A comparative study on pharmacist job satisfaction in the private and public hospitals of the North West Province

by

Martine Vorster

12817570

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Supervisor: Me R Scholtz

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**ABSTRACT**

Pharmacists experience high levels of stress at work, especially from factors intrinsic to their jobs and management roles. In South Africa, the public sector is confronted with situational difficulties such as a shortage of staff and poor working conditions.

Accordingly, a comparative survey was conducted using a self-constructed questionnaire to obtain individual responses from the pharmacists in the public, as well as the private sector. The focus population was the pharmacists in the public, as well as the private hospitals in the North-West Province. The public sector consists of 30 hospitals and the private sector of 20. By using the convenient sampling method, 100 samples were taken. The questionnaire measured six factors of job satisfaction, namely: job design, salary/remuneration satisfaction, performance management, working arrangements, organisational climate, and professional development. The questionnaire was distributed to 100 pharmacists in total, and a response rate of 66% was obtained.

The only medium practical significance shown in the results was between the averages of the private sector (2.89) in contrast with the public sector (3.38). This indicates that the public sector demonstrates less satisfaction with their performance management than the private sector. The data also indicated that the public sector pharmacists are less satisfied with job design, performance of management, professional development, and their working arrangements. The private sector showed only a small difference in the means, when compared to the public sector. It is clear that both sectors illustrate a moderate level of job satisfaction.

Recommendations, therefore, included the revisiting of the job design by increasing job rotation and task identity. The need for self-actualization has to be acknowledged and the opportunity for promotion needs to be provided. The link between the actual activity and the bonus, with regards to performance management, has to be re-established, and there has to be transparency throughout. Decision-making control is extremely important and seeing that 82% of the pharmacists were female, the employer can consider accommodating family responsibilities, compressed working weeks, flexible working hours, job sharing, and part-time work. Professional development is also very important within any company and it is vital that the employer deposits time, money and skill into the staff.
**Key words:**

Job satisfaction, hospital, pharmacist, motivational theories, health profession, job design, pay satisfaction, performance management, work arrangement, organisational climate, public sector, private sector, professional development.
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CHAPTER 1

1.1 INTRODUCTION

Job satisfaction is a multi-dimensional, enduring, important and much researched concept in the field of organisational behaviour (Pietersen, 2005:19). According to Gunner-Vaughn (2003), the logical starting point for any development and/or intervention program, aimed at maintaining and/or enhancing the satisfaction of employees, is to obtain information from employees about the state of their job satisfaction.

The key aspects that contribute to job satisfaction have been identified as recognition in one’s work, level of salary, opportunities for promotion and, achievement of personal goals. Experts believe that job satisfaction directly affects the labour market behaviour and economic efficiency by means of the impact on productivity and turnover of staff (Mackenzie, 2008:1). According to Roelen et al. (2008:433), there is a strong relationship between low job satisfaction and burn-out, as well as other mental health problems such as depression, anxiety and low self-esteem.

As the dissatisfaction of an employee can be very costly and disruptive to organisational effectiveness, more and more companies recognize the importance and need to monitor job satisfaction (Terpstra & Honoree, 2004). It is, thus, clear that job satisfaction is important to both employer, as well as employee. In the case of health care professionals, it is very important that job satisfaction becomes a focus point because it is in the best interest of the patient and the multi-disciplinary teams that health care professionals engage in.

According to the South African Pharmacy Council (South African Pharmacy council, 2009), being a pharmacist is a dynamic, information-driven and, patient-orientated profession whereby the pharmacist, through his or her competence and skills, is committed to meeting the health care needs of the people of South Africa. Furthermore, community and hospital pharmacists have an extremely wide range of responsibilities.
This range of pharmacist responsibilities includes:

1. the provision of pharmaceutical care by taking responsibility for the patient's medicine related needs and being accountable for meeting these needs, which includes the following functions:
   a. evaluation of a patient's medicine related needs by determining the indication, safety and effectiveness of the therapy,
   b. dispensing of any medicine or scheduled substances on the prescription of an authorised prescriber,
   c. furnishing information and advice to any person with regards to medicine,
   d. determining patient compliance with the therapy and follow-up to ensure that the patient's needs are being met, and
   e. provision of pharmacist initiated therapy;
2. the compounding, manipulation or preparation of medicines and scheduled substances;
3. the purchasing, acquiring, keeping, possessing, using, supplying or selling of medicine or scheduled substances;
4. applications for the registration of medicines or medical devices;
5. re-packaging of medicine;
6. the promotion of public health in accordance with guidelines and standards that include:
   a. the provision of information and education regarding the promotion of human health,
   b. the provision of immunisation, mother and child care, blood pressure monitoring, health education, blood-glucose monitoring, screening tests for pregnancy, family planning, cholesterol screening tests, HIV screening tests, urine analysis, and visiometric and audiometric screening tests,
   c. the provision of animal health care services including:
      i. the compounding and dispensing of prescriptions written by veterinarians and ensuring the optimal use of veterinary medicines,
ii. the immunisation of animals,
iii. the handling of minor and/or self-limiting ailments in animals,
and
iv. the provision of information and education regarding the
promotion of animal health;

7. the conducting of pharmaceutical research and development;
8. the provision of primary care drug therapy with prior authorisation from council
and lastly;
9. the timely provision of any other health services that have been approved by
council.

Frederick Herzberg, an American Psychologist, published the Two-Factor Theory in
which he formulated two lists of factors that can either reduce or promote levels of
job satisfaction. He named the first list motivators, which are intrinsic factors that
relate internally or directly to the work such as achievement, recognition,
responsibility, the work itself, and the ability to grow and advance. The second list is
called the Hygiene-factors, which relate extrinsic or indirectly to the work. These
factors include salary, job status, job security, supervision, inter-personal
relationships, personal life, and company policies (Mackenzie, 2008:4).

This study will focus on the job satisfaction of pharmacists in the private and public
health sector of the North-West Province. The study, furthermore, aims to draw a
comparison between the public and private sectors and the various levels of job
satisfaction within these sectors. Thereafter, the necessary recommendations will be
made.
1.2 BACKGROUND TO THE STUDY

Hospital pharmacists are currently functioning in an environment that demands more of them than in any previous period. Employees in pharmaceutical companies need to cope with the demands that arise from the obligation of fulfilling various roles, as well as increased pressure such as managed health care and primary health care (Malan, 2005:vi).

Hospital pharmacists in South Africa, especially in the public sector, are confronted with various situational difficulties, and pharmaceutical services in the public sector are hampered by a shortage of pharmacy personnel (Malan, 2005:2). According to Harisson (2009:18), the ten biggest challenges facing the public health sector for the next five years are:

- **Prevention and control of epidemics**
  2. The prevention of new epidemics (especially MDR-TB).
  3. The prevention of alcohol abuse.

- **Allocation of resources**
  4. The distribution of financing & spending.
  5. The availability of health personnel in the public sector.

- **Health systems management**
  6. The quality of care.
  7. Operational efficiency.
9. The morale of the health worker.
10. Leadership and innovation.

The Disciplinary Committee of the South African Pharmacy Council states that the workload of a pharmacist in the public sector is twice the acceptable norm (Beukes, 2002). In contrast, pharmacists in the private hospital sector seem to be better off in terms of conditions and staff proficiency (Malan, 2005:2).

Organisations everywhere are undergoing rapid and significant changes. These changes are driven by external, as well as internal factors such as higher customer expectations, new technologies, increased marketing dynamics, rapidly growing competition at the international level, strategic changes, and new legislation (Stimie & Fouche, 2006:2).

The worldwide health care industry is also in the process of rapid transformation, and the public health care sector has not escaped the demands of a global economy that is constantly asking for less (Pricewaterhousecoopers, 1999).

These changes ultimately have an effect on organisational effectiveness and employee well-being. This study will be presented against the above mentioned background of the pharmaceutical industry in the public and private hospital sector of the North-West Province. This will be done in order to draw a comparison between the different factors that influence job satisfaction.

1.3 PROBLEM STATEMENT

The need for health care in the public sector increases daily. This is linked directly to the increase in HIV/Aids patients. This sector also recently restructured pharmacist salary structures and focuses on performance bonuses throughout. The focus of management is mainly on having a steady, reliable and loyal workforce, and not on the effective use of resources. This leads to the question: why is the public sector notorious for poor service delivery and poor performance?

In contrast, the private sector focuses on constantly increasing the turnover, being competitive and outperforming the market. The focus of management is usually on
increasing the productivity and turnover, without focusing on the emotional welfare of the employee. In this regard the employee’s wellness is compromised for a better financial turnover and company success. The concern here is the level of effectiveness in providing health care under pressure, as well as the risk of employee burnout.

Any employer should regard it important to study the specific factors that lead to job satisfaction in the organisation to ensure that the best possible strategy is implemented for the pharmacist in the specific organisation.

It is clear, from the above mentioned, that the private and public sectors differ in many ways. Are the different strategies that each sector uses to address job satisfaction, effective? What are the advantages and disadvantages of these strategies and what can these sectors learn from one another?

1.4 OBJECTIVES OF THE STUDY

The objectives of this study are divided into primary and secondary objectives as follows:

1.4.1 Primary objective

The primary objective of this study is to draw a comparison between the job satisfactions of pharmacists in the private hospitals to the pharmacists in the public sector hospitals of the North West Province

1.4.2 Secondary objectives

The secondary objectives of this study are:

- identifying the different factors that lead to job satisfaction,
- identifying the most critical problem areas and possible causes within the context of job satisfaction, and
- making specific recommendations on how to address these issues.
1.5 SCOPE OF THE STUDY

The study will take place in the North-West Province. This province has a population of approximately 3.1 million people. The districts range from the less deprived socio-economic quintile 4 (Dr Kenneth Kaunda district), to the more deprived socio-economic quintile 2 (Ngaka Modiri Molema and Dr Ruth Segomonti Mompati district). In 2007, around 11.2% of the population belonged to a medical aid. The average primary health care expenditure per capita, of R340.00 per person, was the third highest in the country in 2007/08 (DOH, 2008).

The population, considered for this study, will consist of all the pharmacists registered as institutional pharmacists with the South African Pharmacy Council in the North-West Province. The data gathered will then be sent for statistical analysis and interpretations. Recommendations will also be made in the conclusion.

The focus population will be pharmacists in the public, as well as the private hospitals in the North-West Province. The public sector consists of 30 hospitals and the private sector of 20 hospitals. The population for the public sector is 100 pharmacists. The private hospitals, however, limit the number of pharmacists to 50 per sector. Not all of the hospitals in the private sector are registered to a specific body and, therefore, it limits the study to the 20 identified hospitals. The convenience sampling method will be used to obtain the sampling size. An amount of 50 pharmacists from each sector will be used.

A transparent study will be conducted in order to compare the extrinsic factors that have an influence on job satisfaction. These factors include remuneration, working environment and performance recognition of the different sectors. Shortcomings and opportunities will also be identified, and recommendations will be made to both hospital sectors.
1.6 RESEARCH METHODOLOGY

1.6.1 Literature study

Topics on organisational behaviour will be researched with a specific focus on factors that increase job satisfaction, the theoretical views on performance recognition and rewarding, the influence of the working environment, and the methods on how to increase employee satisfaction and performance.

The research will also entail the current strategies that are in place at the hospitals, as well as the theoretical analysis of each of these processes.

1.6.2 Empirical study

After a thorough review of the literature, the researcher compiled a questionnaire to measure job satisfaction according to the factors identified by the literature study.

The questionnaire was designed to cover all identified motivators and their impact on employee job satisfaction. According to Kotler and Armstrong (2008:33), questionnaires are used to enable the researcher to measure the perception responses on quantitative scales. These scales enabled the researcher to compare factors of motivation that have an impact on an employee’s job satisfaction.

The questionnaire consisted of closed-ended questions. Closed-ended questions specify all the possible answers and are easier to interpret and tabularise. Semantic differential types of questions are used within ratings. The use of open-ended questions allowed the participants to define and describe the reason for choosing the specific sector that they are currently working in. According to Saunders et al. (2003:262), "an open question is designed to encourage the interviewee to provide an extension and developmental answer". 
The questionnaire, including letters stating the details of the motivation for the study, as well as a request for participation in the research, was distributed to the relevant pharmacy managers. Ethical aspects, regarding the research, will be discussed with the various approving bodies. The nature of the research will be explained to the participants in the enclosed letter. Self-addressed envelopes will be included for the return of the questionnaire and individualised envelopes will also be provided to ensure confidentiality where there is more than one pharmacist at a specific site.

1.7 LIMITATIONS OF THE STUDY

This study will be limited to the North-West Province and cannot be regarded as a general view of all the pharmacists employed in South Africa. The study will also be limited to the different motivators used in the hospitals, and not to all theoretical motivators available. The results only apply to the selected study population.
1.8 LAYOUT OF THE STUDY

The layout of the study will progress in the following order:

Chapter 1: The topic is introduced and the problem defined. The objectives of the study are highlighted. A description of the research methodology and the sampling procedure used in this study will also be provided.

Chapter 2: A literature review on various topics in organisational behaviour will be examined. There will be a specific focus on motivational strategies, the theoretical views on performance recognition and rewarding, the influence of the working environment, and the methods used to increase employee motivation and performance.

Chapter 3: The introduction of the research design and the instruments used during the research will be explained. This chapter will also contain the data analysis, acquired from the data that the questionnaires provided.

Chapter 4: Provision of discussions and interpretations relating to the answers received from the participants. A comparison will be drawn between the two sectors, and shortcomings and opportunities in each sector will be identified and discussed. The recommendations will be made available to the different sectors.
CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

Job satisfaction is a very important, multi-dimensional, enduring, and much researched concept in the field of organisational behaviour. This is as a result of the human relations movement that began with the Hawthorne studies in the late 1920’s. It states that an employee’s perception is that their job allows the fulfilment of important values and needs (Pietersen, 2005:19). It is described, by Hertzberg (1966), as the pleasure one derives from one’s current job and working conditions.

According to Mackenzie (2008:1), the key aspects that contribute to job satisfaction are recognition in the job, level of salary, opportunities for promotion, and achievement of personal goals.

For any employee, his/her occupation is a main source of income; it also takes up a large part of the day and contributes to their social standing. Since the role of an occupation is central in many people’s lives, job satisfaction is an important component of overall well-being (Sharma & Jyoti, 2009:51). Organisations are undergoing rapid and significant changes, driven by external and internal factors such as the increase in customer expectations, technological changes, increasing market dynamics, rapidly growing competition, strategic changes, and new legislation (Stimie & Fouche, 2004:1).

Job satisfaction is a positive concept, describing work attitudes in particular. The majority of adults spend one third of their lives at work. With the abundant proof that job satisfaction relates directly to physical and psychological well-being and a positive life experience, it is important to emphasise the motivating climate (Coetsee, 2002:45).

Coetsee (2002:46) states that the causes of job satisfaction can include equality of management and leadership, rewards and pay recognition, promotional opportunities, co-workers, working conditions, job security, mentally challenging work, and person-job-fit. Coetsee (2002:48) concludes that performance is not a result or consequence of satisfaction, but rather that satisfaction results from
performance when the rewards, received as a consequence of good performance, are perceived as reasonable or equitable.

A discontented and less motivated workforce leads to low productivity, low organisational effectiveness, absenteeism and a high turnover. For the individual, it can lead to poor mental health, in particular stress and anxiety, and in the end it has an impact on the delivery of health care services as well as the experience of patients in the receipt of care (Hassel et al., 2007:259).

According to Macky and Boxall (2007:537), there is a growing body of evidence that satisfied employees play a huge role in generating satisfied customers. Satisfied customers are more likely to be loyal to a firm, bring more business to the firm, and refer other customers to the firm. This is also relevant in the case of the health care sector and it demonstrates that job satisfaction is important for both the employers and the employees.

Pharmacists are a part of the multi-disciplinary group that assures patients’ of their health. They are, for the most part, the first and last step in the line of information and health. In this study, the aim is to identify factors that lead to job satisfaction, to research the influence of these factors on the pharmacist in the institutional pharmacy, and to make recommendations in order to improve the job satisfaction.

2.2 THEORIES ON JOB SATISFACTION

In the area of organisational theory, one can include the terms job satisfaction, motivation and reward systems. The strongest influence in this area is motivation, because it has common ground with both of the other two terms (Pardee, 1990:3). Motivation can be defined as those forces in an individual that push or propel him to satisfy basic needs or wants, and the level of needs will determine what reward will satisfy an employee. Job satisfaction is one of the most frequently studied work attitudes by organisational behaviour researchers with, in fact, more than 12 000 job satisfaction studies being published in the early 1990’s (Kreitner & Kinicki, 2007:192).
Job satisfaction can be described as the pleasurable, emotional state caused by a person’s job appraisal when achieving or facilitating the achievements of one’s work values. It is described as an effective response to specific aspects of the job and, as job satisfaction has a huge impact on productivity, it is very important to any organisation. Job satisfaction can, therefore, be seen as an attitude eliciting an expression of feeling toward an object (Ermel, 2007:5).

Spector (1997) defined job satisfaction as an attitudinal variable which measures how a person feels about their job in general, and also how they feel about different facets of their job. Lofquist et al. (1996) defined it as the effective orientation that an employee has towards his or her work. Siegel and Lane (1982) state that job satisfaction occurs when an individual subjectively appraises his or her current work situation, and has a positive and pleasurable response to it (Pietersen, 2005:20).

According to Coetsee (2002:45), it can be the positive or negative attitude that individuals have towards their jobs and related matters, and the degree to which there is a good fit between the organisation and the employee.

Utriaine and Kyngas (2009:1002), note that the degree of positive affect towards a job and its components, can be defined as job satisfaction. The theories are:

- discrepancy theories, which examines the extent to which employees need or want to be satisfied within the workplace;
- equity theories, which highlight social comparisons in the evaluation of job rewards; and
- expectancy theories that focuses on employee motivation.

Pietersen (2005:19) lists the following models for job satisfaction:

**Lawler’s model** relates closely to the equity theory; it specifies that employees are satisfied with a specific facet of the job (e.g. co-workers, supervisors, pay) if the amount of the facet they receive equals the amount they perceived.

**Locke’s discrepancy theory** explains job satisfaction in terms of needs. The focus is on satisfaction and dissatisfaction in the job, and further states that it depends on the perceived congruence or discrepancies between desires and outcomes, and the
importance of what is wanted. With job satisfaction being the sum of the aspects of the job multiplied by the importance of the aspect to the person.

**Landy’s opponent-process theory** emphasises emotional equilibrium and regards job satisfaction and dissatisfaction as emotional states. Whereas job satisfaction pertains to positive feelings that individuals have relative to their jobs; job dissatisfaction, on the other hand, indicates the negative feelings that individuals have regarding their jobs or facets of their job.

Siegel and Lane (as quoted by Pietersen, 2005:19) indicate that motivational theories such as equity theory, Maslow’s need hierarchy theory, and Herzberg’s two-factor theory, all have substantial implications for understanding job satisfaction.

**Herzberg’s Theory**

In the book, *The Motivation to Work* (1959), Herzberg did interviews with 200 engineers and accountants. They were asked to describe “any kind of story you like, either a time when you felt exceptionally good or a time when you felt exceptionally bad about your job”. This was conducted in twelve similar organisations (Smerek & Peterson, 2007:230).

This theory, as shown in Figure 2.2, distinguishes between intrinsic and extrinsic motivators. The common aspects of job satisfaction is pay, promotions, recognition, benefits, working conditions, supervision, co-workers, company, and management. The intrinsic motivators are the job tasks and content, whereas extrinsic factors refer to compensation, co-workers and work conditions. According to Pietersen (2005:19), Herzberg also made a distinction between satisfiers and dissatisfiers. If working conditions and supervisors are good, they are perceived as satisfiers and if the working conditions are experienced as bad they can be seen as dissatisfiers.

Factors that contribute to job satisfaction are different from factors that contribute to job dissatisfaction and can, therefore, not be treated as direct opposites of one another. For example, a lack of motivators may not necessarily result in job dissatisfaction. In the same way, the presence of hygiene factors may impact job
dissatisfaction but not job satisfaction. Motivators are strongly associated with job satisfaction and have a long-term positive impact on work performance. These factors are related to the content of an individual’s work and may include recognition, achievement, the type of work being done, responsibility, and opportunity for advancement. Hygiene factors are related to the context of an individual’s work and may include work relationships, physical work condition, salary, supervision, and institutional policy. It may also have a short-term impact on attitude and performance levels (Spivey et al., 2009:55).

A number of researchers were able to verify this theory and they were summarized in his book, *Work and the Nature of Man* (1966). Researchers argued with this theory; stating that he had investigated a narrow range of jobs and used only one measure of job attitude, and that people were making themselves look good in attributing positive events to internal factors and negative experiences to external events. In the end, different results come from different research techniques. When Herzberg’s critical-incident method of interviewing people was used, the results supported his theory, but a uniscalar model for research would just as consistently be conflicting. Herzberg’s theory is intriguing because it is simple and general. Consequently, the key is to be mindful of the measurement used because the theoretical findings are highly dependent upon the method that is used (Smerek & Peterson, 2007:231).

**Maslow’s Need Hierarchy**

Maslow’s theory of human motivation had a notable impact on the thinking of organisational theorists such as McGregor and Argyris, as well as on the empirical work by Porter, Beer, Hall and Nougiam, and Lawler and Suttle (Schneider & Alderfer, 1974:489).

Abraham Maslow believed that man is inherently good and argued that individuals possess a constantly growing inner drive that has great potential (Pardee, 1990:8). In 1954, this humanist psychologist first published *Motivation and Personality* (1954),
which introduced the theory on how people satisfy various personal needs in the context of their work (Gawel, 1997:2).

Pardee (1990:8) states that the needs hierarchy system is devised by Maslow and is frequently used for categorising human motives. This scheme, as seen in Figure 2.1, involves five categories of needs, arranged with lower-level needs at the bottom which must be satisfied first, before the higher level needs come into play. These needs can be explained in the following hierarchical order:

1. **Physiological needs**: food, water, sex and shelter.
2. **Safety needs**: protection against danger, threat and deprivation. Behaviour that brings forth uncertainty in the field of continued employment, or which reflects favouritism or discrimination, and an unpredictable administration of policy, are powerful indicators in this level.
3. **Social needs**: giving and receiving of love, friendship, affection, belonging, association and acceptance.
4. **Ego needs**: need for achievement, adequacy, strength and freedom. This is, in essence, the need for self-sufficiency or autonomy. For example, status recognition, appreciation and prestige.
5. **Self-actualisation**: need for continued self-development and the desire to become more and more of what you are and what you are capable of becoming.
According to Kreitner and Kinicki (2007:237), research does not clearly support this theory of motivation but in this theory, there is a key point for managers to notice and that is the fact that a satisfied need may lose its motivational potential. Employers must strive to motivate employees by devising programs or practises, aimed at satisfying their needs.

**Alderfer’s ERG Theory**

In the late 1960’s, Clayton Alderfer developed a theory that differs from Maslow’s in three major aspects:

1. a smaller set of core needs were used to explain behaviour,
2. the theory does not assume needs are related to each other in a stair-step hierarchy, and
3. the ERG-theory contains a frustration-regression component (Kreitner & Kinicki, 2007:238).

This theory, compared to other theories in Figure 2.2, uses three broad categories of human needs, namely: Existence, Relatedness and Growth. **Existence needs** include all of the various physiological and material desires (hunger and thirst, as well as material needs such as pay, fringe benefits and
physical safety). These needs are characterised by the goal of obtaining a material substance, and one person’s satisfaction tends to be associated with another person’s frustration when resources are limited.

**Relatedness needs** comprise of the desires of people to have relationships with significant others that are characterised by the mutual sharing of thoughts and feelings. These needs can only be satisfied by means of mutuality. There is usually a connection between each party and their individual satisfaction.

**Growth needs** are the desires of a person to have creative and productive effects on himself and on his environment. In this regard, satisfaction occurs when a person engages problems that call upon him/her to utilise his/her capacities fully, and to develop new capabilities. The person, therefore, feels a greater completeness as a human being (Schneider & Alderfer, 1974:490).

**McClelland’s Need Theory**

According to Kreitner and Knicki (2007:239), David McClelland has studied the relationship between needs and behaviour since the late 1940’s. He investigated three specific needs:

1. **The need for achievement**
   Achievement-motivated people share one of three characteristics, namely: the preference of working on tasks of moderate difficulty, the preference of situations in which performance is due to their effort rather than other factors, and they desire more feedback on their successes and failures. The following desires are specified: to accomplish something difficult; to master, manipulate or organise physical objects, human beings or ideas; to do this as rapidly or as independently as possible; to overcome obstacles and attain a high standard; to excel one’s self; to rival and surpass others; and lastly to increase self-regard by means of the successful exercise of talent.
2. The need for affiliation
   These people tend to spend more time on maintaining social relationships and joining various groups. They also have a strong desire to be loved.

3. The need for power
   This reflects an individual’s desire to influence, couch, teach or encourage others to achieve certain goals.

The previously mentioned theory is compared to other theories, in the figure below:

**Figure 2.2 Summary of content approaches to the needs theories.**

<table>
<thead>
<tr>
<th>MASLOW’S (need hierarchy)</th>
<th>HERTZBERG (two factor theory)</th>
<th>ALDERFER</th>
<th>McCLELLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-actualization</td>
<td>The work itself: Responsibility</td>
<td>Growth</td>
<td>Need for achievement</td>
</tr>
<tr>
<td>Esteem</td>
<td>Advancement, Growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belongingness, social and love</td>
<td>Achievement</td>
<td>Relatedness</td>
<td>Need for power</td>
</tr>
<tr>
<td></td>
<td>Recognition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety and security</td>
<td>Quality of interpersonal relationships among peers, with supervisor, with subordinates</td>
<td>Existence</td>
<td>Need for affiliation</td>
</tr>
<tr>
<td>Physiological</td>
<td>Job security</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Working conditions Salary</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Adam’s Equity Theory**

The equity theory, pioneered by psychologist Stacy Adams, can be defined as a model of motivation that explains how people strive for fairness and justice in social exchange or give-and-take relationships (Kreitner & Kinicki, 2007:242). Inputs and outputs are the main components of the exchange relationship. Inputs are the individual’s contribution to the situation, for example previous work experience,
education, training, and a general effort to perform the job. Outcomes are the results that the employee gains from the exchange, for example remuneration, fringe benefits, job assignments, supervisory behaviour, as well as status symbols.

Employees tend to first compare their input-output ratio to fellow employees and will perceive equity if the input they gave, justifies the output received. They will, alternatively, perceive inequity if their outcomes do not validate the input. Employees who experience inequity will also likely correct the balance, and employers are motivated to assist the employee in balancing the equation (Van Tonder, 2007:16). Figure 2.3 illustrates this:

Figure 2.3 Equity of rewards and recognition (Coetsee, 2002:163).

<table>
<thead>
<tr>
<th>PERSON'S</th>
<th>OTHER'S</th>
</tr>
</thead>
<tbody>
<tr>
<td>perception of is/her work</td>
<td>perception of</td>
</tr>
<tr>
<td>CONTRASTED</td>
<td>with PERSON'S perception of</td>
</tr>
<tr>
<td>O(Outcomes)</td>
<td>O(Outcomes)</td>
</tr>
<tr>
<td>I (Inputs)</td>
<td>I (Inputs)</td>
</tr>
</tbody>
</table>

Expectancy Theory

Ivancevich and Matteson (2002:160), define the expectancy theory as the individual's belief, regarding the possibility or subjective probability, that a particular behaviour results in a particular outcome. Kreitner and Kinicki (2004:301) presents Porter and Lawler’s expectancy model in their work, and this is also the model that refined and extended Vroom’s (1964) work. This model identifies individual human values concerning specific outcomes and their expectancies, and links the effort to performance and job satisfaction.
Steers et al. (1996:23) describes the Porter-Lawler model as a model in which reward value and the individuals’ perceived effort, as well as reward interaction, affect the effort put in by the individual. Effort will lead to performance and the perceived equitable rewards received for the performance delivered, will ultimately lead to employee satisfaction. These authors state that a connection exists between job satisfaction and performance, because an employee is only likely to be satisfied in a situation in which s/he receives the perceived equitable rewards. The model also identifies that the nature of the task influences the linkage between performance and satisfaction, and that the individual’s self-valuation has a significant impact on the employee's perception of the equitable reward. The rewards that an employee receives, following a particular level of performance, will determine satisfaction.

To conclude, the theories on job satisfaction can be summarised as:

- **Herzberg’s Theory**: this theory distinguishes between intrinsic and extrinsic motivators.
- **Maslow’s Need Hierarchy**: human beings possess a continually growing need to satisfy personal needs in the context of their work.
- **Alderfer’s ERG Theory**: this theory focuses on three broad categories of human needs, described as Existence, Relatedness and Growth.
- **McClelland’s Need Theory**: need for achievement, affiliation and power.
• Adam’s Equity Theory: entails a comparison of the input-output ratio of the employee to fellow co-workers.
• Expectancy Theory: individual beliefs about the likelihood that a particular behaviour will be followed by a specific outcome.

2.3 JOB SATISFACTION IN HEALTH PROFESSIONS

In 1999, a five year review was conducted in the South African Public Health Care sector and it was found that, in connection with human resources, there is a very low morale (especially among nurses) throughout the country (Harrison, 2009:31). The nursing profession experiences a loss due to brain drain and turnover problems, which also creates various other problems such as enormous pressure on existing employees. This, of course, results in job stress and job dissatisfaction. At this stage, South Africa is one of the five most prominent suppliers of overseas registrations (Jacobs & Roodt, 2008:63).

According to Mackenzie (2008:5), most of the literature/research on job satisfaction within the medical field, was conducted on nurses and doctors with few conducted on Allied Health Professionals. After a review of the literature, the author concluded that most of the studies reported a slight to moderate level of job satisfaction amongst health professionals. It showed no trends of extreme satisfaction. Although most of the dissatisfying factors will remain, they can, most certainly, be reduced in an effort to increase job satisfaction levels.

Comparing the selected major causes of death in the health profession, has revealed that pharmacists have substantially higher standard mortality rates than suicides, cirrhosis, all cancers, cerebrovascular disease and ischemic heart disease (Rothman & Malan, 2007:235).

Willett and Cooper (1996) found that pharmacists experienced high levels of stress at work, especially from factors intrinsic to their jobs and their management roles (Rothman & Malan, 2007:235).
In South Africa hospital pharmacists, especially in the public sector, are confronted with situational difficulties such as shortage of staff, poor work conditions and pharmacists being charged by the Disciplinary Committee of the South African Pharmacy Council (SAPC) with dispensing errors. The SAPC is also concerned with the workload of pharmacists and stated that it is twice the acceptable norm.

In contrast, the private hospital sector seems to be better off in terms of work conditions and human resources. This is a great concern, as the public sector serves more than 80% of the population (Rothman et al., 2007:235).

As the general age of the population increases and the use of prescription medication increases, the demand for pharmacist services also increase. The imbalance between supply and demand affects the type of work that the pharmacists deliver and the environment that they work in. The interaction between work environments and the amount and type of work pharmacists do, can influence the pharmacists' attitude towards their jobs (Rothman et al., 2007:236).

2.4 VARIABLES IN JOB SATISFACTION

2.4.1 Demographic characteristics

2.4.1.1 Age

Mackenzie (2008:7), states that it has been debated that the relationship between age and job satisfaction is linear and that job satisfaction increases with age for the reason that at a specific age, individuals experience different values, expectations and needs.

In a large-sample study done by Clark et al. (1996:73) they found that overall job satisfaction is U-shaped in relation to age. This supports the findings by many researchers that, in general, morale is high among young workers and tends to go down during the first few years of employment; a low point being reached when the workers are in their middle and late twenties or early thirties. They found that morale tends to climb with age. This study was based on new entrants to the labour market,
feeling positive about their new shift to adulthood. This is followed by an increasing boredom and the perception that there is a decrease in opportunities. However, in due time, the employee comes to terms with his situation and job satisfaction rises again.

A study on hospital pharmacists, conducted in 1998, found an association between seniority, with pharmacist in junior grades more likely to be dissatisfied (Hassel et al., 2007:261).

**2.4.1.2 Gender**

Kim et al. (2009:612), affirm that a theory exists about females possessing social-oriented communal behaviour, whilst males demonstrate task-orientated agented behaviour. Thus, women are satisfied with their jobs when they interact with others who understand their roles in the organisation. Men, on the contrary, are satisfied when others value their performance. This leads to females being more likely to experience dissatisfaction than males, unless they have a clear specification of their role expectations.

Women of childbearing age tend to prefer part-time work due to the demands of raising a family. The need, however, tends to decline after 10 years from the birth of their firstborn. Men, in contrast, are satisfied with working full-time, irrespective of having a family, provided they do not have to work overtime (Paull, 2008:F10).

Mackenzie (2008:8), argues that the differences in genders has long been debated, but that despite the evidence presented and many other conclusive findings made, there appear to be no consensus between studies as to which gender experiences a greater job satisfaction. She also states that the theories tend to lie in the probability of differences in satisfaction occurring between the genders, due to the differences in values and attitudes of each gender. It seems that the impact of other variables (for example, expectations) influences the differences.
2.4.1.3 Marital status and family

Generally, married adults are better adjusted than unmarried counterparts. According to Hertzberg et al. (1957), job satisfaction relates positively to adjustment. Through this, one may expect married pharmacists to feel more satisfied with their jobs than unmarried individuals (Sharma & Jyoti, 2009:53).

Work-family conflict is a type of inter-role conflict that occurs as a result of incompatible role pressures from the family and work domains. These domains are inherently bidirectional, thus, stating that work can interfere with family and family can interfere with work. Pleck’s asymmetric boundary permeable theory states that work and family boundaries are asymmetrically permeable. This is why work is allowed to interfere more with family than the other way around. Research shows that work demands positively and strongly relate to work-family conflict (Yildirim & Aycan, 2007:1368).

It is clear that work-family conflict decreases one of the key indicators of psychological well-being namely, life satisfaction, although employees will react differently to the same work demands. Factors such as social support, interpersonal relationships and social interactions, help protect individuals from the effects of stress (Yildirim & Aycan, 2007:1368).

2.4.1.4 Professional status and expertise

The level of education increases one’s capability of obtaining a job and, more so, a job that comes with a greater earning potential. The relation between professional experience and job satisfaction is similar to the relation between age and job satisfaction (Mackenzie, 2008:9).

In 2006, Kavanaugh et al. demonstrated that, for doctors, the years of professional experience is a positive linear in connection with job satisfaction. This can be linked to having a change in status, increase in salary or greater autonomy. For the individual it is, however, more about the development of confidence and a sense of
pride and self-worth. This correlates with Maslow’s Hierarchy of Needs in the same way that human needs are met (Mackenzie, 2008:9).

According to Mackenzie (2008:9), the area of expertise in one’s work does play a role in job satisfaction. Research shows that health care professionals, working in fields like oncology and mental health, tend to have a higher prevalence of burnout, psychological stress, and a low level of job satisfaction. This results in professionals providing a poor quality service and, hence, having a high resignation rate. Patients, consequently, receive inadequate health care and institutions suffer high costs due to high staff turnover. Professional bodies also decline in numbers due to professionals leaving the profession.

It is clear that the area of professional expertise can influence job satisfaction, depending on the nature of the expertise.

2.4.2 Work variables

Work variables refer to the nature of the work and can be linked to the intrinsic factors or motivators of Hertzberg’s Two Factor Theory. The presence of these factors only increases the level of job satisfaction.

2.4.2.1 Job design

The relationship between work aspects and job satisfaction is important for occupational health practises, because working conditions can be managed (Roelen et al., 2006:433).

Job design can be defined as any set of activities that involve the alteration of specific jobs or independent systems of jobs, with the intent of improving the quality of the employee’s job experience and his/her on-the-job productivity.
There are four major approaches for conducting the appropriate job design:

1. **The mechanistic approach**
   This approach can be seen as systematic management. Systematic management is “that kind of management which conducts a business of affairs by standards established by facts of truths gained through systematic observation, experimentation or reasoning. Five steps are involved in this approach:
   a. Develop standard methods for performing jobs by using time and motion studies.
   b. Carefully select employees with the appropriate abilities.
   c. Train workers to use the standard methods and procedures.
   d. Support workers and reduce interruptions.
   e. Provide incentives to reinforce performance.

2. **Motivational approaches**
   This approach attempts to improve employees’ affective and attitudinal reactions such as job satisfaction and intrinsic motivation, as well as behavioural outcomes like absenteeism, turnover, and performance (Kreitner & Kinicki, 2007:254).

   According to Schermerhorn *et al.* (2005:147), the following forms of motivational approaches can be used to increase job satisfaction:

   a. **Job enlargement**
      The term job enlargement can be explained as the horizontal extension of an individual’s job, by adding additional tasks or combining specialised tasks of the same level of difficulty (Steers *et al.* 1996:556). Job enlargement allow individuals to become multi-skilled by becoming familiar with additional chores (Van Tonder, 2007:24).

   b. **Job enrichment**
      Steers *et al.* (1996:566) states that job enrichment means a vertical expansion of an employee’s job, increasing the skills collection, which leads to increased opportunities. Job enrichment is achieved through enhancing work content by
including more factors such as accountability, achievement, recognition and personal growth (Van Tonder, 2007:240). These factors lead to more employee input, as well as a feeling of job satisfaction.

c. **Job rotation**

Job rotation can be defined as the rotating of tasks, according to any time schedule such as hourly, daily, or weekly schedules. It increases task variety by rotating workers between jobs that involve tasks of similar difficulty. Job rotation is an important benefit in the training of employees because workers become more familiar with different tasks and this increases the flexibility of the employee to move from one task to the next.

d. **The job characteristics model**

The reason for this approach to be used, is to promote high intrinsic motivation by designing jobs that possess the following five core job characteristics as suggested by Hackman and Oldham (1975):

1. **Skill variety:** The degree to which the job requires the employee to perform a range of tasks that require him/her to use different skills and abilities.
2. **Task identity:** The extent to which the job requires the employee to perform a whole or completely identifiable piece of work.
3. **Task significance:** How the job affects the lives of other people within or outside the organisation.
4. **Autonomy:** The level to which the job permits the individual to experience freedom, independence and discretion in both scheduling and determining the procedures used in completing the job.
5. **Task feedback:** The amount of direct or clear information the employee receives about how effectively he/she is performing the job.

(Kreitner and Kinicki, 2007:256).
They also suggest that if jobs are designed in a way that increases the presence of these core characteristics, three critical psychological states can occur in employees:

1. Experienced meaningfulness of work.
2. Experienced responsibility for work outcomes.
3. Knowledge of results of work activities.

Hackman and Oldham state that, when these critical psychological states are experienced, work motivation and job satisfaction will be high (Coetsee, 2002:160).

3. Biological approach

This approach entails the research of biomechanics, work physiology, and ergonomics, and also focuses on designing a working environment that reduces the employee’s physical strain, fatigue and health complaints (Kreitner and Kinicki, 2007:258).

4. Perceptual-Motor Approach

Research of the human factors engineering, perceptual and cognitive skills, and information processing, are examined. This looks at the reliability of work outcomes by examining error rates, accidents and workers’ feedback about facilities and equipment (Kreitner and Kinicki, 2007:258).

Schermerhorn et al. (2005:127) state that job design gives managers the opportunity to plan and identify job tasks and to work out schedules that meet organisational requirements for increased performance. This design also gives prospect for job satisfaction because it incorporates the individual’s skills and needs with the organisational requirements.

These approaches can be linked to Hertzberg’s Two Factor Theory because, as Steers et al. (1996:17) argue, the theory holds that individuals are likely to link a satisfying experience with the content of the job itself. The job enlargement may lead to an individual experiencing professional advancement or recognition, and job rotation may lead to perceptions of achievement and growth (Van Tonder, 2007:25).
A sense of personal achievement and recognition is achieved when job design allows employees to experience a more challenging and responsible work diversity. Schermerhorn et al. (2005:150) point out that, on average, job design affects performance, but not nearly as much as it affects job satisfaction.

### 2.4.2.2 Workload

Robinson and Griffith’s found, in 2005, that work overload is the most frequently cited source of job stress. The restructuring, reorganizing and an increasing accent on productivity improvements in the organisation, have all resulted in employees being saddled with amplified responsibilities. Management also tends to focus on profit maximization via cost-cutting which often results in employee layoffs, which leads to overworking the remaining employees. The increase in technology also lead to information overload which forces employees to process more information at an ever-increasing rate (Mulki et al., 2008:285).

In the Model of Occupational Stress, Figure 2.5, it is clear that the work environment is evaluated by employees through an appraisal process, which results in psychological, physiological or behavioural responses. Job strain, therefore, does not necessarily result from the source of pressure, but rather from the employee’s perception of the pressure. Thus, employees experience the same event in a very different manner. (Mulki et al., 2008:285).
The Job demand control model states that employees experience distress when they observe a lack of control over the job demands required of them. An important aspect of this theory is that the most stressful situations in the workplace occur when the employees feel they have too much work to do and believe they lack the necessary resources to deal with job demands (Mulki et al., 2008:286).

Greenglass et al. (2003), define work overload as an acute stressor that measures the individual’s perception that he/she has too many everyday jobs to finish in a given time. Role conflict and role ambiguity are among the two most widely recognized sources of psychological strain. Role conflict measures a person’s perceptions of incompatible demands and can result in expending high levels of effort to meet these demands satisfactorily (Mulki et al., 2008:287).

Research shows that high levels of work overload can make employees angry and suspicious of superiors and the organisation. The frustration can be derived from the
work overload, and can lead to hostile attitudes and engagement in counterproductive work behaviours. It can also trigger employees to have feelings of frustration, anger and cynicism, and occurs because employees believe that they are given too much to do, without the organisation giving them the appropriate compensation for their efforts. The perceptions of work overload may also lead to beliefs that there is a mismatch between job rewards and the employee’s capabilities (Mulki et al., 2008:287).

2.4.3 Institutional factors
2.4.3.1 Pay satisfaction

Human behaviour is the product of consequences, and improvement in work-related behaviour can be ensured by using positive reinforcements such as salary/wage increases, bonuses and other forms of monetary performance-related incentives (Matsie, 2008:29).

Job and pay satisfaction are the two most important aspects in overall job satisfaction. Pay satisfaction occurs when existing pay corresponds or is greater than desired pay. In contrast, pay dissatisfaction happens when existing pay is less than an individual’s desired pay. Pay satisfaction correlates positively with job satisfaction (Ermel, 2007:2&6).

In a study by the World Health Organisation (WHO), emigrated employees were asked what will motivate them to return to their country of origin. In most cases the answer was that they’ll return if the public sector offers competitive salaries and other incentives. A total of 77.5% of South African respondents stated that better salaries would motivate them more (Matsie, 2008:29). Herselman (2001:4), stated that the most important external factor in a company is money as this leads to job satisfaction.

2.4.3.2 Performance management

Van Rooyen (2007:i), explains that over the past decade, a consensus was reached on the importance of performance management as the mechanism to improve the contribution of individual employees to the organisational success.
When performance is linked to rewards an individual might experience internal and/or external equity concerns. Internal equity is the comparison of individual rewards with the rewards of those who are performing similar jobs or those who are performing equally in the organisation. External equity involves comparing the organisation’s rewards and remuneration with those of other organisations in the same labour market (Cummings & Worley, 2005:379). This can be linked to Adam’s Equity Theory in that an employee seeks fairness in the working relationship.

Schermerhorn et al. (2005:177), states that reward systems emphasise a mix of extrinsic and intrinsic rewards. Intrinsic rewards are work outcomes that are positively valued by the individual and directly linked to the task performed, whereas extrinsic rewards are rewards given to a person or group by some other person or source in the work setting.

Phillips (2002:9) states that an employee shows a great need for rewards, based on performance. Employees seek rewards based on individual performance and contribution. Robbins (2000:69) adds that, if the rewards are based on non-performance factors alone, individuals are likely to reduce their effort.

Ivancevich and Matteson’s (2002:224) Performance Diagnostic Model, in Figure 2.6, shows that lack of performance may be caused by a perception problem, inadequate subordinate ability, or inadequate subordinate motivation.

An inadequate subordinate ability may be caused by insufficient resources, training or attitude. Inadequate subordinate motivations may be the result of expectations, incentives and salience problems.
Performance appraisal can be defined as the feedback system that involves direct evaluation of the employee’s work or group performance by a supervisor, manager or peers. Most organisations make use of performance evaluation systems for reasons such as feedback, remuneration issues and employee development (Van Tonder, 2007:42). Recent performance appraisals were customised to balance the numerous organisational and individual needs, by involving the assessor, colleagues
and supervisors in assessing the purpose of the appraisal at the time it takes place and regulating the process to fit the purpose (Cummings & Worley, 2005:374). The predicament with performance management efforts is that it is often perceived as irrelevant, a waste of time or as faddism (Van Rooyen, 2007: i). For any reward to have the desired effect it needs to be available, timely, durable, visible and performance contingent (Van Tonder, 2007:34).

According to Van Tonder (2007:36) the following reward system interventions can be useful in improving employee performance and satisfaction:

a. Gain-sharing plans are giving employees the chance to share in productivity gains through enhanced earnings.

b. Flexible benefits are when an employee can choose from a list of fringe benefits included in the total compensation package.

c. Profit sharing plans are different to gain-sharing plans in that they reflect things such as economic conditions.

d. Employee stock ownership plans are based on the total organisation’s performance and is measured in terms of stock price.

e. Lump-sum pay increases are when an employee chooses to receive the compensation increase in one or more lump sums.

f. Merit pay is the base of an employee’s salary or wage increase on his/her performance accomplishments during a specific time period.

2.4.3.3 Working arrangements

Alternative working arrangements can be described as a strategy which involves giving an employee decision-making control with regards to their work performance (Ivancevish & Matteson, 2002:252). Van Tonder (2007:29) indicates that this is a practical application of Maslow’s Hierarchy of Needs and Aldefer’s ERG Theory because it is based on employees’ needs, and by recognizing the employees’ needs, satisfaction is generated. The
pharmacy profession is categorised as a service delivery profession and, therefore, it is difficult to accommodate different working hours. Different sectors use different working schedules according to the need of the hospital.

Working arrangements can involve the following:

a. Compressed workweeks, as defined by Schermerhorn et al. (2005:134): “...any scheduling of work that allows a full-time job to be completed in fewer than the standard five days”.

b. Flexible working hours, defined by Robbins and DeCenzo (2005:340) as a scheduling option that allows individuals, within specific parameters, to decide when to go to work.

c. Job sharing is an arrangement between two or more individuals to share one job (Van Tonder, 2007:28).

d. Part-time work is when an employee works less than 40 hours in a week and is regarded as temporary or permanent (Schermerhorn et al., 2005:156).

2.4.3.4 Organisational climate

The working environment plays a role in the health and work stability of health care professionals. The work environment ranges from the physical set-up like the access to toilet facilities or internet and the physical working space, to more complex issues such as organisational management (Mackenzie, 2008:12).

Organisational climate is a relatively permanent quality of an organisation’s internal environment and it distinguishes the organisation from other organisations. The work climate is the customs in which organisations establish routine behaviours and the actions that are expected, supported and rewarded. A climate includes the norms, culture, equity, social processes, leadership styles and management practises. Higher job satisfaction is experienced if the employee perceives the climate as conductive (Ermel, 2007:4).
The working environment is a variable that can easily be transformed or modified to improve job satisfaction. The lack or limitation of essential factors that create psychological stress, are imperative in an effort to increase job satisfaction (Mackenzie, 2008:12).

2.4.3.5 Rural versus urban based

Studies from a variety of countries, including Japan, South Africa and Australia, conclude that rurally-based health professionals are significantly less satisfied than their urban-based counterparts. The ‘push’ factors on these health professionals in rural areas include little opportunities for professional development, having to interact with municipal governments, high workload, understaffing, limited resources, professional isolation and lack of security (Mackenzie, 2008:12).

2.4.3.6 Public versus private sector

Stress from working in the public sector hospitals come from low staff moral, limited budgets, a lack of resources, inadequate security, poor salaries, and poor opportunities for promotion. Private enterprises always appear more attractive due to the practitioner having more control over their workload and salary structure. It can, however, also lead to the occupational stress of having to administer and financially support the enterprise, which medical professionals are not always properly educated to do (Mackenzie, 2008:13).

2.4.3.7 Professional development

According to Ermel (2007:1), job challenges and job demands are related to future career needs arising from career opportunities, and are concerned with how much the work tasks encourage new knowledge and continuous learning. Employees continually seek new job challenges from supervisors in order to gain professional knowledge, to secure more challenging work, and to earn and enjoy recognition from supervisors and co-workers because of their new knowledge.
With the unique nature of district hospital practice and the health needs of the population they serve, it is imperative that the health workers in these hospitals receive the relevant education and training. Training and education are key motivating factors in addressing the lack of the distribution of health workers between urban and rural areas (Couper et al., 2005: 119).

Professional development is crucial to improve service delivery. According to Van Zyl (2005:33), employers should first determine the areas in which training is necessary. Training should only be considered if productivity improvements are a primary goal.

Job challenges and demands promote superior performance in the roles that employees play and it was found that job challenges and demands increase job satisfaction and decrease turnover intention (Ermel, 2007:2).

Training and productivity improvements are logical extensions of one another because improvement in performance relies, to a degree, on training. It is also further stated that training and productivity efforts share a common objective in that they both improve performance on both individual and collective levels, thereby increasing efficiency, quality and output while simultaneously controlling cost (Matsie, 2008:35).

Bonineli and Meyer (2004:121) explain that if management wants to improve productivity they should invest in training and staff development whilst they match competitive demands and business contexts, provide attractive development and career options, and ensure effective career management practises.

According to Van Tonder (2007:46), human resource development can be linked to Aldefer’s ERG Theory. When aimed at understanding people’s needs at work, Locke’s Goal Setting Theory and the Reinforcement Theory can be used. The following applications are mentioned by the author:

a. **Staffing**: Schermerhorn et al. (2005:181), states that this starts with job analysis to define jobs, their interpersonal relationships, the demographic, aptitude, and personality traits needed to assist in the recruiting of employees fit for the job.
b. **Training**: Training increases knowledge and skills and improves working attitudes. The advantages include employee commitment and the improvement of staff quality and availability.

c. **Career planning and developing**: Encourage career development in such a way that it lays out a path for those who want to follow it.

d. **Skill-based pay**: When employees earn higher pay rates according to the amount of skill modules they master (Van Tonder, 2007:48).

### 2.5 MEASUREMENT OF JOB SATISFACTION

Pietersen (2005:20), indicates that one of the most accepted ways to accumulate job attitudinal data is by using job satisfaction questionnaires. Researchers who used job satisfaction questionnaires utilised two contrasting approaches to the measurement of job satisfaction, namely the single global rating and using a summation score, made up of a number of job facets. The global rating method is the asking of an individual to respond to one single question where the single global rating identifies key elements to the job and asks the employee’s feelings towards it.

Van Tonder (2007:14) states that measurement of job satisfaction is very difficult due to the complexity and variety of variables in addition to unknown and undefined variables. Van Saane *et al.* (as quoted by Mackenzie, 2008:14) states that there is no gold standard for measuring job satisfaction, especially when noting that there is no standardised variable by which one can measure job satisfaction. Employees from the same institution can have two contrasting results due to their individual needs and perceptions. Mackenzie (2008:14) also indicates that questionnaires can be highly variable, for example the Job In General, Job Descriptive Index, Job Satisfaction Survey and the Minnesota Survey Questionnaires, Job Diagnostic Survey and the Employee Satisfaction Inventory (Pietersen, 2005:20).

Hassel *et al.*, (2007:259), indicates that the Warr-Cook-Wall satisfaction scale has very high reliability and is appropriate for use on pharmacists, without any further
amendments. Other methods include focus groups, individual interviews (either directly or telephonically), and the widely used questionnaires.

2.6 CURRENT TRENDS IN SOUTH AFRICA

South Africa is a developing country with a non-homogeneous population consisting of several cultural groups. This country has experienced very meticulous transformation challenges characterised by hasty changes to achieve the goal of providing equitable access to health services to the majority of the population since the end of Apartheid in 1994. Despite South Africa’s attempt to transform health care, the public health care system is still under-resourced and over-used. Aids and other poverty related diseases, such as tuberculosis and cholera, are placing a tremendous strain on the country’s health care system. The public health care system consumes almost 11% of the total government’s budget. Provincial health departments and local authorities constitute 80% of the public health sector and this includes hospitals, primary health care, laboratories and ambulance services. The shortage of staff, basic equipment and medication, basic fundamentals, and long patient waiting times, are often reported as obstacles in providing quality health care in South Africa (De Jager & Du Plooy, 2007:97).

South Africa traditionally consisted of two industries in the health care sector, namely the private and public hospitals but, recently; a major development in the hospital environment has been the emergence of private/public partnership hospitals. The public sector is by far the largest industry. The author states that at this stage there are 178 private hospitals in South Africa. Three groups, Netcare, Afrox Health Care Limited and Medi-Clinic, are currently dominating the industry. Private hospitals are an increasing competitive environment; with these hospitals competing aggressively to draw patients (Boshoff & Gray, 2004:29).

According to English (2001:1), the pharmaceutical profession is realising an acute shortage of pharmacists. South Africa faces a major crisis in terms of human resources for health, with a shortage in the country and wrongful distribution between provinces, as well as throughout the public and private sector (Wadee &
Khan, 2007:141). According to the World Health Organisation (2006), it is now widely accepted that there is a dire shortage in health workers and one of the most significant constraints is to achieve the Millennium Development Goals.

There is a multitude of job opportunities overseas. The impact of globalisation and the belief that a person’s career is enhanced by international experience, contributes to shortages in staff and remain an uncontrollable problem for hospital employers (Jacobs & Roodt, 2008:63). In the Annual Report of the South African Pharmacy Council (2008), the management team stated that the vacancy rate, particularly in the public sector, is very high and if nothing is done about this, (for example training more pharmacists, drawing up retention strategies and improving working conditions) the situation will continue to deteriorate.

Wadee et al. (2007:142) state that, within the locus of a private-public discussion, the public sector needs to explore ways to tap into private sector resources and to curb the exodus of human resources for health from the public to the private sector.

### 2.7 ROLES OF REGISTERED PHARMACISTS

In the Good Pharmacy Practice (2010:4), it is clearly stipulated that, in order to fulfil the needs relating to pharmaceutical care of the people of South Africa, the scope of practice of the pharmacy profession is prescribed in terms of Section 35A of the Pharmacy Act. The following services or acts are regarded as being services or acts pertaining to the scope of practice of a pharmacist:

(a) Provision of pharmaceutical care by taking responsibility for the patient's medicine-related needs and being accountable for meeting these needs, which will include, but not be limited to, the following functions:

(i) Evaluation of a patient's medicine-related needs by determining the indication, safety and effectiveness of the therapy;

(ii) Dispensing of any medicine or scheduled substance on the prescription of a person authorised to prescribe medicine;

(iii) Furnishing of information and advice to any person with regard to the use of medicine;
(iv) Determining patient compliance with the therapy and follow-up to ensure that the patient's medicine-related needs are met; and
(v) The provision of pharmacist-initiated therapy;

(b) Compounding, manipulation, preparation or packaging of any medicine or scheduled substance or the supervision thereof;
(c) Manufacturing of any medicine or scheduled substance or the supervision thereof;
(d) Purchasing, acquiring, importing, keeping, possessing, using, releasing, storage, packaging, re-packaging, supplying or selling of any medicine or scheduled substance or the supervision thereof;
e) Application for the registration of a medicine in accordance with the Medicines Act;
(f) Formulation of any medicine for the purposes of registration as a medicine;
(g) Distribution of any medicine or scheduled substance;
(h) Re-packaging of medicines; and
(i) Initiation and conducting of pharmaceutical research and development.

2.8 SUMMARY

Job satisfaction is the pleasurable emotional state caused by appraisal of a person’s job when achieving or facilitating the achievements of one’s job values. It is described as an effective response to specific aspects of the job and as job satisfaction has a huge impact on productivity, it is very important to any organisation. Job satisfaction can, therefore, be seen as an attitude eliciting an expression of feeling towards an object (Ermel, 2007:5).

This is proved by literature about several theories on motivation and job satisfaction by Maslow, Alderfer, Herzberg and numerous researchers mentioned in the literature.

Mackenzie (2008:1) states that the key aspects that contribute to job satisfaction are recognition in the job, level of salary, opportunities for promotion and achievement of personal goals. This study will focus on factors such as age, gender, marital status,
professional status, work variables, remuneration, organisational climate, professional development, and whether the hospital is rural or urban based.

According to Mackenzie (2008:5), most of the literature on job satisfaction within the medical field has been conducted on nurses and doctors, with few conducted on Allied Health Professionals. After a review of the literature, the author concluded that most of the studies reported a slight to moderate level of job satisfaction amongst health professionals, with no trends of extreme satisfaction. Although most of the dissatisfying factors remain, they can most certainly be reduced in an effort to increase job satisfaction levels.

English (2001:1) declares that the pharmaceutical profession is realising an acute shortage of pharmacists. South Africa faces a major crisis in terms of human resources for health; with a lingering shortage in the country and wrongful distribution between provinces, as well as throughout public and private sectors (Wadee & Khan, 2007:141). According to the World Health Organisation (2006), it is now widely accepted that there is a dire shortage in health workers and it is one of the most significant constraints to achieve the Millennium Development Goals.

In the Annual Report of the South African Pharmacy Council (2008), the management team stated that the vacancy rate, particularly in the public sector, is very high and if nothing is done, (for example training more pharmacists, drawing up retention strategies and improving working conditions) the situation will continue to deteriorate.

The factors leading to low job satisfaction cannot necessarily be changed, but it will help to identify the items and correct them in any way possible because job satisfaction has a direct influence on the productivity of workers. This study was conducted in the North-West Province and focuses on the institutional pharmacist, in both the public and private sectors, in order to establish if there is a difference in job satisfaction levels.

Chapter 3 follows and deals with the empirical study and results of this study.
CHAPTER 3: EMPIRICAL STUDY

3.1 INTRODUCTION

This chapter addresses the relevant approach to the study. It provides an explanation of the research design, details regarding the sample, instrumentation, means of data collection, and data analysis. The chapter concludes with a summary of the research questions and the analysis used to answer them.

A thorough theoretical orientation of job satisfaction forms the core focus of this study. By means of the analysis of the factors leading to job satisfaction, and some theories on job satisfaction (discussed in Chapter 2), the background for this study was established and its findings can be contributed to the cooperation of the hospital pharmacists in the North-West Province.

3.2 METHODOLOGY

3.2.1 Research design

By using a survey method as the technique of data collection, a cross-sectional design was used to obtain the desired data. Cross-sectional designs are used to simultaneously examine groups of subjects in various stages of development, whilst the survey involves a technique of data collection in which questionnaires are used to gather data about an identified population (Rothner, 2005:39). The questionnaire was analysed and approved by the Statistical Consultation Services of the North-West University, Potchefstroom Campus.

To ease communication, reduce postal and paper costs and to have independence from the postal system, e-mail was the preferable method of contact. The pharmacists at the identified hospitals were phoned and informed of the research being conducted. E-mail addresses were requested and the questionnaires were e-mailed to them. The questionnaires could be e-mailed, faxed or delivered to the researcher as was telephonically agreed upon.
3.2.2 The questionnaire as research instrument

In this study, a quantitative questionnaire survey was used for the following reasons (Gall et al., 1996:289; Neuman, 1997:233):

- it was more cost-effective to e-mail the questionnaires than to visit each hospital to interview staff, and
- the time factor also played a role in obtaining the questionnaires, once they were completed, from the sample hospitals.

The benefit of a questionnaire is that the same questions can be asked at all sample hospitals. The responses were in writing and respondents had the opportunity to respond to the questions without feeling intimidated (Neuman, 1997:237).

Questionnaires, however, cannot probe deeply into respondents' opinions and feelings. In addition, once the questionnaires were distributed, it was not possible to modify the items, even though they might have been unclear to some respondents (Gall et al., 1996:289).

3.2.3 The measuring instrument

A self-constructed questionnaire was used in this research to obtain individual responses from North-West hospitals, with regard to the job satisfaction of institutional pharmacists. The questionnaire used in this research is based on the literature as referred to in Chapter 2.

The questionnaire consisted of three sections:

A. Cover page
   This page indicated the details of the study and how the questionnaire could be returned to the researcher.

B. Demographic questionnaire
   The questions posed in the demographic questionnaire are based on the biographical data and gives the researcher an insight into the different responses to certain questions in relation to the way in which the questions have been filled
The questionnaire consisted of 15 questions, 14 of which were close-ended questions in order to yield information on non-identity related personal details and general information on qualifications. There was also one open-ended question to allow the participants to discuss the primary reason for choosing the specific sector that they are currently in. The aim of this questionnaire was to describe the nature of the respondents by identifying the relationship between job satisfaction and these demographic variables.

C. Job satisfaction questionnaire

In this questionnaire, 21 questions were asked. These questions are related to the different variables that influence job satisfaction as researched in chapter 2. As different factors were identified in the literature, the questionnaire was constructed to fit the correct factors. The different factors were:

1. Job Design
2. Pay Satisfaction
3. Performance Management
4. Working Arrangements
5. Organisational Climate
6. Lack of Professional Development

The questions were randomly, negatively, and positively phrased in order for no apparent pattern to occur. This neutralises the respondent’s reaction when answering the questions. The questionnaire provided a score for job satisfaction in total and for each variable. An even Likert scale was used to ascertain either a positive or negative attitude in response to the theme; therefore, an option for a neutral response was not included. The scale is a typical five-level Likert item, in the format of:

1. Strongly disagree
2. Disagree
3. Slightly agree
4. Agree
5. Strongly agree

The respondents chose the answer according to the Likert item that suited them best.
3.2.4 Factor analysis

The factor analysis was used to perform the data analysis necessary to construct validity and internal reliability of the instruments used. The factor analysis offers a way of examining the inter-relationships amongst the items of the scale that is used to reveal the clusters of items that have sufficient common variation to justify their groupings together as a factor (Laka-Mathebula, 2004:129).

Items that do not load greater than 0.25 on any factor in any solution and those items loading greater than 0.25 in any of the solutions are identified and excluded from the analysis.

The intention of doing the factor-analysis was to see if the 21 items measuring job satisfaction from the questionnaire, loaded together under six factors. The six factors that were retained are portrayed in Table 3.1, below:

**Table 3.1: Descriptive Statistics and Cronbach Alpha Coefficients**

<table>
<thead>
<tr>
<th>FACTOR TESTED</th>
<th>QUESTIONS LINKED TO FACTOR</th>
<th>CRONBACH ALPHA</th>
<th>QUEST TURNED AROUND</th>
<th>QUEST LEFT OUT</th>
<th>MEAN</th>
<th>STD DEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Job Design</td>
<td>Q1,Q2,Q8,Q9,Q15,Q16</td>
<td>0.69</td>
<td>Q9,Q16</td>
<td>Q2</td>
<td>2.93</td>
<td>0.61</td>
</tr>
<tr>
<td>B Pay Satisfaction</td>
<td>Q3,Q10,Q17</td>
<td>0.79</td>
<td></td>
<td>3.33</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>C Performance Management</td>
<td>Q4,Q11,Q18</td>
<td>0.63</td>
<td>Q11</td>
<td>2.99</td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>D Working Arrangements</td>
<td>Q5,Q12,Q19</td>
<td>0.54</td>
<td></td>
<td>Q12</td>
<td>2.89</td>
<td>0.95</td>
</tr>
<tr>
<td>E Organisational Climate</td>
<td>Q6,Q13,Q20</td>
<td>0.56</td>
<td></td>
<td>3.96</td>
<td>0.51</td>
<td></td>
</tr>
<tr>
<td>F Lack of Professional</td>
<td>Q7,Q14,Q21</td>
<td>0.52</td>
<td>Q7</td>
<td>3.16</td>
<td>0.81</td>
<td></td>
</tr>
</tbody>
</table>

- **Factor A - Job Design**: Questions 9 and 16 were negatively stated and turned into a positively stated question. Question 2 had to be left out.
- **Factor C - Performance Management**: Question 11 was negatively stated and changed around to best fit the other questions.
- **Factor D - Working Arrangements**: Question 12 was left out as a variable in the factor analysis.
- **Factor F - Lack of Professional Development**: Question 7 was changed around to best suit question 14 and 21.
Table 3.1 illustrates that the different questions grouped together resulted in an acceptable Cronbach Alpha Coefficient, varying from 0.54 to 0.79. These alpha coefficients compare reasonably well with the guideline of 0.5 for basic research, demonstrating that a large portion of the variance is explained by the dimensions (Rothner, 2005:29).

3.2.5 Description of population

The sample of the study was drawn from the population of hospitals in the North-West Province. The North-West Province consists of 20 private sector hospitals and 30 public sector hospitals. The public sector hospitals are all registered at the Department of Health and, also, more convenient to allocate. The private sector hospitals, however, were more difficult to reach due to their private ownership and because sometimes they do not use a pharmacy on the premises for their pharmaceutical supplies.

3.2.6 Description of the sample

It was decided to use the convenience sampling method to obtain the study sample. A total of 100 questionnaires were distributed, 50 to the public sector and 50 to the private sector.

The hospitals were telephonically contacted and asked if they will participate in the research survey. The questionnaire was then either e-mailed or delivered directly, depending on the hospital location and response from the applicable pharmacist. From the public sector, 36 questionnaires were received back and 30 questionnaires from the private sector. This gives a return rate of 66%.

The response rate of 66% is considered good when measured against guidelines in the literature. A 50% response rate is adequate, a 60% response is considered good, while a 70% response rate is considered very good (Laka-Mathebula, 2004:126). The response rate in this study measured good.
According to Frochlich (2002:555), a questionnaire length of 40-50 items spread over four to five pages, would elicit high response rates and he states that, if a survey is under four or five pages, resistance to participate would be lower and the response rate higher. The lack of a 100% response rate could be because a pharmacist might not have been on duty, might have been on leave or, the majority of the time, the workload might have been too high due to a shortage in staff.

**Two reasons can be given why response rates are important:**

1. With a high non-response rate there is a real risk that the data will be biased. If the data is biased, there is a risk that the low responses might only reflect the perspective of certain types of institutional pharmacists and not all the pharmacist in North-West Province.

2. Many statistical tests require a suitable number of cases. For example, at least 10 degrees of freedom is generally required for each variable in a Multiple Regression Model to achieve sufficient statistical power (Frochlich, 2002:555).

### 3.2.7 Statistical analysis

The Statistical Consultation Services of the North West-University (Potchefstroom Campus) analysed the completed questionnaires and processed the given results. The obtained results of the factor analysis, frequency distribution, and correlation statistical analysis were presented and discussed.

The statistical analysis was carried out by the SPSS program (SPSS, 2005):

- **Descriptive statistics**

  Having received back the questionnaires from the respondents, the data was sent to the Statistical Services of the North-West University (Potchefstroom Campus) to be processed further. The SAS program (SAS Institute Inc., 2005) was used to determine both mean scores and standard deviation. Frequencies and percentages have been determined by means of the "FREQ-procedure" of the SAS programme. The reason for using the descriptive statistics is to place the respondents in an order of ranking.
• **Reliability of measurement**
   In order to obtain the internal consistency and homogeneity of the measuring instruments, the Cronbach Alpha Coefficient is used. A high value means that the scale that is being used is more reliable (SAS Institute Inc., 2005). In this study, the Cronbach Alpha Coefficient of 0.5 is regarded as reliable and acceptable.

• **Practical significance**
   The effect size is independent of sample size and is a measure of practical significance \((d\text{ value})\). It can be understood as a large enough effect to be important in practise and is described for differences in means.

   A natural way of commenting on practical significance is by using the standardised difference between the means of two populations, i.e. the difference between the two means divided by the estimate for standard deviation. A measure is introduced that is called the effect size, which not only makes a difference independent of units and sample size, but also relates it to the spread of data (Ellis & Steyn, 2003:52).

   The formula to calculate the practical significance is as follows: Cohen (1988) gives a guideline for the interpretation of the effect size.

   In this research the guideline is used in the following way:

   **Small effect**: \(d \geq 0, 2\) the different populations do not differ in real terms.

   **Medium effect**: \(d \geq 0, 5\) there is a possible difference between the populations in real terms.

   **Large effect**: \(d \geq 0, 8\) the populations differ in real terms.
3.2.8 Ethics and legal aspects

The questionnaire was anonymous and all the participants were assured of confidentiality during the procedure. Permission to research the different pharmacies was obtained from the individual pharmacy managers.

3.2.9 Assumptions and limitations

The assumptions made are as follow:

- The questions were read and understood correctly.
- The respondents were truthful in answering the questions.
- All the participants understood English.

The limitations of the study include:

- The population is very small, due to the fact that the pharmacy can have as few as two registered pharmacists.
- The private hospitals in the North-West Province is privately owned, and not listed to a specific group. This makes it difficult to determine the population size.
- The response rate is dependent on aspects such as time available to participate, respondents' interest in the study, and the goodwill of the pharmacists participating, as no incentives were given.
3.3 RESULTS AND DISCUSSION

3.3.1 Introduction

This section contains the results of the study. Findings about demographics of the study participants and statistical analyses were used to answer the research questions. The primary aim of this research was to draw a comparison between the level of job satisfaction in the public and private sector hospitals in the North-West Province.

The secondary aims were to: identify the different factors that lead to job satisfaction, recognize the most critical problem areas and possible causes, and make recommendations on how to address the issues.

3.3.2 Demographic analysis of the institutional pharmacists in the North-West Province

Table 3.2 shows the results from the demographic analysis of all the pharmacists that participated in the survey, on the following page:
The results indicated in Table 3.2, come from the completed questionnaires (the private and public sector combined). This target group consisted of 66 pharmacists working in institutional pharmacies in the North-West Province. From the target group, 53.03% were aged between 20 and 30 years and 81.82% were female. The sample consisted of 37.88% single pharmacists and 53.03% are married. A percentage of 74.24% of the sample’s highest degree were the B.Pharm’s and
21.21% acquired a Masters Degree. The sample consisted of 16.67% intern pharmacists, 13.64% pharmacists completing their community service, 46.97% senior pharmacists and 19.70% pharmacy managers. The 34.85% of the pharmacists were situated in rural areas and 57.58% in urban areas.

When asked why they are in the current sector, 30.30% said that it is their passion. A percentage of 22.73% chose this sector for the good salary and benefits, and 18.18% because it is close to home. Only 10.61% had no other job available.

### 3.3.3 Job satisfaction of institutional pharmacists in the North-West Province

Results were analysed to establish the level of job satisfaction in the North-West Province under institutional pharmacists. The findings of the frequencies, mean and standard deviation, are listed in Table 3 on the following page:
### Table 3.3: Job satisfaction of the Institutional Pharmacists in the North-West Province

<table>
<thead>
<tr>
<th>Number</th>
<th>Question</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Slightly agree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My work makes sufficient demands on my skills and capacities</td>
<td>3.60</td>
<td>1.01</td>
<td>9.09%</td>
<td>22.73%</td>
<td>46.97%</td>
<td>15.15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I have too much work to do</td>
<td>3.43</td>
<td>1.03</td>
<td>19.70%</td>
<td>24.24%</td>
<td>34.85%</td>
<td>12.71%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I feel satisfied when I am paid</td>
<td>3.51</td>
<td>1.03</td>
<td>9.09%</td>
<td>33.33%</td>
<td>34.85%</td>
<td>15.15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I can see the link between my performance and the bonuses I receive</td>
<td>2.68</td>
<td>1.06</td>
<td>30.30%</td>
<td>24.24%</td>
<td>24.24%</td>
<td>11.11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>My employer gives me freedom to choose when I perform my allocated work</td>
<td>3.25</td>
<td>1.02</td>
<td>18.18%</td>
<td>24.24%</td>
<td>39.39%</td>
<td>15.15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I have a good interaction network with fellow colleagues</td>
<td>4.23</td>
<td>0.60</td>
<td>9.09%</td>
<td>59.09%</td>
<td>31.82%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>My job gives me enough exposure to CPD activities</td>
<td>3.11</td>
<td>1.12</td>
<td>13.64%</td>
<td>30.30%</td>
<td>36.36%</td>
<td>6.06%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I experience a challenging work diversity</td>
<td>2.76</td>
<td>1.07</td>
<td>13.64%</td>
<td>30.30%</td>
<td>24.24%</td>
<td>24.24%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>My employer gives me freedom to choose when I perform my allocated work</td>
<td>3.25</td>
<td>1.02</td>
<td>18.18%</td>
<td>24.24%</td>
<td>39.39%</td>
<td>15.15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I feel I get paid a fair salary for the work I do</td>
<td>3.23</td>
<td>0.97</td>
<td>19.70%</td>
<td>28.79%</td>
<td>42.42%</td>
<td>4.55%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I do not feel that the work I do is appreciated</td>
<td>3.91</td>
<td>0.83</td>
<td>31.82%</td>
<td>25.76%</td>
<td>22.73%</td>
<td>11.11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>My working arrangements best fit my current personal situation</td>
<td>3.83</td>
<td>0.83</td>
<td>31.82%</td>
<td>25.76%</td>
<td>50.00%</td>
<td>19.70%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>My company is overall a satisfying place to work</td>
<td>3.61</td>
<td>0.80</td>
<td>31.82%</td>
<td>25.76%</td>
<td>56.06%</td>
<td>19.70%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>My employer rotates me regularly to increase my job knowledge</td>
<td>2.80</td>
<td>1.19</td>
<td>30.30%</td>
<td>28.79%</td>
<td>16.67%</td>
<td>10.61%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>My employer gives me freedom to choose when I perform my allocated work</td>
<td>3.25</td>
<td>1.02</td>
<td>18.18%</td>
<td>24.24%</td>
<td>39.39%</td>
<td>15.15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>I feel satisfied when I am paid</td>
<td>3.51</td>
<td>1.03</td>
<td>9.09%</td>
<td>33.33%</td>
<td>34.85%</td>
<td>15.15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>I can live comfortably on my salary</td>
<td>3.23</td>
<td>1.00</td>
<td>19.70%</td>
<td>30.30%</td>
<td>36.36%</td>
<td>6.06%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>I feel restricted in my work due to professional guidelines</td>
<td>3.02</td>
<td>1.22</td>
<td>25.76%</td>
<td>25.76%</td>
<td>16.67%</td>
<td>16.67%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>My working hours can be changed to fit my personal preferences</td>
<td>3.25</td>
<td>1.02</td>
<td>19.70%</td>
<td>31.82%</td>
<td>33.33%</td>
<td>10.61%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>I feel restricted in my work due to professional guidelines</td>
<td>3.02</td>
<td>1.22</td>
<td>25.76%</td>
<td>25.76%</td>
<td>16.67%</td>
<td>16.67%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>There is little possibility for promotion in my job</td>
<td>3.61</td>
<td>0.80</td>
<td>31.82%</td>
<td>25.76%</td>
<td>56.06%</td>
<td>19.70%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A- Job design  
B- Pay Satisfaction  
C- Performance Management  
D- Working Arrangements  
E- Organisational climate  
F- Professional Development

The following results are drawn from Table 3.1: Descriptive Statistics and Cronbach Alpha (page 4) and Table 3.3: Frequency of job satisfaction.

### A- Job Design:
In question 1, with a mean of 3.6, the indication is that the respondents feel that their job makes sufficient demands on their skills, 34.85% of the respondents felt they have too much work to do and they agree slightly that they experience challenging work diversity and repeatedly do the same thing. 39.39% of the respondents felt that they are not restricted in their work and from question 15, it is clear that they show a slight satisfaction to being rotated regularly.

Table 3.1 illustrates that Job Design has a mean of 2.93 and is it clear that the sample in this study does not show significant satisfaction with their job design.
B- Pay Satisfaction:
According to questions 3, 10 and 17 the respondents slightly agree that they get paid a fair salary for the work they do and can live comfortably on their current salary. Table 3.1 indicates that the mean for pay satisfaction is 3.33 which shows slight satisfaction.

C- Performance Management:
The respondents disagree that they can see the link between their performance and the work they do, 31.82% disagree that the work they do is not appreciated and with a mean of 3.14 they slightly agree that they get sufficient feedback on the work that they do.

From the descriptive statistics for the factors the mean of 2.99 for Performance Management, it is clear that the employee is not overall satisfied with the feedback, link between the work and bonuses, and the feeling of appreciation for the work they do.

D- Working Arrangements:
In question 5 the mean is 3.25 and 39.39% of the respondents agreed that they have the freedom to choose when they perform their allocated work. They, however feel that their working hours cannot be changed to fit their personal preferences. Question 12 had to be left out of the factor analysis, but if seen as an individual question it shows that 50% of the sample feels that their working arrangement best fit their personal situation.

With a mean of 2.89 for working arrangements, it is clear that most of the samples feel they cannot change their working arrangements, but still feel they chose the one environment that suits their personal situation the best.

E- Organisational Climate:
From question 6 it is clear that the samples agree to strongly agree that they have a good interaction network with fellow colleagues and the mean of 4.23 for the item confirms it. A percentage of 56.06% stated that their company is overall a satisfying
place to work and 60.61% agree that they can ask for help when necessary. The Organisational climate has a mean of 3.96, which confirm that the pharmacists enjoy the organisational climate and have a satisfying environment in which to operate.

**F- Lack of professional development**

With a mean of 3.11, the samples slightly agreed to agree that their job gives them sufficient exposure to CPD activities. They disagree, with a mean of 2.8, that their knowledge and skills have declined, but still believe that there is little possibility for promotion.

Although the samples indicated that they get exposure to CPD activities and that their knowledge and skills have not yet declined, the mean for “lack of professional development” of 3.16 still shows they agree with a lack of development in their current jobs.

**3.3.4 Job satisfaction in relation to demographic variables**

For this analysis the statistical significance test is used to show whether the results are significant. A p-value, smaller than 0.05, is considered as satisfactory evidence that the result is statistically significant. The test tends to yield small p-values as the size of the data set increases.

Due to the small size of the sample in this study the researcher examined the effect size. The effect size for the difference in means makes the difference independent of units and sample size (Ellis & Steyn, 2003).

Table 3.4, 3.5, 3.6 and 3.7, on the following page, provide the results for job satisfaction in relation to gender, marital status, level of education and location of hospital.
Table 3.4: Job Satisfaction according to gender

<table>
<thead>
<tr>
<th>FACTOR TESTED</th>
<th>MEAN-female</th>
<th>MEAN-male</th>
<th>p-Effect sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Job Design</td>
<td>2.94</td>
<td>2.92</td>
<td>0.034</td>
</tr>
<tr>
<td>B Pay Satisfaction</td>
<td>3.28</td>
<td>3.56</td>
<td>0.311</td>
</tr>
<tr>
<td>C Performance Management</td>
<td>2.96</td>
<td>3.13</td>
<td>0.178</td>
</tr>
<tr>
<td>D Working Arrangements</td>
<td>2.80</td>
<td>3.33</td>
<td>0.545</td>
</tr>
<tr>
<td>E Organisational Climate</td>
<td>3.95</td>
<td>4.03</td>
<td>0.143</td>
</tr>
<tr>
<td>F Lack of Professional Development</td>
<td>3.15</td>
<td>3.19</td>
<td>0.045</td>
</tr>
</tbody>
</table>

The sample consisted of 54 female pharmacists and 12 male pharmacists. In the different factors, the only factor that shows a medium effect with a p-effect size of 0.545 is working arrangements. The other factors show a small difference between the means. Female respondents have a lower level of satisfaction in all the factors, except job design.

Table 3.5: Job Satisfaction according to marital status

<table>
<thead>
<tr>
<th>FACTOR TESTED</th>
<th>MEAN-single</th>
<th>MEAN-married</th>
<th>p-Effect sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Job Design</td>
<td>2.81</td>
<td>3.02</td>
<td>0.321</td>
</tr>
<tr>
<td>B Pay Satisfaction</td>
<td>3.15</td>
<td>3.49</td>
<td>0.372</td>
</tr>
<tr>
<td>C Performance Management</td>
<td>2.81</td>
<td>3.08</td>
<td>0.259</td>
</tr>
<tr>
<td>D Working Arrangements</td>
<td>3.02</td>
<td>2.79</td>
<td>0.226</td>
</tr>
<tr>
<td>E Organisational Climate</td>
<td>3.95</td>
<td>4.01</td>
<td>0.118</td>
</tr>
<tr>
<td>F Lack of Professional Development</td>
<td>3.21</td>
<td>3.12</td>
<td>0.101</td>
</tr>
</tbody>
</table>

The sample consisted of 25 single pharmacists and 35 married pharmacists. The number of pharmacists that are divorced or widowed was left out of the t-test, due to the small number of respondents. For job design, pay satisfaction, performance management and working arrangement there were small effect sizes. Organisational climate and lack of professional development showed no difference in means.

The married respondents showed higher levels of satisfaction with job design, pay satisfaction, performance management and the organisational climate, whereas the single respondents favour the lack of professional development and their working arrangements.
Table 3.6: Job Satisfaction according to level of education

<table>
<thead>
<tr>
<th>FACTOR TESTED</th>
<th>MEAN-postgraduate</th>
<th>MEAN-bachelors</th>
<th>p-Effect sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  Job Design</td>
<td>2.73</td>
<td>3.01</td>
<td>0.404</td>
</tr>
<tr>
<td>B  Pay Satisfaction</td>
<td>3.49</td>
<td>3.28</td>
<td>0.256</td>
</tr>
<tr>
<td>C  Performance Management</td>
<td>2.92</td>
<td>3.01</td>
<td>0.101</td>
</tr>
<tr>
<td>D  Working Arrangements</td>
<td>2.76</td>
<td>2.94</td>
<td>0.181</td>
</tr>
<tr>
<td>E  Organisational Climate</td>
<td>3.86</td>
<td>4.00</td>
<td>0.248</td>
</tr>
<tr>
<td>F  Lack of Professional Development</td>
<td>3.31</td>
<td>3.11</td>
<td>0.221</td>
</tr>
</tbody>
</table>

The sample consisted of 66 respondents of which 17 acquired a postgraduate diploma and 49 have the B.Pharm degree as the highest level of education. The level of education showed a small practical significance for the differences in means.

The postgraduates showed a higher level of pay satisfaction and experienced a higher lack of professional development. Job design, performance management, working arrangements and the organisational climate showed a higher level of satisfaction in the respondents that only have a bachelors degree.

Table 3.7: Job Satisfaction according to location of the hospital

<table>
<thead>
<tr>
<th>FACTOR TESTED</th>
<th>MEAN-rural</th>
<th>MEAN-urban</th>
<th>p-Effect sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  Job Design</td>
<td>3.00</td>
<td>2.92</td>
<td>0.113</td>
</tr>
<tr>
<td>B  Pay Satisfaction</td>
<td>3.77</td>
<td>3.14</td>
<td>0.734</td>
</tr>
<tr>
<td>C  Performance Management</td>
<td>3.07</td>
<td>2.97</td>
<td>0.009</td>
</tr>
<tr>
<td>D  Working Arrangements</td>
<td>2.93</td>
<td>2.80</td>
<td>0.133</td>
</tr>
<tr>
<td>E  Organisational Climate</td>
<td>4.25</td>
<td>3.80</td>
<td>0.897</td>
</tr>
<tr>
<td>F  Lack of Professional Development</td>
<td>3.12</td>
<td>3.24</td>
<td>0.152</td>
</tr>
</tbody>
</table>

Of the 61 respondents, 23 of the respondents worked in more rural areas of the North-West Province, and 38 were situated in the urban areas. Pay satisfaction and organisational climate showed high significance for the differences in means and it is clear that the respondents situated in rural areas, are more satisfied with the organisational climate and the shows more satisfaction with their salary.

The rural areas show an overall higher satisfaction rate than the urban based pharmacists.
3.4 RESULTS FOR PRIVATE AND PUBLIC SECTOR HOSPITAL PHARMACISTS

3.4.1 Introduction

The primary objective of this study is to draw a comparison between the level of job satisfaction of the pharmacists in the public and private sector hospitals in the North-West Province. The following section demonstrates the demographic analysis of both the sectors individually, as well as the results from the job satisfaction questionnaire.

After the results are shown, a comparison will be drawn indicating the difference in job satisfaction according to the six factors that were identified.

3.4.2 Public sector

3.4.2.1 Demographic analysis of the public sector

The demographic analysis of the public sector is shown in Table 3.8, on the following page:
Table 3.8: Demographic analysis of the public sector

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 AGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30-30 years</td>
<td>69.44%</td>
</tr>
<tr>
<td></td>
<td>31-40 years</td>
<td>13.89%</td>
</tr>
<tr>
<td></td>
<td>41-50 years</td>
<td>11.11%</td>
</tr>
<tr>
<td></td>
<td>&gt;51 years</td>
<td>5.56%</td>
</tr>
<tr>
<td>2 GENDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>80.56%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>19.44%</td>
</tr>
<tr>
<td>3 MARITAL STATUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>42.86%</td>
</tr>
<tr>
<td></td>
<td>Living with partner</td>
<td>2.86%</td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>51.43%</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>2.86%</td>
</tr>
<tr>
<td>4 NUMBER OF CHILDREN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No children</td>
<td>66.67%</td>
</tr>
<tr>
<td></td>
<td>1 child</td>
<td>13.89%</td>
</tr>
<tr>
<td></td>
<td>2 children or more</td>
<td>19.44%</td>
</tr>
<tr>
<td>5 YEARS STUDIED TO BECOME PHARMACIST</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 Years</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>4 Years</td>
<td>4.00%</td>
</tr>
<tr>
<td></td>
<td>&gt;5 Years</td>
<td>25.00%</td>
</tr>
<tr>
<td>6 YEARS PRACTISED AS PHARMACIST</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-5 Years</td>
<td>63.89%</td>
</tr>
<tr>
<td></td>
<td>5-10 years</td>
<td>16.67%</td>
</tr>
<tr>
<td></td>
<td>11-15 years</td>
<td>5.56%</td>
</tr>
<tr>
<td></td>
<td>&gt;15 years</td>
<td>13.89%</td>
</tr>
<tr>
<td>7 HIGHEST LEVEL OF EDUCATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bachelors degree</td>
<td>72.22%</td>
</tr>
<tr>
<td></td>
<td>Masters degree</td>
<td>24.00%</td>
</tr>
<tr>
<td></td>
<td>Postgraduate diploma</td>
<td>2.78%</td>
</tr>
<tr>
<td></td>
<td>Doctorate</td>
<td>0.00%</td>
</tr>
<tr>
<td>8 YOUR CURRENT EMPLOYMENT STATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Full-time</td>
<td>94.44%</td>
</tr>
<tr>
<td></td>
<td>Part-time</td>
<td>5.56%</td>
</tr>
<tr>
<td>9 YOUR JOB TITLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intern</td>
<td>11.43%</td>
</tr>
<tr>
<td></td>
<td>Community service pharmacist</td>
<td>17.14%</td>
</tr>
<tr>
<td></td>
<td>Senior pharmacist</td>
<td>57.14%</td>
</tr>
<tr>
<td></td>
<td>Pharmacy manager</td>
<td>14.29%</td>
</tr>
<tr>
<td>10 SECTOR CURRENTLY IN</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td></td>
</tr>
<tr>
<td>11 LOCATION OF HOSPITAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>51.43%</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>48.57%</td>
</tr>
<tr>
<td>12 HOW LONG ARE YOU IN YOUR CURRENT JOB</td>
<td></td>
<td>Years</td>
</tr>
<tr>
<td>13 WHAT IS YOUR CURRENT ANNUAL SALARY (SAR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;R200 000</td>
<td>13.89%</td>
</tr>
<tr>
<td></td>
<td>R200 000-R249 999</td>
<td>23.33%</td>
</tr>
<tr>
<td></td>
<td>R250 000-R299 999</td>
<td>11.11%</td>
</tr>
<tr>
<td></td>
<td>R300 000-R349 999</td>
<td>19.44%</td>
</tr>
<tr>
<td></td>
<td>R350 000-R399 999</td>
<td>19.44%</td>
</tr>
<tr>
<td></td>
<td>R400 000-R449 999</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>&gt;R450 000</td>
<td>2.78%</td>
</tr>
<tr>
<td>14 REASON FOR BEING IN YOUR CURRENT JOB</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>It is my passion</td>
<td>38.46%</td>
</tr>
<tr>
<td></td>
<td>Good salary and benefits</td>
<td>30.77%</td>
</tr>
<tr>
<td></td>
<td>Close to home</td>
<td>15.38%</td>
</tr>
<tr>
<td></td>
<td>No other job available</td>
<td>15.38%</td>
</tr>
<tr>
<td>15 REASON FOR CHOOSING THE CURRENT SECTOR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the analysis above it is clear that the public sector consisted of 69.44% of pharmacists between the age of 20 to 30 years and 80.56% are female. A percentage of 51.43% were married and 42.86% single. Of the 36 pharmacists, 72.22% acquired a B.Pharm degree and 25% a Masters degree. A percentage of 94.44% were employed full-time and 57.14% were senior pharmacists. A total of 51.43% of the hospitals were urban based and 48.57% rural. When asked what the
reason is for being in the current job, 38.46% indicated that it is their passion and 30.77% said it is for the good salary and benefits.

At question 15 the pharmacists from the public sector can be quoted as follows:

- “To serve community and deliver and promote good health”
- “Community service is compulsory”
- “Pay-back to community”
- “Lots of free time. Contract accommodating religion (4months per year off)”
- “Comfortable working hours and salary”
- “For working hours and benefits”
- “For benefits”
- “I’m a people-person and likes the hospital setup”
- “Comfortable working hours”
- “Only available job”
- “Not working over weekends”
- “Benefits”
- “Best option”
- “I do not want to work in private for more than half less money and double the time”
- “Passion helping people”
- “Better working hours”
- “Plenty of time at home, not working weekends and limited afterhours”

3.4.2.2 Job satisfaction in the public sector

The findings of the mean and standard deviation are listed in Table 3.9, on the following page:
Table 3.9: Job satisfaction in the public sector

<table>
<thead>
<tr>
<th>Number</th>
<th>Question</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My work makes sufficient demands on my skills and capacities</td>
<td>3.36</td>
<td>1.07</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>I have too much work to do</td>
<td>3.50</td>
<td>1.06</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>I feel satisfied when I am paid</td>
<td>3.72</td>
<td>1.00</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>I can see the link between my performance and the bonuses I receive</td>
<td>2.67</td>
<td>1.04</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>My employer gives me freedom to choose when I perform my allocated work</td>
<td>3.26</td>
<td>1.04</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>I have a good interaction network with fellow colleagues</td>
<td>4.28</td>
<td>0.61</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>My job gives me enough exposure to CPD activities</td>
<td>2.83</td>
<td>1.06</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>I experience a challenging work diversity</td>
<td>3.25</td>
<td>1.02</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>I repeatedly do the same things</td>
<td>3.97</td>
<td>0.91</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>I feel I get paid a fair salary for the work I do</td>
<td>3.33</td>
<td>0.96</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>I do not feel that the work I do is appreciated</td>
<td>3.08</td>
<td>1.25</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>My working arrangements best fit my current personal situation</td>
<td>3.86</td>
<td>0.76</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>My company is overall a satisfying place to work</td>
<td>3.47</td>
<td>0.88</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>I feel my knowledge and skills have declined since being in my current job</td>
<td>3.08</td>
<td>1.25</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>My employer rotate me regularly to increase my job knowledge</td>
<td>3.28</td>
<td>1.06</td>
<td>0</td>
</tr>
<tr>
<td>16</td>
<td>I feel restricted in my work due to professional guidelines</td>
<td>3.03</td>
<td>1.28</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>I can live comfortably on my salary</td>
<td>3.47</td>
<td>0.88</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>I receive sufficient feedback on my work</td>
<td>2.97</td>
<td>1.13</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>My working hours can be changed to fit my personal preferences</td>
<td>2.37</td>
<td>1.06</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>If necessary, I can ask my fellow colleagues for help</td>
<td>4.17</td>
<td>0.74</td>
<td>0</td>
</tr>
<tr>
<td>21</td>
<td>There is little possibility for promotion in my job</td>
<td>3.89</td>
<td>1.06</td>
<td>0</td>
</tr>
</tbody>
</table>

The following results can be drawn from Table 3.9 above. The pharmacists agreed slightly on the following statements:

It is clear that the pharmacists’ show *moderate satisfaction* when it comes to demands their job puts on their skills and capacities, their salaries, having the freedom to choose when to perform the allocated work, experiencing challenging work diversity and the feeling that their working arrangements best fit their personal situation. They *agree slightly* that they have too much work to do, repeatedly do the same things, do not feel appreciated for the work they do, and see little possibility for promotion.
They agree slightly that their employer rotate them regularly and sometimes feel restricted by the professional guidelines. They do, however, agree that their company is an overall satisfying place to work.

The pharmacists in the public sector show high satisfaction in their interaction with fellow employees and feel comfortable to ask their fellow employees for help when necessary.

They show a low satisfaction with the feedback on the work they do and cannot see the link between their performance and the work they do. They feel they do not receive sufficient exposure to CPD activities and cannot change their working hours to best fit their personal preferences.

Overall, the public sector pharmacists show a moderate job satisfaction with the exclusion of a high job satisfaction when looking at the organisational climate.
### 3.4.3 PRIVATE SECTOR

#### 3.4.3.1 Demographic analysis of the private sector

The demographic analysis of the private sector is illustrated in Table 3.10 below:

<table>
<thead>
<tr>
<th>Table 3.10: Demographic analysis of the private sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 AGE</strong></td>
</tr>
<tr>
<td>20-30 years: 33.33%</td>
</tr>
<tr>
<td>31-40 years: 26.67%</td>
</tr>
<tr>
<td>41-50 years: 16.67%</td>
</tr>
<tr>
<td>&gt;51 years: 23.33%</td>
</tr>
<tr>
<td><strong>2 GENDER</strong></td>
</tr>
<tr>
<td>Male: 66.67%</td>
</tr>
<tr>
<td>Female: 33.33%</td>
</tr>
<tr>
<td><strong>3 MARITAL STATUS</strong></td>
</tr>
<tr>
<td>Single: 33.33%</td>
</tr>
<tr>
<td>Living with partner: 0.00%</td>
</tr>
<tr>
<td>Widowed: 0.00%</td>
</tr>
<tr>
<td>Married: 56.67%</td>
</tr>
<tr>
<td>Divorced: 10.00%</td>
</tr>
<tr>
<td><strong>4 NUMBER OF CHILDREN</strong></td>
</tr>
<tr>
<td>No children: 48.28%</td>
</tr>
<tr>
<td>1 child: 6.90%</td>
</tr>
<tr>
<td>2 children or more: 44.83%</td>
</tr>
<tr>
<td><strong>5 YEARS STUDIED TO BECOME PHARMACIST</strong></td>
</tr>
<tr>
<td>3 Years: 0.00%</td>
</tr>
<tr>
<td>4 Years: 70.00%</td>
</tr>
<tr>
<td>&gt;5 Years: 30.00%</td>
</tr>
<tr>
<td><strong>6 YEARS PRACTISED AS PHARMACIST</strong></td>
</tr>
<tr>
<td>0-5 Years: 36.67%</td>
</tr>
<tr>
<td>6-10 years: 0.00%</td>
</tr>
<tr>
<td>11-15 years: 23.33%</td>
</tr>
<tr>
<td>&gt;16 years: 40.00%</td>
</tr>
<tr>
<td><strong>7 HIGHEST LEVEL OF EDUCATION</strong></td>
</tr>
<tr>
<td>Bachelors degree: 76.67%</td>
</tr>
<tr>
<td>Masters degree: 16.67%</td>
</tr>
<tr>
<td>Postgraduate diploma: 0.00%</td>
</tr>
<tr>
<td>Doctorate: 6.67%</td>
</tr>
<tr>
<td><strong>8 YOUR CURRENT EMPLOYMENT STATE</strong></td>
</tr>
<tr>
<td>Full-time: 66.67%</td>
</tr>
<tr>
<td>Part-time: 33.33%</td>
</tr>
<tr>
<td><strong>9 YOUR JOB TITLE</strong></td>
</tr>
<tr>
<td>Intern: 24.14%</td>
</tr>
<tr>
<td>Community service pharmacist: 10.34%</td>
</tr>
<tr>
<td>Senior pharmacist: 37.93%</td>
</tr>
<tr>
<td>Pharmacy manager: 27.59%</td>
</tr>
<tr>
<td><strong>10 SECTOR CURRENTLY IN</strong></td>
</tr>
<tr>
<td>Public: 23.08%</td>
</tr>
<tr>
<td>Private: 76.92%</td>
</tr>
<tr>
<td><strong>11 LOCATION OF HOSPITAL</strong></td>
</tr>
<tr>
<td>Rural: 23.08%</td>
</tr>
<tr>
<td>Urban: 76.92%</td>
</tr>
<tr>
<td><strong>12 HOW LONG ARE YOU IN YOUR CURRENT JOB</strong></td>
</tr>
<tr>
<td>Years: 100%</td>
</tr>
<tr>
<td><strong>13 WHAT IS YOUR CURRENT ANNUAL SALARY (SAR)</strong></td>
</tr>
<tr>
<td>&lt;R200 000: 29.63%</td>
</tr>
<tr>
<td>R200 000- R249 999: 11.11%</td>
</tr>
<tr>
<td>R250 000- R299 999: 14.81%</td>
</tr>
<tr>
<td>R300 000- R349 999: 11.11%</td>
</tr>
<tr>
<td>R350 000- R399 999: 22.22%</td>
</tr>
<tr>
<td>R400 000- R449 999: 3.70%</td>
</tr>
<tr>
<td>&gt;R450 000: 7.41%</td>
</tr>
<tr>
<td><strong>14 REASON FOR BEING IN YOUR CURRENT JOB</strong></td>
</tr>
<tr>
<td>It is my passion: 35.71%</td>
</tr>
<tr>
<td>Good salary and benefits: 25.00%</td>
</tr>
<tr>
<td>Close to home: 28.57%</td>
</tr>
<tr>
<td>No other job available: 10.71%</td>
</tr>
<tr>
<td><strong>15 REASON FOR CHOOSING THE CURRENT SECTOR</strong></td>
</tr>
</tbody>
</table>


The results indicated in Table 3.10 are from the completed questionnaires of the private sector. This target group consisted of 30 pharmacists. From the target group, 33.33% were aged between 20 and 30 years and 83.33.82% were female. The sample consisted of 33.33% single pharmacists and 56.67% are married. A percentage of 76.67% of the sample's highest degree were the B.Pharm’s and 16.67% acquired a Masters degree. The sample consisted of 24.14% intern pharmacists, 10.34% pharmacist completing their community service, 37.93% senior pharmacists and 27.59% pharmacy managers. A percentage of 23.08% of the pharmacists are situated in a rural area and 76.92% in an urban area.

When asked why they are in the current sector 35.71% said that it is their passion, 25.00% chose this sector for the good salary and benefits, and 28.57% because it is close to home and only 10.71% had no other job available.

At question 15 the pharmacists can be quoted as follows:

- “No other job near home”
- “It suites me, the hours, the place and the type of work”
- “I like it to work in the hospital”
- “Locum-to stay up to date”
- “Working according to business rules”
- “Had retail, public sector experience, felt like trying the private sector”
- “The pharmacy I worked for was sold to Clicks. Saw it as challenge”
- “Working circumstances are better”
- “Love clinical environment”
- “Good job”
- “Nice hours”
- “Easier to be employed part-time”
- “I’m an academic intern and the public sector is not paying for part time-jobs, therefore I am in the private sector”
• “Can’t see myself working within public sector where ethics and responsibility are not upheld, not willing to strike. Enjoying benefits of current position and good salary as well as bonus being close to home”
• “Working hours, salary and benefits”
• “Better salary and benefits”
• “Availability near home”
• “Better salary and benefits”
• “Satisfying company with security”
• “Cannot handle retail”

3.4.3.2 Job satisfaction in the private sector

The answers that resulted from the job satisfaction questionnaire, at the private hospitals, are provided in Table 3.11, on the following page:
Table 3.11: Job satisfaction in the private sector

<table>
<thead>
<tr>
<th>Number</th>
<th>Question</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My work makes sufficient demands on my skills and capacities</td>
<td>3.90</td>
<td>0.86</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>I have too much work to do</td>
<td>3.34</td>
<td>1.14</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>I feel satisfied when I am paid</td>
<td>3.24</td>
<td>1.02</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>I can see the link between my performance and the bonuses I receive</td>
<td>2.69</td>
<td>1.12</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>My employer gives me freedom to choose when I perform my allocated work</td>
<td>3.25</td>
<td>1.11</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>I have a good interaction network with fellow colleagues</td>
<td>4.17</td>
<td>0.59</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>My job gives me enough exposure to CPD activities</td>
<td>3.45</td>
<td>1.12</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>I experience a challenging work diversity</td>
<td>3.53</td>
<td>0.97</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>I repeatedly do the same things</td>
<td>3.73</td>
<td>0.74</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>I feel I get paid a fair salary for the work I do</td>
<td>3.10</td>
<td>0.99</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>I do not feel that the work I do is appreciated</td>
<td>2.75</td>
<td>1.32</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>My working arrangements best fit my current personal situation</td>
<td>3.80</td>
<td>0.92</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>My company is overall a satisfying place to work</td>
<td>3.77</td>
<td>0.68</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>I feel my knowledge and skills have declined since being in my current job</td>
<td>2.47</td>
<td>1.04</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>My employer rotate me regularly to increase my job knowledge</td>
<td>2.46</td>
<td>1.00</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>I feel restricted in my work due to professional guidelines</td>
<td>3.00</td>
<td>1.13</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>I can live comfortably on my salary</td>
<td>2.96</td>
<td>1.10</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>I receive sufficient feedback on my work</td>
<td>3.36</td>
<td>0.83</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>My working hours can be changed to fit my personal preferences</td>
<td>2.73</td>
<td>1.28</td>
<td>0</td>
</tr>
<tr>
<td>20</td>
<td>If necessary, I can ask my fellow colleagues for help</td>
<td>3.93</td>
<td>0.64</td>
<td>0</td>
</tr>
<tr>
<td>21</td>
<td>There is little possibility for promotion in my job</td>
<td>3.75</td>
<td>1.08</td>
<td>2</td>
</tr>
</tbody>
</table>

In Table 3.11, it is shown that the pharmacists in the private sector show low satisfaction with the link between their performance and the work that they do, and feel unappreciated for the work they do. They feel they are not rotated regularly and cannot live comfortably on their salary. They also feel they cannot change their working hours to best fit their personal situation.

The private sector pharmacists show moderate satisfaction with the demands of their job on their skills and capacities, their salaries, having freedom to choose when to perform their duties, exposure to CPD activities, having a challenging work diversity, their current working arrangements and the restriction of professional guidelines. They slightly agree that they repeatedly do the same thing; receive sufficient feedback on the work they do, see little possibility for promotion and have too much
work to do. They do, however, feel that their company is overall a satisfying place to work and they can ask their colleagues for help when needed.

The pharmacists disagree that their skills and knowledge have declined in their job and show high satisfaction with the interaction between fellow colleagues.

3.4.4 Comparison between the public and private sector

In this section a comparison is drawn between the public sector and the private sector. The practical significance is shown in Table 3.12.

Table 3.12: Job Satisfaction according to Sector of Hospital

<table>
<thead>
<tr>
<th>FACTOR TESTED</th>
<th>MEAN-public</th>
<th>MEAN-private</th>
<th>p-Effect sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Job Design</td>
<td>2.90</td>
<td>2.98</td>
<td>0.114</td>
</tr>
<tr>
<td>B Pay Satisfaction</td>
<td>3.51</td>
<td>3.12</td>
<td>0.438</td>
</tr>
<tr>
<td>C Performance Management</td>
<td>2.85</td>
<td>3.16</td>
<td>0.334</td>
</tr>
<tr>
<td>D Working Arrangements</td>
<td>2.81</td>
<td>3.00</td>
<td>0.192</td>
</tr>
<tr>
<td>E Organisational Climate</td>
<td>3.97</td>
<td>3.96</td>
<td>0.031</td>
</tr>
<tr>
<td>F Lack of Professional Development</td>
<td>3.38</td>
<td>2.89</td>
<td>0.585</td>
</tr>
</tbody>
</table>

In this study the public sector consisted of 36 pharmacists and the private sector of 30. A medium practical significance with a p-effect size of 0.585, which is more than 0.5, is seen with the factor “Lack in professional development”. The private sector disagree that they have a lack of professional development, whereas the public sector feel they do not receive sufficient exposure to developmental activities.

Table 3.13: Job satisfaction according to remaining factors

<table>
<thead>
<tr>
<th>FACTOR TESTED</th>
<th>MEAN</th>
<th>STD DEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Job Design</td>
<td>2.93</td>
<td>0.61</td>
</tr>
<tr>
<td>B Pay Satisfaction</td>
<td>3.33</td>
<td>0.84</td>
</tr>
<tr>
<td>C Performance Management</td>
<td>2.99</td>
<td>0.89</td>
</tr>
<tr>
<td>D Working Arrangements</td>
<td>2.89</td>
<td>0.95</td>
</tr>
<tr>
<td>E Organisational Climate</td>
<td>3.96</td>
<td>0.51</td>
</tr>
</tbody>
</table>
With a p-effect size of less than 0.5 it is clear that there is only a small significant difference in the means of the public sector and the private sector when looking at job design, pay satisfaction, performance management, working arrangements and organisational climate.

As indicated above, it is clear that the p-effect size for job design, pay satisfaction, performance management, working arrangements and organisational climate is small and, therefore, the results for the full sample of 66 pharmacists can be used for the mentioned factors to determine the level of job satisfaction. From Table 3.13 it is clear that the full sample of pharmacists show a moderate satisfaction with the remaining five factors.

3.5 CONCLUSION

In chapter 3 the empirical data, gathered from the survey on institutional pharmacist in the North-West Province, was statistically analysed and interpreted. A response rate of 66 percent was achieved. The factor analysis of items that measured job satisfaction indicated that items for each factor (job design, pay satisfaction, performance management, working arrangements, organisational climate and lack of professional development) clustered in a satisfactory manner. The Cronbach Alpha Coefficient was used to determine the reliability of the job satisfaction measuring instrument (Section C of the questionnaire), and it was found that the instrument was reliable. From the inter-correlations between each factor, the job satisfaction showed low to moderate inter-correlations.

The pharmacists of both the public and private sector combined, shows slight job satisfaction with their salaries and high satisfaction with their organisational climate. They do, however, show less satisfaction to their professional development, job design, performance management and working arrangements.

In the statistical analysis, the t-test showed significant differences in means for working arrangements and gender. Female respondents felt less satisfied than male co-workers with their current working arrangements. According to the level of
education, the post graduate participants showed a higher level of pay satisfaction and have a lack of professional development. The location of the hospital made a significant difference in the means of pay satisfaction and organisational climate and showed that the respondents situated in rural areas are more satisfied with the organisational climate and their current salaries.

From the comparison drawn between the private and public sector hospital pharmacists, it is clear that they do not differ as the assumption is so often made. The only medium practical significant difference in means is that the public sector differs from the private sector is that the public sector feels they do not receive enough exposure to professional development. Overall, the pharmacists show a moderate satisfaction level. From question 15 in the demographic questionnaire, it is evident that the private sector employee values the working environment and job design, whereas the public sector appreciates the working hours, free time on weekends, benefits, and being able to serve the community.

Chapter 4 follows and deals with the concluding perspectives of this study.
CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

This chapter will discuss the general conclusions derived from the results, linked with recommendations. Thereafter, the recommendation for future research and conclusions will be drawn.

4.2 CONCLUSION AND RECOMMENDATIONS

4.2.1 Job satisfaction of hospital pharmacists in the North-West Province

In this study the following variables were tested with regards to the job satisfaction of hospital pharmacists in the North-West Province:

A. JOB DESIGN

According to Roelen et al. (2006:433), the working conditions can be managed and is very important to the employer. When looking at job design the public sector showed a mean of 2.90 and the private sector one of 2.98. With a p-effect size of 0.114 it is clear that there is no significant difference in the means. The researcher decided to take the mean of 2.93 for the pharmacists combined.

The research shows that the sample agrees that their work makes sufficient demands on their skills; they do, however, feel they have too much work to do and experience a challenging working range. They feel they repeatedly do the same thing and disagree that they are restricted to certain professional guidelines. Overall, the pharmacists do not show a significant satisfaction with their job design.

Recommendation:

Hackman et al. (1975), states that a job involves five core dimensions: skills variety, task identity, task significance, autonomy and task feedback.
When looking at Figure 4.1, it is clear that the five core dimensions can help increase internal work motivation, high growth satisfaction, general job satisfaction and work effectiveness.

In increasing the *skills variety* it is necessary to include certain responsibilities in the daily activities of the pharmacist that will enable the employee to make use of a variety of skills, abilities and talents. This will lead to the employee experiencing meaningfulness in their work.

With *task identity*, the employee will be able to see the bigger picture of where his/her job fits in and what contribution he is making in realising the visions and goals of the organisation (Coetsee, 2002:160). Especially with pharmacists delivering an essential service, it is necessary for the employer to provide task significance when emphasising the impact of the work of the employee on the lives of other people.
According to Coetsee (2002:160), if these three core job characteristics are present, the employee will experience the job as being important, valuable and worthwhile.

B. PAY SATISFACTION

The research showed a small significance of 0.438 when looking at the difference in means of the public sector (mean of 3.51) versus the private sector (mean of 3.12). Although the effect is small, there is a difference in the pay satisfaction observed. The pharmacists of the public sector show slightly more satisfaction than the private sector pharmacists. The pharmacists from both sectors show a moderate to high level of satisfaction with the salary they receive. They feel they get paid a fair salary and can live comfortably on the payment.

The satisfaction in the public sector can be due to recent occupational specific dispensations (OSD) they received. OSD is a revised salary structure that is unique to each identified occupation in the public service (DOH, 2007). The pharmacists received OSD from April 2009, which lead to them being on more or less the same salary structure as their co-workers in the private sector, and with less working hours.

Recommendations:

Although the pharmacists showed the second highest satisfaction level for their salaries, after organisational climate, it is still a moderate satisfaction rate which needs attention. The pharmacy profession is a well-paid profession, but still the pharmacists show only moderate satisfaction. This leads to questioning whether salary increases can be used as a main driving force behind job satisfaction.

According to Judge et al. (2010:7), it is firstly important to be mindful of the fact that even though level of pay may have a limited ability to satisfy, that does not mean that pay is not motivating. It is clear that too many individual’s pay is motivating. Secondly, employers should realize that being a pay leader is not likely, by itself, to result in a satisfied workforce. Given that job satisfaction is related to employee
withdrawal, and the financial effects of positive job attitudes are well documented, employers interested in having a satisfied workforce may need to turn elsewhere to raise job satisfaction levels.

C. PERFORMANCE MANAGEMENT

The results in this study indicated that the public sector showed less satisfaction than the private sector when looking at performance management. The results showed only a small significance in difference in means. Performance management is of great importance to employees and could lead to an improved contribution to the organisational successes. Through this study it is clear that the pharmacists from both sectors sense that they cannot see the link between their performance and the bonuses they receive, although they feel appreciated and receive sufficient feedback from supervisors.

Recommendations:

For any reward to give the desired effect it needs to be available, visible, timely, durable and performance contingent (Van Tonder, 2007:34). In the public sector, the evaluation takes place, but the feedback and payments is made too late. Although the performance appraisal programs are visible and efforts are put in place, the employee seldom links the bonus to the performance. Matsie (2008:66) shows ways to increase satisfaction with performance management:

- Determine the performance gaps - make sure the employees only act according to their outlined job descriptions.
- The hospital needs to find a way to separate performance assessment from money in order to assess the true reflection of an employee’s performance so that corrective measures can be put in place.
• Rewards should be given immediately and not only after the annual evaluations. The reward should be specific, prompt and recognise exceptional behaviour on the part of the employee.

Ways to increase satisfaction can be done by increasing transparency; give the employee freedom to choose the reward either through gain-sharing, flexible benefits, profit sharing plans, employee stock owner plans, lump-sum pay increases, or merit pay. It is, however, very important for the process to be transparent and the employee needs to know what the link is between his/her efforts and the reward.

**D. WORKING ARRANGEMENTS**

By looking at the results of the study, there is no clear difference between the different means of the public (mean of 2.81) and the private sector (mean of 3.00) and is the mean of 2.89 taken as the result for job satisfaction for the pharmacists in North-West Province. It is clear that the pharmacists felt they do not have the freedom to choose their working arrangements, but still feels they chose the one environment that fits their personal situation the best.

Paull (2008:F10), indicated that women of child-bearing age tend to prefer part-time work and as the sample consisted of 82% female respondents and an age distribution of 53% between 20-30 years, it is clear that the profession is female dominant. This can also be a reason for the low satisfaction in working arrangements.

**Recommendations:**

The employees need to feel they have decision-making control with regard to their performance of duties. In chapter 2, Alderfer’s ERG Theory and Maslow’s Needs Theory state that an employee has certain needs and if the employer focuses on their needs satisfaction is, thereby, generated.
As the profession is female-dominant, it might be a reason to accommodate the family responsibilities, and the company can focus on compressed workweeks, flexible working hours, job sharing, and part-time work.

E. ORGANISATIONAL CLIMATE

There was no significant difference between the two samples and they both showed a high level of satisfaction with their organisational climate. The pharmacists showed a high satisfaction rate with their organisational climate. They feel strongly that they have a good interaction network at work and can ask their co-workers for help when needed. They stated that their company is an overall satisfying place to work at.

It is, however, necessary to emphasise that this is not an indication of the physical environment (space, office bathrooms etc.), but only the climate in the working environment.

Recommendations:

This variable can easily be transformed or modified to improve job satisfaction. The working environment plays a role in the health and work stability of health care professionals. The employer needs to focus on the norms, culture, equity, social processes, leadership styles, and management practises (Ernel, 2007:4).

F. PROFESSIONAL DEVELOPMENT

The sample showed a medium significant change in the mean of the private versus the public sector. The public sector is less satisfied with the professional development they receive. The private sector, although more satisfied than the public sector, also shows a low satisfaction level with professional development. Even though they feel they get enough exposure to CPD activities and that their knowledge and skills have not yet declined, they strongly feel that there is little to no possibility for promotion.
Recommendations:

The research in chapter 2 indicates that career planning and developing is very important for employees. Although employees receive sufficient opportunity for training and development, they need to feel it will encourage career development/promotion. When looking at Maslow’s Hierarchy of Needs, the primary need of employees is self-actualisation. Employees need to receive the opportunity to satisfy their desires in order to reach their full potential.

According to Matsie (2008:70), the transfer of skills can also be done through job rotation and job enrichment, for example periodically assigning employees to alternating jobs. The hospitals should also help the different departments to benchmark from larger hospitals.

4.2.2 Comparisons for the demographic variables

The following variables showed no significant difference between the means of the public and private sector and were taken as the overall job satisfaction between the institutional pharmacists in North-West Province.

1. Gender

From the results of this study, it is clear that women have a lower job satisfaction than men. Working arrangements showed a medium significant effect in the difference in means. This can be substantiated by the literature that states that women are more likely to experience dissatisfaction. According to Paul (2008:F10), men are more satisfied with working full-time, irrespective of having a family. The study consisted of 82% female respondents, which is a clear reason for the low satisfaction according to gender.
2. Marital status

Marital status showed low significance in the differences in means. The married pharmacists showed higher satisfaction than the single respondents. This can be confirmed by the literature that states that married adults are better adjusted than single counterparts and by looking at Herzberg’s theory, job satisfaction is positively related to adjustment.

3. Level of education

Although there is only a small practical significance in the means of the postgraduate pharmacists and the ones with a bachelors degree, it is clear that the higher the qualification the higher the expectation. The pharmacists with a bachelors degree showed a higher level of satisfaction in job design, performance management, working arrangements and the organisational climate. The literature states that a higher qualification can increase a greater earning potential, lead to a change in status, and a greater autonomy. In the hospital environment, there are few opportunities to differentiate between the skills of both parties, which can lead to lower satisfaction for postgraduate pharmacists.

4. Location of the hospital

The literature studies from various countries concluded that rurally based health professionals are significantly less satisfied than urban-based counterparts. In this study it, however, illustrates a high practical significance in pay satisfaction and the organisational climate, where the public sector showed a very high satisfaction rate. In the public sector the employees that are rural-based, receive an allowance added to the basic salary, and rural based pharmacies consists mostly of less pharmacists which give more staff cohesion. Overall, in this study the rural based pharmacists showed higher satisfaction.
4.3 RECOMMENDATIONS FOR FUTURE RESEARCH

When observing this study in retrospect, it is clear that more research needs to be done to assess the job satisfaction of South African pharmacists. The pharmacists in the North-West Province are a small population and for this study to have the required impact, it needs to be done on a much broader scale; not only focusing on the North-West province, but the whole of South Africa.

Starting on a small scale, future studies within South Africa should be based on more qualitative research by conducting open interviews or focus groups to obtain more information regarding poor levels of job satisfaction. The recommendation of this study should be discussed within these interviews to determine if the pharmacists are in agreement, or have alternative recommendations. The recommendations should also be tested in order to determine efficiency and value in increasing job satisfaction.

On a broader scale, moving laterally, the job satisfaction of pharmacists can be compared to the levels of other allied health professionals like dieticians and social workers to examine if there are any similarities or differences. This can help to increase job satisfaction of health professionals across the board. Job satisfaction of South African pharmacists can also be compared on a global scale to learn about differences or methods to increase job satisfaction locally.

4.4 CONCLUSION

The main purpose of this study was to empirically examine and compare the job satisfaction levels between pharmacists in the public and private hospitals of North-West Province, and to, furthermore, provide recommendations on the different factors identified in the literature.

By means of the literature, the following six factors were identified to lead to job satisfaction: job design, pay satisfaction, performance management, working arrangements, organisational climate and professional development. A questionnaire was constructed to test these six factors. The factor analysis showed a Cronbach
Alpha of higher than 0.5 for all these factors and the data was collected by means of the questionnaire.

By analysing the open-ended question, it was clear that the private sector employee values the working environment and job design, whereas the public sector employee appreciates the working hours, free time on weekends, benefits and being able to serve the community.

The data showed that the public sector pharmacists are less satisfied with the job design, performance management, professional development and their working arrangements. A moderate satisfaction rate was found with their annual package and the organisational climate. Although it was more than the public sector, the private sector still maintained a medium job satisfaction. The only medium practical significance shown in the results was between the mean of the private sector (2.89) versus the public sector (3.38) which shows that the public sector has less satisfaction with their performance management than the private sector.

The male respondents showed a significant difference to their female colleagues with a higher satisfaction with their working arrangements. The private sector showed more satisfaction with their professional development, and the pharmacists that were rural-based indicated a high satisfaction rate with regards to their salaries and organisational climate.

The managerial implication of this study is to focus on the different motivational theories to increase job satisfaction. The need for self-actualisation has to be acknowledged and the opportunity for promotion needs to be given. The job design needs to be enriched with job rotation and task identity. With performance management, the link between the actual activity and the bonus needs to be re-established and transparency needs to be showed throughout. Decision-making controls is of high importance and as 82% of the pharmacists were female, the employer can look at accommodating family responsibilities, compressed workweeks, flexible working hours, job sharing, and part-time work.
Professional development is of high importance and should be essential to any company because an increase in skill leads to an increase in productivity and, ultimately, better service delivery. The pharmacists showed little satisfaction in this regard and it is important that the employer deposits time, money and skill into the staff.

It is my sincere belief that this study contributed to the field of organisational development for practitioners and academics alike.
BIBLIOGRAPHY


ROELEN, C.A.M., KOOPMANS, P.C. AND GROOTHOFF, J.W. 2008. Which work factors determine job satisfaction? Department of Social Medicine, University Medical Center, University of Groningen, Groningen, the Netherlands.433-439.


APPENDIX A: DEMOGRAPHIC QUESTIONNAIRE

DEMOGRAPHIC QUESTIONNAIRE

Please answer the following questions by encircling the relevant number or as indicated otherwise

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 AGE</td>
<td>1 20-30 years 2 31-40 years 3 41-50 years 4 &gt;51 years</td>
</tr>
<tr>
<td>2 GENDER</td>
<td>1 Male 2 Female</td>
</tr>
<tr>
<td>3 MARITAL STATUS</td>
<td>1 Single 2 Living with partner 3 Widowed 4 Married 5 Divorced</td>
</tr>
<tr>
<td>4 NUMBER OF CHILDREN</td>
<td>1 No children 2 1 child 3 2 children or more</td>
</tr>
<tr>
<td>5 YEARS STUDIED TO BECOME PHARMACIST</td>
<td>1 3 Years 2 4 Years 3 &gt; 5 Years</td>
</tr>
<tr>
<td>6 YEARS PRACTISED AS PHARMACIST</td>
<td>1 0-5 Years 2 5-10 years 3 11-15 years 4 &gt;16 years</td>
</tr>
<tr>
<td>7 HIGHEST LEVEL OF EDUCATION</td>
<td>1 Bachelors degree 2 Masters degree 3 Postgraduate diploma 4 Doctorate</td>
</tr>
<tr>
<td>8 YOUR CURRENT EMPLOYMENT STATE</td>
<td>1 Full-time 2 Part-time</td>
</tr>
<tr>
<td>9 YOUR JOB TITLE</td>
<td>1 Intern 2 Community service pharmacist 3 Senior pharmacist 4 Pharmacy manager</td>
</tr>
<tr>
<td>10 SECTOR CURRENTLY IN</td>
<td>1 Public 2 Private</td>
</tr>
<tr>
<td>11 LOCATION OF HOSPITAL</td>
<td>1 Rural 2 Urban</td>
</tr>
<tr>
<td>12 HOW LONG ARE YOU IN YOUR CURRENT JOB</td>
<td>Years  Months</td>
</tr>
<tr>
<td>13 WHAT IS YOUR CURRENT ANNUAL SALARY (SAR)</td>
<td>1 &lt;R200 000 2 R200 000- R249 999 3 R250 000- R299 999 4 R300 000- R349 999 5 R350 000- R399 999 6 R400 000- R449 999 7 &gt;R450 000</td>
</tr>
<tr>
<td>14 REASON FOR BEING IN YOUR CURRENT JOB</td>
<td>1 It is my passion 2 Good salary and benefits 3 Close to home 4 No other job available</td>
</tr>
<tr>
<td>15 REASON FOR CHOOSING THE CURRENT SECTOR</td>
<td></td>
</tr>
</tbody>
</table>
# APPENDIX B: JOB SATISFACTION QUESTIONNAIRE

## JOB SATISFACTION QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Slightly agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My work makes sufficient demands on my skills and capacities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I have too much work to do</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I feel satisfied when I am paid</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I can see the link between my performance and the bonuses I receive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. My employer gives me freedom to choose when I perform my allocated work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I have a good interaction network with fellow colleagues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. My job gives me enough exposure to CPD activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I experience a challenging work diversity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I repeatedly do the same things</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I feel I get paid a fair salary for the work I do</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I do not feel that the work I do is appreciated</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. My working arrangements best fit my current personal situation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. My company is overall a satisfying place to work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. I feel my knowledge and skills have declined since being in my current job</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. My employer rotate me regularly to increase my job knowledge</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. I feel restricted in my work due to professional guidelines</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. I can live comfortably on my salary</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. I receive sufficient feedback on my work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. My working hours can be changed to fit my personal preferences</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. If necessary, I can ask my fellow colleagues for help</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. There is little possibility for promotion in my job</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>