with far less effort if things were organised more efficiently (Semmer et al, 2012). A task may be legitimate for one profession but illegitimate for another. The legitimacy of the task may even vary from situation to situation, as when a nurse receives a demand to close the window next to a patient who is unable to do so it will be perfectly legitimate, but if the demand was made by a person who was perfectly able, it would be perceived as illegitimate. It is important to note that IT
are based on the perception of the employees. In other words, the social meaning of the task, and not the task itself, is the stress component (Eatough, 2013). According to Semmer et al. (2014) it is not the intrinsic qualities that make a task illegitimate, but the content of a task expected from a given person, place, time or situation. In other words, IT are not always inherently stressful or demanding, but the unreasonable and unnecessary nature of the context in which they are made makes them stressful.

Any position occupied in an organisation is defined by aspects such as status, expectations and responsibilities. What legitimately may be expected of an employee will depend on his or her occupation. In other words, a supervisor can be expected to coordinate teams, a nurse can be expected to support the healing process of a patient, and a cleaner can be expected to clean. Although different roles imply different acts that can be expected, they also imply acts that cannot be expected of a specific role (Semmer et al., 2012). When a registered nurse is asked to clean the toilets she would not only see the task as illegitimate, but also as offending. Not much attention has been given to the roles of employees that cannot be expected of them, although this aspect may have negative consequences. Semmer et al. (2010) suggests that roles are more than expectations. A person’s professional role becomes part of his or her social identity. An individual's professional identity provides a sense of meaning and purpose. Acts that confirm one’s professional identity are likely to induce pride and self-esteem. IT has the potential to harm one’s identity. Any threat to one’s identity can be seen and experienced as a stressor. In other words, IT can also be seen as identity-threatening stressors.

There currently are no studies referring specifically to the antecedents of IT. However, a number of behaviours and activities were taken from the literature that would most likely lead to the occurrence of IT. When the supervisor is inconsiderate of employees, it can be expected that demeaning tasks for employees or communicating the assignments without considering potential offense would take place (Semmer et al., 2014). Another potential antecedent is culture. When tasks are perceived as illegitimate by one culture, and another culture perceives them as legitimate, this could have problematic consequences (Semmer et al., 2014). The same can take place within the professional culture of an organisation. Some employees may perceive tasks as legitimate, whereas others see them as
illegitimate. When unfairness and injustice take place within a working environment on a regular basis, one can assume that IT would most likely take place in such an environment (Eatough, 2013), especially in organisations that have high demands from clients and a shortage of employees. The healthcare system is a perfect example of the above mentioned. The shortage of nurses makes it impossible to have the correct number of staff. The shortage sometimes requires nurses to perform activities that are not part of their job description, simply because there is no one else to do it.

Previous research has shown that IT is associated with various negative consequences. Stocker, Jacobshagen, Semmer and Annen (2010) state that IT is related to strain, reduces well-being, increases counterproductive behaviour, lowers job satisfaction and increases feelings of resentment. IT also reduces the self-determined motivation of employees. Employees will be less likely to remain in an organisation if it is expected of them to perform IT. IT causes resentments such as anger, unfairness, indignation, dissatisfaction and hurt. Björk et al. (2013) provide evidence that IT are positively related with stress and inversely related with satisfaction with work performance. Employees that engage in IT usually feel that their psychological contract has been breached and that their expectations have been violated. Employees will usually feel that their needs, roles and capabilities have not been respected. The feeling of disrespect undermines their self-esteem or perception they have of themselves, which evoke negative emotions (Semmer, Jacobshagen, Meier & Elfering, 2007). Identity-threatening stressors, that bring forth an offense to self, should be related to low self-esteem. Depressive mood and fatigue were also found to be positively correlated with IT (Eatough, 2013).

2.5 Relationships between variables

2.5.1 Work engagement and organisational citizenship behaviour
Murthy (2014) provide evidence that WE is a significant predictor of OCB amongst executives. A study done by Matamala (2011) provided evidence of a relationship between WE and OCB. A stronger relationship was found between WE and OCB towards the organisation (OCBO) compared to organisational citizenship behaviour towards the individual (OCBP). Employees who are engaged and heavily immersed
in task-related activities will be more likely to engage in OCB that may arise from their work tasks. Another study supported the significant positive relationship between employee engagement and OCB and also stated that OCB promotes the efficient and effective functioning of the organisation, as well as employee performance (Ariani, 2012). Ariani (2012) believes that engaged employees can perform extra-role behaviour because they “free up” resources through the accomplishment of their goals, as well as by performing their tasks efficiently. Both the above accomplishments enable them to pursue activities that are not part of their job descriptions. In the very demanding nursing work environment, extra-role behaviour is extremely important, especially in hospitals with a shortage of staff. Anything that can lead to nurses doing more than expected and walking the extra mile would be of much worth in this environment. Although both OCB and WE are positive and desired work outcomes, it would be important to investigate the relationship between these two variables, as it would be of much worth if WE caused nurses to engage in OCB.

Hypothesis 1: WE will have a significant positive effect on the OCB of nurses.

2.5.2 Work engagement and servant leadership

The impact of leadership must not be underestimated as a driving force for employee engagement. Although various studies have shown that WE is related to some leadership styles, this study is interested in the relationship between WE and SL. One of the drivers of WE is appreciation (Carter, 2012). Appreciation was identified by Russell and Stone (2002) as a characteristic of SL. One can assume that, if the servant leader shows appreciation towards his or her followers, the followers will more likely be in a position to experience WE. Another characteristic of SL that is related to WE and has been identified by a number of SL studies is trust. Employees who have a belief in the values and goals of the leaders of their organisation will be more loyal and dedicated (Carter, 2012; Vondey, 2010; Russell & Stone, 2002). Carter (2012) provides evidence that SL has a strong influence on employee engagement amongst restaurant workers and their managers. Carter (2012) states that servant leaders create a supportive environment and that the servant leader’s behaviour is beneficial for follower WE. Although there are some studies that provide
evidence that shows a relationship between WE and SL, more research is necessary to support the relationship between SL and WE.

**Hypothesis 2**: SL will have a significant positive effect on the WE of nurses.

### 2.5.3 Work engagement and psychological capital

Boamah and Laschinger (2014) state that personal resources are just as important as workplace resources in explaining the occurrence of WE. Othman and Nasuradin (2011) argue that, in order to promote WE in the nursing workforce, nurses need to have higher PsyCap. When an individual has psychological strengths it can create tendencies that are favourable to WE. Tims et al. (2012) state that job resources are the most important factor that enables employees to be engaged in their work. This is in accordance with the Job Demands-Resource Model of Occupational Well-Being, which states that job resources are the main driver of WE, which will lead to increased well-being and positive organisational outcomes. Simons and Buitendach (2013) found a positive significant relationship between the PsyCap and WE of call centre employees. Various studies of POB have shown that PsyCap may contribute to a decreased level of stress and an increased level of WE. The level of engagement also represents the willingness of employees to dedicate physical, cognitive and emotional resources to their work (Ariani, 2012). The higher the level of engagement, the more willing the employees will be to dedicate personal resources to their work. Murthy (2014) found a significantly positive relationship between PsyCap and the WE of executives. The overall constructs of PsyCap relate better to the outcome of WE than the individual constructs of PsyCap (hope, optimism, self-efficacy and resilience) do. However Simons and Buitenbach (2013) also found that each of the dimensions of PsyCap and the dimensions of WE had a positive relationship. Self-efficacy and optimism as dimensions of PsyCap were found to have a significant positive relationship with WE. Optimism also displayed a significant positive relationship with each of the dimensions of WE, namely vigour, dedication and absorption.

A study done on Malaysian nurses revealed that hope and resilience are positively related with WE (Othman & Nasuradin, 2011). Hope and resilience were not only related, but these dimensions of PsyCap were seen as important factors determining
the WE of hospital staff nurses (Othman & Nasurdin, 2011). Bakker et al. (2008) state that engaged employees are highly self-efficacious. These employees believe that they are able to meet the demands faced within a wide context. Engaged employees also believe that they will experience good outcomes in life, in other words they are optimistic. Self-efficacy and optimism were found to make a unique contribution to explaining variance in WE over time. The reason why it is unique is because variance is explained over and above the impact of job resources and previous levels of engagement (Bakker et al., 2008). Several studies have found positive relationships between PsyCap and WE in the challenging environment of nurses (Bakker, Gierveld & Van Rijswijk, 2006). Thus, revealing the strength of the linkage between WE and personal resources (PsyCap) would be interesting.

Hypothesis 3: PsyCap will have a significant positive effect on the WE of nurses.

2.5.4 Work engagement and illegitimate tasks
Schie et al. (2012) found that IT has a negative impact on the WE of employees. As mentioned, IT is rooted in stress research. The literature shows that stress has a negative effect on WE (Caponetti, 2012). Wright (2009) demonstrated in a study that job demands, like role stressors, were negatively related to WE. Nurses often feel that IT is not part of their work role and it is experienced as a stressor that effects WE negatively. Iqbal, Khan and Iqbal (2012) refer to job stress as an imbalance between job demands and an employee’s ability to fulfil these demands. The employee’s stress level will increase as the imbalance between job demands and ability to meet demands increases. This study also supports the negative and significant relationship between job stress, in this case IT, and WE. Stocker et al. (2010) state that WE is significantly correlated with both unnecessary tasks and unreasonable tasks. According to Semmer et al. (2014), IT would qualify as a demand in the job demand-resource model associated with burnout, which is characterised by emotional exhaustion and disengagement. From the provided information it is clear that stressors are related to WE. This study is interested in IT, and the hypothesis will test whether IT as stressor will be significantly negatively related to employee WE.
Hypothesis 4: IT (both unreasonable tasks and unnecessary tasks) will have a significant negative effect on the WE of nurses.

2.5.5 Organisational citizenship behaviour and servant leadership

Although it is evident that SL is related to various outcomes, this study’s focus is on whether there is a relationship between SL and OCB. SL is an emerging perspective by which OCB theory can be extended. Mathumbu and Dodd (2013) found that nurses perform better when they perceive that they are supported by their organisation. When employees feel more supported they will engage in OCB. Lo and Ramayah (2009) have demonstrated that leaders’ support is the strongest predictor of significant OCB among subordinates. Chen, Wang, Chang and Hu (2008) found in a study that was done on nurses that supervisor support had a significant effect on the nurses’ OCB. In a study that investigated whether there is a relationship between SL and OCB, evidence was provided that a relationship does indeed exist.

Walumbwa et al. (2010) revealed that commitment, self-efficacy, a procedural justice climate and a service climate all partially mediate the relationship between SL and OCB. Several studies done on SL have shown a positive relationship between SL and OCB (Ehrhart, 2004; Walumbwa et al., 2010). SL explains variance in OCB beyond that predicted by transformational leadership as well as the leader-member exchange theory. The information provided above can be seen as important because transformational leadership and leader-member exchange theory have a strong relationship with positive employee attitudes and behaviours. Thus, SL is a unique leadership theory that can extend researchers’ knowledge about leadership processes and outcomes (Walumbwa et al., 2010).

Hypothesis 5: SL will have a significant positive effect on the OCB of nurses.

2.5.6 Organisational citizenship behaviour and psychological capital

Organisations need employees who are psychologically connected to their work, employees who are willing and also able to invest themselves fully in their roles. Employees are needed who are proactive, willing to go beyond their job description and committed to high quality performance standards A significant positive relationship between PsyCap and OCB in a study that aimed to extend previous
research on PsyCap as a positive predictor of OCB. Beal, Stavros and Cole (2013) examined the relationship between PsyCap and OCB and the results showed that PsyCap had a positive relationship with OCB. Another study that was done in India amongst employees in private and public sectors revealed that PsyCap influenced OCB (Shahnawaz & Jafri, 2009). Only a few studies have been done in South Africa on the relationship between PsyCap and OCB. More studies are necessary to support the relationship between these two variables.

**Hypothesis 6:** PsyCap has a significant positive effect on the OCB of nurses.

### 2.5.7 Organisational citizenship behaviour and illegitimate tasks

Semmer et al. (2010) point out that employees can be active and take initiative in many ways, including through behaviour that is positive (OCB) or negative (CWB). IT are associated with counterproductive behaviour in organisations. The more IT required from an employee, the higher the occurrence of CWB. Fox, Spector, Goh, Bruursema and Kessler (2012) provide information that supports the relationship between OCB and CWB. Their study showed that there was a strong negative correlation between OCB and CWB. One can assume IT will be negatively related with OCB. The reason for the abovementioned is because of the strong relationship that OCB has with CWB. In other words, employees faced with a large number of IT will not engage in OCB.

**Hypothesis 7:** IT (both unreasonable tasks and unnecessary tasks) will have a significant negative effect on the OCB of nurses.

### 2.6 Moderating effects between variables

Job demands and resources initiate different processes, although they also have joint effects. These joint effects are of much value in demanding work environments such as nursing. Job demands and resources interact with each other to predict WE, which in turn leads to increased well-being and positive organisational outcomes. There are two possible ways in which demands and resources may have a combined effect on WE that will lead to well-being. The first interaction is where job resources can buffer the impact of job demands on strain. A large number of studies
have shown that job resources such as social support, performance feedback and opportunities for development can moderate the impact of job demands on strain, including burnout (Bakker & Sanz-Vergel, 2013).

Regarding personal resources that have been included in the JD-R model recently, Bakker et al. (2014) found that job demands, especially emotional demands experienced by nurses, strengthen the impact of personal resources on WE. On the other hand, employees who have high levels of personal resources are seen as individuals who can cope better with daily job demands. Teo, Roche, Pick & Newton (2014) state that nurses with more job demands will use more job and personal resources to cope with these increasing demands. Thus, PsyCap, as personal resource, can be seen as a vital source that has a moderating effect on the negative effects of job demands.

The second interaction is where job demands strengthen the impact of job resources on engagement or motivation. In other words, job resources become salient and will have the strongest positive impact on WE when job demands are high. Predominantly when employees are confronted with challenging job demands, job resources become valuable and foster dedication to the tasks at hand (Bakker & Sanz-Vergel, 2013). From the information provided above, the following hypotheses were developed and tested:

**Hypothesis 8:** SL has a significant moderating effect on the relationship between IT and WE.

**Hypothesis 9:** PsyCap has a moderating effect on the relationship between IT and WE.

**Hypothesis 10:** IT has a significant moderating effect on the relationship between SL and WE.

**Hypothesis 11:** IT has a significant moderating effect on the relationship between PsyCap and WE.
2.7 Conceptual model

The hypotheses stated above are represented in Figure 2.2.

![Conceptual model diagram](image)

**Figure 2.2:** Conceptual model of work engagement and organisational citizenship behaviour

2.8 Chapter summary

The literature review provided information on research done previously on each latent variable. Information regarding previous research on the relationships between all the variables was provided. This research evidence was used to develop hypotheses that were tested in this study. Throughout the literature review, the Job Demands-Resources model of occupational wellbeing was used as a framework.
CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction
The main purpose of the current chapter is to introduce the methodology and research design that best fits the study. The methodology used to test the structural model plays a vital role and therefore had to be chosen carefully in order to maximise the probability of valid findings as well as valid explanations. This section also includes the statistical descriptions of the sample that were used in the study. The research procedure and data collection process are discussed thoroughly. The different measuring instruments used to measure each variable amongst the sample group are introduced. The technical aspects of each measuring instrument that support the reason for the selection of the specific instruments are revealed. The reason for the specific methods chosen is discussed and an explanation is provided of how the results were interpreted.

3.2 Substantive research hypothesis
The overarching substantive research hypothesis can be dissected into the following, more detailed, specific, direct-effect substantive research hypotheses:

Hypothesis 1: In the proposed structural model it is hypothesised that WE has a significant positive effect on the OCB of nurses.

Hypothesis 2: In the proposed structural model it is hypothesised that SL has a significant positive effect on the WE of nurses.

Hypothesis 3: In the proposed structural model it is hypothesised that PsyCap has a significant positive effect on the WE of nurses.

Hypothesis 4: In the proposed structural model it is hypothesised that IT (both unreasonable tasks and unnecessary tasks) has a significant negative effect on the WE of nurses.
Hypothesis 5: In the proposed structural model it is hypothesised that SL has a significant positive effect on the OCB of nurses.

Hypothesis 6: In the proposed structural model it is hypothesised that PsyCap has a significant positively effect on the OCB of nurses.

Hypothesis 7: In the proposed structural model it is hypothesised that IT (both unreasonable tasks and unnecessary tasks) have a significant negative effect on the OCB of nurses.

Hypothesis 8: In the proposed structural model it is hypothesised that SL has a significant moderating effect on the relationship between IT and WE.

Hypothesis 9: In the proposed structural model it is hypothesised that PsyCap has a moderating effect on the relationship between IT and WE.

Hypothesis 10: In the proposed structural model it is hypothesised that IT have a significant moderating effect on the relationship between SL and WE.

Hypothesis 11: In the proposed structural model it is hypothesised that IT have a significant moderating effect on the relationship between PsyCap and WE.

3.3 Structural model
The structural model (Figure 3.1) represents the statistical hypotheses for the study. All the variables and interaction effects between variables included in the structural model are depicted in Table 3.1.
Table: 3.1

*Summary of Latent Variables*

<table>
<thead>
<tr>
<th>η1</th>
<th>Work Engagement (WE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>η2</td>
<td>Organisational Citizenship Behaviour (OCB)</td>
</tr>
<tr>
<td>η3</td>
<td>Servant Leadership (SL)</td>
</tr>
<tr>
<td>η4</td>
<td>Psychological Capital (PsyCap)</td>
</tr>
<tr>
<td>η5</td>
<td>Illegitimate Tasks (IT)</td>
</tr>
<tr>
<td>η6</td>
<td>Servant Leadership* Illegitimate tasks</td>
</tr>
<tr>
<td>η7</td>
<td>Psychological Capital* Illegitimate tasks</td>
</tr>
<tr>
<td>η8</td>
<td>Illegitimate tasks* Servant Leadership</td>
</tr>
<tr>
<td>η9</td>
<td>Illegitimate tasks* Psychological Capital</td>
</tr>
</tbody>
</table>
Figure 3.1: Structural model of work engagement and organisational citizenship behaviour

3.4 Research design

3.4.1 Research approach
A non-experimental approach was followed; in other words, no manipulation of variables was done. In the case of no manipulation, a correlational ex post facto research design will be the best approach to follow. Ex post facto research is ideal
for studies in which the manipulation of the characteristics of human participants is not possible or unacceptable (Simon & Goes, 2013). Through ex post facto investigation this study sought to reveal possible relationships between the different constructs. The study used the collected data to address the hypotheses.

Whenever one chooses a research design it is important to take into consideration the limitations associated with the research design. There are three shortcomings regarding the ex post facto correlation design. Firstly, no manipulation of independent variables can be done, there is a lack of power to randomise, and there is a risk that one may interpret results in an improper manner (Kerlinger, 1973). Despite the shortcoming of the ex post facto correlational design, it is still a valuable research design to use. This design adds value in the fact that most research on variables in the field of industrial psychology and other social sciences cannot be manipulated. In this case, ex post facto correlational design would be much more preferable than experimental design, in which manipulation is usually done.

A cross-sectional study was used to collect data from the selected sample of nurses in order to make inferences about possible relationships and to gather data to support further or previously conducted research. A correlational research approach was adopted to discover whether there are relationships between the different latent variables. Three possible results can be provided by a correlational study, namely a positive correlation, a negative correlation or no correlation (Cherry, 2013). Quantitative research was done according to a scientific approach. Data were collected, quantified and the results after analysis were generalised to the population of interest.

### 3.4.2 Research method

#### 3.4.2.1 Research participants

It is important that the sample is chosen in such a way that it represents the whole population. The target population of the current study was nurses from private hospitals. Non-probability convenience sampling of Registered nurses (after completion of a four-year degree or diploma in nursing, and in some instances a one-year diploma in a specialised area such as ICU), Enrolled nurses (individuals
who have completed a two-year certificate in nursing) and Auxiliary nurses (the lowest qualification in nursing, referring to individuals who have completed a one-year certificate in nursing) was done (Brandt, 2007). All the nurses who fell into one of the abovementioned nursing categories could participate in the data collection process. The private hospitals that were used to collect data are located in the Western Cape and Gauteng. Permission was required from all the hospitals before data collection started. In other words, no data collection took place without the permission of the participating hospitals. The total number of nurses in all four hospitals was 480 and a total of 199 questionnaires were completed. In other words the response rate was 41.5%.

3.4.2.2 Sample size

The aim was to collect data from a representative sample of the total population. A convenience sampling method was used. The reason for this sampling method was because it is easy to adapt the sample size should it be necessary. However, the nature of the sample group made it difficult. A final sample of 199 nurses from four private hospitals completed the questionnaire. The characteristics of the sample of respondents who participated in the questionnaires are described in this section. The descriptive statistics of the sample (Table 3.2) are provided in terms of the following demographic variables: age, gender, location of work, province of hospital, section of hospital, education, and nursing category.

The average age of the nurses who participated in the study was 41.4 years. Individuals within this age group are known as generation X. Individuals from generation X (Xers) were born roughly between 1963 and 1983 (Beutell & Wittig-Burma, 2008). According to Schroer (n.d.), Xers are the group that is best educated, with 29% having obtained a bachelor's degree or higher. This can explain why a large number (77%) of the sample had a three-year degree or diploma or a postgraduate qualification. Altogether 97% of the sample was female and only 3% were male. This is a common phenomenon amongst nurses. A total of 57% of the nurses were registered nurses and 37% of the nurses worked in the general ward. The section of “other” work that was found in a large part of the sample (28%) refers mostly to nurses working in the theatre. The section of work “theatre” was not
included in the questionnaire. The location that provided the most participants was Pretoria (44%), although more than half of the sample was from the Western Cape (56%). Nurses from two of the largest private hospital groups participated, and the nurses from Gauteng belonged to one private hospital group, whereas nurses from the Western Cape belonged to the other private hospital group.

Table 3.2

Descriptive Statistics of Participant Sample

<table>
<thead>
<tr>
<th>Age</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20</td>
<td>1</td>
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</tr>
<tr>
<td>20-29</td>
<td>32</td>
<td>16%</td>
</tr>
<tr>
<td>30-39</td>
<td>58</td>
<td>29%</td>
</tr>
<tr>
<td>40-49</td>
<td>55</td>
<td>28%</td>
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<tr>
<td>50-59</td>
<td>43</td>
<td>21%</td>
</tr>
<tr>
<td>60-69</td>
<td>10</td>
<td>5%</td>
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<table>
<thead>
<tr>
<th>Gender</th>
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<tr>
<td>Female</td>
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<td>97%</td>
</tr>
<tr>
<td>Male</td>
<td>6</td>
<td>3%</td>
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<table>
<thead>
<tr>
<th>Province</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Gauteng</td>
<td>87</td>
<td>44%</td>
</tr>
<tr>
<td>Western Cape</td>
<td>112</td>
<td>56%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Location</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretoria</td>
<td>87</td>
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</tr>
<tr>
<td>Hermanus</td>
<td>56</td>
<td>27%</td>
</tr>
<tr>
<td>Paarl</td>
<td>45</td>
<td>23%</td>
</tr>
<tr>
<td>George</td>
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<td>6%</td>
</tr>
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<table>
<thead>
<tr>
<th>Nursing category</th>
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<tr>
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</tr>
<tr>
<td>Enrolled nurse</td>
<td>53</td>
<td>27%</td>
</tr>
<tr>
<td>Auxiliary nurse</td>
<td>32</td>
<td>16%</td>
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<table>
<thead>
<tr>
<th>Section of hospital</th>
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<th></th>
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</thead>
<tbody>
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<td>General ward</td>
<td>74</td>
<td>37%</td>
</tr>
<tr>
<td>ICU</td>
<td>32</td>
<td>16%</td>
</tr>
<tr>
<td>Maternity</td>
<td>18</td>
<td>9%</td>
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<tr>
<td>Emergency room</td>
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<td>10%</td>
</tr>
<tr>
<td>Other</td>
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<td>28%</td>
</tr>
</tbody>
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<table>
<thead>
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</thead>
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<tr>
<td>Grade 12</td>
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<tr>
<td>Diploma</td>
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<tr>
<td>3-year diplomas/degree</td>
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<td>16%</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>31</td>
<td>16%</td>
</tr>
</tbody>
</table>
3.4.2.3 Measuring instruments

3.4.2.3.1 Work engagement

The instrument chosen to measure WE is the Utrecht Work Engagement Scale. The scale was developed by Schaufeli et al. (2002) and consists of 17 items. The measurement has three scales, each measuring a specific dimension of WE. Vigour, dedication and absorption are the three dimensions of WE that were measured by the Utrecht Work Engagement Scale (UWES-17). Six of the seventeen items are used to measure vigour, five are used for the measurement of dedication, and the remaining six for the measurement of absorption (Joseph, Luyten, Corveleyn & De Witte, 2011). These items together measure the WE level of a participant (Mendes & Stander, 2011). The Utrecht Work Engagement Scale is a self-reported questionnaire that uses a seven-point Likert scale, ranging from never (0) to daily (6). The different scales contain different types of questions for the specific dimensions. A typical item for Vigour is ‘At my work I feel bursting with energy’. A typically item for Absorption is ‘I feel happy when I am working intensely’, and a typically item for Dedication is ‘I am enthusiastic about my job’ (Mendes & Stander, 2011).

The Cronbach alpha coefficient for Absorption is 0.78; it is 0.89 for Dedication and 0.78 for Vigour (Mendes & Stander, 2011). The UWES-17 showed good internal consistency of 0.68 to 0.91 (Durán, Extremera & Rey, 2012). The measurement has a test-retest reliability of 0.63 to 0.72 for all the items. De Bruin, Hill, Henn and Muller (2013) provide evidence that a summed score across items should be interpreted and used. They argue that the use of subscale scores may seem to be more complete, but the overlap of the subscales is so large that the additional information yielded by the subscales is likely to be misleading. Thus, the UWES-17 should be interpreted as a uni-dimensional scale rather than as a multidimensional scale (De Bruin et al., 2013). The UWES also demonstrated good construct and factorial validity (Thor, 2012). The validity and reliability criteria (Cronbach’s alpha) adopted and applied in this study are considered satisfactorily when $\alpha \geq 0.7$ (Nunnally, 1978). The UWES-17 was chosen after the psychometrical properties were taken into
consideration. By using this instrument to measure WE, one can expect to obtain reliable results.

3.4.2.3.2 Organisational citizenship behaviour

The instrument that was used to measure OCB amongst nurses is the Organisational Citizenship Checklist (OCB-C). The originally designed OCB-C consisted of 42 items. The instrument was designed to assess the frequency of OCB performed by employees. The checklist then was refined and shortened to 36 items, and then to a 20-item scale. The revised 20-item scale is still used and is strongly recommended to measure the construct OCB. The OCB-C was specifically designed to address and minimise overlap with the counterproductive work behaviour scale, which was noted in prior scales (Spector, Bauer & Fox, 2010). This scale was also designed to avoid antithetical items. Each item is based on critical incidents of OCB provided by employed individuals who are given the complete definition of OCB and then asked to generate examples (Spector et al., 2010). Some items that were included reflect acts directed towards the organisation and acts towards people employed in the organisation, in other words co-workers. The scale also consists of items asking about altruistic acts that help co-workers with personal as opposed to workplace concerns. The OCB-C consists of two subscales, namely organisational citizenship behaviour that is directed towards the organisation (OCBO) and behaviour that is directed towards co-workers (OCBP) by helping with work-related issues. Both behaviours towards the organisation or co-workers are beneficial. A typical item for OCBO is how often an employee has ‘Helped co-worker learn new skills or shared job knowledge’. A typical item for OCBP is how often an employee has ‘Lent a compassionate ear when someone had a personal problem’.

Separate subscale scores that reflect the frequency of acts towards the organisation and acts towards co-workers can be computed. A five-point frequency scale, ranging from 1 = never to 5 = every day was used to score OCB according the OCB-C. Scores were computed by summing the responses across all 20 items. The total score can be calculated as the sum of responses to all items (Spector et al., 2010). The OCB-C is a causal indicator scale consisting of items that are not all parallel assessments of a single underlying construct. The OCB-C was found to be reliable.
For causal indicator scales, items are not necessarily expected to be highly related with each other. Thus, internal reliability is not a good indicator of reliability. However, the internal consistency for the 42-item version was found to be 0.97 for the total scale, 0.92 for OCBO and 0.91 for OCBP (Spector et al., 2010). The coefficient alphas for the 20-item version were 0.89 for OCB-C, 0.94 for the self-report samples and 0.94 for the co-worker sample (Spector et al., 2010). Cicei (2012) found that the internal consistency reliability for the 42-item version was 0.78 for the total scale, 0.72 for OCBO and 0.81 for OCBP. As the internal consistency of both the OCBO and OCBP shows an acceptable internal reliability one can expect reliable results. The OCB-C was chosen because the instrument consists of sound psychometric properties and the interpretation of OCB can be done in terms of a one-dimensional construct. By using this instrument to measure OCB one can expect to obtain reliable results.

3.4.2.3.3 Servant leadership

Barbuto and Wheeler (2006b) introduced an instrument measuring the 11 characteristics of SL. Each characteristic was measured by five to seven items, and after factor analysis five factors were derived from the 11 potential servant leadership characteristics. The rating was assigned five categories: 0 = not at all; 1 = once in a while; 2 = sometimes; 3 = fairly often; 4 = frequently, if not always (Bunch, 2013). The Servant Leadership Questionnaire (SLQ) consists of 23 items that measure five dimensions. Examples of the items included are ‘This person goes above and beyond the call of duty to meet my needs’ (altruistic calling); ‘This person is talented at helping me to heal emotionally’ (emotional healing); ‘This person is good at anticipating the consequences of decisions’ (wisdom); ‘This person is very persuasive’ (persuasive mapping); and ‘This person believes that the organisation needs to play a moral role in society’ (organisational stewardship). The reliabilities of the SLQ range from 0.68 to 0.87 for the self-rate version and 0.82 to 0.92 for the rater version (Mahembe & Engelbrecht, 2013). The internal consistency coefficients of all the subscales of the SLQ were found to be highly satisfactory (α > 0.70; Nunnally, 1978). Cronbach’s alpha scores of between 0.87 and 0.92 were reported for all subscales. The total score of all the subscales is used to reveal an individual’s level of SL (Salameh, Al-Wyzinany & Al-Omari, 2012). From the promising evidence
of reliability and construct validity yielded by the SLQ, the instrument could be used and expected to yield reliable results.

3.4.2.3.4 Psychological capital

The Psychological Capital Questionnaire (PCQ) was chosen to measure the level of PsyCap of each nurse. The PCQ was developed by Luthans, Avolio, Avey and Normans (2007). The PCQ measures PsyCap and consists of four subscales, namely hope, optimism, self-efficacy and resilience. The questionnaire consists of 24 items, each subscale consists of six items and it is a self-report questionnaire. Each item is rated in a scale from 1 (strongly disagree) to 6 (strongly agree). The sum of all the subscales represents an individual’s PsyCap (Simons & Buitendach, 2013). Although all the dimensions have their own subscale, the overall construct of PsyCap will be measured. Thus the level of PsyCap as the sum of all sub-dimensions will be the main focus, not the score for each dimension. A typical item would be, ‘This person can think of many ways to reach his/her current work goals’ and ‘This person feels confident in representing his/her work area in meetings with management’.

Evidence of the internal validity (construct and discriminant validity), reliability and external validity (relationship with theoretically relevant variables, namely stress, burnout and WE) was provided by research done recently in a South African context (Görgens-Ekermans & Herbert, 2013). Acceptable reliability coefficients have also been found in a South African study for the four dimensions of the PCQ, with the alpha coefficient ranging from 0.67 to 0.83 (Simons & Buitenbach, 2013). Thus, according to the psychometric soundness that has been supported by a number of studies, one can regard the PCQ as an effective measurement of PsyCap.

3.4.2.3.5 Illegitimate tasks

The Bern Illegitimate Task Scale (BITS) was used to assess the occurrence of IT. The BITS consists of eight items and the items are rated on a five-point Likert scale. The answers range from 1 = never to 5 = frequently. The scale consists of two subscales. One subscale measures unnecessary tasks and the other subscale
measure unreasonable tasks. Stocker et al. (2010) found that the two scales correlate with each other ($r = .65, p < .001$). Some of the items are ‘Do you have work tasks to take care of which keep you wondering if they have to be done at all?’; ‘Do you have work tasks to take care of which you believe should be done by someone else?’ Semmer et al. (2010) revealed that the total scale has an internal consistency of $\alpha = 0.88$. Although there are only a few studies on IT, the BITS shows an internal consistency of between 0.79 and 0.90 in most of the studies (Stocker et al., 2010; Semmer et al., 2010). IT can successfully be modelled as a second-order construct, however this study is interested in IT as a whole, therefore the total scale was used, in other words the sum of the two subscales, which had a very good internal consistency (Stocker et al., 2010). Semmer et al. (2010) also provide evidence that the BITS represents a distinct construct in its own right.

3.4.3 Research procedure

The data collection procedure started after the approval of the study by the Ethical Committee of University Stellenbosch. Three of the questionnaires are available in the public domain and permission was granted for the other two. After permission was received from the two targeted private hospital groups and informed consent was signed by the participating nurses, data collection started. Data was collected from 208 nurses. The completion of one questionnaire, consisting of five different measures, was required of all participating nurses. A final sample of 199 was used after the exclusion of nine questionnaires because of incompletion. Data collection on all five variables, namely work engagement, organisational citizenship behaviour, servant leadership, psychological capital and illegitimate tasks, was done by way of self-administered questionnaires. This specific type of questionnaire was chosen for the study because of the unique nature of the sample. The questionnaires were personally delivered to each hospital. The five questionnaires were the Utrecht Work Engagement Scale, the Organisational Citizenship Checklist (OCB-C), the Servant Leadership Questionnaire, the Psychological Capital Questionnaire (PCQ) and the Bern Illegitimate Task Scale (BITS). Enclosed with the questionnaires were the purpose of the study and the value that each participant would contribute to the study. Completion of questionnaires started after the nurses were informed that the data collected from the questionnaires would be used only for the purposes of the
study and that it was confidential. The nurses were also informed that they had the autonomy to withdraw from the study at any point in time. Clear guidelines on how to complete the questionnaires were provided beforehand and the participants were guaranteed anonymity.

3.4.3.1 Data collection process

Only nurses who were either a registered, auxiliary or enrolled nurse were included and approached to participate in the study. The total amount of nurses in the four hospitals was 480. A total of 480 questionnaires were distributed. Three of the four hospitals allowed the researcher to use the training room to collect data. Nurses from different sections were sent to the training room on a rotation basis. The highly demanding work environment made it difficult to complete the questionnaires. In one of the hospitals, circumstances required the researcher to meet the nurses in the tearoom and to accommodate them during tea or lunch breaks. The hospital located in Pretoria required the researcher to send them the questionnaires, which they returned after three weeks. A total of 199 questionnaires were completed and used for the analysis.

3.4.3.2 Missing values

Multivariate datasets in which there are missing values for one or more of the selected variables are often found in practice (Du Toit & Mels, 2002). No matter how carefully researchers try to have all items in a questions fully responded to, it is usually not the case. The problems referred to above could be seen as missing values, in other words a question that has not been answered as required. Missing values may impact the effectiveness and value of the indicator variables. Before any statistical analyses took place the missing values were dealt with by excluding all questionnaires that were not complete. The questionnaire required the nurses to respond to each question and incomplete questionnaires were excluded from the statistical analyses.
3.5 Statistical analyses

3.5.1 Data analyses
The selection of data analysis techniques depends on the type of research questions the study is aiming to answer. The data in this study was analysed by means of quantitative techniques. The data collected from all the measurements was analysed by a number of different quantitative techniques. The techniques include item analyses and structural equation modeling (SEM). The objective of the data analysis is to test the null hypothesis and the structural model. A short explanation of the different quantitative techniques and programmes used in this study is provided.

3.5.2 Computer package
Item analysis and partial least squares (PLS) analysis methods were used to analyse the collected data. Statistica version 12 was used to perform the item analyses in order to provide the reliabilities of the items and constructs. SmartPLS version 3 (Ringle, Wende & Becker, 2014) was used to test the relationships between the different variables, to provide the path coefficients between the variables and to estimate the PLS model.

3.5.3 Item analysis
A large number of scales can be used to test latent variables. By using item analysis, an individual can increase his or her understanding of the validity and reliability of tests. Close examination of individual tests is essential to understand why some tests show specific levels of reliability and validity, and others do not. Each item of a measurement instrument measures something specific of an individual and it is necessary that the items contained in each measurement include items that measure the actual latent variable or dimensions of the latent variable that it is supposed to measure. Each variable carries a specific constitutive definition, and each item that is used to measure a specific variable must be in line with the constitutive definition of the variable. The items of each instrument have been developed to indicate the participants’ standing on the specific latent variable. The items serve as stimuli that encourage the expression of the behaviour that is being measured.
The responses to each measurement are collected by means of self-report questionnaires, and a number of item statistics will be generated if the design intentions of each scale are successful. Item analysis must be performed on the item statistics to determine the internal consistency of each item of the measuring instrument. By performing item analyses one can identify poor items that do not reflect the intended latent variable successfully.

According to a considerable amount of psychometric evidence, poor items will be identified and a decision has to be made on whether they have to be deleted from the scale. The decision to remove items will be based on the available evidence. The validity and reliability of a test can be improved by removing these items. The focus also will be placed on the change in subscale reliability if an item is deleted, as well as the change in variance when an item is deleted. Cronbach’s alphas and average inter-item correlations for each subscale, as well as for the total scale, were used for this purpose.

### 3.5.4 Structural equation modelling

#### 3.5.4.1 Partial least squares SEM analysis

PLS can be seen as an alternative approach to covariance-based SEM. PLS refers to a soft modelling technique (Monecke & Leisch, 2012). The PLS approach has the ability to determine the relationship between dependent and independent variables as linear composites. This technique can be seen as similar to the multiple regression multivariate technique (Glocker, 2012). PLS have the ability to determine the direct and indirect path influence among latent variables that are included in a nomological network.

One advantage of PLS path modeling is that it can be used when samples are relatively small (Glocker, 2012). The soft assumption of PLS gives it an advantage over covariance structure analysis (Glocker, 2012). In other words, soft modelling techniques differ from hard modeling techniques because of the soft distributional assumption. The PLS approach is distribution free, thus the data is not required to be normally distributed (Chin, 1998). In other words, this method can accommodate
both reflective and formative scales easily, which is in contrast to covariance structure analysis (Campus, 2014).

PLS structural equation modelling consists of two parts. The measurement model relates measured indicators to latent variables. The second part is the structural model, which relates latent variables to each other. However, the estimation of the model will require calculation of the parameters related to both the measurement model and the structural model (Campus, 2014).

Before the PLS model estimation can be done, a series of analyses need to take place (Charoenosukmongkol, 2014). Firstly, the reliability of the latent variables was evaluated in order to estimate the measurement model fit. This was done by looking at the composite reliabilities, average variance distracted (AVE) and r-squared. If the coefficients exceed 0.70 they are regarded as satisfactory (Charoenosukmongkol, 2014). After the systematic evaluation of the reliabilities of the latent variables, the PLS estimates reveal the measurement model reliability and validity according to certain criteria associated with the measurement model.

The structural model estimates needs to be evaluated once the calculated latent variable scores show evidence for sufficient reliability and validity (Roux, 2010). The structural model relates latent variables to each other. In order to assess whether the main effect and interaction effect are significant, a bootstrapping sampling procedure is performed. After bootstrapping, the accuracy of the path estimates to the true effects is assessed. It is important to note that the estimates of the structural paths tend to be more accurate than the reliability score for the estimated construct increases (Chin, 1998).

3.6 Chapter summary
This chapter introduced the research method that was used in this study. The differential statistics of the research respondents were discussed. All the measurement instruments that were used to measure latent variables were introduced. Information regarding the entire research procedure, including the data collection process, was provided. Lastly, the statistical analyses, which include item analysis and PLS, were explained.
CHAPTER 4

RESULTS

4.1 Introduction
This chapter includes the results after analysing the data according to the statistical methods discussed in Chapter 3. Item analysis was used to find the reliability of the different measures that were used to measure the five latent variables (Work engagement, Organisational citizenship behaviour, Servant leadership, Psychological Capital and Illegitimate tasks). After item analysis was performed, PLS (SEM) was used to support the reliability of the different measurements and to confirm the fit of the measurement model. In addition, PLS (SEM) was utilised to analyse and investigate the relevant paths between the variables in order to confirm the structural model fit.

4.2 Validating the measurement model

4.2.1 Item analysis
The validity and reliability criteria normally depend on the nature of the constructs included in the study. The validity and reliability criteria (Cronbach’s alpha) adopted and applied in this study are considered satisfactorily, i.e. ≥ 0.7 (Nunnally, 1978). Item correlations were used to evaluate the consistency between items. Item correlations are the subtype of internal consistency reliability. Item correlation values between 0.5 and 1 indicate a high internal consistency reliability, whereas values between 0 and 0.5 indicate acceptable reliability.

Item analysis was performed for all items included in the questionnaire. A summary of the items measuring each dimension of the constructs can be found in Table 4.1. The item analysis summary includes the mean, standard deviation, Cronbach’s alpha and average inter-item correlation of all the items that measure the specific latent variables. Table 4.2 provides a summary of the mean, standard deviation, Cronbach’s alpha and average inter-item correlation of all the total scales.
Table 4.1

Means, Standard Deviations and Internal Consistency Reliabilities of Subscales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Sample size</th>
<th>Number of items</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Cronbach’s alpha</th>
<th>Average inter-item correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UWES_1</td>
<td>199</td>
<td>0</td>
<td>25.71</td>
<td>7.03</td>
<td>0.86</td>
<td>0.52</td>
</tr>
<tr>
<td>UWES_2</td>
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<td>5</td>
<td>24.89</td>
<td>5.51</td>
<td>0.86</td>
<td>0.58</td>
</tr>
<tr>
<td>UWES_3</td>
<td>199</td>
<td>8</td>
<td>28.73</td>
<td>6.77</td>
<td>0.80</td>
<td>0.42</td>
</tr>
<tr>
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<td>0.79</td>
<td>0.34</td>
</tr>
<tr>
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<td>0.65</td>
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<tr>
<td>SLQ_4</td>
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<tr>
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<td>0.87</td>
<td>0.61</td>
</tr>
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<td>PCQ_2</td>
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<td>0.63</td>
</tr>
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<td>PCQ_3</td>
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<td>4.28</td>
<td>0.81</td>
<td>0.56</td>
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<td>BITS_1</td>
<td>199</td>
<td>4</td>
<td>12.03</td>
<td>4.24</td>
<td>0.80</td>
<td>0.63</td>
</tr>
<tr>
<td>BITS_2</td>
<td>199</td>
<td>4</td>
<td>11.03</td>
<td>4.26</td>
<td>0.89</td>
<td>0.68</td>
</tr>
</tbody>
</table>

UWES = Utrecht Work Engagement Scale; OCB-C = Organisational Citizenship Behaviour towards person; OCB-O = Organisational Citizenship Behaviour towards organisation; Checklist; SLQ = Servant Leadership Questionnaire; PCQ = Psychological Capital Questionnaire; BITS = Bern Illegitimate Tasks Scale

Table 4.2

Means, Standard Deviations and Internal Consistency Reliabilities of Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Sample size</th>
<th>Number of items</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Cronbach’s alpha</th>
<th>Average inter-item correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UWES</td>
<td>199</td>
<td>17</td>
<td>13.89</td>
<td>3.18</td>
<td>0.93</td>
<td>0.81</td>
</tr>
<tr>
<td>OCB-C</td>
<td>199</td>
<td>20</td>
<td>7.16</td>
<td>1.38</td>
<td>0.89</td>
<td>0.81</td>
</tr>
<tr>
<td>SLQ</td>
<td>199</td>
<td>23</td>
<td>15.29</td>
<td>3.36</td>
<td>0.94</td>
<td>0.77</td>
</tr>
<tr>
<td>PCQ</td>
<td>199</td>
<td>24</td>
<td>17.87</td>
<td>2.74</td>
<td>0.82</td>
<td>0.54</td>
</tr>
<tr>
<td>BITS</td>
<td>199</td>
<td>8</td>
<td>5.80</td>
<td>1.85</td>
<td>0.68</td>
<td>0.51</td>
</tr>
</tbody>
</table>

UWES = Utrecht Work Engagement Scale; OCB-C = Organisational Citizenship Behaviour Checklist; SLQ = Servant Leadership Questionnaire; PCQ = Psychological Capital Questionnaire; BITS = Bern Illegitimate Tasks Scale

4.2.1.1 Work engagement

The three dimensions of WE were measured with 17 items. The first dimension, UWES_1, refers to vigour and obtained a Cronbach’s alpha of 0.86. This indicates
that the subscale vigour shows acceptable internal consistency reliability. The Cronbach’s alpha was supported by the average inter-item correlation, which was 0.52. The second dimension, UWES_2, which refers to dedication, also obtained a Cronbach’s alpha of 0.86. Again, this dimension indicates acceptable reliability. The Cronbach’s alpha was supported by the average inter-item correlation, which was 0.58. The third dimension, UWES_3, refers to absorption and obtained a Cronbach’s alpha of 0.80. The dimension absorption showed acceptable internal consistency reliability and the Cronbach’s alpha was supported by the average inter-item correlation, which was 0.42.

The Cronbach’s alpha for the total UWES was 0.93, as depicted in Table 4.2, which indicates that the UWES shows acceptable internal consistency reliability. The internal consistency was supported by an inter-item correlation of 0.81. These results show that the UWES measures what it is supposed to measure.

4.2.1.2 Organisational citizenship behaviour

OCB consists of two dimensions, which were measured with two subscales that consist of a total of 20 items. The OCB_P, which refers to organisational citizenship behaviour towards a person, was measured by eight items and obtained a Cronbach’s alpha of 0.79. The Cronbach’s alpha of this dimension was supported by an inter-item correlation of 0.34. The second dimension was organisational citizenship behaviour towards the organisation, which was measured by a subscale consisting of 12 items and obtained a Cronbach’s alpha of 0.85. The Cronbach’s alpha of this subscale was supported by an inter-item correlation of 0.33.

The Cronbach’s alpha for the total OCB-C was 0.89, as depicted in Table 4.2, and refers to acceptable internal consistency reliability of the scale. The internal consistency was supported by an inter-item correlation of 0.81. The results show that the OCB-C measures what it is supposed to measure.

4.2.1.3 Servant leadership

The five dimensions of SL were measured with 23 items. The first subscale, SLQ_1, refers to altruistic calling and obtained a Cronbach’s alpha of 0.90. This is an acceptable internal consistency reliability and was supported by the average inter-
item correlation of 0.71. No deletion of items was considered, as this would have led to a decrease in the reliability of the scale. The second subscale, SLQ_2, refers to emotional healing and also obtained a Cronbach’s alpha of 0.91. This subscale showed acceptable internal consistency reliability and was supported by the average inter-item correlation of 0.71. No deletion of items was considered, as this would have led to a decrease in the reliability of the scale. The third subscale, SLQ_3, refers to wisdom and obtained a Cronbach’s alpha of 0.90. Again, acceptable internal consistency reliability is shown by this subscale. The Cronbach’s alpha was supported by the average inter-item correlation of 0.65. No deletion of items was considered, as this would have led to a decrease in the reliability of the scale. The fourth subscale, SLQ_4, refers to persuasive mapping and obtained an acceptable Cronbach’s alpha of 0.87 and was supported by an average inter-item correlation of 0.58. Lastly, the fifth subscale, SLQ_5, refers to stewardship and obtained a Cronbach’s alpha of 0.87. The Cronbach’s alpha was further corroborated by an average inter-item correlation of 0.57. Deletion of items was not considered as it would only result in decreased reliability of the scale.

The Cronbach’s alpha for the total SLQ was 0.94, as depicted in Table 4.2, and refers to acceptable internal consistency reliability of the SLQ. The internal consistency was supported by an inter-item correlation of 0.77. This shows that the SLQ measures what it is supposed to measure.

4.2.1.4 Psychological capital

The four dimensions of PsyCap were measured with 24 items. The first dimension, PCQ_1, refers to self-efficacy. This dimension obtained an acceptable Cronbach’s alpha of 0.87. The Cronbach’s alpha of self-efficacy was supported by an average inter-item correlation of 0.54. The second dimension, PCQ_2, refers to hope. This dimension obtained an acceptable Cronbach’s alpha of 0.87. The Cronbach’s alpha of hope was supported by an average inter-item correlation of 0.53. The third dimension, PCQ_3, refers to resilience. This dimension obtained a Cronbach’s alpha of 0.61. This Cronbach’s alpha is not acceptable, as it is smaller than 0.7. The average inter-item correlation was 0.26 and did not support the Cronbach’s alpha of resilience, as it was below 0.50. The deletion of any items except for item 13 would
not have resulted in an increased Cronbach’s alpha. However, the deletion of item 13 would result in a Cronbach’s alpha of 0.76, which is acceptable. It is important to note that this item was reversed. However, no deletion of the item was performed as it would have manipulated the overall reliability of the scale. PCQ_4 refers to optimism and obtained a Cronbach’s alpha of 0.49. If item 20 was deleted it would have resulted in a slightly higher Cronbach’s alpha of 0.58. The average inter-item correlation of 0.18 did not provide any better results and did not support the Cronbach’s alpha. The weak Cronbach’s alpha and average inter-item correlation could be because the item was reversed.

The Cronbach’s alpha for the total PCQ was 0.82, as depicted in Table 4.2, and refers to an acceptable internal consistency reliability of the scale. The internal consistency was supported by an inter-item correlation of 0.54. These results show that the PCQ measured what it was supposed to measure. However, it is important to note that the subscales of resilience and optimism did not provide an acceptable reliability and this may have been problematic when subscale scores were used for interpretation. This study uses the total score of the PCQ for interpretation.

4.2.1.5 Illegitimate tasks
The BITS consist of two subscales, called unnecessary tasks and unreasonable tasks. Each subscale is measured by four items. The first subscale, BITS_1, refers to unnecessary tasks and obtained an acceptable Cronbach’s alpha of 0.86. The internal consistency reliability was supported by an average inter-item correlation of 0.63. Inter-item correlations for all items were above 0.50, and therefore no deletion of items was considered for this subscale. The second subscale, unreasonable tasks (BITS_2), obtained a Cronbach’s alpha of 0.89, which refers to an acceptable internal consistency reliability. The Cronbach’s alpha was supported by an average inter-item correlation of 0.68.

The Cronbach’s alpha for the total BITS was 0.68, as depicted in Table 4.2, and refers to an internal consistency reliability that is slightly below the critical value of 0.70. Although the internal consistency reliability is slightly less than 0.70, the researcher will still critically accept this reliability of the BITS. The internal consistency reliability for the scale was supported by an average inter-item correlation of 0.68.
correlation of 0.51. Although satisfactory high internal consistency reliability was not obtained, these results still are acceptable.

Item analysis was conducted to provide evidence that each scale is internally consistent and reliable. Four of the five scales had a Cronbach’s alpha of ≥ 0.70, which shows an acceptable internal consistency. Although the Cronbach’s alpha of 0.68 is only slightly below 0.70, the internal consistency reliability of the BITS will be critically accepted. Acceptable average inter-item correlations supported the internal consistency of each scale. No deletion of items was performed, as this would not have resulted in substantial differences in the reported reliability of the scales. The results obtained confirm the reliability of each scale that was used to measure the latent variables. The reliability of the indicator variables assigned to represent each latent variable was also confirmed.

4.3 Partial least squares (SEM) analysis

A two-step process is recommended when the PLS approach to structural equation modelling is utilised (Chin, 1998). The first step is to evaluate the measurement model, followed by the evaluation of the structural model. The structural model refers to the structural component of the model. The main purpose of the measurement model evaluation is to determine the measurement quality of the construct that will be used in the evaluation of the inner model. After the reliability of each latent variable scale has been established, path coefficients are examined to determine the strength and significance of the hypothesised relationships. In other words, once it has been shown that the measurement model fits, the significance of the paths between the variables can be tested and evaluated in order to confirm the fit of the structural model.

4.3.1 Evaluating and interpreting the measurement model

The purpose of the reliability analysis is to examine the measurement model fit, as well as the reliability of the latent variable scales. The composite reliability and average variances extracted (AVE) were used for the evaluation and interpretation of the reliabilities of each latent variable. The composite reliability value measures whether the reliability of the latent variable scales is satisfactory. When the
composite reliability value is equal to or higher than 0.70, it is deemed satisfactory. All the latent variables scores of reliability were > 0.70. The AVE for all latent variables was above 0.5, which shows that the constructs explains more than 50% of the variances in the items. The reliability statistics can be found in Table 4.3.

The last evaluation of reliability of the items included in the latent variable scales was done by conducting a PLS bootstrap analysis. Bootstrap was used to determine if item loadings were significant or not. Evaluation of the factor loadings was necessary for this specific purpose. The factor loadings were evaluated by looking at whether zero falls within the 95% confidence interval. If zero does fall within the interval, the factor loadings would not be statistically significant; if zero does not fall within this interval, the factor loadings are significant. All factor loadings were found to be statistically significant, in other words zero did not fall within the 95% confidence interval. This confirms the reliability of each item included in the latent variable scales. It is safe to state that the items or indicators are very good measures of all the latent variables.

In order to establish the construct validity, additional analyses were performed. Construct validity refers to the degree to which a scale measure what it is supposed to measure. The model was specifically checked for discriminate validity and no problems occurred. In other words, the latent variable measurements can be seen to successfully measure what they are supposed to measure.

Table 4.3

<table>
<thead>
<tr>
<th>Scale</th>
<th>Average variance extracted (AVE)</th>
<th>Composite reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>UWES</td>
<td>0.87</td>
<td>0.95</td>
</tr>
<tr>
<td>OCB-C</td>
<td>0.90</td>
<td>0.95</td>
</tr>
<tr>
<td>SLQ</td>
<td>0.81</td>
<td>0.95</td>
</tr>
<tr>
<td>PCQ</td>
<td>0.65</td>
<td>0.88</td>
</tr>
<tr>
<td>BITS</td>
<td>0.75</td>
<td>0.86</td>
</tr>
</tbody>
</table>

UWES = Utrecht Work Engagement Scale; OCB-C = Organisational Citizenship Behaviour Checklist; SLQ = Servant Leadership Questionnaire; PCQ = Psychological Capital Questionnaire; BITS = Bern Illegitimate Tasks Scale
4.3.2 Evaluating and interpreting the structural model

4.3.2.1 Evaluation and interpretation of the R square

The R square values show that the total model accounted for a high amount of variance in the latent variables. The OCB-C obtained an R square value of 0.219, which indicates that the total model accounts for 21.9% of the variance observed in OCB amongst nurses. The UWES obtained an R square value of 0.409, which indicates that the total model accounts for 40.9% of the variance observed in WE amongst nurses.

4.3.2.2 Evaluation and interpretation of the main effects

It is important to note that the purpose of PLS path modelling is not to test a theory, but to facilitate prediction. After the reliability of each latent variable scale was established, path coefficients were examined to determine the strength and significance of the hypothesised relationships. In order to determine significance between variables, the bootstrapping method was used (Davison, Hinkley & Young, 2003; Efron & Tibshirani, 1994). According to this method, when zero falls in the confidence interval, the corresponding coefficient will be seen as not significant, and vice versa.

In Table 4.4 it is indicated whether the path coefficients were significant or not. In order to determine the strength and significance of the hypothesised paths as proposed in the structural model (Figure 3.1), path coefficients were investigated. In order to determine the significance of a path it was examined whether zero falls within the 95% confidence interval. If zero does fall within this confidence interval, one can conclude that the coefficient and the path are not significant. In the case where zero does not fall within the confidence interval, the coefficient and thus the path can be seen as significant. The significance of the path coefficients was investigated and information on whether the hypothesised paths were significant was provided for each path.
Table 4.4

Path Coefficients Between Variables

<table>
<thead>
<tr>
<th>Path</th>
<th>Path Coefficient</th>
<th>95% Confidence interval (Lower)</th>
<th>95% Confidence interval (Upper)</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: WE-OCB</td>
<td>0.062</td>
<td>-0.099</td>
<td>0.219</td>
<td>no</td>
</tr>
<tr>
<td>H2: SL-WE</td>
<td>0.227</td>
<td>0.102</td>
<td>0.341</td>
<td>yes</td>
</tr>
<tr>
<td>H3: PsyCap-WE</td>
<td>0.449</td>
<td>0.328</td>
<td>0.577</td>
<td>yes</td>
</tr>
<tr>
<td>H4: IT-WE</td>
<td>-0.121</td>
<td>-0.235</td>
<td>-0.014</td>
<td>yes</td>
</tr>
<tr>
<td>H5: SL-OCB</td>
<td>0.125</td>
<td>-0.013</td>
<td>0.259</td>
<td>no</td>
</tr>
<tr>
<td>H6: PsyCap-OCB</td>
<td>0.375</td>
<td>0.202</td>
<td>0.521</td>
<td>yes</td>
</tr>
<tr>
<td>H7: IT-OCB</td>
<td>0.147</td>
<td>-0.019</td>
<td>0.294</td>
<td>no</td>
</tr>
</tbody>
</table>

WE = Work engagement; OCB = Organisational citizenship behaviour; SL = Servant leadership; PsyCap = Psychological capital; IT = Illicit tasks

Hypothesis 1: WE has a significant positive effect on OCB of nurses.

The hypothesised positive relationship between WE and OCB was found **not to be significant**. The PLS path coefficient was equal to 0.062, with zero falling in the 95% confidence interval. The exact information on the confidence of the lower and upper interval is provided in Table 4.4. These results are in contrast with existing findings on the relationship between WE and OCB. Ravindranath and Murthy (2014) provided evidence that WE is a significant predictor of OCB amongst executives. Another study done by Matamala (2011) also provided evidence of a relationship between WE and OCB. However the results of this study do not indicate that a nurse that is engaged in his or her work would perform OCB. It is important to note that a relationship between WE and OCB was first shown to be significant, however the lowest interval level was near to zero. When the second bootstrapping analyses were run a different results were obtained. It was found that the path coefficient between WE and OCB was not significant and was reported respectively. The path, path coefficient and whether it is significant or not is illustrated the structural model (Figure 4.1).
Hypothesis 2: SL has a significant positive effect on the WE of nurses.

The hypothesised positive relationship between SL and WE was found to be significant. The PLS path coefficient was equal to 0.227, with zero not falling in the 95% confidence interval. The exact information on the confidence of the lower and upper interval is provided in Table 4.4. A variety of research has shown that leadership is positively related to WE. Although most of the research on WE and leadership does not specifically include SL, Carter (2012) provides evidence that SL has a strong influence on employee engagement, especially amongst restaurant workers and their managers. Carter (2012) states that servant leaders create a supportive environment and that the servant leader’s behaviour is beneficial for the follower’s WE. According to the results of this study it is evident that SL would lead to employee WE. Not only has this finding contributed to research on SL and WE, but also to SL and WE research specifically within the healthcare system.

Hypothesis 3: PsyCap has a significant positive effect on the WE of nurses.

The hypothesised positive relationship between PsyCap and WE was found to be significant. The PLS path coefficient was equal to 0.449, with zero not falling in the 95% confidence interval. The exact information on the confidence of the lower and upper interval is provided in Table 4.4. These results are parallel with existing research on the relationship between PsyCap and WE. Simons and Buitendach (2013) found a significant positive relationship between the PsyCap and WE of call centre employees. Research has shown that the overall constructs of PsyCap relates better to the outcome of WE than the individual constructs of PsyCap. These findings agree with the findings of the current study, as the relationship between PsyCap and WE was measured in terms of the overall construct. In other words, nurses with a higher PsyCap will be more likely to experience WE than nurses with a lower level of PsyCap.

Hypothesis 4: IT (both unreasonable tasks and unnecessary tasks) have a significant negative effect on WE.
The hypothesised negative relationship between IT and WE was found to be significant. The PLS path coefficient was equal to -0.121, with zero not falling in the 95% confidence interval. The exact information on the confidence of the lower and upper interval is provided in Table 4.4. These findings support the findings of Van Schie et al. (2013), who found that IT has a negative impact on the WE of employees. In other words, the more IT nurses have to deal with, the lower the level of WE.

**Hypothesis 5:** SL has a significant positive effect on the OCB of nurses.

The hypothesised negative relationship between IT and WE was found not to be significant. The PLS path coefficient was equal to 0.125, with zero falling in the 95% confidence interval. The exact information on the confidence of the lower and upper interval is provided in Table 4.4. Several studies done on SL have shown a positive relationship between SL and OCB (Erhart, 2004; Walumbwa et al., 2010). The non-significant finding of this hypothesis is the opposite of existing research on the relationship between SL and OCB. The finding suggests that, in the case of nursing, SL is not positively related with OCB. However, it is important to note that, although the path coefficient between SL and OCB was first shown to be significant, the lowest interval level was near to zero. When the second bootstrapping analysis was run, different results were obtained. It was found that the path coefficient between SL and OCB was not significant and this was reported respectively. This results show that SL will not influence nurses to engage in OCB.

**Hypothesis 6:** PsyCap has a significant positive effect on the OCB of nurses.

The hypothesised negative relationship between PsyCap and OCB was found to be significant. The PLS path coefficient was equal to 0.375, with zero not falling in the 95% confidence interval. The exact information on the confidence of the lower and upper interval is provided in Table 4.4. A number of studies provide evidence on the positive relationship between PsyCap and OCB (Beal et al., 2013; Ravindranath & Murthy, 2014). This, however, supports the finding of the hypothesis and one can expect that a nurse with a high PsyCap level would be more likely to engage in OCB than nurses with a lower PsyCap level.
Hypothesis 7: IT (both unreasonable tasks and unnecessary tasks) have a significantly negative effect on the OCB of nurses.

The hypothesised negative relationship between IT and WE was found not to be significant. The PLS path coefficient was equal to 0.147, with zero falling in the 95% confidence interval. The exact information on the confidence of the lower and upper interval is provided in Table 4.4. Currently there is no evidence or studies that have reported on the relationship between IT and OCB. However, research has shown that the more IT required from an employee, the higher the occurrence of CWB. Fox et al. (2012) provide information that supports the relationship between OCB and CWB. It was also found that there is a strong negative correlation between OCB and CWB. The assumption was made that IT will be negatively related with OCB, because of the strong relationship that OCB has with CWB. The result of this hypothesis was not significant. In other words, IT does not have a negative effect on OCB. It therefore was found that when nurses have more IT, they would not engage in less OCB, as expected.

4.3.2.3 Evaluation and interpretation of the moderating effects

Two approaches were followed to test moderation. Firstly, three variables were used (independent, moderator and dependant) to test whether the $R^2$ will increase significantly when the interaction between the independent and moderator variables (independent*moderator) are included. Secondly, the moderation are tested by including the interaction (independent*moderator) in the PLS model to see whether the path coefficient of the interaction will be significant.

In Table 4.5, the interaction coefficients, R square change and p-values are provided in order to evaluate whether moderating effects exist between paths. It is important to note that $p < 0.05$ is statistically significant at the 95% confidence level. In Table 4.6, the path coefficients of the moderation effects are provided. If zero does fall within this confidence interval one can conclude that the coefficient and the path are not significant. In the case where zero does not fall within the confidence interval, the coefficient and thus the path can be seen as significant. The path, path coefficient and whether it is significant or not are illustrated in the structural model (Figure 4.1).
Table 4.5

P-values for Servant Leadership, Psychological Capital and Illegitimate Tasks as Moderating Effects

<table>
<thead>
<tr>
<th>Path</th>
<th>Interaction coefficient</th>
<th>$R^2$</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>H8: SL*IT - WE</td>
<td>0.15</td>
<td>-0.02</td>
<td>0.04**</td>
</tr>
<tr>
<td>H9: PsyCap*IT - WE</td>
<td>0.19</td>
<td>-0.03</td>
<td>0.01**</td>
</tr>
<tr>
<td>H10: IT*SL - WE</td>
<td>0.11</td>
<td>-0.01</td>
<td>0.09</td>
</tr>
<tr>
<td>H11: IT*PsyCap - WE</td>
<td>0.06</td>
<td>-0.00</td>
<td>0.23</td>
</tr>
</tbody>
</table>

**p < 0.05 is statistically significant at the 95 percent confidence level

Table 4.6

Path Coefficients for Servant Leadership, Psychological Capital and Illegitimate Tasks as Moderating Effects

<table>
<thead>
<tr>
<th>Path</th>
<th>Path Coefficient</th>
<th>95% Confidence Interval (Lower)</th>
<th>95% Confidence Interval (Upper)</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H8: SL*IT - WE</td>
<td>0.076</td>
<td>-0.048</td>
<td>0.198</td>
<td>no</td>
</tr>
<tr>
<td>H9: PsyCap*IT - WE</td>
<td>0.034</td>
<td>-0.085</td>
<td>0.142</td>
<td>no</td>
</tr>
<tr>
<td>H10: IT*SL - WE</td>
<td>0.076</td>
<td>-0.042</td>
<td>0.195</td>
<td>no</td>
</tr>
<tr>
<td>H11: IT*PsyCap - WE</td>
<td>0.034</td>
<td>-0.085</td>
<td>0.149</td>
<td>no</td>
</tr>
</tbody>
</table>

WE = Work engagement; OCB = Organisational citizenship behaviour; SL = Servant leadership; PsyCap = Psychological capital; IT = Illegitimate tasks

**Hypothesis 8:** SL has a significant moderating effect on the relationship between IT and WE.
The p-value of SL as moderator on the relationship between IT and WE was found to be less than 0.05 (Table 4.5). A p-value of less than 0.05 means that SL has a significant moderating effect on the relationship between IT and WE. However, when this moderating effect of SL on the relationship between IT and WE was tested in terms of PLS bootstrapping, the opposite was found. The hypothesised moderating effect of SL on the relationship between IT and WE was found to be not significant. The PLS path coefficient was equal to 0.076, with zero falling in the 95% confidence interval. The exact information on the confidence of the lower and upper intervals is provided in Table 4.6. The results of the bootstrapping method was utilised for interpretation, as the PLS results are usually of more value and more strict. Thus, SL would not influence how nurses perceive IT as having an effect on WE. Various studies have shown that job resources, in this case SL, can mitigate the impact of job demands on burnout (Bakker & Demerouti, 2014). As burnout can be seen as the antithesis of WE, it can be assumed that job resources, in this case SL, can mitigate the impact of job demands on WE. However, statistical evidence that focuses specifically on how job resources moderate the relationship between job demands and WE is necessary. The path, path coefficient and whether it is significant or not are illustrated in the structural model (Figure 4.1).

**Hypothesis 9:** PsyCap has a moderating effect on the relationship between IT and WE.

The p-value of PsyCap as moderator of the relationship between IT and WE was found to be less than 0.05 (Table 4.5). A p-value of less than 0.05 means that PsyCap has a significant moderating effect on the relationship between IT and WE. However, when this moderating effect of PsyCap on the relationship between IT and WE was tested in terms of PLS bootstrapping, the opposite was found. The hypothesised positive moderating effect on the relationship between IT and WE was found to be not significant. The PLS path coefficient was equal to 0.034, with zero falling in the 95% confidence interval. The exact information on the confidence of the lower and upper intervals is provided in Table 4.6. The results of the bootstrapping method were utilised for interpretation, as PLS results are usually of more value. Although the hypothesis was found not to be significant, further studies need to be conducted to test the moderation of PsyCap on the relationship between IT and WE.
The finding of the hypothesis supports existing SEM analysis research on the moderating effect of personal resources on the relationship between demands and WE. According to Bakker and Demerouti (2014), personal resources do not offset the relationship between job demands and burnout. As mentioned, burnout is the antithesis of WE, in other words the same would account for the relationship between job demands and WE. Thus, the finding of this hypothesis provides evidence that PsyCap does not offset the relationship between IT and WE. Nurses rely on their own personal resources as a way to moderate the negative consequences of the job demands they are faced with every day. It is also found that nurses with more job demands will use more job resources to cope with these increasing demands, which is somehow in contrast with the finding of the hypothesis.

The finding of the hypothesis supports existing SEM analysis research on the moderating effect of personal resources on the relationship between demands and WE. According to Bakker and Demerouti (2014), personal resources do not offset the relationship between job demands and burnout. As mentioned, burnout is the antithesis of WE, in other words the same would account for the relationship between job demands and WE. Thus, the finding of this hypothesis provides evidence that PsyCap does not offset the relationship between IT and WE. Nurses rely on their own personal resources as a way to moderate the negative consequences of the job demands they are faced with every day. It is also found that nurses with more job demands will use more job resources to cope with these increasing demands, which is somehow in contrast with the finding of the hypothesis.

The path, path coefficient and whether it is significant or not are illustrated in the structural model (Figure 4.1).

**Hypothesis 10:** IT has a significant moderating effect on the relationship between SL and WE.

The hypothesised moderating effect of IT on the relationship between SL and WE was found to be not significant. The p-value of IT as moderator of the relationship between SL and WE was found to be bigger than 0.05 (Table 4.5). A p-value bigger than 0.05 means that IT has no significant moderating effect on the relationship between SL and WE. The PLS path coefficient was equal to 0.076, with zero falling in the 95% confidence interval. The exact information on the confidence of the lower and upper interval is provided in Table 4.6. These findings are in contrast with research regarding the JD-R theory and model, which states that demands will amplify the impact of job resources on WE (Bakker & Demerouti, 2014). Thus, this study found that, in the case of nurses and specifically in relation to SL, IT as demand would not increase the impact of SL as job resources, on WE. SL as job resource does not become salient and does not have the strongest positive impact on WE when IT as demands are high, as one would expect. Nurses face very demanding and challenging job demands and, in this case, resources become very important. Although one would wanted the results to have indicated a different finding, it has been shown that SL does not become valuable in such a way that it fosters dedication to the task at hand, and it does not have the strongest positive
impact on WE. The path, path coefficient and whether it is significant or not are illustrated in the structural model (Table 4.1).

**Hypothesis 11:** IT has a significant moderating effect on the relationship between PsyCap and WE.

The hypothesised moderating effect of IT on the relationship between PsyCap and WE was found to be not significant. The p-value of IT as moderator of the relationship between PsyCap and WE was found to be bigger than 0.05 (Table 4.5). A p-value bigger than 0.05 means that IT has no significant moderating effect on the relationship between PsyCap and WE. The PLS path coefficient was equal to 0.034, with zero falling in the 95% confidence interval. The exact information on the confidence of the lower and upper interval is provided in Table 4.6. In other words, this finding proposes that IT does not moderate the relationship between PsyCap and WE, as proposed. According to Bakker and Sanz-Vergel (2013), job demands, especially emotional demands on nurses, strengthen the impact of personal resources on WE. Teo et al (2014) also states that employees who have a high level of personal resources are seen as individuals who can cope better with daily job demands. These findings are in contrast with the finding of the hypothesis, which indicates that IT, as job demand, does not strengthen the effect of PsyCap as personal resource on WE. In other words, this study adds value in as far as the findings indicate that IT does not strengthen the effect of PsyCap in determining WE. More research regarding this moderating relationship is needed before final conclusions can be made.

The significant and non-significant path coefficients are illustrated in the structural model of work engagement and organisational citizenship behaviour (Figure 4.1).
Figure 4.1: Structural model with path coefficients

4.4 Chapter summary
The purpose of this chapter was to report on and discuss the findings of the statistical analyses that were performed. The measurement model was validated by conducting item analyses on each subscale of each measurement in order to establish the reliability of the items included in the questionnaires that were used to measure the constructs. PLS was used to further investigate the reliability of the items of each scale used to measure the latent variables. The reliability analysis
confirmed most of the reliability of each item, except for two items included in the PsyCap measurement. Thus, one cannot confirm with confidence that these items are a very good measure of PsyCap. Although the reliability of the items included in the BITS was confirmed, the internal consistency of the total scale was not satisfactory high, but rather acceptable. However, the internal consistency was only slightly less than satisfactorily high. These findings were kept in mind throughout the interpretation of the results. In order to confirm the fit of the structural model, PLS was used to evaluate the significance of the paths as illustrated in Table 4.4 and Table 4.6. Although the p-values were reported, the hypotheses were interpreted by using the findings of PLS bootstrapping, as these are regarded as more valuable. Based on the path analysis it was found that hypotheses 2, 3, 4 and 6 were found to be significant. Hypotheses 1, 5, 7, 8, 9, 10 and 11 were found not to be statistically significant. It is important to take note that there were some tendencies that PsyCap and SL possibly could be a moderator in the relationship between IT and WE.

Chapter 5 delineates the limitations of this study and provides recommendations for future research studies. Furthermore, the managerial implications of the research findings are discussed.
CHAPTER 5

IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

5.1 Introduction
This study investigated factors that may explain why certain nurses experience WE and engage in OCB in the same demanding work environment as other nurses who experience burnout. The JD-R model of occupational well-being (Bakker et al., 2014) was used as framework for the study. This study investigated whether salient job and personal resources as well as job demands account for the variance in WE and OCB. To survive in the rapidly changing work environment and the increasing nursing shortage, WE and OCB are crucial outcomes that need to take place and be promoted. The resources and demands selected and investigated for the specific purpose of this study were servant leadership, psychological capital and illegitimate tasks. This chapter focuses on providing the managerial implications and interventions that can foster WE and OCB through the promotion and development of job and personal resources. These practical implications can be utilised by industrial psychologists and managers within the workplace. The limitations will be discussed, as will recommendations for future research relating specifically to the selected variables.

5.2 Managerial implications and interventions
Research, especially quantitative research, in which relationships between variables are shown to be significant is of much value for industrial psychologists and managers within workplaces. The PLS path analysis provided valuable information regarding the amount of variance accounted for by the total model. The results of the PLS path analyses showed that the model accounted for almost half of the variance observed in WE and for 21,9% of the variance observed in OCB. It is clear that the developed model provides valuable findings for practicality within the workplace.

Interventions should aim at fostering WE. The interventions that were found to be most effective are those that combine specific measures at the organisational and individual levels (Bakker et al, 2014). The JD-R theory propose two types of interventions to foster WE, namely organisational-level interventions and individual-
level interventions, as mentioned above. Interventions at the organisational level focus on groups of employees, whereas individual approaches focus on the specific needs and problems employees may have (Bakker et al., 2014). Interventions on both of these levels are discussed by focusing specifically on increasing job resources, fostering personal resources, and optimising job demands.

5.2.1 Organizational-Level Interventions

The hypothesised relationship between SL and WE was found to be significant in the PLS path analysis. The results of this study provide evidence that SL will lead to WE, and indicate the importance of exploring the development of SL. According to Bakker et al. (2014), job resources such as social support and performance feedback can be optimised by redesigning the work environment or through training. An example of these optimised redesigned work environments is when the work environment is designed is such a way that employees regularly meet with each other, as this will provide them with opportunities to exchange information and provide feedback to each other. Additionally, employees may learn how to distil feedback from their own work results, whereas managers may be taught how to provide feedback in an appropriate way.

SL will contribute to a work environment that promotes the virtue of serving others and in which followers want to remain. Providing opportunities for professional development and training programmes to develop servant leader behaviours (e.g., self-awareness, self-efficacy, consensus-building, reflection, honest feedback and communication, active listening, empathy and mentoring) can be one way of developing servant leaders (Beck, 2014). A SL programme encourages leaders to find a specific area of service that aligns with their individual sense of purpose, calling or desire to give back, and such a programme could also focus on ethical training and conduct.

A leadership development programme that aims at developing servant leaders would also include specific elements identified in this study as important characteristics of a servant leader. These characteristics may not all be teachable, but can be observed and nurtured (Beck, 2014). These elements of a servant leader include an altruistic mind-set, interpersonal acceptance, active listening behaviour, an “others”
orientation, spirituality, a desire to make a positive difference in the lives of others, and leading to help others. Leader development programmes that include coaching can also be utilised to improve outward displays of care and concern for others, thereby improving their other-orientation overall (Hunter et al., 2013).

The recruitment and selection programme may be used as an opportunity to recruit and develop individuals who possess more of the SL characteristics. Test batteries used for selection can include a SL questionnaire to identify individuals high on these characteristics. Hospitals may consider creating a broader servant-minded culture throughout the organisation in order to provide support and maintain the worthy behaviours of servant leaders in the long term (Liden et al., 2008).

In addition, when hospitals want to promote or recruit a new manager or supervisor it is advised that they seek individuals who have demonstrated a strong connection of their identity with the hospital, as evidenced by their positive evaluations of the hospital, the degree to which these individuals show a desire to have a great amount of contact and interaction with its co-workers and nurses, their eagerness to be supportive of hospital members and whether they display organisational citizenship behaviours (Dutton, Dukerich, & Harquail, 1994). In other words, by increasing SL as a job resource, one can work towards fostering WE amongst nurses.

The hypothesised relationship between PsyCap and WE was found to be significant in the PLS path analysis. In other words, if nurse managers want to get their nurses to be more engaged in their work, they can develop PsyCap. Positive psychology interventions are described as intentional activities that aim to develop positive feelings, behaviours or cognitions (Luthans, Luthans & Avey, 2013). There is no doubt that WE leads to a variety of positive work outcomes. From the results it is evident that PsyCap has a positive significant relationship with WE. It is also evident that personal resources such as optimism, resilience and self-efficacy can be developed (Demerouti & Bakker, 2011). In other words, when an organisational assessment indicates that large groups of employees have low levels of personal resources, it could be decided to arrange on-the-job training (Bakker et al., 2014) in order to foster personal resources. Training will provide employees with examples of how to develop their personal resources in their daily work routines, and help them to
acquire new competencies that will assist them to execute their daily job tasks (Luthans et al., 2006).

Luthans et al. (2013) developed a PsyCap intervention (PCI) training model that can be used to increase the level of PsyCap. More specifically, this programme aims to increase levels of hope, resilience, optimism and self-efficacy. Personal resource development includes providing employees with examples of how to develop their personal resources in their daily work routines in order to acquire new competencies that help them execute their daily job tasks (Luthans et al., 2013). In order to develop hope, the nurses need to develop work-related goals that can be seen as personally valuable as well as challenging. The nurses can then be asked to think of possible pathways that will enable them to reach these goals. They also need to think of possible obstacles that they may encounter along the way. Each participant receives feedback in small-discussion groups. The feedback includes additional pathways to reach their goals and overcome obstacles. These additional pathways must be new and not previously considered. Through this practice, pathway generation capacities and the ability to plan for obstacles will be acquired. It is expected that, after these activities, the participants’ efficacy levels for accomplishing their goals is enhanced. Positive expectations of future success may also have been increased through the process, which will lead to higher levels of optimism. Through the development of multiple pathways to reach goals it can be concluded that resilience is developed. When obstacles are faced or a goal is not reached, nurses will have multiple pathways, in other words they will be able to bounce back. Through the alternative pathways they will overcome the setback and be even more confident (efficacious). In addition, to raise resilience, nurses can be asked to name their assets, job and personal resources that can assist them in being persistent in achieving their goals (Luthans et al., 2013).

PsyCap can also play an important role in terms of the recruitment and selection procedure of hospitals. A high level of PsyCap can play a vital role in the nursing profession that is characterised by a very demanding and stressful work environment. PsyCap questionnaires can be included in selection batteries. The level of PsyCap can be one of the deciding factors when deciding whether or not to appoint nurses based on individual differences. Another implication is to engage in
leadership development interventions. These interventions will train leaders in practices that enhance employee PsyCap. Hospitals that implement leadership development interventions will not only acquire more highly developed leaders, but also benefit from the fact that leadership development may most likely lead to increased employee PsyCap (Avey, 2014).

The hypothesised relationship between IT and WE was found to be significant in the PLS path analysis. However, it is important to note that, although the relationship was significant, it was negative. This indicates that a decrease in the amount of IT will lead to an increase in WE. The ideal will be to decrease the number of IT required of nurses. Challenging job demands such as work pressure and complex tasks are positively related to WE and are seen by employees as something that they want to overcome. However, demands that hinder work activities need to be reduced, as they bring forth stress and are experienced as unnecessary (Bakker et al., 2014). Interventions to reduce hindrance demands, such as IT, need to be implemented. The implementation of fair procedures, and teaching teams and departments to combine challenging demands with sufficient job resources can be considered as interventions to reduce the occurrence of hindrance tasks such as IT among nurses.

In the case of unnecessary demands in particular, supervisors may consider identifying these tasks and address them accordingly (Semmer et al., 2010). In cases where nurses perceive tasks as unnecessary, and where circumstances do not allow the reorganisation of tasks, the nurse supervisor can provide a rationale for why these tasks need to be done. Whether nurses will experience some tasks as illegitimate and other not will to a large extent depend on the supervisor's talent in translating the hospital's and client's needs. Thus, it is important to communicate the IT with respect and also to put emphasise on why the tasks are important and necessary. However, reorganisation will not solve the problem of unreasonable tasks, which can be experienced as an offense to a specific person (Schie et al., 2013). Coaching and communication can play an important role in detecting nurses' personal feelings of being offended. Nurse supervisors could reaffirm why a specific nurse that has been given the unreasonable task to do is indeed the right person for the job. Supervisors may not always perceive tasks as illegitimate, or illegitimate
tasks as a potential problem. They may only see the importance of the task in order to make the department succeed (Semmer et al., 2007). Most supervisors see IT as a minor problem. Thus, nurse supervisors should be aware of these tasks they assigned and expect from nurses.

Another helpful way of dealing with IT is if supervisors themselves start participating in these activities. Supervisors must be willing to carry out such tasks that others are not willing to carry out. This behaviour will display that they do not expect something from others that they are not willing to do themselves (Semmer et al., 2010). The most important thing that nurse managers need to take into consideration is to be aware of the potential threat IT can pose to an employee’s professional identity. However, the shortage of nurses makes it more challenging to reduce the number of IT. Consequently, the focus needs to be on job and personal resources in order to cope with IT.

5.2.2 Individual-Level Interventions

Individual-level interventions can include attending to the specific needs and problems nurses may have. In some case nurses may face hindrance demands caused by certain life events. Some nurses may also lack certain job or personal resources because of changes in the organization or in their personal lives. Hospitals can make use of internet versions of JD-R questionnaires where tailored feedback will inform nurses and nurse managers of their most important job demands and resources (Bakker et al., 2014). This information can be used as the starting point of a change process that is guided by a personal coach.

Other possible interventions are (a) training in job crafting, where employees can learn how to proactively change their own work environment (Tims et al., 2012); (b) training in the use of their strengths, in which employees learn to set their own goals and use their strengths at work in different ways (Linley & Harrington, 2006); and lastly (c) recovery training, in which employees learn which activities best help them to recover from their work-related efforts (Bakker et al., 2014). Recovery training may include relaxation techniques or mindfulness to help employees recover from stressful events.
5.3 Limitations and recommendations

A number of limitations were experienced while this study was being done. However, these limitations did not significantly undermine the results discussed in the previous chapter.

Although the sample size was satisfactory, a larger sample size would have made the results and study more credible. The shortage of nurses was indeed a factor that placed a limit on the amount of responses. The nature of their work made it difficult for them to take 25 minutes from their schedule to complete the questionnaire. The limited size of the sample may cause some concern when referring to generalizability, as well as the validity of the inferences made about nurses as a population. The sample size and the complexity of the structural model also limited the use of LISREL to test the structural model. Although the model was tested using LISREL, it did not converge.

The questionnaire was only provided in English. Some of the Afrikaans- and Xhosa-speaking nurses found some of the items difficult to understand, especially words such as “immersed” and “resilient” in the UWES and PCQ respectively. Certain items were also confusing in the way they were stated, for example item 13 of the PCQ, “When this person has a setback at work, he/she has trouble recovering from it, moving on”. Another example that the nurses misinterpreted was item 6, “When I am working, I forget everything else around me”, of the UWES. Item 1, “Picked up meal for others at work”, from the OCB-C was the item nurses found the most difficult to interpret and answer. These items can be seen as items that could have an influence on the overall results of the study. Although the scales showed good reliability, further development and validation of the scales measuring these constructs within the South African context can be considered.

The study made use of self-administered questionnaires that were completed on paper copies of the questionnaire. This method may give rise to impression management, which can be seen as a weakness of self-administered questionnaires. It is possible that nurses responded in a way that would create a more favourable image and impression of themselves. However, it was made clear to the nurses that they did not have to identify themselves and this would have made
it favourable to answer as honestly as possible. The use of self-report questionnaires can falsely influence the paths between latent variables (Avey, 2014).

Many other variables that can be seen as determinants of WE and OCB were not included in the research study. Therefore, it may not be accurate to view the variables in the study as the most important. It is recommended that more job and personal resources as well as job demands that influence OCB and WE are identified and researched.

In summary, the findings contribute to the positive psychology literature by exploring PsyCap as an antecedent of WE and OCB. The study supports the JD-R theory by showing that job and personal resources are positively related with WE, whereas job demands are negatively related with WE. The JD-R theory can be applied across various work environments and by tailoring the JD-R model to fit a specific work environment WE can be addressed through a range of job and personal resources. It is thus recommended that hospitals alter the JD-R model in such a way that it fits their business model.

5.4 Chapter summary

The main focus of this study was to explore salient job and personal resources, as well as job demands, that account for variance in nurses experiencing WE and engaging in OCB. SL and PsyCap were tested as job and personal resources respectively, whereas IT were tested as a job demand. This study contributes to the theoretical framework of JD-R theory, as well as to positive psychology research. This study also contributes to the understanding of the WE and OCB of nurses in the private sector in Gauteng and the Western Cape. The findings can provide industrial psychologists and nurse managers or supervisors with insight into how to address specific challenges within the nursing work environment. The findings can also be used to increase WE through the development of PsyCap and SL behaviour. In addition, OCB can be increased by developing nurses’ PsyCap.

In conclusion, the limitations of this study were discussed and recommendations for future research were provided. The results of the study and practical implications provide valuable insight into how to create a work environment in which nurses can be more engaged and in some cases display more OCB. These findings can only be
of true value amongst professional nurses once interventions are developed and implemented.
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