An Investigation of the Factors that Influence the Retention of Physiotherapists in the South African Public Sector

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This research report has been submitted to the School of Public Health, University of the Witwatersrand, in partial fulfilment for the Masters in Public Heath Degree

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DECLARATION

I declare that this research report is the product of my own, unaided work. It is being submitted in partial fulfilment for the Masters in Public Health degree at the University of the Witwatersrand School of Public Health. This report has not been submitted before for degree or examination purposes.

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Lintle Rakgokong

Signed on the _____ day of _____, 2007

DEDICATION

This work is dedicated to my family, especially my husband, Lesedi, whom I cannot thank enough for his patience, continued motivation and unwavering support throughout this journey; my mother, Mamoliehi Ntlhakana, for her endless encouragement and for being a role model throughout my life and my two daughters, Kgali and Tumi, for understanding and appreciating that this was done in part to help them appreciate the value of hard work and dedication.

ABSTRACT

Every year, physiotherapists leave the South African public sector in large numbers, citing reasons such as low salaries and unsatisfactory working conditions as the main contributing factors. However, despite this, there are some physiotherapists who continue to choose to stay for the duration of their careers, and it is the aim of this study to investigate the factors that influence these choices. The author has tried to achieve this by trying to predict those factors that cause physiotherapists to stay at their current work places and by finding out if these physiotherapists share any common characteristics and motivations which contribute to their decisions to stay. The participants were also asked to rate their current job satisfaction, rank the importance of given motivation factors for retention and what they knew about their own institutions' retention strategies.

The study population was made up of all the qualified physiotherapists working for the South African public sector in Gauteng between January and December 2006. There were 93 physiotherapists who met these study criteria, 76 (82.0%) of whom completed the questionnaire.

The research revealed that characteristics such as gender, age, race, marital status, having children and being the family breadwinner played a significant role as determinants of whether physiotherapists left or stayed at their current public sector jobs in 2007. For example, the female participants and those who had children were twice as likely to stay as the male participants and those who did not have children, respectively. Similarly, the white participants and those who were family breadwinners were three times more likely to stay than those of other racial groups and non-breadwinners, respectively. Physiotherapists over the age of thirty-one were almost five times more likely to stay than their younger counterparts. On the other hand, factors such as professional rankings, having postgraduate qualifications and the type or level of institution seemed to play relatively insignificant roles.

According to the results, the respondents' main source of dissatisfaction was their salaries, followed by what they felt were poor opportunities for promotion. Feeling unappreciated and undervalued in their workplaces, as well as poor recognition for their professional status, were also rated as contributors to dissatisfaction. They felt that

more attention needed to be given to improve on these factors if the retention of physiotherapists was to be achieved successfully.

The factors which received the highest importance rating and ranking as retention factors, included, once again, better salaries, promotion opportunities, career development and training opportunities, as well as receiving the scarce skills allowance. In terms of knowledge of the existence of retention strategies for physiotherapists in their institutions, only 29% responded positively, the most commonly cited one being the scarce skills allowance.

The main conclusion that was drawn from this study is that in addition to better salaries, improved working conditions and more promotion opportunities, there are more characteristic features that are shared by those physiotherapists that stay in the South African public sector. These, as mentioned earlier, include being a female, being over the age of 31, being married, having children and carrying the financial responsibilities of a family breadwinner.

Finally, in terms of some of the key recommendations made, the findings of this study reveal a heightened necessity for the government of South Africa to review the salary structure of public sector physiotherapists in an effort to motivate them and encourage them to stay. Furthermore, it is recommended that physiotherapy managers improve their human resource record keeping, particularly worker flow and turnover data, and that they encourage more evidence-based research in the field of physiotherapy human resources.

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- All the participants in this study, for their honest responses and for appreciating the potential value of a study such as this.

Most importantly, I thank God for giving me the strength and desire to conduct this study; and for the times when I felt like giving up, I thank Him for encouraging me to persevere until its completion. He who started a great work in me has shown me once again that He is faithful to complete it.

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CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1. Introduction

In this chapter the author introduces the motivation behind, as well as the purpose of, the study. It begins with background information on some of the problems and challenges regarding the working conditions of physiotherapists in the South African public sector today, which could influence their decisions to either leave or stay. This is then followed by a brief statement of the aim and, lastly, objectives of the study.

1.2. Background Information

Despite some definite measures that have been undertaken by the South African government to retain all health professionals, such as the introduction of the scarce skills allowance, prioritising the training of more health professionals and improving their salaries (South African Human Resource Health Plan, 2006), their turnover continues to be relatively high and steady (Dovlo and Martineau, 2004). In the case of physiotherapists, the Gauteng Department of Health (GDOH) Annual Report of 2002/3, which is the only recent report that specifically presents a breakdown of allied health professional turnover rates by profession, reported a 28% turnover rate in Gauteng between April 2002 and April 2003 (GDOH Annual Report of 2002/3) - a figure which was the highest amongst all other allied health professions in the province.

The office of the Gauteng Health Department, which is responsible for handling all matters pertaining to allied health professionals in the province, as well as the

physiotherapy departments visited, did not have the required statistical records, such as physiotherapist attrition rates and worker flow data, which could have been used in the study to demonstrate the staff turnover problem more clearly. Despite this, the information that is available from various ad hoc staff surveys, as well as information available from informal written and verbal exit interviews, suggests that there is a definite and serious problem regarding the retention of physiotherapists in the South African public sector. Furthermore, having served as a physiotherapy department manager at Johannesburg Hospital, the author also draws on her own findings from similar staff surveys, as well as challenges she experienced regarding this problem, to further support this claim.

Most physiotherapy departments in Gauteng keep very up to date staff establishment records, and this is the information that the author used in 2004 when she looked at the average number of physiotherapists who left Johannesburg Hospital's physiotherapy department per annum, focussing on the five-year period between 1999 and 2004. This small, unpublished survey revealed that the department was losing, on average, up to 65% of its physiotherapy staff annually during that five year period alone. Although this figure was the highest when compared to the findings of similar surveys from some of the major institutions, such as Pretoria Academic, Chris Hani Baragwanath, George Mukhari, Leratong, Helen Joseph and Edenvale Hospital, their departments also reported high annual staff percentage losses during that period.

Similarly, also based on the author's own experience and discussions with physiotherapy managers, the following are some of the common reasons that are given by physiotherapists for leaving:

- Most of them report being unhappy with government salaries.

- Many, particularly the lower ranking physiotherapists, also report dissatisfaction with what they perceive to be poor opportunities for promotion.
- Many are not satisfied with the working conditions that they felt prevailed in most government health institutions. This includes the unavailability of, or inadequate, equipment; poor security, as well as ineffective referral systems, which tends to result in high patient volumes and increased work load.
- Some want to travel and work overseas, just to gain further experience and to visit different parts of the world.
- Some of them want to work in the private sector, either for themselves or for other physiotherapists in well-established practices.
- Many report being unhappy with what they feel is poor management in most government institutions and a general lack of support for them and their profession.
- Many also feel that there is a general lack of communication about processes and decisions taking place but expected to support them.

However, what is interesting is that despite the various reasons cited by their colleagues as contributing factors to their decisions to leave, there seem to be some physiotherapists who make a conscious decision to stay and work for the public sector for the duration of their physiotherapy careers. There has been no research on what these physiotherapists have in common and why they choose to stay, and this study seeks to do just that. It is also hoped that these findings could provide information that will assist physiotherapy managers with recruitment and retention strategies.

1.3. Aim of Study

The overall aim of this study was to try to find out the factors that influence the retention of physiotherapists in the South African public sector.

1.4. Study Objectives

The specific research objectives were to:

1. Describe the characteristics and motivations of those physiotherapists who choose to remain in the South African public sector.
2. Rate the participants' job satisfaction with various factors in their current work places, and how they rank them in terms of their level of importance for retention.
3. Predict the factors that are most likely to cause physiotherapists currently working in the public sector to want to stay.
4. Describe the physiotherapists' levels of awareness and knowledge of the existence of retention strategies that their institutions have in place to ensure their retention.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

Several key issues are reviewed in this chapter. The author begins by providing essential information on the general role of physiotherapy in the public sector. Next, there will be a brief description of the role and the relevance of physiotherapy in South Africa's transforming public health sector. This will be followed by a summary of the training and practice adaptations that have had to be made within the profession in order for it to remain relevant and recognised for the value that it adds concerning health care. Most of the literature review begins in the next section that highlights some theories on staff retention and motivation from the human resource literature emphasising factors that influence the retention of staff members in organisations will be discussed. Then the retention factors that have been researched and documented and are known to cause health workers to leave the public sector will be dealt with. The final sections of this chapter review the retention problems, as well as some existing retention strategies, for South African public sector physiotherapists as well as those in other countries.

2.2. The Role of Physiotherapy in the Public Sector

As this is a study that focuses on the retention of physiotherapists in the South African public sector, it is necessary to begin by providing a very brief description of the general role of physiotherapy in the public sector, as it is essential for all healthcare managers and key decision-makers in government structures to fully understand and be informed

about the importance and relevance of physiotherapy in South Africa's primary health care-focused public health system in order to assist them further in their decisions and policy development processes. Furthermore, it is very important to point out that physiotherapy offers a wide scope of practice, as very often one has heard members of the public and professionals alike confusing the role of physiotherapy with that of several alternative therapies, particularly massage therapy. Massage, based on very sound scientific principles, including an understanding of the anatomy and physiology of the human body, is indeed a critical element of physiotherapy. However, it is but only one of many other areas of physiotherapy practice.

There are many ways of describing the role of physiotherapy. However, one of the most concise descriptions was quoted in a journal editorial as stating that "the aim of physiotherapy is to maintain, restore and optimise a patient's functional ability in his or her socio-economic and geographical environment in the best interest of the patient" (Eales, 2000, p.2.). In addition to this, physiotherapy has a strong role to play with regards to disease and disability prevention, facilitating the curative process and healing, palliative care and health promotion. This clearly means that physiotherapists are not only involved in hospital patient care, but that this care also extends to rehabilitating physically disabled patients to lead normal, where possible independent, functional lives once they are back in their communities.

Without a doubt, because of their unique clinical skills, knowledge and training, physiotherapists will always have an extremely critical and essential role to play in acute and sub-acute patient care at quaternary, tertiary and secondary levels of care. Here, physiotherapists form part of an important multidisciplinary team, which also includes medical doctors, nurses and other allied health professionals. Their opinions and

contributions are trusted and respected by other team members when planning the management of patients. Again, studies with a more clinical focus have proven and over and over again that without the intervention of physiotherapy during the acute stages of patient care, especially when patients are receiving assisted ventilation and cannot clear secretions or mobilise themselves, such patients run the risk of sustaining either secondary complications, or permanent disability, or may even die (Mackenzie, 1981; Anthonisen, 1964).

The importance of having multidisciplinary groups as essential elements of effective and efficient patient care and management was also reported in a recent report on the physiotherapy students of Dalhousie University (Newfoundland & Labrador Physiotherapy Association, 2005). This was in response to the government stating that it intended to reduce the number of physiotherapy students enrolling from one of the country's universities. Furthermore, as first-line practitioners, physiotherapists are able to provide fully independent patient diagnoses. A key implication of this is that physiotherapists are able to assist doctors with the complete management of certain types patients, thus assisting with the reduction of waiting times (Newfoundland & Labrador Physiotherapy Association, 2005), a problem which tends to plague most public sector hospitals worldwide.

However, the role of physiotherapy does not end at the levels of patient care that have been mentioned. Indeed physiotherapists continue to be involved with patient care and rehabilitation even during the chronic and rehabilitation stages. In addition to this, physiotherapists play a crucial role in education and health promotion, both of which are key aspects of primary health care.

Lastly, public sector physiotherapists in many countries, including South Africa, are not only responsible for patient care, but are also represented in hospital management structures, where they contribute to key decision-making processes concerning the future of health care in a country's health system. This also gives them the opportunity to educate and create awareness amongst hospital managers about the importance of physiotherapy, particularly in the areas that were outlined above, as well as in the promotion of cost-effective service provision. In the case of South Africa, physiotherapists have demonstrated their willingness to adapt their role where necessary in order to keep up with the requirements of a constantly changing public health system (van Rooyen and van der Spuy, 2000).

2.3. The Role of Physiotherapy in the South African Public Sector

During the past decade, South Africa's public health system has undergone a major transformation, which began in earnest from 1994 when the current democratically elected government came into power (Department of Health, 2001). The primary objectives of the transformation of the health system in South Africa have been to redress the health service inequities and inequalities that were characteristic of healthcare provision during the previous apartheid regime; to rebuild what was a highly fragmented healthcare system; and to provide effective and efficient health care to all the citizens of the country. Indeed, for many years prior to 1994, the South African healthcare environment mirrored the rest of the country's climate of racial segregation, where white and non-white South African citizens received healthcare at different healthcare facilities. Furthermore, this form of healthcare delivery, which focused on curative and hospital-centred patient care, proved to be ineffective and inefficient in that it was not reaching out and serving the majority of the country's sick people. This was

largely because it was inaccessible and unaffordable to those poorer communities that lived in rural and remote parts of the country. In all, it was also a form of health care delivery which did not take the needs of all the country's people into account.

Today, in order to guide the country's health sector reform process and related policies, the principles of primary health care have been adopted and embraced by the government of South Africa and are currently being implemented. The primary health care approach places emphasis on the provision of equal, equitable, accessible, affordable, effective and efficient healthcare to all citizens, regardless of their ability or inability to pay for these services (Dennill et al, 1995). However, although primary health care is accepted worldwide as the best way of achieving "health for all", its implementation in South Africa has not come without great challenges and problems, and some of those that have borne the brunt of this great transformation are the health workers. Since much has been written about this, particularly concerning doctors and nurses (Naidoo, 2000; Nawaal, 2003) , for the purpose of this study, only those aspects of primary health care that are of direct relevance to physiotherapists working in the South African public sector will be dealt with.

Worldwide, the discipline of physiotherapy has traditionally always been predominantly practiced at tertiary and secondary levels of healthcare. The focus of student training at academic institutions worldwide, including South Africa, was largely based on western methods and approaches, equipping physiotherapists with skills to practice primarily in these types of settings, but not as much so for primary health care settings. Furthermore, due to the country's segregation laws of the past, physiotherapy in South Africa was generally not well known in the black communities (Mbambo, 2004). There, it was perceived by black communities to be an elite profession, which was practiced

predominantly by white people, who lived in designated separate suburbs and attended separate hospitals from them.

However, as soon as the government embarked on its vigorous health sector reform initiative, it became evident that all health professions in the country, including physiotherapy, would also have to undergo certain changes in order to adapt to, and remain relevant in, a rapidly changing health system. Indeed, according to one physiotherapy study (van Rooyen and van der Spuy, 2000), the role and relevance of physiotherapy in South Africa's new and rapidly evolving post-1994 health care system soon came under great scrutiny. What the study did not explore in depth was the impact that this new health model may have had on the perceptions of public sector physiotherapists towards their profession, and whether or not these perceptions may have influenced their decisions to either stay or leave the public sector. As this study also does not focus on this subject matter, it would be necessary to conduct a separate study which looks specifically into this matter.

In addition to doing away with what has always been a predominantly biomedical and western emphasis of teaching and practicing physiotherapy, and to equip the country's physiotherapists with the skills required to practice in primary health care settings, one of the first accelerated measures that were taken by the South African government, was to apply great pressure on the country's training institutions to change elements of their 'old' teaching methods and introduce the elements and cornerstones of primary health care in their teaching. The number of physiotherapy students enrolled at training institutions was also increased in order to ensure that the coverage and effectiveness of physiotherapy in the country was optimised, and to ensure that even with the high

turnover of physiotherapists, services would not be gravely affected as there would always be enough in the country to recruit.

Black students in particular, who had in the past not been able to gain entry into 'white' universities, often due to their unattainable entry requirements, were prioritised (Mbambo, 2004) at most of the country's tertiary institutions such as the University of the Witwatersrand. This served to address the problem of having too few physiotherapists in the country. It also helped to increase the level of awareness of physiotherapy amongst black people, as well as make it an attractive and attainable career option for black students, instead of them holding on to the perception that it was an elite profession that was reserved for white students and clients only.

Another key measure that the government took in order to accelerate the provision of physiotherapy to previously disadvantaged and inaccessible parts of the country, was to introduce one year of compulsory community service for all newly qualified physiotherapists. The community service policy was first implemented for medical doctors, dentists and pharmacists in 1998, but in 2002, it was extended to allied health professionals, including physiotherapists. This helped to take all forms of medical and allied healthcare to previously disadvantaged people in their communities instead of concentrating all the expertise and technology at a few, already over-populated and often inaccessible urban health facilities.

2.4. Staff Retention

The subject of staff retention has been well researched and documented over the years. Different authors have defined retention in different ways, depending largely on the context. One definition of retention, which was given from a nursing perspective, but can

also be used for all other health professionals, defines retention as “the maintenance of an appropriate supply of nursing personnel to meet the health needs of any given population” (Baumann et al, 2006, p.6). Simply put, staff retention refers to the ability of an organisation to constantly maintain optimum staffing levels necessary to ensure efficient and effective service delivery at all times. This is best achieved by ensuring that staff members remain satisfied with their jobs and working conditions, as well motivated to remain at that particular organisation. The factors that influence levels of staff motivation and their decisions to either leave or stay at their jobs will be discussed next.

2.4.1. “Push” and “Pull” Factors and Staff Motivation

When discussing retention, or the decisions of employees to leave or stay at their jobs, many authors, including Dovlo and Martineau (2004), classify the factors that influence these into two categories, namely ‘push factors’ and ‘pull factors’. By definition, the former refer to those undesirable factors that ‘push’ staff members away from an organisation, such as poor financial remuneration, poor working conditions, an unhealthy work environment and poor management. The latter refer to those factors that actually ‘pull’, or attract, workers to a particular organisation, for example, satisfactory remuneration and better fringe benefits, good management, opportunities for promotion and feelings of being valued (Stilwell et al. 2003).

Generally these push and pull factors can be classified into headings according to the level at which they impact on people. For example, there could be personal factors, social factors, environmental factors, economic factors and professional factors (Mafubelu 2004). Again, these tend to differ according to the author, country, employees that are being discussed, as well as organisational context (Table 1).

Table 1: Examples of Push and Pull Factors that Affect Decision Making in Employees

LEVEL OF IMPACT ON EMPLOYEES	PUSH FACTORS	PULL FACTORS
ECONOMIC	• Poor salaries • Inability to settle debts • Lack of benefits, e.g. pension, medical aid and savings	• Good exchange rates • Potential to improve financial status • Tax exemptions • Perceived economic security
POLITICAL	• Perceived high levels of crime • Uncertainty about the country's future	• Political stability • Low levels of crime and increased security
PROFESSIONAL	• No opportunities for continuing professional development • No professional mentoring for inexperienced staff members	• Study opportunities • Promotion opportunities • Recognition of and respect for one's professional status
SOCIAL	• Lack of mentorship • Hostile, unfriendly work environment	• Team work • Support from colleagues
PERSONAL	• Personal security and stability • Personal growth and fulfilment	• Better opportunities for entire family, incl. good schools for children • Acknowledging good performance • Feeling valued
JOB RELATED	• Being overworked • Understaffing • Poor institution management	• Challenging work • Satisfactory conditions of service

Similarly, a simple and concise way of classifying these factors was summarised in a study on the retention of physiotherapists in Northern Ontario (Beggs and Noh, 1991) in terms of 'Personal Factors' which included family proximity, life style and partner's employment; "Professional Factors", including academic credentials; "Occupational Factors", such as salary and opportunities for promotion; and "Environmental Factors", such as the availability of schools nearby. These types of classification examples highlight the types of concerns of health workers in different parts of the world. In the

latter, due to the country's long established political and economic stability as a first world country, issues of safety, security and uncertainties about the future were not the health workers' primary concerns.

Push and pull factors can also be described in terms of motivation, where push factors refer to those factors which bring about a lack of motivation concerning work related performance amongst employees, and pull factors refer to those that are inviting and contribute towards making employees motivated at work. The following are the two main types of motivation (Armstrong, 1998):

- **Intrinsic Motivation:** This refers to the ability to motivate oneself, often by performing tasks that are fulfilling and rewarding to one, in an effort to achieve certain goals. Factors that are associated with this type of motivation include having responsibilities, freedom to grow and make choices or develop skills, as well as having opportunities for advancement.
- **Extrinsic Motivation:** In this case, the source of motivation is not the individual him/ herself, but someone or something else. Extrinsic motivational factors include rewards, such as increased pay, praise from supervisors, fringe benefits, promotion, as well as more negative factors such as punishment, criticism and withholding pay.

Having a clear understanding of what keeps employees motivated will result in managers developing creative ways of retaining them. Developing effective retention strategies, therefore, requires experienced and proactive leaders.

2.4.2. Push and Pull Factors Affecting Health Professionals

Although poor financial compensation is arguably a strong push factor amongst health workers, especially in South Africa, a number of studies have shown that it is certainly

not the only factor (Buchan and Calman, 2004). In South Africa, for example, health professionals continue to migrate to other parts of the world in much larger numbers that those working in other African counties, such as Uganda who earn by far less than the former (Lehman and Sanders, 2004). The turnover of South African health workers is caused by other unsatisfactory elements of the work environment, such as perceived deteriorating and living conditions (Lehman and Sanders, 2004, Vujic et al, 2004); weak performance management, poor leadership and supervision (Huddart and Picazo, 2003); the lack of adequate equipment and other essential resources (Matthauer and Imhoff, 2003); the lack of recognition for good performance (Naidoo, 2000);increased stress levels resulting from heavy workloads (Matthauer and Imhoff, 2003, Naidoo, 2000) and perceived lack of opportunities for career development and promotion (Buchan and Dovlo, 2004).

According to Fatu Yumkella (2006), in an article published for the Capacity Project in the United States of America, the strongest pull factor by far for health professionals is satisfactory financial compensation. He states that health workers, in developed and developing countries alike, are wiling to leave their posts for higher pay elsewhere. Other pull factors include opportunities for promotion and continuing professional development, good and supportive management, manageable workloads, team work and the availability of equipment and resources necessary for optimal patient care and service delivery.

2.5. Retention Issues Facing Public Sector Physiotherapists

2.5.1. South Africa

Finding published articles and other sources of information that focus specifically on the subject of the retention of physiotherapists in the South African public sector proved to be a difficult task. To the author's knowledge, there is no published literature on the subject in this country. Generally, most of the available published material deals with health professionals in general rather than specifically with physiotherapists, and as discussed in the previous section, there are indeed many studies and publications that report on the health sector human resource plight of South Africa. Many, such as the Open Democracy report (Hodgson, 2006) discuss the problem of the high level of migration of South Africa's skilled health professionals, or "brain drain", to developed countries.

As far as South African public sector physiotherapists are concerned, this absence of useful information on their retention has, as mentioned in the previous chapter, resulted in the author relying on the information that comes from ad hoc staff satisfaction 'surveys' and largely verbal and informal, exit 'interviews' that have been conducted over the years by the various physiotherapy managers in Gauteng. Although it may be inaccurate due to its informal and non-scientific nature, the information that is obtained from these endeavours is sufficient in that it gives an overall idea of the gravity of the problem facing most physiotherapy managers and can be used as a basis upon which to develop some retention strategies.

Whilst conducting this study, the author noted that there is an overlapping of responsibilities amongst the human resource managers of the provincial health department, institutions and physiotherapy managers, particularly concerning the

function of compiling and keeping relevant statistical information. This could explain the reason why most physiotherapy managers did not have their own scientifically interpreted statistics, such as staff attrition rates and worker flow data sets. Although this is important and should be investigated in a separate study, for the purpose of this study, the author was more interested in finding out from the physiotherapy managers themselves, as well as their staff members, what staff retention problems they were faced with and how, and if, they were trying to solve them.

As highlighted previously, according to these surveys and informal exit interviews, physiotherapists leave the South African public sector for reasons that include their dissatisfaction with their salaries, limited or non-existent opportunities for promotion and poor working conditions, including the unavailability of necessary equipment that would enable them to perform their jobs effectively and poor security at their work environments. Others reported leaving in order to experience working overseas or in the South African private sector, whilst others reported being unhappy with the way in which their institutions were managed and the poor levels of communication concerning matters that affected them in some of these institutions. Most of these reasons for leaving concurred with those that were cited by authors, such as Buchan and Dovlo (2004) and Huddart and Picazo (2003), who were mentioned earlier.

2.5.2. Other Countries

Compared to South Africa, the subject of physiotherapy retention has been explored in greater depth in international publications, particularly in countries such as Canada, Australia, the United Kingdom and the United States of America. However, as is the case with South Africa, international literature sources also have much more information on the retention of medical doctors and nurses than that of physiotherapists.

Furthermore, studies that deal specifically with the retention of physiotherapists are still fewer than those that deal with all allied health professionals. Despite this, there is clear evidence from the studies and reports that were sourced that the issue of physiotherapist retention is a problem that is faced by many countries in the world.

Due to its objectives being similar to those of this study, the findings of a physiotherapist retention study, which was conducted in Northern Ontario, Canada, will be discussed first and in some detail. This cross-sectional survey by Beggs and Noh (1991) had two primary objectives: firstly, to establish baseline information about the extent of physiotherapy retention problems in Northern Ontario; and, secondly, to identify the potentially significant factors for their retention. The authors begin by stating that the turnover of health care employees is a dynamic process in which personal, professional, occupational and environmental factors interact to affect staff morale and behaviour. Through analysing previous retention studies, they were also able to establish that there are certain demographic factors, such as age, family responsibility and, marital status, that are inversely related to staff turnover. Through their study, they were able to establish five key factors, which were directly related to their outcome measure 'intention to leave', and these were marital status, the respondents' own and their spouses' levels of satisfaction with the lifestyle of Northern Ontario, professional tenure and perceived degrees of career advancement opportunities. Indeed, the latter showed the strongest relationship with the outcome measure.

Furthermore, they established that although some personal factors, such as marital status, cannot be addressed by retention efforts, others such as lifestyle satisfaction could be easily promoted during recruitment initiatives and maintained in order to enhance retention. They felt that the professional and occupational factors that they

identified, including opportunities for career development, professional recognition and chances of promotion, could best be addressed by managers through carefully planned retention activities.

In a separate study which was published in 1993, the same authors decided to investigate the factors that caused job turnover and regional attrition among Northern Ontario physiotherapists. Once again they made some interesting findings, including the fact that age played an important role in this matter. The authors found that regional attrition was more prevalent amongst physiotherapists under the age of 30 than it was amongst those who were 40 years old and older. Educational background, particularly whether participants had a physiotherapy degree or diploma, as well as years of experience in the field, were also significant factors. In a similar manner to their previous (1991) study, opportunities for career development came up as the most significant factor for the retention of physiotherapists. Furthermore, with attrition rates being higher amongst physiotherapists working in small, community-based settings than amongst hospital-based physiotherapists, the findings supported and confirmed the earlier suggestion that place of employment (type of institution) also played a role.

One of the main conclusions that were also drawn from this study was the fact that physiotherapists are highly mobile professionals, often as a result of seeking better opportunities elsewhere. Another was their perceived lack of professional autonomy for physiotherapists as first-line practitioners, which was established as a factor that led to decreased morale and increased staff turnover,

In another Ontario physiotherapist attrition survey, Wolpert, and Yoshida (1992) established that public sector physiotherapists left their jobs largely as a result of family

responsibilities, the desire to pursue new challenges and dissatisfaction with the profession 1992). The authors further found that many of these physiotherapists had stopped working as physiotherapists, either for a period, or permanently. In the case of the former, it was mostly due to taking care of family responsibilities, such as caring of small children. In the case of those that had left permanently, most had moved on to pursue other careers. Other reasons they gave for leaving included insufficient income; stress due to high patient case loads which had been exacerbated by staff shortages; increasing demands of administrative duties; and inadequate management support. The lack of promotion opportunities and, once again, the issue of lack of professional recognition, authority and autonomy were also reported to be significant push factors. Similarly to the studies mentioned previously, these authors stated that retention strategies would have to adequately address all of these factors in order to render them effective.

In the same study, most of the physiotherapists, who reported high levels of job satisfaction and intended to stay in the public health sector, seemed to occupy predominantly management or academic positions. The authors also found that older physiotherapists, compared to younger ones, and those that had higher qualifications, also tended to report greater levels of job satisfaction than the others.

This issue of physiotherapists reclaiming their professional autonomy and identity was reiterated in another study, which dealt with issues that affect the identity of Canadian physiotherapists. The authors, Miles-Tapping et al (1992), found that physiotherapists by nature tended to be reluctant to challenge the old order in which doctors' referrals were required before they could legally treat patients. However, this did a great disservice to them and to the profession, as the authors felt that in order for

physiotherapy to gain power as an equally important profession to medicine, it had to project a strong message to the public and recruit support in its bid for power. Furthermore, they felt that this could only be achieved if the profession had a clear image of itself, as well as the image that it sought to portray to the public.

Indeed, in this same study, the majority of participating physiotherapists felt proud of their profession, particularly of the fact that they were helping people in need. However, they felt that although they provided a valuable service and physiotherapy was a good career, they were not fully appreciated, particularly by other health professionals and government health care managers, leaving them with feelings of bitterness and powerlessness. In fact, when they were asked to rate their levels of commitment to the profession from the time of graduation, one year later and after five years of working, most reported declined commitment levels over this five-year period. Another important finding from this was that due to the low average age and short experience of physiotherapists in the public sector, most of the responses they gave indicated commitment levels for the first two years only.

Still on the issue of professional recognition and prestige, and how it relates to why physiotherapists leave or stay at their work places, more interesting findings were established in a recent study on the occupational prestige of physiotherapy in Australia (Turner, 2001). In this study, the author established that in many parts of the world physiotherapy has had very little in the way of professional status granted to it by others outside the profession and this has contributed to low morale and high physiotherapy turnover levels. This includes South Africa, where physiotherapy was reported to have an inferior image amongst certain medical practitioners and laymen. Through comparisons between the responses given by various professional and lay people on

their perceptions of physiotherapy, the author was able to determine that there were high levels of ignorance amongst members of the public about the role of the profession, many stating that all they knew about the profession was that it had something to do with exercise but very little else. In a similar vein to the previous study, the author found out that physiotherapy did not have a strong public identity and most members of the public and professionals were unclear about its role and were unable to differentiate it from other allied health professions.

In the same Australian study, the author had set out to find out how laymen, students and professionals compared physiotherapists with other professionals, from the highest paid, such as doctors, judges and architects, to lower paid ones, such as cleaners and postmen. These comparisons were made against factors such as levels of education, income, responsibility, social standing and the profession's usefulness.

In terms of education, level of responsibility, social standing and level of usefulness, physiotherapists were ranked third after doctors and judges, and were higher than nurses, chiropractors and others. However, in terms of levels of income, physiotherapists were ranked sixth, which was well below doctors and judges, but on a par with chiropractors.

In conclusion, the study revealed that physiotherapy in Australia was regarded as a highly respected and recognised profession, by the public, students and professionals alike. For Australian physiotherapists this is good news, which not only has a positive implications on the future of the profession in that country, but also on their decisions to remain in the country. In comparison, previous similar studies that were referred to in this Australian study had indicated that the British public and physiotherapists did not

recognise physiotherapy as a profession of high status. Indeed, in Britain physiotherapy simply enjoyed an intermediate “lesser profession” status in terms of the Registrar General’s social class classification of occupations of 1985 (Sim, 1985).

The issue of having opportunities for career development as a definite pull factor for physiotherapists was also cited in an American study, which dealt with the job satisfaction and turnover levels of physiotherapists in Utah (Okerlund, Jackson & Parsons, 1994). Having freedom at work, as well as better pay and fringe benefits were also reported to contribute towards greater motivation levels, and hence promoted the retention of physiotherapists. Another point of view that was raised in this, as well as one of the studies mentioned previously, was that due to the many job opportunities and options available to physiotherapists, they often did not hesitate to leave organisations that did not adequately provide them with satisfactory retention opportunities.

Other factors that seem to influence the retention factors of physiotherapists include the availability of leisure and recreation activities, close proximity of families of origin, the perceived need for their services, as well as the influence of partners or spouses in the decision-making processes. These were cited as important factors by Canadian physiotherapists in another study (Solomon, Salvatori & Berry, 2001). This study also reiterated the issue of professional autonomy, which has been established by some of the previously mentioned authors (Miles-Tapping et al, 1992 and Sim, 1985) as an important source of job satisfaction for physiotherapists.

In another study that was conducted in America in order to predict the effects of intrinsic and extrinsic job satisfaction factors on the recruitment and retention of rehabilitation professionals (Randolph, 2005), it was revealed that intrinsic factors, such as

professional growth, the recognition of accomplishments and importance of including them in departmental decision-making processes, as well as having a work environment that was in line with personal values, were more significant in ensuring job satisfaction and retention than extrinsic factors, such as pay and continuing education.

From these few studies, it is clear that developed countries are also faced with the challenges of high physiotherapist turnover and ensuring their retention in public sector institutions, although most of these countries may have slightly different challenges to deal with. A case in particular is that of financial remuneration, which seems to be a very significant push and pull factor amongst physiotherapists and other health professionals in South Africa, but is hardly cited as such in first world countries (Randolph, 2005).

Finally, according to Noh and Beggs (1993), staff turnover can be beneficial for organisations as well as the individuals concerned as long as it is not too high, particularly if they are seeking opportunities for professional development. It is when the turnover levels are too high that it can be dysfunctional for an organisation because it increases costs and impacts negatively on service delivery.

2.6. Retention Strategies for Public Sector Physiotherapists

2.6.1 South Africa

As highlighted earlier, in South Africa, there seems to be an overlapping of responsibilities between the human resource department of the provincial health department, institutional human resource departments and physiotherapy managers, as far as the issue of developing strategies for the retention of physiotherapists, is concerned. Although this shared responsibility is necessary because just as there are

multiple reasons why employees leave their work, there should be multiple creative interventions to ensure their retention. Its downside, however, is that the government generally has the final say and often due to annual budgetary constraints, hospital and departmental managers may be restricted in terms of their own creativity concerning their efforts to try to reduce staff turnover levels and implement their planned retention strategies. In other words, although physiotherapy and hospital managers, who are in the best position to understand the problems and potential remedies of their individual departments and institutions respectively, may have sound retention strategies planned, their success will often only depend on whether or not there is the political will and funds available to implement and sustain those strategies. This then becomes a problem that can only be addressed by government's policies and budgetary allocations concerning these issues.

Over the years, most physiotherapy managers have made their own attempts to retain their staff. Amongst others, they recognise the importance of continuing education as an achievable motivating factor and opportunities for this are indeed prioritised in most departments. Often, this is in the form of inviting guest presenters, sometimes for a small fee, who are experts in their chosen fields of interest, to give talks on various interesting and relevant topics. Furthermore, in agreement with facility managers, opportunities for further study and specialising in various fields of physiotherapy, accompanied by generous amounts of study leave and, where necessary and agreed upon, flexible working hours are widely available to South African public sector physiotherapists in most institutions.

Many of these physiotherapy managers also recognise the importance of breaking the monotony of work and make an effort to organise regular breakaway sessions with their

staff, either to celebrate important occasions, such as birthdays, Easter and Christmas, or as team-building exercises away from work. However, due to financial constraints and the lack of dedicated funding for these types of activities, they do not occur as regularly as perhaps they ought to.

According to other physiotherapy managers, having effective mentoring programmes is not only a part of good management practice but also an essential element of ensuring staff motivation and retention. At Johannesburg Hospital, for example, this occurs in the form of senior and experienced physiotherapists being assigned the responsibility of taking younger and more junior physiotherapists under their wings to guide and support them both professionally and emotionally (Johannesburg Hospital, Physiotherapy Department, 2004). The most obvious benefit of this is that it removes the responsibility of taking care of the needs of all the staff members from the shoulders of the managers, thus preventing them from burn-out and enabling them to function effectively under pressure. Furthermore, mentoring ensures that employees feel valued, appreciated, like they always have someone to talk to, and prevents isolation. Where there is an absence of proper mentoring and support, these are some of the factors that have been reported by some South African public sector physiotherapists as their real reasons for leaving.

Planning for retention and coming up with creative ways of keeping staff members motivated and wanting to stay are clearly measures that must be carried out by managers. However, this depends on how motivated, creative and driven they themselves are, as well as their ability and willingness to lead. Unfortunately, as mentioned previously, although most of those retention strategies that have been highlighted can be, and certainly are being, carried out successfully by most managers, not all aspects of staff retention are within their control. Very often facility managers and

key decision makers in government have to get involved, especially when there are funds required, or if there is a clear staffing crisis which cannot be solved by departmental managers, such as the freezing of posts.

At the facility level, a government initiative which is largely driven by hospital managers, and may have partly contributed to the retention of physiotherapists in the institutions, has been the introduction of private wards in certain designated hospitals. These private wards called “Folateng” are the result of countywide partnerships between the public and private health sectors in the country (Cullinan, 2002). Apart from providing public sector patients with services and facilities that they would expect to receive in private hospitals, but at more affordable rates, the health professionals who work in these Folateng units benefit by earning additional financial compensation without having to leave their own work places. At Johannesburg Hospital, for example, the physiotherapists working there are able to charge locum rates to private patients treated outside normal working hours in much the same way as they would if they were working for private practitioners outside the hospital. The advantage of this is that this it is a benefit that is reserved solely for the hospital’s physiotherapists and is not available to those that do not work there. However, in-as-much as this benefit has been received very well by most of the hospital’s physiotherapists, it also has not completely stopped the exodus of physiotherapists from this hospital. Once again, the extent to which this intervention has contributed towards the retention of South African public sector physiotherapists is yet to be measured and should be explored in future studies.

Overall, the government of South Africa has developed several very good policies, many of which have been implemented, in an effort to address the serious problem of health professional shortages in the public sector and how to improve their retention.

One of these policies, as mentioned earlier, is the Human Resource for Health (HRH) Plan (Department of Health, 2006), which clearly outlines several steps that the government seeks to take to address human resource issues. However, this HRH Plan is very general in its approach and does not single out individual allied health professionals and how the government intends to address their specific problems and plans to retain them in the public sector, although it does do this very clearly for the medical doctors and nurses.

Amongst other strategic objectives, the HRH Plan clearly states the importance of providing human resources to render adequate, accessible and appropriate services equitably all over the country. It proposes that this will be done by revisiting existing recruitment criteria for health science students in order to earmark those that come from the rural areas of the country and previously disadvantaged backgrounds and deliberately making bursaries available for their tuition. Another important objective is to develop financial and non-financial incentives for health professionals in order to attract and retain them in rural areas. In addition to these, the balancing of health worker categories and recruiting more experienced ones to supervise and support those that are less experienced is also highlighted as an objective.

As mentioned earlier, one of the factors that cause physiotherapists to leave the public sector is the unavailability of the necessary equipment that would enable them to execute their duties more efficiently. As one of its strategic objectives, the HRH Plan specifically states that this problem will also be addressed. Furthermore, it states that vacant posts will be filled as a matter of urgency, and employees will be acknowledged for service excellence, both of which could address their problems of not seeing opportunities for promotion and not feeling recognised and valued as professionals of

note in the South African public sector. Equally importantly, the HRH Plan places a lot of emphasis on the importance of providing continuing education opportunities and training for health professionals as a means of ensuring their retention.

As highlighted earlier, another important retention strategy that has been driven by the government since 2004 is that of providing non-pensionable scarce skills allowances to designated health professionals, including physiotherapists, working in the public sector (Document by Public Health and Welfare Bargaining Council, 2004) This came about as a result of the government officially recognising and acknowledging some of its public health professionals, including physiotherapists, as scarce skill professionals due to the their unacceptably high turnover and unavailability, particularly in the previously disadvantaged and rural areas, where they are needed the most. For physiotherapists, this monthly scarce skills allowance is approximately 10% of the gross monthly salary. Unfortunately, it was not within the scope of this study to measure the impact and effectiveness of this intervention to date, although it would certainly be interesting to establish this in future studies. What does remain clear, however, is that despite this measure, health professionals, including physiotherapists, are continuing to leave South Africa's public sector in large numbers (Dovlo and Martineau, 2004). This suggests that although financial remuneration is important, it is not the only factor contributing towards the retention of health professionals. Seemingly, health professionals, physiotherapists included, need more than higher salaries to motivate them to remain in the South African public sector. It is one of the objectives of this study to investigate what these other factors could be.

Finally, although one of the main motivations behind introducing compulsory community service for health professionals was to improve the availability of health care services

and personnel to rural and previously disadvantaged parts of the country, it has also served as a type of retention strategy. However, although it has been an effective short-term strategy, its effectiveness and success in the long term is yet to be measured, and should certainly be given priority as a topic for future research studies. What is known at present is in the form of feedback from a group of medical doctors who, when questioned in a survey by the Health Systems Trust (Nawaal, 2003), about how their year of community service had made them feel about working for the South African public sector, mostly reported that despite its obvious benefits to the community, it had had no effect on their career plans and had merely served to delay them by a year. They further stated that the reasons why they were leaving included the lack of management, stress, work overload and emotional burnout. Owing to the similarities of the problems that are facing all health professionals in the country, one can only assume that these could be the same sentiments that would be raised by those physiotherapists that are leaving either immediately after completing community service, or shortly thereafter.

2.6.2. Other Countries

The issues of retaining public sector physiotherapists that are being faced in other countries around the world have already been highlighted. In this section, some of the retention strategies that have been suggested or implemented in some of these countries will be discussed.

Firstly, in their 1991 Northern Ontario study, which was quoted earlier, Noh and Beggs established the fact that one of the best retention strategies for those physiotherapists employed in smaller community clinics, where opportunities for career and professional advancement were relatively limited, would be to work on increasing their professional

responsibilities, autonomy and recognition. This same point of view was also expressed by Solomon, Salvatori and Berry (2001), Miles-Tapping et al (1992) and Sim (1985) in their respective studies. All of them also suggested that retention strategies would have to prioritise this matter if there was to be any success in ensuring the retention of physiotherapists.

Secondly, in their 1993 study, which investigated the causes of regional attrition amongst Northern Ontario physiotherapists, Noh and Beggs noted that due to the region's health care policies, which had started placing emphasis on community-based health care, thus increasing the demand for rehabilitation professionals, especially physiotherapists, it would be necessary to increase physiotherapy student enrolments in education facilities, exploring the use of more assistants and making provision for rehabilitation research. They further suggested that the most effective retention strategies for physiotherapists in that region would be to make provisions for student and relocation grants for physiotherapists, in addition to increasing their starting salaries. Rehabilitation managers, including physiotherapists, immediately embarked on the process of developing recruitment and retention strategies for their staff members.

In the same study, Noh and Beggs also established that although job turnover could at times be beneficial, both for the organisation and for employees seeking opportunities for personal growth, it was the high rates of job turnover that were potentially destructive for an organisation, as this often results in increased recruitment costs, particularly every time vacancies need to be advertised, and it impacts adversely on service delivery. Again, they quoted studies which had shown that having good recruitment and retention strategies often resulted in decreasing dysfunctional rates of staff turnover.

These strategies include conducting realistic job previews, developing career paths, clinical ladders and mentoring programmes.

Furthermore, they suggested that those factors that were identified to be potential retention factors for physiotherapists needed to be considered when developing retention strategies. They also stated that if health care planners were aware of those factors over which they could have some level of control and influence, such as increasing opportunities for career development, then valuable time, resources and effort would then be saved and directed towards developing strategies that would address those factors that would result in more positive outcomes for both the individual *and* the organisation.

Similarly, in his 2005 study, which was also discussed earlier, Randolph established that it was important for managers to take the intrinsic and extrinsic factors into account when planning retention strategies for qualified allied health professionals. He further specified that the role of healthcare managers in striking a balance between satisfying both intrinsic and extrinsic factors was crucial in ensuring the retention of this group of health professionals.

Finally, in their study, Canadian authors Solomon, Salvatori and Berry (2001), made the crucial discovery that physiotherapists' decision-making processes are not clear-cut and straightforward, but are instead quite complex, and managers need to take this into account when developing retention strategies.

CHAPTER 3

METHODOLOGY

3.1. Introduction

This chapter deals with the method that was used to conduct the study, as well as the preparation involved. It begins with brief descriptions of the study design, followed by descriptions of the population, study setting, sampling method employed and measuring too. Next, the pilot study is described, followed by the data collection, data management and analysis. The ethical considerations are described in the last part of the chapter.

3.2. Study Design

The study was in the form of an exploratory, descriptive cross-sectional survey, which was conducted on physiotherapists working for the South African public sector in Gauteng.

3.3. Study Population

The study population comprised all qualified physiotherapists working for the public sector in Gauteng between the months of October and December, 2006. In order to meet the selection criteria for the study, the participants had to have been qualified as physiotherapists, with either a BSc degree or diploma in physiotherapy, for at least one or more years. Therefore, community service physiotherapists, who are legally obliged to remain at their assigned work places for the full duration of one year after qualifying as physiotherapists, had to be excluded. Also excluded were physiotherapy assistants

and technicians, as they also did have physiotherapy qualifications and hence did not meet these specified inclusion requirements.

3.4. Setting

All of Gauteng's institutions where physiotherapists are employed were visited. These institutions included the tertiary hospitals, such as Johannesburg Hospital and Chris Hani Baragwanath Hospital, which are primarily academic hospitals that also provide specialist and sub-specialist patient care; the secondary level hospitals, including Kopanong Hospital and Leratong Hospital, which also provide teaching and specialist care; and the district hospitals and district services, which focus mainly on primary health care delivery and training, as well as general patient care.

Although the larger hospitals that provide tertiary and secondary level services have separate dedicated physiotherapy departments, which employ several members of staff of across all professional rankings, at district level there tends to be combined rehabilitation services, where allied health professionals work together and are managed by one rehabilitation manager. Currently in Gauteng, due to the lack of senior qualified staff to occupy existing posts, physiotherapy services at district level are provided mainly by community health physiotherapists, physiotherapy technicians and assistants.

3.5. Sampling

There were 152 registered public sector physiotherapists in Gauteng for 2006 (Gauteng Department of Health, 2006). After excluding the community service physiotherapists, the actual study population was then reduced to 93. This small number and their uneven distribution among the province's institutions made it difficult to employ standard

sampling strategies, so it was decided not to take a sample but to include all 93 physiotherapists as study participants. The total number of institutions visited was 29.

3.6. The Measuring Tool

The questionnaire was designed by the author specifically for the purpose of this study. By relying mainly on available human resource literature, as well as management experience, the questions, which were a mixture of open- and close-ended questions, were developed. The final product was a six-part questionnaire (Appendix 1), which covered issues such as the participants' demographic information, their educational and employment history, remuneration and motivational factors. In the case of the latter, a list of twenty well-researched and documented motivation and retention factors, which were sourced from the various literature resources, was provided (Armstrong, 1998). From this, participants were requested to rate their satisfaction with each of these factors at their current workplaces on a score from 1 (very unsatisfied) to 10 (very satisfied). The respondents were also asked to rate the importance of each factor as a retention strategies for physiotherapists in the South African public sector from 1 (very unimportant) to 10 (very important).

3.7. Pilot Study

The questionnaire was tested in a pilot study that was conducted at the beginning of October 2006, two weeks prior to commencing the actual survey. The primary aim of this exercise was to test the relevance of the questions, as well as allow for input in terms of improving it. This was achieved by randomly selecting three public sector physiotherapists that met the study criteria from one of the hospitals in Gauteng and asking them to assist with the evaluation of the questionnaire by not only answering the questions asked, but by also making useful notes and amending, where they deemed necessary, the questionnaire. Their written and verbal feedback proved to be highly

valuable in terms of contributing towards improving the questionnaire. These physiotherapists were not included as participants in the actual study.

3.8. Data Collection

The data collection process began by contacting the Gauteng Department of Health and asking them for lists of all the public sector healthcare institutions in Gauteng, as well as lists of names of all the registered physiotherapists in Gauteng. The latter consisted of all the physiotherapy staff establishments, which included community service physiotherapists and physiotherapy assistants. Next, after telephonically verifying the information and confirming the exact staff numbers with each institution, all community service physiotherapists and physiotherapy assistants were excluded. Thereafter, all those physiotherapists, who worked at these institutions and also qualified as participants, were selected for the study.

Following this initial preparation, all the physiotherapy departments in Gauteng were contacted telephonically in order to inform the heads of departments about the study and to organise visiting dates and times for the hand delivery of questionnaires either to them or to dedicated personnel in the departments.

Next, a data collection planning schedule, which specified the dates, times and names of all the institutions to be visited for delivery and collection of the questionnaires was developed. Generally, the purpose of this schedule was to ensure that the goal set for the delivery and collection of all questionnaires within three to four weeks could be achieved. A map of Gauteng was used to assist in the location of each institution to be visited.

In the first week, all the institutions concerned that are situated outside Johannesburg were visited for the delivery of questionnaires. Those that are situated in and around Johannesburg were visited during the course of the following week. Each questionnaire had a clear set of instructions, which informed the participants about the importance of placing completed and non-completed (blank) questionnaires back into the envelopes and sealing the envelopes. The participants were also informed that they had five working days - before collection on the fifth day - to complete the questionnaires. Both the questionnaire and a detailed study information sheet (Appendix 2) were delivered inside an A4-size envelope.

Although for a few of the Johannesburg-based institutions some questionnaires were collected before the end of the second week, the majority of collections were carried out in the third and fourth weeks. Despite mentioning to the participants that questionnaires would be collected after five days from the day of delivery, it was still necessary to contact each institution head of department telephonically prior to visiting them. By the middle of December, 2006, approximately 70% of the questionnaires had been collected, whether completed or not. The last set of questionnaires were collected at the beginning of January, 2007, bringing the number of completed ones to 76, which was a response rate of 82%. Next, the process of analysing the collected data began.

3.9. Data Management

For the data management and analysis, the statistical package STATA 9 was used. All the data was captured electronically from each questionnaire and onto the STATA 9 spreadsheet for analysis. Some of the less complex analysis was carried out on Excel in addition to illustrations and graphical presentations of the results.

3.10. Analysis

3.10.1. Qualitative Data Analysis

The responses to the open-ended questions were first recorded, then coded according to similarity and then tallied. These were then presented in terms of the number of respondents who mentioned a particular response and percentage responses in tables. Many participants had more than one response per question. This was taken into account and they had to be grouped according to similarity when the results were presented.

3.10.2. Quantitative Data Analysis

Most of the analysis in the study was descriptive and the outcomes presented in terms of number of observations, percentages and means. For key study outcomes, the 95% confidence intervals were also calculated. The chi-square test was used to evaluate the differences in proportions between groups. Due to the small study population size (only 93 physiotherapists were eligible for inclusion) the finite population correction (Narins, P. 1999) was used for the calculation of all standard errors and all statistical tests using the survey functions in Stata. A 5% level of significance was used for all statistical decisions.

The mean scores and relevant standard errors were calculated to compare the ratings for job satisfaction and the importance of different factors in the participant's current workplace. Respondents were also asked to identify and rank the five most important factors in terms of potential retention strategies. The responses were weighted from 5

(ranked first) to 1 (ranked fifth), and the sum of these weighted ranks was then used to identify the highest ranked factors overall.

Respondents were asked if they intended to stay working in the public sector in 2007. Logistic multiple regression analysis was employed in order to evaluate the association between this key dependent variable and several independent variables. Bivariate analysis in the form of the chi-squared test was used to identify potential independent variables. The final logistic regression model included age, gender, race, marital status, professional ranking, having children, possessing higher qualifications in physiotherapy, the type or level of institution, and being a breadwinner. In the case of variables with more than two categories, such as race, appropriate dummy variables were produced for inclusion in the model. The analysis is reported in the form of adjusted odds ratios, which describe the independent likelihood of one event occurring over another (Beaglehole et al, 1993). In this case, the analysis was concerned with the likelihood of staying in 2007. Again a p-value of less than 0.05 was regarded as significant for each variable.

3.11. Ethical Considerations

As this study involved the participation of qualified professionals, who understood and appreciated the value of continuing education and research, the main ethical issues to consider was to ensure that they were fully informed about the purpose of the study, as well as their rights to participate or to decline, without the risk of adverse consequences. Furthermore, they were also given the assurance that their responses would be held in strict confidentiality, and that their names, as well as those of the institutions, were not required for the study's database. In order to ensure that patient care was not

compromised in any way during this process, participants were asked to complete their questionnaires only when they were not attending to patients.

Approval to conduct this study on the premises of the institutions concerned was sought in writing and received from the persons responsible at the various institutions (Appendix 3). Ethics approval was also granted by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand (Appendix 4).

CHAPTER 4

RESULTS

4.1. Introduction

In this chapter, the results are presented in five parts. The first part summarises the basic descriptive information, including the response rate, the participants' socio-demographic profile and qualifications. The second part deals with issues surrounding the participants' overall employment history, including current, past and other employment. The next part of the results provides information regarding their current work-related decisions and motivations for the following year (2007). This is followed by the fourth part which deals with issues surrounding the participants' job satisfaction at their current workplaces, as well as how they rated and ranked certain motivation factors according to their levels of importance for physiotherapist retention. The final part presents the participants' responses concerning their knowledge of retention strategies being in place at their workplaces, as well as their general feelings and attitudes towards working in the South African public sector.

4.2. Descriptive and Demographic Data

4.2.1. Response Rate

As mentioned in the previous chapter, the total number of questionnaires delivered was 93. Of these, 87 were returned and, for reasons unknown, 6 were not. The final number of completed questionnaires collected was 76, which produced a response rate of 82% (Figure 1). 18% of the collected questionnaires were not completed and this was due to several reasons, which included participants being away on leave and others refusing to participate in the study. Others said that they simply did not have the time to complete them, despite having been given up to two weeks (or longer, where necessary) do so. Although it was not a pre-requisite of the study for these participants to give reasons why they did not complete the questionnaires, a few made brief notes on their questionnaires to state their reasons for not completing them.

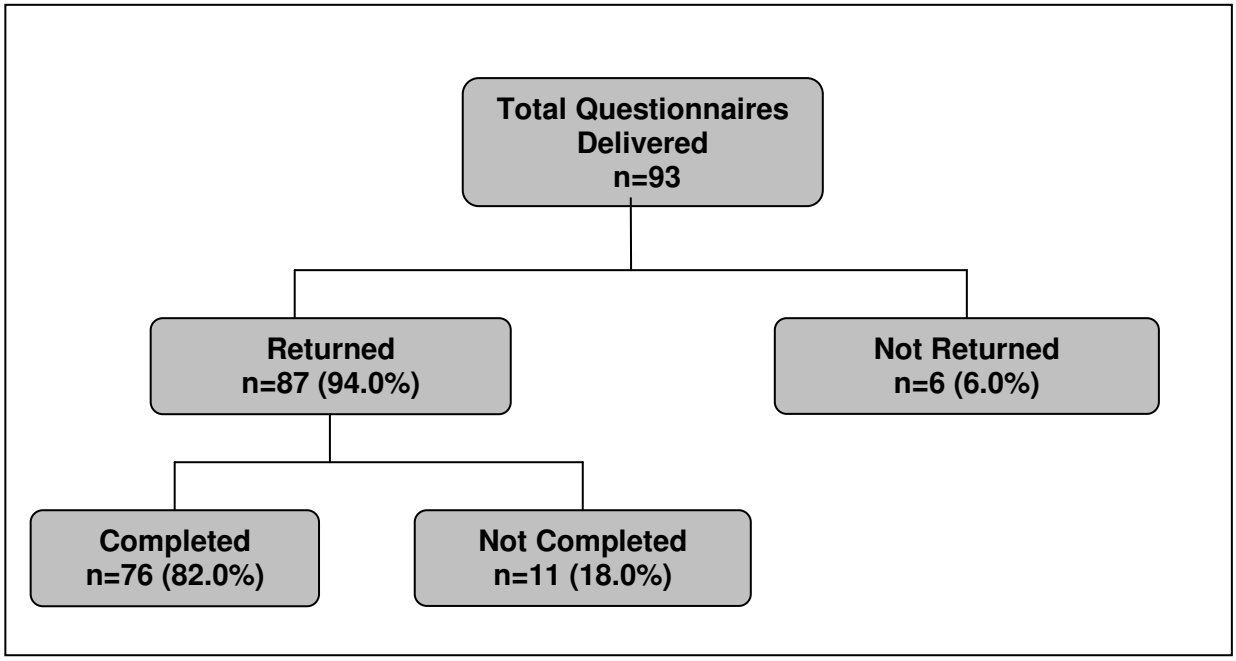

Figure 1: Response Rate

4.2.2. Socio-Demographic Information

The mean age of the respondents was 34.8 (standard deviation: 11.1), the youngest being 22.0 years old and the oldest 63.0 years old. Other key socio-demographic information is summarised in Table 2.

As the results show, 51.3% of the participants were black and 30.3% white. There was only one coloured participant in this sample. The majority, 84.2%, were female and 63.2% were married. 63.2% of respondents also reported having children. 56.6% of the participants claimed to have financial dependents, although only 38.2% were the main breadwinners in their families.

Table 2: Socio-demographic Information (n=76)

Variable		No. of Participants	% Participants
Race	**Black**	39	51.3%
	White	23	30.3%
	Asian	13	17.1%
	Coloured	1	1.3%
Gender	**Male**	12	15.8%
	Female	64	84.2%
Marital Status	**Married**	48	63.2%
	Single	27	35.5%
	Divorced	1	1.3%
Participants with Children	**Yes**	48	63.2%
	No	28	36.8%
Participants with financial dependents	**Yes**	43	56.6%
	No	33	43.4%
Family breadwinners	**Yes**	29	38.2%
	No	47	61.8%

4.2.3. Education and Qualifications

When participants were asked questions about their education and qualifications, the results revealed that 84.2% of them had BSc degrees in physiotherapy and 15.5% diplomas in physiotherapy (Table 3).

Of those who had physiotherapy diplomas, 83.0% were females and all had qualified as physiotherapists before 1985. At 26.3%, it was only a relatively few respondents who already had postgraduate degrees in physiotherapy, and 6.6% who said that they were

currently pursuing them. Furthermore, 21.0% of the respondents already had other qualifications besides physiotherapy.

Table 3: Educational Information (n=76)

Variable		No. of Participants	% Participants
Undergraduate physiotherapy qualification	**Diploma**	12	15.8%
	BSc Degree	64	84.2%
With postgraduate physiotherapy qualification	**Yes**	20	26.3%
	No	51	67.1%
	Currently Pursuing	5	6.6%
Additional qualifications other than physiotherapy	**Yes**	16	21.0%
	No	55	72.4%
	Currently Pursuing	5	6.6%

Various reasons for pursuing further studies in either physiotherapy or other qualifications were expressed by the participants. These are summarised in Tables 4 and 5.

Table 4: Reasons for Pursuing Postgraduate Studies in Physiotherapy (n=25)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
To improve clinical knowledge and skills	12	48.0%
To gain expertise in specific field, i.e. specialise	11	44.0%
For personal growth and fulfilment	3	12.0%
To improve professional status and chances of promotion and better pay	3	12.0%

The results, as seen in Table 4, revealed that 48.0% of the respondents who already had or were currently pursuing physiotherapy postgraduate studies were doing so in order to improve their clinical knowledge, skills and reasoning, as well as to keep

abreast of changes and developments within the profession. 44.0% stated that they wanted to specialise in a specific field of physiotherapy, expressed their interest in understanding injuries and pathology more. Some of these said that they wanted to pursue more academic careers in order to become lecturers. 12.0% of the participants reported that having postgraduate physiotherapy qualifications would enhance their professional status.

Table 5: Reasons for Pursuing Studies other than Physiotherapy (n=21)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
To change my profession	9	42.9%
I already had the qualification before studying physiotherapy	5	23.8%
To advance my career within the public health sector e.g. management	3	14.3%
For self development and personal interest	3	14.3%

Table 5 shows that, of those participants who had already completed or were in the process of pursuing studies other than physiotherapy, 42.9% reported doing so in order to leave the profession completely. These other qualifications included Bachelor of Commerce (BCom) degrees and business management. 23.8% stated having already had other qualifications before studying towards physiotherapy degrees. A further 14.3% stated that they simply wanted to advance their careers into higher levels whilst remaining within the health sector, particularly in healthcare management, policy development and quality assurance. Lastly, another 14.3% of respondents were pursuing other qualifications simply out of interest, or for self development and growth. Those that were reported included short courses in '"entrepreneurship" in order to develop business skills which they thought they could use in the future, and fire-fighting.

4.3. Employment and Remuneration

4.3.1. Current Employment

Participants were also asked various questions about their current work place, including the number of years that they had been working there, the type of institution, their professional ranking, as well as their general feelings about where they were working. The mean number of years worked was 3.1 years (standard deviation:6.0), and 44.0% of all respondents had been working at their current work places for less than one year, whilst one respondent had been working for 30.0 years.

As illustrated in Table 6, 56.6% of respondents were employed at the tertiary and academic hospitals, followed by 25.0% at the secondary level hospitals. At 94.7%, most of them were full- time employees. In terms of professional ranking, 43.4% of the respondents were senior physiotherapists, followed by 32.9% who were chief physiotherapists. Since assistant director positions for physiotherapists exist primarily at tertiary institution levels, these were predictably very few at only 7.9%.

Table 6: Current Employment Information (n=76)

Variable		No. of Participants	% Participants
Current Institution Level	**District Services**	6	7.9%
	District Hospital	8	10.5%
	Regional/ 2º Level Hospital	19	25.0%
	Tertiary and Academic Hospital	43	56.6%
Type of Employment	**Full-time**	72	94.7%
	Part-time	4	5.3%
	Junior physiotherapists	12	15.8%

	Senior physiotherapists	33	43.4%
	Chief physiotherapists	25	32.9%
	Assistant Directors	6	7.9%

Once again, a wide variety of reasons for working at their current workplace were given, as summarised in Table 7.

Table 7: Reasons for Working at Current Work Place (n=76)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
The public sector is best for gaining experience and developing skills. Especially the academic and tertiary hospitals	26	34.2%
I work close to where I stay, therefore it is convenient in terms of travel	25	32.9%
I enjoy working here and I like the work environment, team work and support	12	15.8%
I am hoping to get a promotion soon here	2	2.6%
I am currently stationed in an area that I wish to specialise in	2	2.6%
I need the income	2	2.6%
I have no better options	1	1.3%

The results, as illustrated in the table above, revealed that 34.2% of the respondents were working at their current workplaces in order to gain experience in physiotherapy, as there were opportunities for continuing professional development as well as a wide variety of conditions to treat. The same group also said that they wanted to develop their skills further and that the public sector provided the best opportunity for this, particularly at tertiary and academic facilities for this. 32.9% stated that since they did not live very far from where they worked, it provided more travel convenience for them. A few respondents (2.0%) also stated that they needed the financial stability that came with working in the public sector, despite the low salaries.

4.3.2. Current Financial Remuneration

In terms of gross monthly salary, 36.8% of the participants earned between R7, 001 and R9, 000, which is the salary range for senior physiotherapists in the South African public sector. These were followed closely by the chief physiotherapists, who earn between R9, 001 and R11, 000 (Table 8).

Table 8: Summary of Financial Remuneration (n=76)

Variable	Salary Range	No. of Participants	% Participants
Gross monthly salary	**<R5000**	1	1.3%
	R5001-R7000	14	18.4%
	R7001-R9000	28	36.8%
	R9001-R11000	24	31.6%
	>R11000	9	11.8%

4.3.3. Other Employment for Financial Remuneration

Next, in order to try to get an indication of the extent to which poor salaries are a factor that causes physiotherapists to leave the South African public sector ,and if indeed they are, it was necessary to find out how many of them felt the need to have additional jobs and why. As shown in Table 9, below, 60.5% [95% CI:55.6;65.2] of the respondents said that they did have other jobs as physiotherapists, and 96% of these were in the private sector, including the Folateng private wards in certain designated hospitals.

Table 9: Respondents with Additional Employment (n=76)

Staying in 2007	No. of Respondents	% Respondents	95% Confidence Interval

yes	46	60.5%	55.5 – 65.2
no	30	39.5%	34.8 – 44.4

Several reasons for having additional paid work were given, the most common of which was to supplement low salaries. Other respondents reported wanting to gain experience working in the private sector, some stating that they needed to do this before they decided to leave the public sector for good. A few stated that they felt that they needed to work in different work environments in order to expose themselves to a wider variety of conditions and to break the monotony of working in the same work environment, with the same people. These reasons are summarised in table 10 below.

Table 10: Reasons for Additional Work for Pay (n=46)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
To supplement my low income	38	82.6%
To gain experience in the Private Sector	5	10.9%
For work diversity and to break job monotony	2	4.3%

4.3.4. Leaving and Returning to the Public Sector

When the participants were asked about whether they had ever stopped working for the South African public sector for any length of time, 68.9% of the respondents stated that they had never taken a break off work for any length of time. The remaining 31.1% (25 respondents) who had broken service for various reasons were asked to explain why they left. A summary of some of the reasons given is shown in Table 11 below.

As the results in Table 11 show, 40.0% of the respondents' reasons were related to family responsibilities, such as spending time to have and raise small children. 36.0%

went to try out work in the private sector and 8.0% tried to set up their own private practices mainly due to dissatisfaction with the low salaries that they were getting in the public sector.

Table 11: Reasons for Breaking Service (n=25)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
To attend to family responsibilities	10	40.0%
I went to work for someone in the private sector	9	36.0%
I got married and had to relocate between provinces	2	8.0%
I went to work overseas	2	8.0%
I tried setting up my own private practice	2	8.0%

Similarly, the reasons given by these respondents to explain why they had all decided to return to work in the South African public sector are summarised in Table 12 below. As in the tables above, some respondents gave more than one reason as they were encouraged to elaborate on their responses.

Table 12: Reasons for Returning to the Public Sector (n=25)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
For the financial stability in the public sector, especially since starting a family	7	28.0%
I was disappointed with the private sector.	7	28.0%
I find it convenient to travel to work here	4	16.0%
The public sector has good benefits, including more flexible working hours than in private	4	16.0%
My business plans did not succeed. Setting up a private practice is difficult	2	8.0%
I came back to study and to keep in touch with the changes within the profession	2	8.0%

As the results in Table 12 show, 28.0% of the respondents who had left the South African public sector returned because they felt that it provided them with greater financial stability than other alternatives, particularly in the case of those that had new family responsibilities, such as spouses and children. Another 28.0% responded that they had gone out to try their luck in the private sector but expressed their disappointment by stating that "the grass was not greener on the other side". Some explained that in the private sector they had to work longer hours; the patients and doctors were difficult and they had to take responsibility for their own continuing professional development, including paying for their own courses, with no subsidies from the practice owners. Others returned for reasons such as travel convenience, good fringe benefits despite low salaries and to pursue further studies.

4.3.5. Employment Tenure

The mean number of years employed in the South African public sector as a whole was 9.3 years, the shortest being 0.6 years and the longest 42.0 years (Table 13).

Compared to 44.3% of the female participants, only 27.3% of the male participants had worked for 9 years or more. None of the male participants had been employed by the South African public sector for more than 20 years.

Table 13: Total Years Employed in the South African Public Sector (n=76)

No. of Participants	Mean Years	Standard Deviation	Minimum Number of Years	Maximum Number of Years
76	9.3	8.2	0.6	42.0

4.4. Staying or Leaving in 2007

4.4.1. Leaving or Staying at the Current Workplace in 2007

In order to gain further understanding about what caused some physiotherapists to leave and others to stay at in the South African public sector, the author decided to ask them about whether they intended to stay for the duration of the following year, 2007 or not, in the hope that this and the reasons given would achieve this objective (Table 14).

Table 14: Respondents Intending to Stay or Not Stay at their Current Workplaces in 2007 (n=76)

Staying in 2007	No. of Respondents	% Respondents	95% Confidence Interval
yes	42	55.3%	50.3 - 60.1
no	12	15.8%	12.5 - 19.7
not sure	22	29.0%	24.7 - 33.6

As the table above shows, 55.3% [95% CI: 50.3; 60.1] of the respondents said that they did intend to remain at their current workplaces for the duration of 2007. On the other hand, 29.0% said that they were 'not sure'.

4.4.2. Motivations for Staying in 2007

Various reasons for staying in 2007 were given (Table 15), including those that have already been mentioned in the previous section, such as enjoying the work environment, travel convenience and gaining experience. Once again, 11.9% of the respondents stated that they were staying for the financial stability that was afforded them in the public sector. 9.5% felt that they were too old to leave, had invested many years in the public sector and would simply wait for their retirement. A few respondents had government bursary obligations which required them to remain in the public sector for a specified period of time. Other respondents stated that they felt called to the

profession and enjoyed helping underprivileged people, and that they would remain in the public sector for these reasons.

Table 15: Reasons for Staying at Current Workplace in 2007 (n=42)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
I enjoy the work environment and have found no reason to leave so far	7	16.7%
This is a good place for gaining Physiotherapy experience.	6	14.3%
I enjoy the work, regardless of institution.	4	9.5%
I am too old to go anywhere. I am waiting to get my pension	4	9.5%
I am completing further studies.	3	7.1%
I must pay for my government bursary	3	7.1%
Other	3	7.1%

In terms of those who were definitely leaving, or not sure if they were staying or leaving, Table 16 below, reveals that 23.3% of the respondents who were definitely not staying in 2007 reported reasons such as job dissatisfaction, frustration and lack of fulfilment. 15% stated that they simply needed a change of working environment, whereas 13.3% felt that there were no promotion opportunities for them at their current workplaces. A further 13.3% reported low salaries as their reasons for leaving.

Some of those who were not sure if they were staying or leaving said that it depended on a variety of factors, including whether they would get promoted or get part-time posts within their current institutions. Others stated that if physiotherapist salaries and working conditions, such as poor management and lack of supervision, did not improve in 2007, they would definitely consider leaving.

Table 16: Reasons for Not Staying or Not Sure if Staying at Current Workplace in 2007 (n=34)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
I feel frustrated and unfulfilled. There is no job satisfaction for me here	7	20.5%
There are no promotion opportunities here.	4	11.8%
My salary is too low	4	11.8%
I am going to look for a job in the Private sector	4	11.8%
There are inadequate and insufficient resources – equipment and staff	3	8.8%
other	3	8.8%
I applied for a higher position. I shall stay only if I get it.	2	5.9%
I need a change of environment	2	5.9%
I receive no support from my supervisors and management.	1	2.9%

4.4.3. Characteristics of Participants Intending to Stay in the Public Sector in 2007

Another objective of the study was to try to establish if there are any significant characteristics about the physiotherapists who chose to remain at their current workplaces in 2007. In addition to some of the factors that have been mentioned previously, such as tenure in the South African public service and reasons for returning after leaving, it was felt that this information, including the participants' reasons, would also be useful and relevant information in this regard.

The key outcome variable, "Intention to Stay in 2007", was measured against nine selected variables, namely gender, age, race, marital status, being a breadwinner,

having children, having postgraduate physiotherapy qualifications, professional ranking and institution level. Multiple logistic regression was used to determine the significance of the independent predictors of intending to stay in the public sector in 2007. These results are summarised in Table 17 below, with the comparison groups for each variable shown for completeness.

The results of the logistic regression analysis reveal several interesting findings. Firstly, there is clear evidence that race, marital status, being the family breadwinner and age are significant determinants of whether the study participants intended to stay at their current workplaces in 2007. However, other factors such as gender, having children, type of institution, professional ranking and whether or not participants have postgraduate qualifications were not statistically significant. Interestingly, though, in terms of odds ratios, the female participants and those that have children seem to be twice as likely as their counterparts to stay.

Table 17: Association of Intention to Stay in 2007 and Different Participant Characteristics using Logistic Regression

Variable	Category	Odds Ratio	95% CI		P-value
			Lower limit	Upper limit	
Gender	Females	2.0	1.0	4.2	0.055
	Males	1.0	-	-	-
Race	Whites	3.0	1.5	6.1	0.003
	Asians	0.2	0.1	0.4	<0.001
	Blacks	1.0	-	-	-
Marital Status	Married	0.4	0.2	0.7	0.004
	Single	1.0	-	-	-
Having Children	Children	1.7	0.8	3.6	0.150
	No children	1.0	-	-	-
Being Family Breadwinner	Breadwinner	2.6	1.4	4.9	0.002
	Not breadwinner	1.0	-	-	-
Type of Institution	Tertiary and academic institutions	0.9	0.7	1.1	0.302
	Non-tertiary institutions and district services	1.0	-	-	-
Professional Ranking	Assistant director/ chief physiotherapist	1.3	0.9	1.8	0.152
	Junior/senior physiotherapist	1.0	-	-	-
Age	31 years old and older (≥ 31)	4.6	2.4	8.5	<0.001
	30 years old and younger (≤ 30)	1.0	-	-	-
Postgraduate Physiotherapy Qualification	With postgraduate physiotherapy qualification	1.3	0.7	2.2	0.353
	No postgraduate physiotherapy qualification	1.0	-	-	-

4.5. Job Satisfaction

4.5.1. Levels of Job Satisfaction at Current Workplaces

Participants were asked to rate how satisfied they were at their current workplaces with each of the motivation and retention factors listed in the questionnaire, using a rating between 1 (very dissatisfied) and 10 (very satisfied). The mean satisfaction level and 95% confidence interval for each factor are represented in Figure 2 below. The values can be interpreted in comparison to a mean of 5.0, so that ratings below 5.0 indicate those factors where, overall, respondents were dissatisfied with the current situation.

As the figure shows, benefits such as leave and having medical aid, team work, having the support of colleagues and pension benefits received relatively high mean satisfaction ratings between 6.2 and 7.2. On the other hand, many respondents were dissatisfied with their current salaries and lack of promotion opportunities, which had mean satisfaction ratings of 3.1 and 3.2, respectively. Not feeling valued, the lack of recognition of their professional status and good performance, as well as the lack of career development opportunities, also all received low ratings between 4.3 and 4.6. Interestingly, the scarce skills allowance also had a relatively low mean satisfaction rating of 4.3.

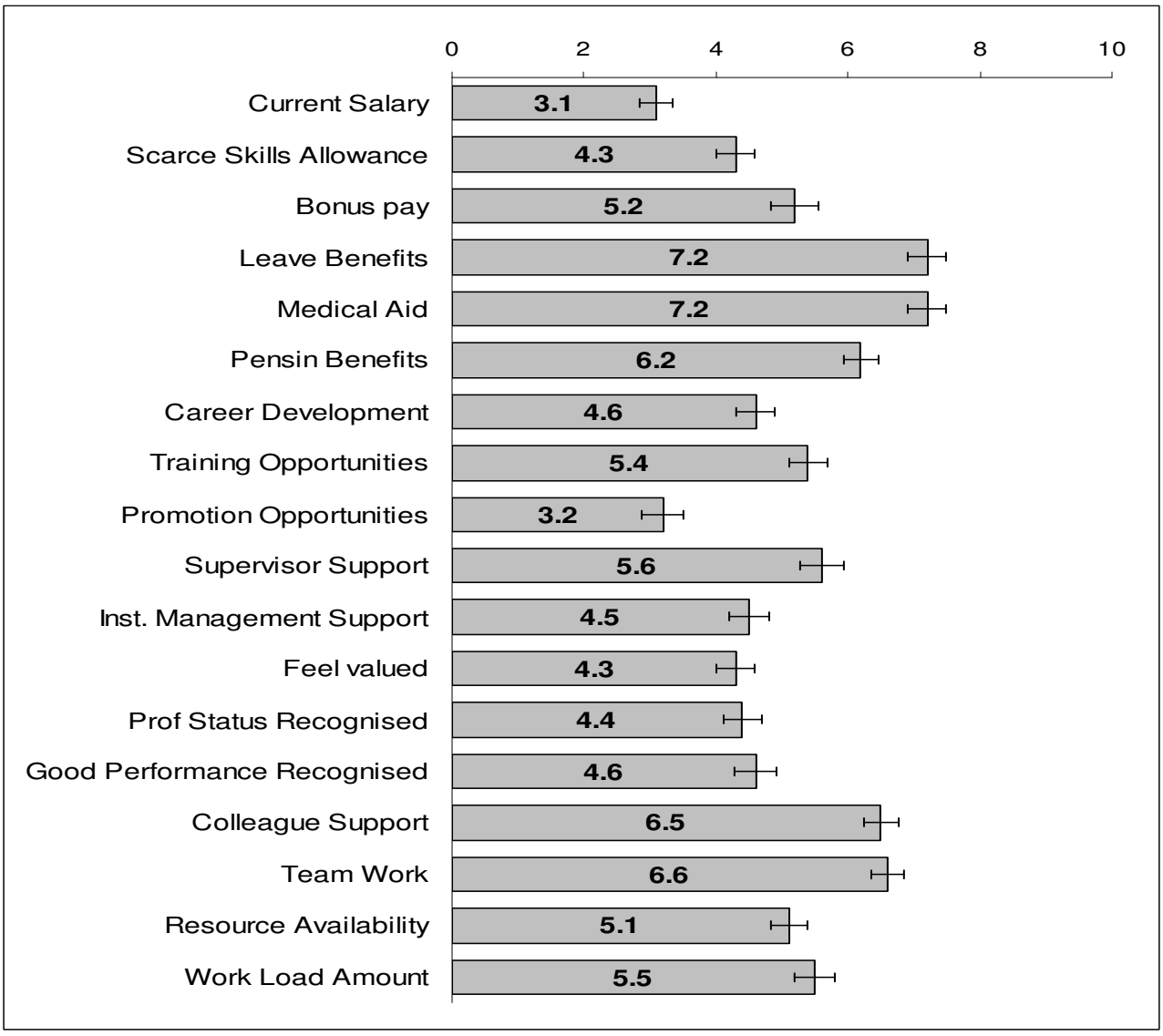

Figure 2: Illustration of Mean Satisfaction Levels (n=76)

Shaded bars represent and are labelled with the mean satisfaction for each factor, the error bars represent the 95% confidence interval of the mean.

4.5.2. Rating Importance of Motivation Factors for Retention

The participants were then asked to rate each of these factors according to how important they perceived it to be as an effective and essential retention factor for physiotherapists in the South African public sector, on a scale from 1 (very unimportant)

to 10 (very important). Once again, mean levels of importance, and the 95% confidence intervals of each are shown in Figure 3.

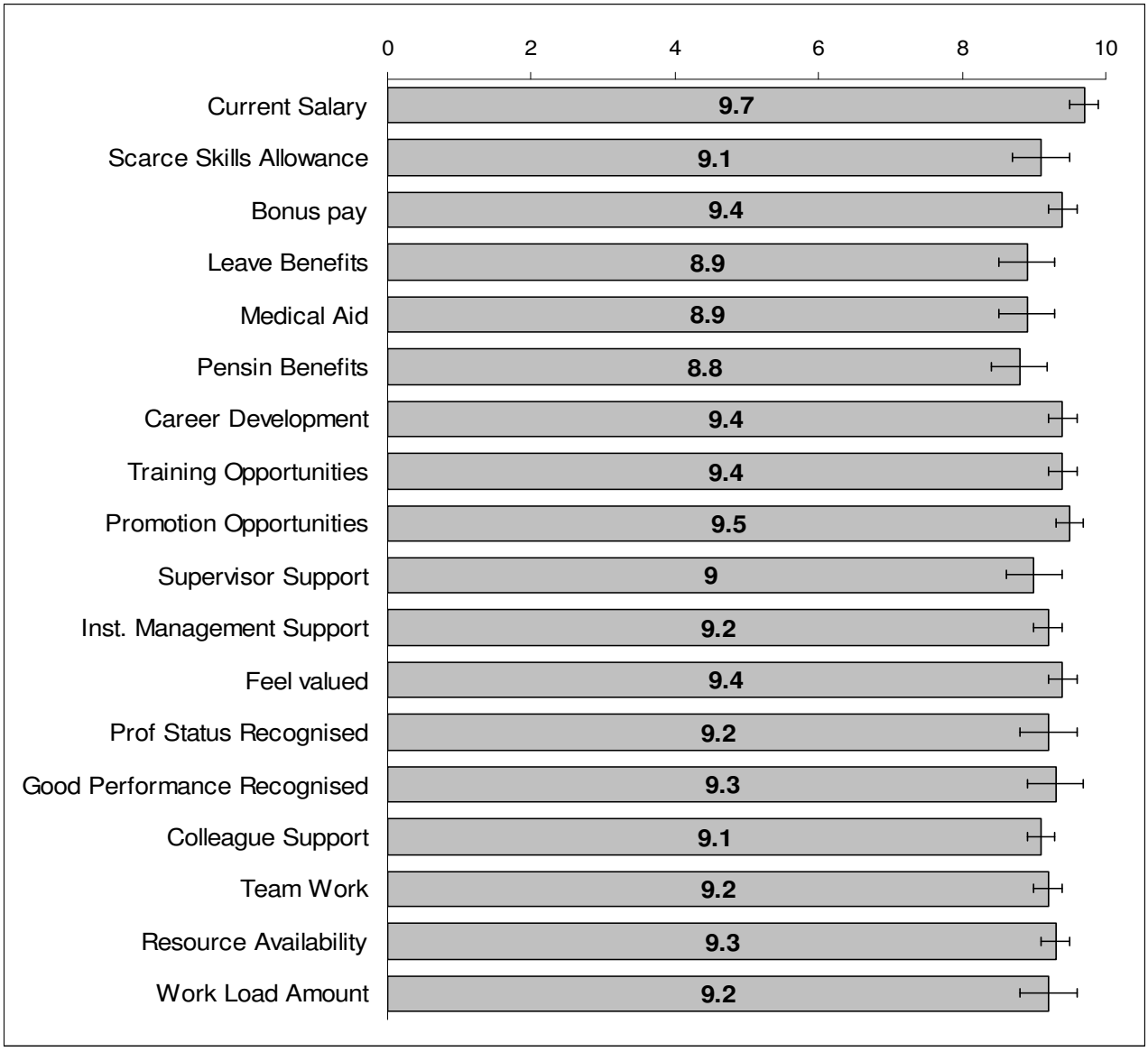

Figure 3: Illustration of Mean Levels of Importance (n=76)

Shaded bars represent and are labelled with the mean satisfaction for each factor, the error bars represent the 95% confidence interval of the mean.

As expected, most of the participants rated all the factors very high in terms of their levels of importance. Salaries received the highest mean importance rating of 9.6, followed very closely by factors, such as promotion opportunities and feeling valued, which both received a mean importance rating of 9.5. Career development and training

opportunities were also regarded as relatively important by participants with mean importance ratings of 9.4. Interestingly, standard benefits such as Medical Aid, Leave and Pension received relatively lower ratings of between 8.8 and 8.9.

4.5.3. Ranking of Motivation Factors According to Level of Importance

Anticipating that respondents might rate all factors equally highly, they were also asked to rank, in order, the five most important motivational factors. The ranks received for each factor and the weighted total ranking (see Chapter 3) are shown in Table 18.

With a total weighted ranking score of 320, better salaries was clearly identified as the most important factor. This was more than double the score of 133 for the second most important factor, which was the availability of promotion opportunities. With a score of 128, career development opportunities were ranked as the third most important retention factor overall, followed by training and opportunities for continuing education, which had a score of 78. Receiving a scarce skills allowance was, in this case, ranked as the fifth most important factor for the retention of physiotherapists in the South African public sector. Interestingly, factors such as having the support of supervisors, management and colleagues were ranked relatively low.

Table 18: Respondents' Ranking of the Importance of Motivational Factors for Retention

Factor	No. of Ranking Votes Received					Weighted Ranking Score
	First	Second	Third	Fourth	Fifth	
Better Salary	53	7	5	6	0	320
Promotion Opportunities	5	12	11	11	5	133
Career Development	6	15	9	4	3	128
Training and CPD Opportunities	2	5	9	7	7	78
Scarce Skills Allowance	0	12	4	4	1	69
Bonus Benefits	1	6	7	3	7	63
Leave	5	2	5	3	3	57
Feeling Valued	2	4	0	5	5	41
Availability of Required Resources	0	4	2	5	8	40
Team Work	0	2	6	5	4	40
Recognition of Professional Status	0	2	5	5	4	37
Recognition of Good Performance	0	0	4	7	5	31
Work Load	1	1	2	4	7	30
Medical Aid	1	0	2	2	6	21
Support by Supervisors	0	0	2	4	3	17
Pension Fund Benefit	0	2	1	0	2	13
Support by Colleagues	0	1	1	0	5	12
Support by Management	0	1	1	1	1	10

4.6. Knowledge of Retention Strategies and Attitudes towards Public Sector Employment

4.6.1. Participants' Knowledge of their Institutions' Retention Strategies

Respondents were also questioned about whether they knew if their departments had retention strategies in place or not. As illustrated in Figure 4 below, 71.0% stated that they did not know of any being in place. This included a 60.0% of the chief physiotherapists and 67.0% of the assistant directors who participated in the study.

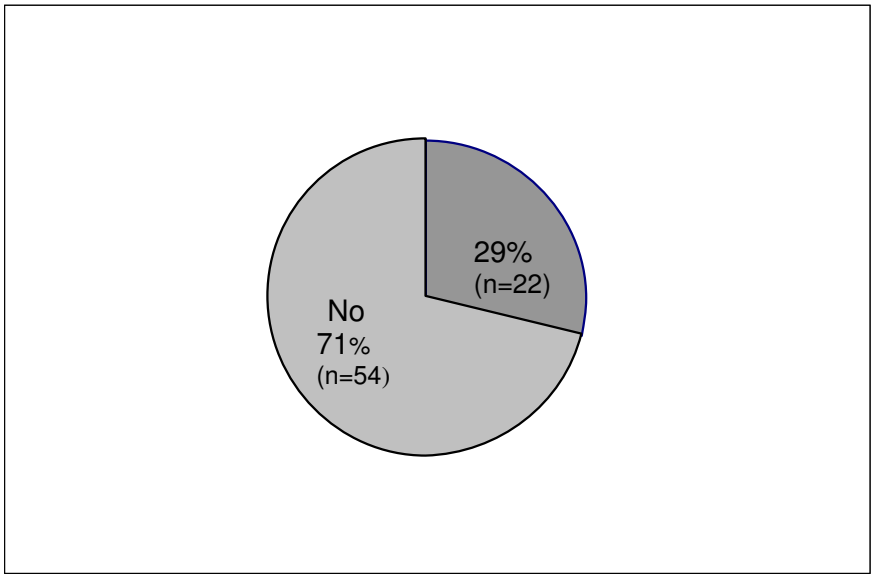

Figure 4: Participants' Knowledge of the Existence of Retention Strategies in their Departments (n=76)

Only 29.0% reported any knowledge of the existence of retention strategies in their institutions or departments. As shown in Table 19 below, 45.0% of the responses were the scarce skills allowance

Table 19: Physiotherapist Retention Strategies Known (n= 20)

Retention Strategy	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
Scarce skills allowance	9	45.0%
Folateng private practice	5	25.0%
Managers motivating for more posts and internal promotions	4	20.0%
CPD opportunities	3	15.0%
Service bonus	1	5.0%

4.6.2. Recommending Employment as a Physiotherapist in the South African Public Sector

Finally, in order to further gain an understanding of how the participants really felt about working as physiotherapists for the South African public sector, a question about whether or not they would recommend working as physiotherapists in the South African public sector to their colleagues outside was asked (Figure 5).

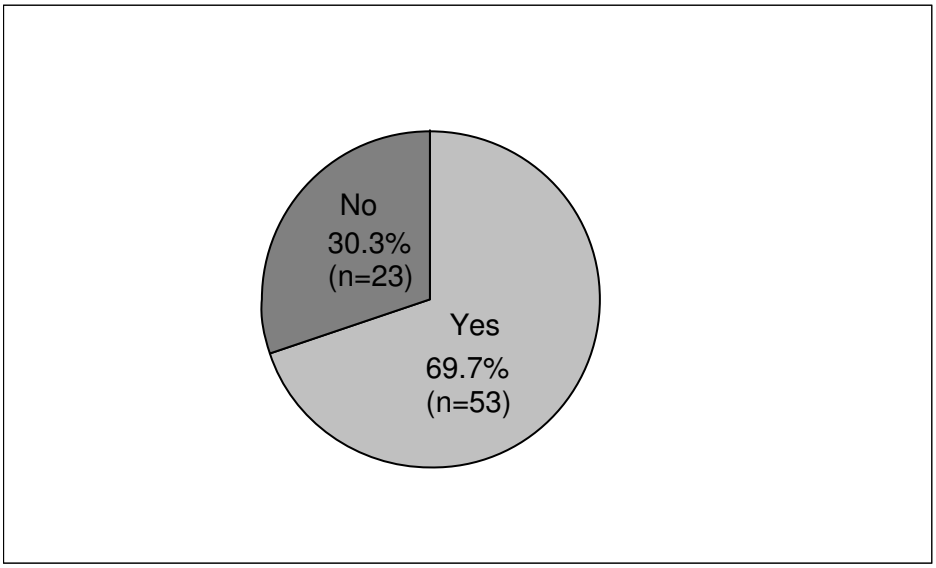

Figure 5: Recommending Physiotherapy in the SA Public Sector (n=76)

As illustrated above, 69.7% (53 respondents) felt that they would definitely recommend working as a physiotherapist in the South African public sector to their colleagues. On the other hand, 30.3% said that they would not do so. The reasons listed for the former response included the fact that they felt that the public sector was a better place to gain experience in physiotherapy than the private sector, particularly for newly qualified physiotherapists. They stated that the reason for this was that the public sector offered a wider variety of conditions to treat, in addition to opportunities for continuous learning from members of multidisciplinary teams, as well as supervisor support. These they said were lacking in the private sector, which they felt was also more cutthroat and had a general focus of making as much money as quickly as possible. However, 12.0% of the respondents felt that in order to experience the benefits of working in the South African public sector, physiotherapists were better off working in the tertiary and academic hospitals instead of district hospitals, where they felt opportunities to learn and improve oneself professionally were limited due to staff shortages and lack of adequate supervision and continuing professional development (CPD) support. These reasons are summarised below in Table 20 below.

Table 20: Reasons for Recommending Physiotherapy Employment in the SA Public Sector (n=49)

Most Common Reasons "Yes"	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
The public sector is best for gaining experience in Physiotherapy	22	45.0%
One can work in a supportive multidisciplinary environment	7	14.0%
It depends on the institution. Tertiary and Academic institutions are best	6	12.0%
The public sector provides better more security and satisfaction than the private sector	4	8.0%

Similarly, the reasons why some respondents said that they would not recommend physiotherapy employment in the South African public sector are summarised in Table 21 below. Once again, the most common reason cited was the low salaries, followed by the lack of promotion opportunities. 14.0% of the respondents stated that the work environment in South African public sector health institutions was so stressful and frustrating that they would never recommend it to any of their physiotherapist colleagues. However, a few of these respondents also stated that they agreed with the former group that the public sector provided better learning opportunities and excellent work experience, but were upset with the fact that they had to go through four rigorous years of university studies, followed by community service, only to get paid poor salaries and receive no recognition. For this reason, they felt that working for the South African public sector was not worth it and they would not recommend it to other physiotherapists, as they did not want them to feel their kind of frustration.

Table 21: Reasons for Not Recommending Physiotherapy Employment in the SA Public Sector (n=21)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
Salaries in the SA public sector are very low	9	43.0%
There are no promotion opportunities	4	19.0%
The work and environment can be frustrating and emotionally stressful	3	14.0%
Physiotherapists in the SA public sector are neither valued nor recognised as professionals	3	14.0%
The private sector is a better for employer in terms of all reasons mentioned above	1	5.0%

CHAPTER 5

DISCUSSION

5.1. Introduction

In this chapter, there will be an overall discussion of the study results, which will begin with an overview of some of the more descriptive results will be given. This will be followed by a discussion of the key findings concerning the reasons why the participants choose to either stay or leave in 2007. Next, the results of the job satisfaction rating and importance ranking will be discussed, which will be followed by the findings from the knowledge, attitudes and opinions section of the study. The limitations to the study will also be presented and discussed at the end of this chapter.

5.2. General Demographic and Socio-Economic Findings

Being a traditionally female dominated profession in most parts of the world, including South Africa, it was not surprising to find that, at 84.2%, there were more female participants than males. Also consistent with physiotherapist samples in other international studies, the majority of participants (68.4%) were under the age of 35 years. In the study from Northern Ontario mentioned previously, for example, approximately 80.6% of all physiotherapists were female and 52% were under the age of 35 (Beggs and Noh, 1991). Similarly, in terms of marital status, 63.2% of the participants in this study reported being married, compared to 70.9% in the Canadian study (Beggs and Noh, 1991).

Racially, with 51.3% of the participants being black, 30.3% being white and 17.1% of Asian descent, the sample was not quite representative of the racial demographics of the country or Gauteng. In Gauteng, black people form about 74% of the province's population, followed by whites at 20%, coloureds at 4% and Asians at 3% (Census, 2001). The country's racial demographics are also quite similar. Although it may seem that these demographic results do not have clear or direct relevance to the subject of staff retention, they do however serve to confirm that there are still not enough black physiotherapists, which is a matter that was discussed in Chapter 2. Secondly, demographic information is important in terms of ensuring that the country's employment equity standards are adequately met during staff recruitment and promotion initiatives.

In terms of financial compensation, most of the participants earned gross monthly salaries between R7, 000 and R9, 000 which is in line with what senior physiotherapists in the South African public sector, who also made up the highest percentage of participants, earn. Furthermore, the results revealed that 56.6% of all the participants had people who depended on them financially. However, on further investigation, only 38.2% of the participants were the breadwinners in their families, which is not surprising, given the fact that most of them were married females, and in most South African households the male spouse continues to be the primary breadwinner (Budlender, 2002).

The results from the job satisfaction rating and participants' responses also revealed that the issue of dissatisfaction with salaries for South African public sector health professionals, including physiotherapists, continues to contribute to the country's high turnover levels. Most of them reported being unhappy with their salaries, including those

that chose to stay, and they felt that they deserved more market-related salaries and, which are also in line with their BSc degree qualifications. Similarly, the findings of the available retention studies quoted earlier reveal that salaries are also reported to be very significant for ensuring the retention of physiotherapists (Beggs and Noh, 1991; Wolpert and Yoshida, 1992).

5.3. Education and Qualifications

As in most other counties in the world, physiotherapy is offered as a four year degree qualification in South Africa. However, this is a change that took place as recently as the early 1980's. Indeed, before 1984, physiotherapy in South Africa was offered as a diploma course, which as mentioned before, was mainly offered at those tertiary institutions that were reserved for white people according to the past segregation laws of the country (Mbambo, 2004). The results of this are somewhat reflected in this study, where 15.5% of the participants have physiotherapy diplomas. All of these participants, both black and white, qualified as physiotherapists before 1985. At 84.2%, the percentage of physiotherapists with Bachelors degrees was consistent with that of countries, such as Australia, where between 80 to 100% of all qualified physiotherapists have undergraduate degrees or higher (O'Kane and Curry, 2002).

The value of engaging in continuing professional education and evidence-based research are some of the issues that most physiotherapists in South Africa embrace. Although the results reveal that only 26.3% have postgraduate qualifications in physiotherapy and a further 6.6% are currently pursuing them, there are many more physiotherapists who possess certificates for various continuing education short courses. However, for the purpose of this study, specific details on these were not required.

In terms of qualifications other than physiotherapy, almost a third of all participants either already had, or were currently pursuing, them. However, with further investigation, 25% of the former had left other professions or careers in favour of a degree in physiotherapy. On the other hand, a relatively high 45% of those that either had or were currently pursuing other qualifications were doing so with clear intentions of leaving the profession. The two most common alternative qualifications cited were the Bachelor of Commerce (BCom) and Masters in Business Administration (MBA) degrees. In South Africa, professionals possessing these qualifications are generally guaranteed better paying jobs and provide wider scopes of practice in industries and sectors other than physiotherapy.

5.4. Employment

The fact that physiotherapists are quite a mobile group of professionals, which was mentioned in one of the Canadian studies cited earlier (Miles-Tapping et al, 1992), is confirmed by the relatively low mean number of years worked by the participants of this study. According to that study, physiotherapists generally tend to have short work experiences from the time that they graduate to the time that they leave their public sector jobs. Furthermore, due to their mobility, which is not necessarily from the public to other sectors, but is often from one public sector institution to another, 43.3% of all participants had been employed at their current workplaces for less than one year. Since community service physiotherapists were excluded as participants, this is a reliable figure, as it suggests that there is indeed a fair amount of mobility amongst physiotherapists between public sector institutions.

Most of the participants (56.6%) were employed in the tertiary and central academic hospitals, which are situated in the major city centres of Gauteng. Only 10.5% and 7.9% were employed in district hospitals and for district services, respectively, both of which involve working in the semi-urban to “rural” parts of Gauteng. Again, this seems to be a phenomenon that is common in Australia (O’Kane and Curry, 2002), where the authors attributed it to factors such as possible professional preferences, the lack of dedicated positions in rural and remote locations and the possible flexible work environments that suit physiotherapists in the more urban locations. In the case of the participants of this study, those who worked in district hospitals and services gave reasons, such as enjoying community-based physiotherapy and helping people who live in previously disadvantaged areas.

The two most common reasons cited by the participants for working where they were currently working were in order to gain professional experience and for travel convenience. These reasons are consistent with some of the reasons given by physiotherapists in some of the studies quoted earlier on in the report. In the case of the Northern Ontario physiotherapists (Beggs and Noh, 1991), similar reasons of family proximity and improving academic credentials were given. Other similarities in reasons included job satisfaction and promotion prospects.

According to Noh and Beggs (1991), longer tenured employees tend to be among the more stable staff members of an organisation. From this study, the average number of years worked by the participants in the South African public sector was 9 years, the shortest duration being 16 months and the longest 42 years. 44.3% of the participants who had been employed for 9 or more years were women, compared to only 27.3% of the men.

These findings include the 31.1% of participants who stated that they had stopped working for a period of time, and decided to return to the South African public sector according to the results, the majority of them had done so in order to attend to family responsibilities, particularly having and raising small children.

As far as having additional sources of remuneration, one of the key findings of this study was the fact that 60.5% of all participants in this study reported having other paid jobs in outside their full-time employment, most of them citing the supplementation of their monthly incomes as reasons. Most of them worked for private physiotherapists outside and others worked in the Folateng wards after working hours on weekdays or weekends. This is a large percentage of the public sector physiotherapist workforce, and the implication of this is that there are probably many physiotherapists that are not performing their work duties optimally at their permanent workplaces due to the potentially high stress levels and burn-out that arise from working these extra hours. This is also a potential cause of frequent absenteeism, which is often a direct consequence of elevated stress levels and fatigue. The result of frequent absenteeism can be loss of productivity and disruptions to proper service delivery, which has been reported on in several studies on nursing staff who work for additional remuneration at places other than their permanent jobs (Cullinan, 2006).

5.5. Staying in 2007

The participants' responses when asked about whether they intended to stay at their current work places in 2007 or not, as well as the results of the ranking analysis, provided some of the most valuable and relevant information to what the study sought

to achieve, which was to determine the factors that influence the retention of South African public sector physiotherapists.

55.3% of all respondents reported that they did have intentions of staying at their current workplaces throughout the following year of 2007. Furthermore, according to the results of the logistic regression analysis, those participants over the age of 31 were almost five times more likely to stay than those under the age of 31. This result is similar to that which was reported by Noh and Beggs (1993) in one of their Northern Ontario studies, where they found that levels of physiotherapist turnover were five to six times higher amongst physiotherapists who were under thirty years of age than above.

Other significant determinants of whether participants were intending on staying or leaving in 2007 included was gender and race, where the female and white participants, respectively, were found to be twice as likely as the males and other races to stay. Furthermore, being the family breadwinner, as well as marital status were also found to be quite significant, which was consistent with the findings of the 1991 study by Noh and Beggs.

In terms of their reasons for staying in 2007, some noteworthy responses included the fact that 17.5% of these participants wanted to stay because they enjoyed their work environments and did not have reasons to leave. Once again the reasons of gaining experience and living close to work, which made travelling convenient were cited as important contributory factors.

Many also said that they enjoyed the financial stability that the public sector gave them, despite the low salaries. This was compared to the private sector, where payment is

often proportional to the number of patients treated. This is generally true for small private practices. It was also good to note that many of these participants reported that they enjoyed the work that they do so much that where they worked did not matter.

When planning for retention, these are undoubtedly some of the factors that managers need to take into account. By conducting regular staff attitude surveys amongst their staff, physiotherapy managers would be better able to establish those factors that enhance their levels of job satisfaction and those that decrease them, and then try to address those issues that are within their power when they plan their retention strategies.

Interestingly, those factors which did not seem to have any major significance as determinants of whether participants were intending to stay or not in 2007, include having children, the type or level of institution, professional ranking and having postgraduate qualifications. This is in contrast to other studies, including the one that has already been quoted by Noh and Beggs (1991), where these factors are described as being significant determinants of whether physiotherapists leave or stay at their workplaces.

The results of the satisfaction and importance rating, as well as those of the ranking analysis and the participants' responses for staying in 2007 can be used as key contributors to baseline information about the extent of and reasons for physiotherapist retention problems. They may serve to provide managers with a clearer indication about the characteristics of physiotherapists who tend to be more stable and committed to service, despite low salaries and other challenges. In other words, managers may be

able to make more informed recruitment decisions and retention strategies when they have this type of information.

5.6. Job Satisfaction

The results also revealed that current South African public sector salaries for physiotherapists are by far the greatest source of demotivation and dissatisfaction. This finding, which is also the main reason why participants said they would leave, was further illustrated and confirmed by the importance ranking. However, for those who said that they would stay in 2007 and those who returned to the South African public sector after a period of absence, there seemed to be greater benefits to staying than leaving, despite what they also readily admitted were poor salaries. Indeed, there seemed to be a definite willingness on their part to weigh the options of staying or leaving and they chose the latter based on other reasons, such as having more readily available opportunities for continuing professional development, colleague support and teamwork. Many also felt that in the public sector they were making a difference in the lives of disadvantaged people who could not afford private sector rates. Others cited factors, such as leave, travel convenience and working close to home

It was clear that there are physiotherapists who are aware of the problems and challenges of working in the public sector, but they are so motivated and driven mainly by the sheer enjoyment of their work and fulfilment that comes with the feeling of helping others, financial stability and well-defined working hours that these problems end up being challenges that come with the territory and need to be addressed whilst the work is being done. One would assume that for them, physiotherapy is not a job, but a calling, and many of them are optimistic that the situation will soon change for them as long as they continue to apply pressure on the government to value them more and

recognise the profession as a major contributor to health promotion here in South Africa. They have also shown very clearly that although they do want to get better salaries, the other benefits and job security that are offered by the public sector, as well as the desire to keep promoting the role of physiotherapy in the public sector, are the major factors that are keeping them there.

Apart from poor salaries, many physiotherapists in the South African public sector complain about the lack of promotion opportunities. According to the study by Wolpert and Yoshida (1992), physiotherapists in Ontario also reported a strong desire for upward mobility within the profession. In Ontario, as is the case in South Africa, the profession is structured with limited opportunities for upward mobility after entry at the junior physiotherapist level. Again, as in the case of South Africa, there are relatively few vacant senior and clinical specialist positions, and any further promotion has to be at the managerial level, where vacant positions are even more limited. This becomes a problem for those physiotherapists who wish to remain as clinicians and never want to become managers. The result of this is highly mobile physiotherapists who are continually leaving their workplaces in search of more senior positions in other public sector institutions or, if there are none available, they join the private sector or migrate overseas.

Another important source of dissatisfaction and low morale amongst physiotherapists working in the South African public sector is that of not having their professional status recognised in the same way that the professional status of their western counterparts is recognised in their home countries. However, in the case of South African physiotherapists, the question that needs to be asked is how much they are doing to actively promote their own profession and prove its relevance in today's primary health

care, context. Fortunately, according to the study by van der Spuy and van Rooyen (2000), physiotherapists started to take proactive steps to adapt to this new health model, show the importance of the work that they do and to prove their relevance as professionals of note as soon as health sector reform began.

5.7. Knowledge and Attitudes Towards Retention

In terms of knowledge and awareness concerning their own departments' retention strategies the results revealed that only 29% of all the participants responded positively to this question and, remarkably, this included several heads of departments. As expected, the scarce skills allowance seemed to be the most widely known retention strategy. Several participants also mentioned the Folateng private wards as possible retention factors, which formed a part of their institutions' staff retention efforts.

The fact that the percentage of physiotherapists who know something about their departments or institutions' retention plans and strategies is so small partly reveals that communication within their departments and institutions could be improved. Furthermore, it also partly reveals a lack of awareness, on the part of institution managers, of the importance of retaining physiotherapists, the role that they play in the health system, as well as the need to include them in planning and decision-making processes.

5.8. Limitations

One of the factors which needed to be taken into account as a potential limiting factor was non-respondent bias. Indeed, due to some levels of participant non-compliance, it is possible that the responses of those who did not participate could have contributed different results and points of view, which could have impacted on the final findings.

According to Wolpert and Yoshida (1992), non-respondent bias can be a real limiting factor, as they found out in the case of their study that those physiotherapists that had declined to participate in their survey had either graduated in other countries or were recent graduates and appeared to represent a young, “transient” group who may have been unresponsive to retention strategies. Had they responded, this may have had a more significant impact on the final outcome of their results, as there is a possibility that their responses would have been slightly different from those of the participants, thus affecting statistical measures such as frequencies, percentages and chi-square significance values.

Another potentially limiting factor is the fact that the study focused exclusively on those physiotherapists that were still employed by the South African public sector, instead of including input from those that had left and were either working in the private sector, overseas, or other places in order to establish their exact reasons for leaving and what would have made them stay. Indeed, the responses of, and reasons given by, those that have already left can often differ once they make hindsight reflections when they are in different working environments.

Thirdly, by limiting the study to physiotherapists in Gauteng only, it is possible that many of the findings of this study are unique to them and do not necessarily apply to those working in other provinces. For example, due to differences in population demographic distributions between the different provinces, there would have been different responses and racial representation according to response, which could have produced different findings.

Fourthly, due to the predominantly quantitative nature of this study, respondents may have felt restricted in terms of the range of responses that they were able to give on the questionnaire. As a result, it was not possible to determine the complexities of their lives as individuals and to have a more in-depth look into what drives their decision making processes.

Additionally, in the case of such studies, there is always the possibility of participants not trusting the research process, including the researcher's motives, completely, which results in them not expressing their true feelings or intentions freely.

Lastly, another potential limitation was the absence of a control group which could have been used for comparing the participants' responses and findings. An example of a control group for this type of study would be a similar sample size of registered physiotherapists, who also meet the selection criteria but work for the public sector in another province. Similarly, those physiotherapists that work in the private sector could also be used. However, the methodology would have to be adapted accordingly in order to accommodate the control group.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1. CONCLUSIONS

Several conclusions can be drawn from the findings of this study. These include the fact that despite the unsatisfactory salaries and certain working conditions that were mentioned by the participants, there are physiotherapists who choose to remain in the South African public sector. The results have revealed that most of them choose to do so because of they feel that there are benefits to working for the public sector, such as receiving a stable income, service bonus, a scarce skills allowance, medical aid and 'free' opportunities for continuing education as a result of regular interdisciplinary lectures and visiting guest speakers who are often willing to address physiotherapists for very little or no fees. Furthermore, when they compare it to the private sector, these physiotherapists believe that the public sector provides them with more flexibility in terms of working hours, greater autonomy in terms of clinical decision-making, support from colleagues, interdisciplinary team work, appreciative and friendly patients, as well as a wider range of conditions to treat in the hospitals and clinics.

Indeed, in the private sector, physiotherapists very often work long hours on their own in order to treat as many patients as possible in any given day, as each patient treated means more money for the practice, which in turn often translates to more pay for them. Often, private patients can be very demanding and difficult to work with, and private physiotherapists sometimes have to adhere to strict and inflexible treatment protocols,

which are not always necessary, but have prescribed tariffs, thus making it simpler for the private practitioner in question to pre-determine the cost of each treatment.

In terms of the characteristics that the author was determined to investigate, the study has revealed age plays a significant role as a determinant of whether physiotherapists are likely to remain at their workplaces or leave, where the older physiotherapists (31years and older) tend to stay longer in the public sector than those that are younger. Indeed, according to Noh and Beggs (1991), longer tenured employees tend to be among the more stable staff in an organisation. Furthermore, female physiotherapists, those that are married and those that are family breadwinners also seem to be more likely to stay once employed than their male, single and non-breadwinner counterparts.

These are very important observations which must neither be overlooked nor ignored when recruiting physiotherapists. Very often, managers tend to select younger, newly-qualified physiotherapists as employees of choice, deliberately avoiding those that are older and have more years of experience, believing that the former are more likely to approach their tasks with greater energy and enthusiasm and still have many years of service ahead of them. Although this may be true, several studies have shown that there is greater mobility amongst younger physiotherapists than their more experienced and older counterparts (Beggs and Noh, 1993). Indeed, very often when the latter apply for positions it is because they have decided to settle down and work at the same place until they retire. This is equally true for those physiotherapists who may have stopped working for many years due to family responsibilities. Quite often, these physiotherapists are keen to show their younger colleagues that they are still productive, eager and committed professionals. In the end, however, the ability to recruit the best physiotherapists in terms of their knowledge, skills, attributes and ‘fit’

within the department, regardless of age and experience, will depend largely on how skilled and qualified the manager is at doing so.

According to the results of this study, salaries are undoubtedly the most important motivators and potential retention factors for physiotherapists in the South African public sector. By drawing from their own experiences, the participants in this study have stated that salaries are by far the most important retention factors for physiotherapists. Furthermore, many of them reported that they were prepared to discourage interested physiotherapists from working for the South African public sector solely on this basis, despite the benefits.

South Africa continues to lose health professionals from all disciplines, including physiotherapists, who are seeking better pay elsewhere. According to Yumkella (2006) salary outranked all other factors when health workers in different African countries, such as Ghana, Cameroon and South Africa were asked what would make them remain in their home country. The financial implications of this to the government are potentially great, and possibly higher than what it would cost to increase their salaries and invest more money into their retention efforts.

Another strong deterrent for physiotherapists remaining in the South African public sector is the perceived lack of opportunities for promotion. Indeed, many of the participants felt that the only way of advancing professionally and in status was to leave their work places in search for more senior positions elsewhere, usually in other public sector institutions or in the private sector.

Many of the respondents also reported poor management as one of the reasons why they would stop working for the South African public sector. Furthermore, as

highlighted in Chapter 1, the absence of accurate and reliable records of exit interviews, turnover records, vacancy rates and the results of regular staff attitude surveys from physiotherapy departments, which could be used to inform effective retention strategies, partly indicates a lack of proper management.

Many of the participants also reported the perceived lack of recognition and appreciation for their profession, as well as not feeling valued as important professionals with a meaningful contribution to make in the South African public sector, as other sources of their dissatisfaction in the workplace. This can mostly be attributed to the continuing lack of awareness for the role of physiotherapy amongst key decision makers, other health professionals and the public that, as was highlighted in Chapter 2. It can also be attributed to a lack of relevant evidence-based research by physiotherapists, which could help to create more awareness for the profession and plight of public sector physiotherapists. As mentioned earlier, most of the human resource studies that have been conducted in the country focus on nurses and doctors, and this partly explains why these two professions are known to the South African government to be 'endangered species' (Health Systems Trust, 2003) and are perceived to be more important than the allied health professions, including physiotherapy.

Finally, the fact that there were such few participants who had any form of knowledge about their institutions' retention strategies partly confirms that there could indeed be insufficient levels of communication and inclusion in decision making processes regarding these matters both between institution and physiotherapy managers, as well as physiotherapy managers and their staff.

6.2. RECOMMENDATIONS

This is probably not the first time that a recommendation is being made to the government for regular engagements in discussions with physiotherapy managers to be made by the relevant government officials in order to review and improve the salaries of public sector physiotherapists as a direct measure of ensuring their retention. However, these must be accompanied by the formulation of definite strategies, follow-up action, dead-lines, monitoring and evaluation. The findings of this study can be used to contribute to and support existing evidence that reveals the fact that physiotherapists are leaving the South African public sector mainly due to their dissatisfaction with their salaries. Until something is done about this by the relevant government stakeholders, there will be no changes in the status quo and this subject will continue to be a key matter of discussion in most physiotherapy and allied health management meetings.

Secondly, it is recommended that physiotherapy managers at healthcare facilities become more proactive and creative in terms of developing specific retention strategies. According to Michael Armstrong (1998), issues of staff recruitment, retention and turnover are very closely linked and have an impact on each other. He states that it is the responsibility of managers to properly analyse and understand why staff members leave in order to adequately and effectively plan for their retention. He also believes that one of the ways of gaining some understanding into the reasons why staff members leave in large numbers is to conduct formal, written exit interviews and regular attitude surveys within work departments. Often the information that is derived from these, such as lack of commitment and dissatisfaction, is usually crucial and honest information that needs to be addressed by any good retention plan. This same idea is reiterated by Yumkella (2006), who states that in order to understand the causes of turnover “health managers and organisations have to…understand the characteristics of those health

workers who are at risk of moving, their patterns of movement and the reasons why they make decisions to leave." The author further states that due to the absence of complete and accurate worker flow data sets in most developing countries, health managers are unable to measure turnover and vacancy rates in a precise manner. The implication of this are that in order for retention plans to be effective on-going staff surveys, monitoring and evaluation of existing strategies and impeccable staff record keeping are essential, including formal, written exit interviews.

Thirdly, given the fact that solving the financial remuneration problem is not within the control of physiotherapy managers, they need to focus more on developing retention strategies that address non-financial incentives that they are able to exercise control over. Some suggested non-financial retention strategies that are already being employed in many physiotherapy departments in Gauteng, but could be improved, include promoting and encouraging continuing professional development through the attendance of courses, as well as scientific and professional meetings. Furthermore, as mentioned before, mentorship programmes are also useful in terms of keeping staff members motivated at work, as they contribute towards making individuals feel more valued, appreciated and cared for. In addition to these, and depending on the organisation's rules and management support, discussing the possibilities of introducing flexible working hours and job sharing have also been suggested by some authors as factors that promote staff retention.

In the same way that physiotherapists engage in evidence-based clinical research, another recommendation is that they extend their research efforts into the field of human resources. Scientifically presented findings of such studies in professions such as medicine and nursing, have demonstrated that they have a greater impact in terms of

creating awareness about the importance and relevance of their respective roles in South Africa's health sector today, as well as informing decision-making processes that are essential for policy development and human resource planning. Some suggestions for future research are to investigate the exact financial implications of losing and recruiting physiotherapists, as well as how these impact on the delivery of efficient and effective service and to conduct a study similar to this one on a national scale.

In relation to the previous recommendations, another one would be to ensure that physiotherapy managers are adequately equipped to function optimally within their management roles. Without proper management skills and training, none of these recommendations can be effectively addressed. Indeed, in many South African public sector institutions, physiotherapy managers did not undergo formal management training, but were simply promoted from being clinicians to management positions through the ranks of the profession. A recommendation in this regard is to ensure that basic management training is included in the undergraduate physiotherapy curriculum at universities. In addition to this, once physiotherapists are faced with the task of becoming departmental managers, they need to be sent for specific courses in management. As several studies have shown, including the study by Wolpert and Yoshida (1992) and the study by Turner (2001), which were referred to earlier, professional recognition and authority are some of the factors that lead to the retention of physiotherapists, and by formally training those who are interested in becoming managers they are given an added level of responsibility and heightened professional status which may indeed serve as an incentive for them to stay.

Furthermore, recruitment and retention are management responsibilities which require specific training. As long as physiotherapy managers do not have the necessary human

resource management skills to conduct professional interviews and to recruit effectively, they will not be able to identify and employ the best candidates for their departments. Similarly, by having these skills, there would be less of an overlapping in terms of the human resource management responsibilities of the different health managers, such as the compiling and maintaining of advanced statistical data sets, as highlighted in Chapter 1.

A final recommendation, which is also within the powers of physiotherapists themselves, is the issue of enhancing and promoting their own professional image by educating doctors, nurses, institution managers, other key health workers, as well as the public on the scope of physiotherapy practice. Physiotherapists need to strengthen their efforts of claiming and clearly stating their rightful place in the current South African health care system. It may also be useful for them to monitor and evaluate their progress and rate of transformation as far as the issue of adapting to the changing health care system is concerned, and make improvements where necessary. Without this, they face the real risk of being perceived as irrelevant in the country today, both by health managers, other health workers and the public, which in turn creates feelings of them feeling unappreciated and having low morale at work, resulting in high levels of turnover. However, public sector physiotherapists cannot successfully overcome this challenge on their own, and it is further recommended that they form stronger partnerships with their private sector counterparts. The current reality is that every time physiotherapists enter and leave the public sector and move into the private or other sectors, they tend to stop being concerned with and addressing the challenges that are being faced by those that choose to remain behind. The result of this is an on-going cycle of many years of unresolved problems, which benefit neither the physiotherapists nor the country in the long term.

REFERENCES

1. Anthonisen, P., Riis, P., Sogaard-Andersen, T. 1964. **The Value of Lung Physiotherapy in the Treatment of Acute Exacerbation Chronic Bronchitis.** Acta Med Scandinavia, vol. 175. pp175-719
2. Armstrong, M. 1998. **A Handbook of Personnel Management Practice.** 6th ed. London: Kogan Page. pp 433-436
3. Baumann, A. Yan, J. Degelder, J. Malikov, K. 2006. **Retention Strategies for Nursing: A Profile of Four Countries.** Human Health Resource Series, no.5, pp.5-11
4. Beaglehole, R. Bonita, R. Kjellstrom, T. 1993. **Basic Epidemiology.** World Health Organisation, Geneva. p. 69
5. Beggs, C.E. and Nosh, S. 1993. **Job Turnover and Regional Attrition Among Physiotherapists in Northern Ontario.** Canadian Journal of Physiotherapy, vol. 45, no. 4, pp 239-244
6. Beggs, C.E. and Noh, S. 1991. **Retention Factors for Physiotherapists in an Under serviced Area: An Experience in Northern Ontario.** Physiotherapy Canada, vol.43, no.2, pp 15-21
7. Buchan, J. Calman, L. **The Global Shortage of Registered Nurses: An Overview of Issues and Actions.** Geneva, Switzerland: International Council of Nurses (ICN), 2004. <http:www.icn.ch/global/shortage.pdf>
8. Buchan, J. and Dolvo, D. 2004. **International; Recruitment of Health Workers to the UK: A Report for DFID, London**. DFID Health Systems Resource Centre.
9. Budlender, D. 1998. **Women and Poverty: An Executive Summary**. South African Human Rights Commission. <http:www.genderstats.org.za>
10. Cullinan, K. 2006. South Africa: Hospitals in Crisis. Health-e (Cape Town). <http: **www.worldproutassembly.org>**
11. Cullinan, K. 2002. **Private Patients Swell Public Hospital's Coffers.** Health Systems Trust, South Africa. <http:www.hst.org.za>
12. Cutchin, M.P., Norton, J.C., Quan, M.M., Bolt, D., Hughes, S. and Lindeman, B. 1994. **To Stay or Not to Stay: Issues in Rural Primary Care Physician**

Retention in Eastern Kentucky. Journal of Rural Health, vol. 10, no. 4, pp. 273-278

13. Dennill, K. et al. 1995. **Aspects of Primary Health Care.** Halfway House: Southern.
14. Dovlo, D. and Martineau, T. 2004. **A Review of the Migration of African Health Professionals.** JLI Working Paper 4-4 <http:www.globalhealthtrust.org>
15. Eales. C. 2000. **Who Are We?** South African Journal of Physiotherapy, vol.56, no.2, p. 2
16. Forti, E.M., Martin, K.E., Jones, R.L. and Herman, J.M. 1995. **Factors Affecting the Retention of Rural Pennsylvania Family Physicians.** Journal of the American Board of Family Practice, vol. 8, no. 6, pp. 496-499
17. Gauteng Department of Health. **Annual Report, 2002/3**.
18. Health Statistics. 2006. **Number of Physiotherapists**. Health Systems Trust, South Africa. <http:www.hst.org. za>
19. Hodgson, I. 2006. **The Price of the Ticket.** Open Democracy: Free thinking for the World. <http:www.openDemocracy.net>
20. Huddart, J. and Picazo, O. 2003.**The Health sector Human Resource Crisis in Africa: An Issue Paper.** Washington, DC: SARA Project, AED; USAID.
21. Human Resources for Health. 2006. **A National Agenda for Human Resource for Health.** National Department of Health, South Africa. <http:www.doh.gov.za>
22. Humphreys, J.S., Michael, P.J., Jones, J.A. and Mara, P.R. 2002. **Workforce Retention in Rural and Remote Australia: Determining the Factors that Influence Length of Practice.** The Medical Journal of Australia, vol.176, no. 10, pp 472-476
23. Johannesburg Hospital, Physiotherapy Department, 2004.
24. Lehmann, U. and Sanders, D. **Human Resources for Health in South Africa. Background and Overview of Paper for JLI National Consultation.** 2004. Cape Town, South Africa
25. Mackenzie, C.F., Ciesla, N., Impe, P.C., Kemie, N. 1981. **Physiological Changes Following Chest Physiotherapy.** Chest Physiotherapy in the Intensive Care Unit. Baltimore: Williams and Wilkins. Pp 215-250
26. Mafubelu, D. 2004. **Using Bilateral Arrangements to Manage Migration of Health Care Workers: The Case of South Africa and the United Kingdom.** <http:www.old.iom.int/PP_ bilateral SAfrica.pdf>

27. Matthauer, I and Imhoff, I. 2003. **Staff Motivation in Africa. The Impact of Non-financial Incentives and Quality Management Tools: A Way to Retain Staff.** Eshcborn,Germany:GTZ.<http:www2.gtz.de/migrationdevelopment/download/documentation2-en-pdf>
28. Mbambo, NP. 2004. **Widening Access of Black Students to Physiotherapy Programmes in South Africa.** South African Journal of Physiotherapy, vol.60, no.4, pp. 3-4
29. Miles-Tapping, C. Rennie, G.A., Duffy, M., Rooke, L., Holstein, S. 1992. **Canadian Physiotherapists' Professional Identity: An Exploratory Survey.** Physiotherapy Canada, vol.44, No.4, pp31-34
30. Naidoo, N. 2000. **South Africa is Losing hundreds of Nurses Each Year.** Natal Witness, 24 May.
31. Narins, P. 1999. **The Finite Population Correction.** SPSS
32. National Department of Health, South Africa. 2006. **National Human Resource Plan for Health**. <http:doh.gov.za.>
33. Nawaal,D. 2003. **Despondent Healthcare Workers Flee.** Health Systems Trust, South Africa. <http:www.hst.org. za>
34. Newfoundland and Labrador Physiotherapy Association. 2005. **Issues and Impact Statement Regarding the Discontinuation of the Seat Purchase Agreement.** <http:www.physiotherapynb.ca>
35. O'Kane, A. and Curry, R. 2002. **Unveiling the Secrets of the Allied Workforce.** 7th National Rural Health Conference
36. Okerlund, V.W., Jackson, P.B. and Parson, R.J. 1994. **Factors Affecting Recruitment of Physiotherapy Personnel in Utah.** American Journal of Physical Therapy, vol. 74, no. 2, pp. 177-184
37. Randolph, D.S. 2005. **Predicting the Effects of Extrinsic and Intrinsic Job Satisfaction Factors in the Recruitment and Retention of Rehabilitation Professionals.** Journal of Health Management, vol. 50, no. 1, pp.49-60
38. Sim, J. 1985. **Physiotherapy: A Professional Profile.** Physiotherapy Practice, vol.1, pp.14-22
39. Smith, P., Schiller, M.R., Grant, H.K. and Sacks, L. 1995. **Recruitment and Retention Strategies Used by Occupational Therapy Directors in Acute Care, Rehabilitation and Long-term-care Settings.** American Journal of Occupational Therapy, vol. 49, no.5, pp. 412-419

40. Solomon, P., Salvatori, P. and Berry, S. 2001. **Perceptions of Important Retention and Recruitment Factors by Therapists in North-western Ontario**. Journal of Rural Health, vol. 17, no. 3, pp. 278-285
41. South African Department of Health, 2001. **The District Health System in South Africa: Progress Made and Next Steps.** <http:www.doh.gov.za>
42. Stilwell, B. Diallo, K. Zurn, P. Dal Poz, M.R. Adams, O. Buchan, J. 2003. **Developing Evidence-based Ethical Policies on the Migration of Health workers: Conceptual and Practical Challenges.** <http.www.pubmedcentral.nih.gov>
43. Stratton, T.D., Dunkin, J.W., Juhl, N. and Geller, J.M. 1995. **Retainment Incentives in Rural Practice Settings: Variations in Job Satisfaction Among Staff Registered Nurses.**
44. Turner, P. 2001. **The Occupational Prestige of Physiotherapy: Perceptions of Student Physiotherapists in Australia**. Australian Journal; of Physiotherapy, vol. 47, pp.191-197
45. Van Rooijen, AJ and Van der Spuy, AA. 2000. **The Role of Physiotherapy in a Changing Health Care System.** South African Journal of Physiotherapy, vol.56, no.2, pp. 3, 6-8
46. Vujic, M. Zurn, P. Diallo, K. Adams, O. Dal Poz, M.R. 2004.**The Role of wages in the Migration of Health Care Professionals from Developing Countries.** Human Resources For health, vol.2, no.1, p.3. <http:www.numan-resources-health.com/content/2/1/3>
47. Wolpert, R. and Yoshida, K. 1992. **Attrition Survey of Physiotherapists in Ontario.** Physiotherapy Canada, vol.44, no.2, pp17-24
48. Wikepedia. <http:www.wikepedia.org/wiki/Gauteng>
49. Yumkella, F. 2006. **Retention if Health Care Workers in Low resource Settings: Challenges and Responses.** The Capacity Project, UK. <http:www.capacityproject.org>

APPENDIX 1: QUESTIONNAIRE

APPENDIX 2: STUDY INFORMATION SHEET

APPENDIX 3: LETTER OF REQUEST TO CONDUCT STUDY

APPENDIX 4: ETHICS CLEARANCE CERTIFICATE

An Investigation of the Factors that Influence the Retention of Physiotherapists in the South African Public Sector

L.I. RAKGOKONG

An Investigation of the Factors that Influence the Retention of Physiotherapists in the South African Public Sector

Lintle I. Rakgokong

This research report has been submitted to the School of Public Health, University of the Witwatersrand, in partial fulfilment for the Masters in Public Heath Degree

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DECLARATION

I declare that this research report is the product of my own, unaided work. It is being submitted in partial fulfilment for the Masters in Public Health degree at the University of the Witwatersrand School of Public Health. This report has not been submitted before for degree or examination purposes.

_____

Lintle Rakgokong

Signed on the _____ day of _____, 2007

DEDICATION

This work is dedicated to my family, especially my husband, Lesedi, whom I cannot thank enough for his patience, continued motivation and unwavering support throughout this journey; my mother, Mamoliehi Ntlhakana, for her endless encouragement and for being a role model throughout my life and my two daughters, Kgali and Tumi, for understanding and appreciating that this was done in part to help them appreciate the value of hard work and dedication.

ABSTRACT

Every year, physiotherapists leave the South African public sector in large numbers, citing reasons such as low salaries and unsatisfactory working conditions as the main contributing factors. However, despite this, there are some physiotherapists who continue to choose to stay for the duration of their careers, and it is the aim of this study to investigate the factors that influence these choices. The author has tried to achieve this by trying to predict those factors that cause physiotherapists to stay at their current work places and by finding out if these physiotherapists share any common characteristics and motivations which contribute to their decisions to stay. The participants were also asked to rate their current job satisfaction, rank the importance of given motivation factors for retention and what they knew about their own institutions' retention strategies.

The study population was made up of all the qualified physiotherapists working for the South African public sector in Gauteng between January and December 2006. There were 93 physiotherapists who met these study criteria, 76 (82.0%) of whom completed the questionnaire.

The research revealed that characteristics such as gender, age, race, marital status, having children and being the family breadwinner played a significant role as determinants of whether physiotherapists left or stayed at their current public sector jobs in 2007. For example, the female participants and those who had children were twice as likely to stay as the male participants and those who did not have children, respectively. Similarly, the white participants and those who were family breadwinners were three times more likely to stay than those of other racial groups and non-breadwinners, respectively. Physiotherapists over the age of thirty-one were almost five times more likely to stay than their younger counterparts. On the other hand, factors such as professional rankings, having postgraduate qualifications and the type or level of institution seemed to play relatively insignificant roles.

According to the results, the respondents' main source of dissatisfaction was their salaries, followed by what they felt were poor opportunities for promotion. Feeling unappreciated and undervalued in their workplaces, as well as poor recognition for their professional status, were also rated as contributors to dissatisfaction. They felt that

more attention needed to be given to improve on these factors if the retention of physiotherapists was to be achieved successfully.

The factors which received the highest importance rating and ranking as retention factors, included, once again, better salaries, promotion opportunities, career development and training opportunities, as well as receiving the scarce skills allowance. In terms of knowledge of the existence of retention strategies for physiotherapists in their institutions, only 29% responded positively, the most commonly cited one being the scarce skills allowance.

The main conclusion that was drawn from this study is that in addition to better salaries, improved working conditions and more promotion opportunities, there are more characteristic features that are shared by those physiotherapists that stay in the South African public sector. These, as mentioned earlier, include being a female, being over the age of 31, being married, having children and carrying the financial responsibilities of a family breadwinner.

Finally, in terms of some of the key recommendations made, the findings of this study reveal a heightened necessity for the government of South Africa to review the salary structure of public sector physiotherapists in an effort to motivate them and encourage them to stay. Furthermore, it is recommended that physiotherapy managers improve their human resource record keeping, particularly worker flow and turnover data, and that they encourage more evidence-based research in the field of physiotherapy human resources.

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- The heads of the various physiotherapy departments that I visited in Gauteng for their overwhelming support and cooperation. Their response to this study was very positive, providing me with renewed incentive to complete it this study.
- All the participants in this study, for their honest responses and for appreciating the potential value of a study such as this.

Most importantly, I thank God for giving me the strength and desire to conduct this study; and for the times when I felt like giving up, I thank Him for encouraging me to persevere until its completion. He who started a great work in me has shown me once again that He is faithful to complete it.

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CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1. Introduction

In this chapter the author introduces the motivation behind, as well as the purpose of, the study. It begins with background information on some of the problems and challenges regarding the working conditions of physiotherapists in the South African public sector today, which could influence their decisions to either leave or stay. This is then followed by a brief statement of the aim and, lastly, objectives of the study.

1.2. Background Information

Despite some definite measures that have been undertaken by the South African government to retain all health professionals, such as the introduction of the scarce skills allowance, prioritising the training of more health professionals and improving their salaries (South African Human Resource Health Plan, 2006), their turnover continues to be relatively high and steady (Dovlo and Martineau, 2004). In the case of physiotherapists, the Gauteng Department of Health (GDOH) Annual Report of 2002/3, which is the only recent report that specifically presents a breakdown of allied health professional turnover rates by profession, reported a 28% turnover rate in Gauteng between April 2002 and April 2003 (GDOH Annual Report of 2002/3) - a figure which was the highest amongst all other allied health professions in the province.

The office of the Gauteng Health Department, which is responsible for handling all matters pertaining to allied health professionals in the province, as well as the

physiotherapy departments visited, did not have the required statistical records, such as physiotherapist attrition rates and worker flow data, which could have been used in the study to demonstrate the staff turnover problem more clearly. Despite this, the information that is available from various ad hoc staff surveys, as well as information available from informal written and verbal exit interviews, suggests that there is a definite and serious problem regarding the retention of physiotherapists in the South African public sector. Furthermore, having served as a physiotherapy department manager at Johannesburg Hospital, the author also draws on her own findings from similar staff surveys, as well as challenges she experienced regarding this problem, to further support this claim.

Most physiotherapy departments in Gauteng keep very up to date staff establishment records, and this is the information that the author used in 2004 when she looked at the average number of physiotherapists who left Johannesburg Hospital's physiotherapy department per annum, focussing on the five-year period between 1999 and 2004. This small, unpublished survey revealed that the department was losing, on average, up to 65% of its physiotherapy staff annually during that five year period alone. Although this figure was the highest when compared to the findings of similar surveys from some of the major institutions, such as Pretoria Academic, Chris Hani Baragwanath, George Mukhari, Leratong, Helen Joseph and Edenvale Hospital, their departments also reported high annual staff percentage losses during that period.

Similarly, also based on the author's own experience and discussions with physiotherapy managers, the following are some of the common reasons that are given by physiotherapists for leaving:

- Most of them report being unhappy with government salaries.

- Many, particularly the lower ranking physiotherapists, also report dissatisfaction with what they perceive to be poor opportunities for promotion.
- Many are not satisfied with the working conditions that they felt prevailed in most government health institutions. This includes the unavailability of, or inadequate, equipment; poor security, as well as ineffective referral systems, which tends to result in high patient volumes and increased work load.
- Some want to travel and work overseas, just to gain further experience and to visit different parts of the world.
- Some of them want to work in the private sector, either for themselves or for other physiotherapists in well-established practices.
- Many report being unhappy with what they feel is poor management in most government institutions and a general lack of support for them and their profession.
- Many also feel that there is a general lack of communication about processes and decisions taking place but expected to support them.

However, what is interesting is that despite the various reasons cited by their colleagues as contributing factors to their decisions to leave, there seem to be some physiotherapists who make a conscious decision to stay and work for the public sector for the duration of their physiotherapy careers. There has been no research on what these physiotherapists have in common and why they choose to stay, and this study seeks to do just that. It is also hoped that these findings could provide information that will assist physiotherapy managers with recruitment and retention strategies.

1.3. Aim of Study

The overall aim of this study was to try to find out the factors that influence the retention of physiotherapists in the South African public sector.

1.4. Study Objectives

The specific research objectives were to:

1. Describe the characteristics and motivations of those physiotherapists who choose to remain in the South African public sector.
2. Rate the participants' job satisfaction with various factors in their current work places, and how they rank them in terms of their level of importance for retention.
3. Predict the factors that are most likely to cause physiotherapists currently working in the public sector to want to stay.
4. Describe the physiotherapists' levels of awareness and knowledge of the existence of retention strategies that their institutions have in place to ensure their retention.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

Several key issues are reviewed in this chapter. The author begins by providing essential information on the general role of physiotherapy in the public sector. Next, there will be a brief description of the role and the relevance of physiotherapy in South Africa's transforming public health sector. This will be followed by a summary of the training and practice adaptations that have had to be made within the profession in order for it to remain relevant and recognised for the value that it adds concerning health care. Most of the literature review begins in the next section that highlights some theories on staff retention and motivation from the human resource literature emphasising factors that influence the retention of staff members in organisations will be discussed. Then the retention factors that have been researched and documented and are known to cause health workers to leave the public sector will be dealt with. The final sections of this chapter review the retention problems, as well as some existing retention strategies, for South African public sector physiotherapists as well as those in other countries.

2.2. The Role of Physiotherapy in the Public Sector

As this is a study that focuses on the retention of physiotherapists in the South African public sector, it is necessary to begin by providing a very brief description of the general role of physiotherapy in the public sector, as it is essential for all healthcare managers and key decision-makers in government structures to fully understand and be informed

about the importance and relevance of physiotherapy in South Africa's primary health care-focused public health system in order to assist them further in their decisions and policy development processes. Furthermore, it is very important to point out that physiotherapy offers a wide scope of practice, as very often one has heard members of the public and professionals alike confusing the role of physiotherapy with that of several alternative therapies, particularly massage therapy. Massage, based on very sound scientific principles, including an understanding of the anatomy and physiology of the human body, is indeed a critical element of physiotherapy. However, it is but only one of many other areas of physiotherapy practice.

There are many ways of describing the role of physiotherapy. However, one of the most concise descriptions was quoted in a journal editorial as stating that "the aim of physiotherapy is to maintain, restore and optimise a patient's functional ability in his or her socio-economic and geographical environment in the best interest of the patient" (Eales, 2000, p.2.). In addition to this, physiotherapy has a strong role to play with regards to disease and disability prevention, facilitating the curative process and healing, palliative care and health promotion. This clearly means that physiotherapists are not only involved in hospital patient care, but that this care also extends to rehabilitating physically disabled patients to lead normal, where possible independent, functional lives once they are back in their communities.

Without a doubt, because of their unique clinical skills, knowledge and training, physiotherapists will always have an extremely critical and essential role to play in acute and sub-acute patient care at quaternary, tertiary and secondary levels of care. Here, physiotherapists form part of an important multidisciplinary team, which also includes medical doctors, nurses and other allied health professionals. Their opinions and

contributions are trusted and respected by other team members when planning the management of patients. Again, studies with a more clinical focus have proven and over and over again that without the intervention of physiotherapy during the acute stages of patient care, especially when patients are receiving assisted ventilation and cannot clear secretions or mobilise themselves, such patients run the risk of sustaining either secondary complications, or permanent disability, or may even die (Mackenzie, 1981; Anthonisen, 1964).

The importance of having multidisciplinary groups as essential elements of effective and efficient patient care and management was also reported in a recent report on the physiotherapy students of Dalhousie University (Newfoundland & Labrador Physiotherapy Association, 2005). This was in response to the government stating that it intended to reduce the number of physiotherapy students enrolling from one of the country's universities. Furthermore, as first-line practitioners, physiotherapists are able to provide fully independent patient diagnoses. A key implication of this is that physiotherapists are able to assist doctors with the complete management of certain types patients, thus assisting with the reduction of waiting times (Newfoundland & Labrador Physiotherapy Association, 2005), a problem which tends to plague most public sector hospitals worldwide.

However, the role of physiotherapy does not end at the levels of patient care that have been mentioned. Indeed physiotherapists continue to be involved with patient care and rehabilitation even during the chronic and rehabilitation stages. In addition to this, physiotherapists play a crucial role in education and health promotion, both of which are key aspects of primary health care.

Lastly, public sector physiotherapists in many countries, including South Africa, are not only responsible for patient care, but are also represented in hospital management structures, where they contribute to key decision-making processes concerning the future of health care in a country's health system. This also gives them the opportunity to educate and create awareness amongst hospital managers about the importance of physiotherapy, particularly in the areas that were outlined above, as well as in the promotion of cost-effective service provision. In the case of South Africa, physiotherapists have demonstrated their willingness to adapt their role where necessary in order to keep up with the requirements of a constantly changing public health system (van Rooyen and van der Spuy, 2000).

2.3. The Role of Physiotherapy in the South African Public Sector

During the past decade, South Africa's public health system has undergone a major transformation, which began in earnest from 1994 when the current democratically elected government came into power (Department of Health, 2001). The primary objectives of the transformation of the health system in South Africa have been to redress the health service inequities and inequalities that were characteristic of healthcare provision during the previous apartheid regime; to rebuild what was a highly fragmented healthcare system; and to provide effective and efficient health care to all the citizens of the country. Indeed, for many years prior to 1994, the South African healthcare environment mirrored the rest of the country's climate of racial segregation, where white and non-white South African citizens received healthcare at different healthcare facilities. Furthermore, this form of healthcare delivery, which focused on curative and hospital-centred patient care, proved to be ineffective and inefficient in that it was not reaching out and serving the majority of the country's sick people. This was

largely because it was inaccessible and unaffordable to those poorer communities that lived in rural and remote parts of the country. In all, it was also a form of health care delivery which did not take the needs of all the country's people into account.

Today, in order to guide the country's health sector reform process and related policies, the principles of primary health care have been adopted and embraced by the government of South Africa and are currently being implemented. The primary health care approach places emphasis on the provision of equal, equitable, accessible, affordable, effective and efficient healthcare to all citizens, regardless of their ability or inability to pay for these services (Dennill et al, 1995). However, although primary health care is accepted worldwide as the best way of achieving "health for all", its implementation in South Africa has not come without great challenges and problems, and some of those that have borne the brunt of this great transformation are the health workers. Since much has been written about this, particularly concerning doctors and nurses (Naidoo, 2000; Nawaal, 2003) , for the purpose of this study, only those aspects of primary health care that are of direct relevance to physiotherapists working in the South African public sector will be dealt with.

Worldwide, the discipline of physiotherapy has traditionally always been predominantly practiced at tertiary and secondary levels of healthcare. The focus of student training at academic institutions worldwide, including South Africa, was largely based on western methods and approaches, equipping physiotherapists with skills to practice primarily in these types of settings, but not as much so for primary health care settings. Furthermore, due to the country's segregation laws of the past, physiotherapy in South Africa was generally not well known in the black communities (Mbambo, 2004). There, it was perceived by black communities to be an elite profession, which was practiced

predominantly by white people, who lived in designated separate suburbs and attended separate hospitals from them.

However, as soon as the government embarked on its vigorous health sector reform initiative, it became evident that all health professions in the country, including physiotherapy, would also have to undergo certain changes in order to adapt to, and remain relevant in, a rapidly changing health system. Indeed, according to one physiotherapy study (van Rooyen and van der Spuy, 2000), the role and relevance of physiotherapy in South Africa's new and rapidly evolving post-1994 health care system soon came under great scrutiny. What the study did not explore in depth was the impact that this new health model may have had on the perceptions of public sector physiotherapists towards their profession, and whether or not these perceptions may have influenced their decisions to either stay or leave the public sector. As this study also does not focus on this subject matter, it would be necessary to conduct a separate study which looks specifically into this matter.

In addition to doing away with what has always been a predominantly biomedical and western emphasis of teaching and practicing physiotherapy, and to equip the country's physiotherapists with the skills required to practice in primary health care settings, one of the first accelerated measures that were taken by the South African government, was to apply great pressure on the country's training institutions to change elements of their 'old' teaching methods and introduce the elements and cornerstones of primary health care in their teaching. The number of physiotherapy students enrolled at training institutions was also increased in order to ensure that the coverage and effectiveness of physiotherapy in the country was optimised, and to ensure that even with the high

turnover of physiotherapists, services would not be gravely affected as there would always be enough in the country to recruit.

Black students in particular, who had in the past not been able to gain entry into 'white' universities, often due to their unattainable entry requirements, were prioritised (Mbambo, 2004) at most of the country's tertiary institutions such as the University of the Witwatersrand. This served to address the problem of having too few physiotherapists in the country. It also helped to increase the level of awareness of physiotherapy amongst black people, as well as make it an attractive and attainable career option for black students, instead of them holding on to the perception that it was an elite profession that was reserved for white students and clients only.

Another key measure that the government took in order to accelerate the provision of physiotherapy to previously disadvantaged and inaccessible parts of the country, was to introduce one year of compulsory community service for all newly qualified physiotherapists. The community service policy was first implemented for medical doctors, dentists and pharmacists in 1998, but in 2002, it was extended to allied health professionals, including physiotherapists. This helped to take all forms of medical and allied healthcare to previously disadvantaged people in their communities instead of concentrating all the expertise and technology at a few, already over-populated and often inaccessible urban health facilities.

2.4. Staff Retention

The subject of staff retention has been well researched and documented over the years. Different authors have defined retention in different ways, depending largely on the context. One definition of retention, which was given from a nursing perspective, but can

also be used for all other health professionals, defines retention as “the maintenance of an appropriate supply of nursing personnel to meet the health needs of any given population” (Baumann et al, 2006, p.6). Simply put, staff retention refers to the ability of an organisation to constantly maintain optimum staffing levels necessary to ensure efficient and effective service delivery at all times. This is best achieved by ensuring that staff members remain satisfied with their jobs and working conditions, as well motivated to remain at that particular organisation. The factors that influence levels of staff motivation and their decisions to either leave or stay at their jobs will be discussed next.

2.4.1. “Push” and “Pull” Factors and Staff Motivation

When discussing retention, or the decisions of employees to leave or stay at their jobs, many authors, including Dovlo and Martineau (2004), classify the factors that influence these into two categories, namely ‘push factors’ and ‘pull factors’. By definition, the former refer to those undesirable factors that ‘push’ staff members away from an organisation, such as poor financial remuneration, poor working conditions, an unhealthy work environment and poor management. The latter refer to those factors that actually ‘pull’, or attract, workers to a particular organisation, for example, satisfactory remuneration and better fringe benefits, good management, opportunities for promotion and feelings of being valued (Stilwell et al. 2003).

Generally these push and pull factors can be classified into headings according to the level at which they impact on people. For example, there could be personal factors, social factors, environmental factors, economic factors and professional factors (Mafubelu 2004). Again, these tend to differ according to the author, country, employees that are being discussed, as well as organisational context (Table 1).

Table 1: Examples of Push and Pull Factors that Affect Decision Making in Employees

LEVEL OF IMPACT ON EMPLOYEES	PUSH FACTORS	PULL FACTORS
ECONOMIC	• Poor salaries • Inability to settle debts • Lack of benefits, e.g. pension, medical aid and savings	• Good exchange rates • Potential to improve financial status • Tax exemptions • Perceived economic security
POLITICAL	• Perceived high levels of crime • Uncertainty about the country's future	• Political stability • Low levels of crime and increased security
PROFESSIONAL	• No opportunities for continuing professional development • No professional mentoring for inexperienced staff members	• Study opportunities • Promotion opportunities • Recognition of and respect for one's professional status
SOCIAL	• Lack of mentorship • Hostile, unfriendly work environment	• Team work • Support from colleagues
PERSONAL	• Personal security and stability • Personal growth and fulfilment	• Better opportunities for entire family, incl. good schools for children • Acknowledging good performance • Feeling valued
JOB RELATED	• Being overworked • Understaffing • Poor institution management	• Challenging work • Satisfactory conditions of service

Similarly, a simple and concise way of classifying these factors was summarised in a study on the retention of physiotherapists in Northern Ontario (Beggs and Noh, 1991) in terms of 'Personal Factors' which included family proximity, life style and partner's employment; "Professional Factors", including academic credentials; "Occupational Factors", such as salary and opportunities for promotion; and "Environmental Factors", such as the availability of schools nearby. These types of classification examples highlight the types of concerns of health workers in different parts of the world. In the

latter, due to the country's long established political and economic stability as a first world country, issues of safety, security and uncertainties about the future were not the health workers' primary concerns.

Push and pull factors can also be described in terms of motivation, where push factors refer to those factors which bring about a lack of motivation concerning work related performance amongst employees, and pull factors refer to those that are inviting and contribute towards making employees motivated at work. The following are the two main types of motivation (Armstrong, 1998):

- **Intrinsic Motivation:** This refers to the ability to motivate oneself, often by performing tasks that are fulfilling and rewarding to one, in an effort to achieve certain goals. Factors that are associated with this type of motivation include having responsibilities, freedom to grow and make choices or develop skills, as well as having opportunities for advancement.
- **Extrinsic Motivation:** In this case, the source of motivation is not the individual him/ herself, but someone or something else. Extrinsic motivational factors include rewards, such as increased pay, praise from supervisors, fringe benefits, promotion, as well as more negative factors such as punishment, criticism and withholding pay.

Having a clear understanding of what keeps employees motivated will result in managers developing creative ways of retaining them. Developing effective retention strategies, therefore, requires experienced and proactive leaders.

2.4.2. Push and Pull Factors Affecting Health Professionals

Although poor financial compensation is arguably a strong push factor amongst health workers, especially in South Africa, a number of studies have shown that it is certainly

not the only factor (Buchan and Calman, 2004). In South Africa, for example, health professionals continue to migrate to other parts of the world in much larger numbers that those working in other African counties, such as Uganda who earn by far less than the former (Lehman and Sanders, 2004). The turnover of South African health workers is caused by other unsatisfactory elements of the work environment, such as perceived deteriorating and living conditions (Lehman and Sanders, 2004, Vujic et al, 2004); weak performance management, poor leadership and supervision (Huddart and Picazo, 2003); the lack of adequate equipment and other essential resources (Matthauer and Imhoff, 2003); the lack of recognition for good performance (Naidoo, 2000);increased stress levels resulting from heavy workloads (Matthauer and Imhoff, 2003, Naidoo, 2000) and perceived lack of opportunities for career development and promotion (Buchan and Dovlo, 2004).

According to Fatu Yumkella (2006), in an article published for the Capacity Project in the United States of America, the strongest pull factor by far for health professionals is satisfactory financial compensation. He states that health workers, in developed and developing countries alike, are wiling to leave their posts for higher pay elsewhere. Other pull factors include opportunities for promotion and continuing professional development, good and supportive management, manageable workloads, team work and the availability of equipment and resources necessary for optimal patient care and service delivery.

2.5. Retention Issues Facing Public Sector Physiotherapists

2.5.1. South Africa

Finding published articles and other sources of information that focus specifically on the subject of the retention of physiotherapists in the South African public sector proved to be a difficult task. To the author's knowledge, there is no published literature on the subject in this country. Generally, most of the available published material deals with health professionals in general rather than specifically with physiotherapists, and as discussed in the previous section, there are indeed many studies and publications that report on the health sector human resource plight of South Africa. Many, such as the Open Democracy report (Hodgson, 2006) discuss the problem of the high level of migration of South Africa's skilled health professionals, or "brain drain", to developed countries.

As far as South African public sector physiotherapists are concerned, this absence of useful information on their retention has, as mentioned in the previous chapter, resulted in the author relying on the information that comes from ad hoc staff satisfaction 'surveys' and largely verbal and informal, exit 'interviews' that have been conducted over the years by the various physiotherapy managers in Gauteng. Although it may be inaccurate due to its informal and non-scientific nature, the information that is obtained from these endeavours is sufficient in that it gives an overall idea of the gravity of the problem facing most physiotherapy managers and can be used as a basis upon which to develop some retention strategies.

Whilst conducting this study, the author noted that there is an overlapping of responsibilities amongst the human resource managers of the provincial health department, institutions and physiotherapy managers, particularly concerning the

function of compiling and keeping relevant statistical information. This could explain the reason why most physiotherapy managers did not have their own scientifically interpreted statistics, such as staff attrition rates and worker flow data sets. Although this is important and should be investigated in a separate study, for the purpose of this study, the author was more interested in finding out from the physiotherapy managers themselves, as well as their staff members, what staff retention problems they were faced with and how, and if, they were trying to solve them.

As highlighted previously, according to these surveys and informal exit interviews, physiotherapists leave the South African public sector for reasons that include their dissatisfaction with their salaries, limited or non-existent opportunities for promotion and poor working conditions, including the unavailability of necessary equipment that would enable them to perform their jobs effectively and poor security at their work environments. Others reported leaving in order to experience working overseas or in the South African private sector, whilst others reported being unhappy with the way in which their institutions were managed and the poor levels of communication concerning matters that affected them in some of these institutions. Most of these reasons for leaving concurred with those that were cited by authors, such as Buchan and Dovlo (2004) and Huddart and Picazo (2003), who were mentioned earlier.

2.5.2. Other Countries

Compared to South Africa, the subject of physiotherapy retention has been explored in greater depth in international publications, particularly in countries such as Canada, Australia, the United Kingdom and the United States of America. However, as is the case with South Africa, international literature sources also have much more information on the retention of medical doctors and nurses than that of physiotherapists.

Furthermore, studies that deal specifically with the retention of physiotherapists are still fewer than those that deal with all allied health professionals. Despite this, there is clear evidence from the studies and reports that were sourced that the issue of physiotherapist retention is a problem that is faced by many countries in the world.

Due to its objectives being similar to those of this study, the findings of a physiotherapist retention study, which was conducted in Northern Ontario, Canada, will be discussed first and in some detail. This cross-sectional survey by Beggs and Noh (1991) had two primary objectives: firstly, to establish baseline information about the extent of physiotherapy retention problems in Northern Ontario; and, secondly, to identify the potentially significant factors for their retention. The authors begin by stating that the turnover of health care employees is a dynamic process in which personal, professional, occupational and environmental factors interact to affect staff morale and behaviour. Through analysing previous retention studies, they were also able to establish that there are certain demographic factors, such as age, family responsibility and, marital status, that are inversely related to staff turnover. Through their study, they were able to establish five key factors, which were directly related to their outcome measure 'intention to leave', and these were marital status, the respondents' own and their spouses' levels of satisfaction with the lifestyle of Northern Ontario, professional tenure and perceived degrees of career advancement opportunities. Indeed, the latter showed the strongest relationship with the outcome measure.

Furthermore, they established that although some personal factors, such as marital status, cannot be addressed by retention efforts, others such as lifestyle satisfaction could be easily promoted during recruitment initiatives and maintained in order to enhance retention. They felt that the professional and occupational factors that they

identified, including opportunities for career development, professional recognition and chances of promotion, could best be addressed by managers through carefully planned retention activities.

In a separate study which was published in 1993, the same authors decided to investigate the factors that caused job turnover and regional attrition among Northern Ontario physiotherapists. Once again they made some interesting findings, including the fact that age played an important role in this matter. The authors found that regional attrition was more prevalent amongst physiotherapists under the age of 30 than it was amongst those who were 40 years old and older. Educational background, particularly whether participants had a physiotherapy degree or diploma, as well as years of experience in the field, were also significant factors. In a similar manner to their previous (1991) study, opportunities for career development came up as the most significant factor for the retention of physiotherapists. Furthermore, with attrition rates being higher amongst physiotherapists working in small, community-based settings than amongst hospital-based physiotherapists, the findings supported and confirmed the earlier suggestion that place of employment (type of institution) also played a role.

One of the main conclusions that were also drawn from this study was the fact that physiotherapists are highly mobile professionals, often as a result of seeking better opportunities elsewhere. Another was their perceived lack of professional autonomy for physiotherapists as first-line practitioners, which was established as a factor that led to decreased morale and increased staff turnover,

In another Ontario physiotherapist attrition survey, Wolpert, and Yoshida (1992) established that public sector physiotherapists left their jobs largely as a result of family

responsibilities, the desire to pursue new challenges and dissatisfaction with the profession 1992). The authors further found that many of these physiotherapists had stopped working as physiotherapists, either for a period, or permanently. In the case of the former, it was mostly due to taking care of family responsibilities, such as caring of small children. In the case of those that had left permanently, most had moved on to pursue other careers. Other reasons they gave for leaving included insufficient income; stress due to high patient case loads which had been exacerbated by staff shortages; increasing demands of administrative duties; and inadequate management support. The lack of promotion opportunities and, once again, the issue of lack of professional recognition, authority and autonomy were also reported to be significant push factors. Similarly to the studies mentioned previously, these authors stated that retention strategies would have to adequately address all of these factors in order to render them effective.

In the same study, most of the physiotherapists, who reported high levels of job satisfaction and intended to stay in the public health sector, seemed to occupy predominantly management or academic positions. The authors also found that older physiotherapists, compared to younger ones, and those that had higher qualifications, also tended to report greater levels of job satisfaction than the others.

This issue of physiotherapists reclaiming their professional autonomy and identity was reiterated in another study, which dealt with issues that affect the identity of Canadian physiotherapists. The authors, Miles-Tapping et al (1992), found that physiotherapists by nature tended to be reluctant to challenge the old order in which doctors' referrals were required before they could legally treat patients. However, this did a great disservice to them and to the profession, as the authors felt that in order for

physiotherapy to gain power as an equally important profession to medicine, it had to project a strong message to the public and recruit support in its bid for power. Furthermore, they felt that this could only be achieved if the profession had a clear image of itself, as well as the image that it sought to portray to the public.

Indeed, in this same study, the majority of participating physiotherapists felt proud of their profession, particularly of the fact that they were helping people in need. However, they felt that although they provided a valuable service and physiotherapy was a good career, they were not fully appreciated, particularly by other health professionals and government health care managers, leaving them with feelings of bitterness and powerlessness. In fact, when they were asked to rate their levels of commitment to the profession from the time of graduation, one year later and after five years of working, most reported declined commitment levels over this five-year period. Another important finding from this was that due to the low average age and short experience of physiotherapists in the public sector, most of the responses they gave indicated commitment levels for the first two years only.

Still on the issue of professional recognition and prestige, and how it relates to why physiotherapists leave or stay at their work places, more interesting findings were established in a recent study on the occupational prestige of physiotherapy in Australia (Turner, 2001). In this study, the author established that in many parts of the world physiotherapy has had very little in the way of professional status granted to it by others outside the profession and this has contributed to low morale and high physiotherapy turnover levels. This includes South Africa, where physiotherapy was reported to have an inferior image amongst certain medical practitioners and laymen. Through comparisons between the responses given by various professional and lay people on

their perceptions of physiotherapy, the author was able to determine that there were high levels of ignorance amongst members of the public about the role of the profession, many stating that all they knew about the profession was that it had something to do with exercise but very little else. In a similar vein to the previous study, the author found out that physiotherapy did not have a strong public identity and most members of the public and professionals were unclear about its role and were unable to differentiate it from other allied health professions.

In the same Australian study, the author had set out to find out how laymen, students and professionals compared physiotherapists with other professionals, from the highest paid, such as doctors, judges and architects, to lower paid ones, such as cleaners and postmen. These comparisons were made against factors such as levels of education, income, responsibility, social standing and the profession's usefulness.

In terms of education, level of responsibility, social standing and level of usefulness, physiotherapists were ranked third after doctors and judges, and were higher than nurses, chiropractors and others. However, in terms of levels of income, physiotherapists were ranked sixth, which was well below doctors and judges, but on a par with chiropractors.

In conclusion, the study revealed that physiotherapy in Australia was regarded as a highly respected and recognised profession, by the public, students and professionals alike. For Australian physiotherapists this is good news, which not only has a positive implications on the future of the profession in that country, but also on their decisions to remain in the country. In comparison, previous similar studies that were referred to in this Australian study had indicated that the British public and physiotherapists did not

recognise physiotherapy as a profession of high status. Indeed, in Britain physiotherapy simply enjoyed an intermediate “lesser profession” status in terms of the Registrar General’s social class classification of occupations of 1985 (Sim, 1985).

The issue of having opportunities for career development as a definite pull factor for physiotherapists was also cited in an American study, which dealt with the job satisfaction and turnover levels of physiotherapists in Utah (Okerlund, Jackson & Parsons, 1994). Having freedom at work, as well as better pay and fringe benefits were also reported to contribute towards greater motivation levels, and hence promoted the retention of physiotherapists. Another point of view that was raised in this, as well as one of the studies mentioned previously, was that due to the many job opportunities and options available to physiotherapists, they often did not hesitate to leave organisations that did not adequately provide them with satisfactory retention opportunities.

Other factors that seem to influence the retention factors of physiotherapists include the availability of leisure and recreation activities, close proximity of families of origin, the perceived need for their services, as well as the influence of partners or spouses in the decision-making processes. These were cited as important factors by Canadian physiotherapists in another study (Solomon, Salvatori & Berry, 2001). This study also reiterated the issue of professional autonomy, which has been established by some of the previously mentioned authors (Miles-Tapping et al, 1992 and Sim, 1985) as an important source of job satisfaction for physiotherapists.

In another study that was conducted in America in order to predict the effects of intrinsic and extrinsic job satisfaction factors on the recruitment and retention of rehabilitation professionals (Randolph, 2005), it was revealed that intrinsic factors, such as

professional growth, the recognition of accomplishments and importance of including them in departmental decision-making processes, as well as having a work environment that was in line with personal values, were more significant in ensuring job satisfaction and retention than extrinsic factors, such as pay and continuing education.

From these few studies, it is clear that developed countries are also faced with the challenges of high physiotherapist turnover and ensuring their retention in public sector institutions, although most of these countries may have slightly different challenges to deal with. A case in particular is that of financial remuneration, which seems to be a very significant push and pull factor amongst physiotherapists and other health professionals in South Africa, but is hardly cited as such in first world countries (Randolph, 2005).

Finally, according to Noh and Beggs (1993), staff turnover can be beneficial for organisations as well as the individuals concerned as long as it is not too high, particularly if they are seeking opportunities for professional development. It is when the turnover levels are too high that it can be dysfunctional for an organisation because it increases costs and impacts negatively on service delivery.

2.6. Retention Strategies for Public Sector Physiotherapists

2.6.1 South Africa

As highlighted earlier, in South Africa, there seems to be an overlapping of responsibilities between the human resource department of the provincial health department, institutional human resource departments and physiotherapy managers, as far as the issue of developing strategies for the retention of physiotherapists, is concerned. Although this shared responsibility is necessary because just as there are

multiple reasons why employees leave their work, there should be multiple creative interventions to ensure their retention. Its downside, however, is that the government generally has the final say and often due to annual budgetary constraints, hospital and departmental managers may be restricted in terms of their own creativity concerning their efforts to try to reduce staff turnover levels and implement their planned retention strategies. In other words, although physiotherapy and hospital managers, who are in the best position to understand the problems and potential remedies of their individual departments and institutions respectively, may have sound retention strategies planned, their success will often only depend on whether or not there is the political will and funds available to implement and sustain those strategies. This then becomes a problem that can only be addressed by government's policies and budgetary allocations concerning these issues.

Over the years, most physiotherapy managers have made their own attempts to retain their staff. Amongst others, they recognise the importance of continuing education as an achievable motivating factor and opportunities for this are indeed prioritised in most departments. Often, this is in the form of inviting guest presenters, sometimes for a small fee, who are experts in their chosen fields of interest, to give talks on various interesting and relevant topics. Furthermore, in agreement with facility managers, opportunities for further study and specialising in various fields of physiotherapy, accompanied by generous amounts of study leave and, where necessary and agreed upon, flexible working hours are widely available to South African public sector physiotherapists in most institutions.

Many of these physiotherapy managers also recognise the importance of breaking the monotony of work and make an effort to organise regular breakaway sessions with their

staff, either to celebrate important occasions, such as birthdays, Easter and Christmas, or as team-building exercises away from work. However, due to financial constraints and the lack of dedicated funding for these types of activities, they do not occur as regularly as perhaps they ought to.

According to other physiotherapy managers, having effective mentoring programmes is not only a part of good management practice but also an essential element of ensuring staff motivation and retention. At Johannesburg Hospital, for example, this occurs in the form of senior and experienced physiotherapists being assigned the responsibility of taking younger and more junior physiotherapists under their wings to guide and support them both professionally and emotionally (Johannesburg Hospital, Physiotherapy Department, 2004). The most obvious benefit of this is that it removes the responsibility of taking care of the needs of all the staff members from the shoulders of the managers, thus preventing them from burn-out and enabling them to function effectively under pressure. Furthermore, mentoring ensures that employees feel valued, appreciated, like they always have someone to talk to, and prevents isolation. Where there is an absence of proper mentoring and support, these are some of the factors that have been reported by some South African public sector physiotherapists as their real reasons for leaving.

Planning for retention and coming up with creative ways of keeping staff members motivated and wanting to stay are clearly measures that must be carried out by managers. However, this depends on how motivated, creative and driven they themselves are, as well as their ability and willingness to lead. Unfortunately, as mentioned previously, although most of those retention strategies that have been highlighted can be, and certainly are being, carried out successfully by most managers, not all aspects of staff retention are within their control. Very often facility managers and

key decision makers in government have to get involved, especially when there are funds required, or if there is a clear staffing crisis which cannot be solved by departmental managers, such as the freezing of posts.

At the facility level, a government initiative which is largely driven by hospital managers, and may have partly contributed to the retention of physiotherapists in the institutions, has been the introduction of private wards in certain designated hospitals. These private wards called “Folateng” are the result of countywide partnerships between the public and private health sectors in the country (Cullinan, 2002). Apart from providing public sector patients with services and facilities that they would expect to receive in private hospitals, but at more affordable rates, the health professionals who work in these Folateng units benefit by earning additional financial compensation without having to leave their own work places. At Johannesburg Hospital, for example, the physiotherapists working there are able to charge locum rates to private patients treated outside normal working hours in much the same way as they would if they were working for private practitioners outside the hospital. The advantage of this is that this it is a benefit that is reserved solely for the hospital’s physiotherapists and is not available to those that do not work there. However, in-as-much as this benefit has been received very well by most of the hospital’s physiotherapists, it also has not completely stopped the exodus of physiotherapists from this hospital. Once again, the extent to which this intervention has contributed towards the retention of South African public sector physiotherapists is yet to be measured and should be explored in future studies.

Overall, the government of South Africa has developed several very good policies, many of which have been implemented, in an effort to address the serious problem of health professional shortages in the public sector and how to improve their retention.

One of these policies, as mentioned earlier, is the Human Resource for Health (HRH) Plan (Department of Health, 2006), which clearly outlines several steps that the government seeks to take to address human resource issues. However, this HRH Plan is very general in its approach and does not single out individual allied health professionals and how the government intends to address their specific problems and plans to retain them in the public sector, although it does do this very clearly for the medical doctors and nurses.

Amongst other strategic objectives, the HRH Plan clearly states the importance of providing human resources to render adequate, accessible and appropriate services equitably all over the country. It proposes that this will be done by revisiting existing recruitment criteria for health science students in order to earmark those that come from the rural areas of the country and previously disadvantaged backgrounds and deliberately making bursaries available for their tuition. Another important objective is to develop financial and non-financial incentives for health professionals in order to attract and retain them in rural areas. In addition to these, the balancing of health worker categories and recruiting more experienced ones to supervise and support those that are less experienced is also highlighted as an objective.

As mentioned earlier, one of the factors that cause physiotherapists to leave the public sector is the unavailability of the necessary equipment that would enable them to execute their duties more efficiently. As one of its strategic objectives, the HRH Plan specifically states that this problem will also be addressed. Furthermore, it states that vacant posts will be filled as a matter of urgency, and employees will be acknowledged for service excellence, both of which could address their problems of not seeing opportunities for promotion and not feeling recognised and valued as professionals of

note in the South African public sector. Equally importantly, the HRH Plan places a lot of emphasis on the importance of providing continuing education opportunities and training for health professionals as a means of ensuring their retention.

As highlighted earlier, another important retention strategy that has been driven by the government since 2004 is that of providing non-pensionable scarce skills allowances to designated health professionals, including physiotherapists, working in the public sector (Document by Public Health and Welfare Bargaining Council, 2004) This came about as a result of the government officially recognising and acknowledging some of its public health professionals, including physiotherapists, as scarce skill professionals due to the their unacceptably high turnover and unavailability, particularly in the previously disadvantaged and rural areas, where they are needed the most. For physiotherapists, this monthly scarce skills allowance is approximately 10% of the gross monthly salary. Unfortunately, it was not within the scope of this study to measure the impact and effectiveness of this intervention to date, although it would certainly be interesting to establish this in future studies. What does remain clear, however, is that despite this measure, health professionals, including physiotherapists, are continuing to leave South Africa's public sector in large numbers (Dovlo and Martineau, 2004). This suggests that although financial remuneration is important, it is not the only factor contributing towards the retention of health professionals. Seemingly, health professionals, physiotherapists included, need more than higher salaries to motivate them to remain in the South African public sector. It is one of the objectives of this study to investigate what these other factors could be.

Finally, although one of the main motivations behind introducing compulsory community service for health professionals was to improve the availability of health care services

and personnel to rural and previously disadvantaged parts of the country, it has also served as a type of retention strategy. However, although it has been an effective short-term strategy, its effectiveness and success in the long term is yet to be measured, and should certainly be given priority as a topic for future research studies. What is known at present is in the form of feedback from a group of medical doctors who, when questioned in a survey by the Health Systems Trust (Nawaal, 2003), about how their year of community service had made them feel about working for the South African public sector, mostly reported that despite its obvious benefits to the community, it had had no effect on their career plans and had merely served to delay them by a year. They further stated that the reasons why they were leaving included the lack of management, stress, work overload and emotional burnout. Owing to the similarities of the problems that are facing all health professionals in the country, one can only assume that these could be the same sentiments that would be raised by those physiotherapists that are leaving either immediately after completing community service, or shortly thereafter.

2.6.2. Other Countries

The issues of retaining public sector physiotherapists that are being faced in other countries around the world have already been highlighted. In this section, some of the retention strategies that have been suggested or implemented in some of these countries will be discussed.

Firstly, in their 1991 Northern Ontario study, which was quoted earlier, Noh and Beggs established the fact that one of the best retention strategies for those physiotherapists employed in smaller community clinics, where opportunities for career and professional advancement were relatively limited, would be to work on increasing their professional

responsibilities, autonomy and recognition. This same point of view was also expressed by Solomon, Salvatori and Berry (2001), Miles-Tapping et al (1992) and Sim (1985) in their respective studies. All of them also suggested that retention strategies would have to prioritise this matter if there was to be any success in ensuring the retention of physiotherapists.

Secondly, in their 1993 study, which investigated the causes of regional attrition amongst Northern Ontario physiotherapists, Noh and Beggs noted that due to the region's health care policies, which had started placing emphasis on community-based health care, thus increasing the demand for rehabilitation professionals, especially physiotherapists, it would be necessary to increase physiotherapy student enrolments in education facilities, exploring the use of more assistants and making provision for rehabilitation research. They further suggested that the most effective retention strategies for physiotherapists in that region would be to make provisions for student and relocation grants for physiotherapists, in addition to increasing their starting salaries. Rehabilitation managers, including physiotherapists, immediately embarked on the process of developing recruitment and retention strategies for their staff members.

In the same study, Noh and Beggs also established that although job turnover could at times be beneficial, both for the organisation and for employees seeking opportunities for personal growth, it was the high rates of job turnover that were potentially destructive for an organisation, as this often results in increased recruitment costs, particularly every time vacancies need to be advertised, and it impacts adversely on service delivery. Again, they quoted studies which had shown that having good recruitment and retention strategies often resulted in decreasing dysfunctional rates of staff turnover.

These strategies include conducting realistic job previews, developing career paths, clinical ladders and mentoring programmes.

Furthermore, they suggested that those factors that were identified to be potential retention factors for physiotherapists needed to be considered when developing retention strategies. They also stated that if health care planners were aware of those factors over which they could have some level of control and influence, such as increasing opportunities for career development, then valuable time, resources and effort would then be saved and directed towards developing strategies that would address those factors that would result in more positive outcomes for both the individual *and* the organisation.

Similarly, in his 2005 study, which was also discussed earlier, Randolph established that it was important for managers to take the intrinsic and extrinsic factors into account when planning retention strategies for qualified allied health professionals. He further specified that the role of healthcare managers in striking a balance between satisfying both intrinsic and extrinsic factors was crucial in ensuring the retention of this group of health professionals.

Finally, in their study, Canadian authors Solomon, Salvatori and Berry (2001), made the crucial discovery that physiotherapists' decision-making processes are not clear-cut and straightforward, but are instead quite complex, and managers need to take this into account when developing retention strategies.

CHAPTER 3

METHODOLOGY

3.1. Introduction

This chapter deals with the method that was used to conduct the study, as well as the preparation involved. It begins with brief descriptions of the study design, followed by descriptions of the population, study setting, sampling method employed and measuring too. Next, the pilot study is described, followed by the data collection, data management and analysis. The ethical considerations are described in the last part of the chapter.

3.2. Study Design

The study was in the form of an exploratory, descriptive cross-sectional survey, which was conducted on physiotherapists working for the South African public sector in Gauteng.

3.3. Study Population

The study population comprised all qualified physiotherapists working for the public sector in Gauteng between the months of October and December, 2006. In order to meet the selection criteria for the study, the participants had to have been qualified as physiotherapists, with either a BSc degree or diploma in physiotherapy, for at least one or more years. Therefore, community service physiotherapists, who are legally obliged to remain at their assigned work places for the full duration of one year after qualifying as physiotherapists, had to be excluded. Also excluded were physiotherapy assistants

and technicians, as they also did have physiotherapy qualifications and hence did not meet these specified inclusion requirements.

3.4. Setting

All of Gauteng's institutions where physiotherapists are employed were visited. These institutions included the tertiary hospitals, such as Johannesburg Hospital and Chris Hani Baragwanath Hospital, which are primarily academic hospitals that also provide specialist and sub-specialist patient care; the secondary level hospitals, including Kopanong Hospital and Leratong Hospital, which also provide teaching and specialist care; and the district hospitals and district services, which focus mainly on primary health care delivery and training, as well as general patient care.

Although the larger hospitals that provide tertiary and secondary level services have separate dedicated physiotherapy departments, which employ several members of staff of across all professional rankings, at district level there tends to be combined rehabilitation services, where allied health professionals work together and are managed by one rehabilitation manager. Currently in Gauteng, due to the lack of senior qualified staff to occupy existing posts, physiotherapy services at district level are provided mainly by community health physiotherapists, physiotherapy technicians and assistants.

3.5. Sampling

There were 152 registered public sector physiotherapists in Gauteng for 2006 (Gauteng Department of Health, 2006). After excluding the community service physiotherapists, the actual study population was then reduced to 93. This small number and their uneven distribution among the province's institutions made it difficult to employ standard

sampling strategies, so it was decided not to take a sample but to include all 93 physiotherapists as study participants. The total number of institutions visited was 29.

3.6. The Measuring Tool

The questionnaire was designed by the author specifically for the purpose of this study. By relying mainly on available human resource literature, as well as management experience, the questions, which were a mixture of open- and close-ended questions, were developed. The final product was a six-part questionnaire (Appendix 1), which covered issues such as the participants' demographic information, their educational and employment history, remuneration and motivational factors. In the case of the latter, a list of twenty well-researched and documented motivation and retention factors, which were sourced from the various literature resources, was provided (Armstrong, 1998). From this, participants were requested to rate their satisfaction with each of these factors at their current workplaces on a score from 1 (very unsatisfied) to 10 (very satisfied). The respondents were also asked to rate the importance of each factor as a retention strategies for physiotherapists in the South African public sector from 1 (very unimportant) to 10 (very important).

3.7. Pilot Study

The questionnaire was tested in a pilot study that was conducted at the beginning of October 2006, two weeks prior to commencing the actual survey. The primary aim of this exercise was to test the relevance of the questions, as well as allow for input in terms of improving it. This was achieved by randomly selecting three public sector physiotherapists that met the study criteria from one of the hospitals in Gauteng and asking them to assist with the evaluation of the questionnaire by not only answering the questions asked, but by also making useful notes and amending, where they deemed necessary, the questionnaire. Their written and verbal feedback proved to be highly

valuable in terms of contributing towards improving the questionnaire. These physiotherapists were not included as participants in the actual study.

3.8. Data Collection

The data collection process began by contacting the Gauteng Department of Health and asking them for lists of all the public sector healthcare institutions in Gauteng, as well as lists of names of all the registered physiotherapists in Gauteng. The latter consisted of all the physiotherapy staff establishments, which included community service physiotherapists and physiotherapy assistants. Next, after telephonically verifying the information and confirming the exact staff numbers with each institution, all community service physiotherapists and physiotherapy assistants were excluded. Thereafter, all those physiotherapists, who worked at these institutions and also qualified as participants, were selected for the study.

Following this initial preparation, all the physiotherapy departments in Gauteng were contacted telephonically in order to inform the heads of departments about the study and to organise visiting dates and times for the hand delivery of questionnaires either to them or to dedicated personnel in the departments.

Next, a data collection planning schedule, which specified the dates, times and names of all the institutions to be visited for delivery and collection of the questionnaires was developed. Generally, the purpose of this schedule was to ensure that the goal set for the delivery and collection of all questionnaires within three to four weeks could be achieved. A map of Gauteng was used to assist in the location of each institution to be visited.

In the first week, all the institutions concerned that are situated outside Johannesburg were visited for the delivery of questionnaires. Those that are situated in and around Johannesburg were visited during the course of the following week. Each questionnaire had a clear set of instructions, which informed the participants about the importance of placing completed and non-completed (blank) questionnaires back into the envelopes and sealing the envelopes. The participants were also informed that they had five working days - before collection on the fifth day - to complete the questionnaires. Both the questionnaire and a detailed study information sheet (Appendix 2) were delivered inside an A4-size envelope.

Although for a few of the Johannesburg-based institutions some questionnaires were collected before the end of the second week, the majority of collections were carried out in the third and fourth weeks. Despite mentioning to the participants that questionnaires would be collected after five days from the day of delivery, it was still necessary to contact each institution head of department telephonically prior to visiting them. By the middle of December, 2006, approximately 70% of the questionnaires had been collected, whether completed or not. The last set of questionnaires were collected at the beginning of January, 2007, bringing the number of completed ones to 76, which was a response rate of 82%. Next, the process of analysing the collected data began.

3.9. Data Management

For the data management and analysis, the statistical package STATA 9 was used. All the data was captured electronically from each questionnaire and onto the STATA 9 spreadsheet for analysis. Some of the less complex analysis was carried out on Excel in addition to illustrations and graphical presentations of the results.

3.10. Analysis

3.10.1. Qualitative Data Analysis

The responses to the open-ended questions were first recorded, then coded according to similarity and then tallied. These were then presented in terms of the number of respondents who mentioned a particular response and percentage responses in tables. Many participants had more than one response per question. This was taken into account and they had to be grouped according to similarity when the results were presented.

3.10.2. Quantitative Data Analysis

Most of the analysis in the study was descriptive and the outcomes presented in terms of number of observations, percentages and means. For key study outcomes, the 95% confidence intervals were also calculated. The chi-square test was used to evaluate the differences in proportions between groups. Due to the small study population size (only 93 physiotherapists were eligible for inclusion) the finite population correction (Narins, P. 1999) was used for the calculation of all standard errors and all statistical tests using the survey functions in Stata. A 5% level of significance was used for all statistical decisions.

The mean scores and relevant standard errors were calculated to compare the ratings for job satisfaction and the importance of different factors in the participant's current workplace. Respondents were also asked to identify and rank the five most important factors in terms of potential retention strategies. The responses were weighted from 5

(ranked first) to 1 (ranked fifth), and the sum of these weighted ranks was then used to identify the highest ranked factors overall.

Respondents were asked if they intended to stay working in the public sector in 2007. Logistic multiple regression analysis was employed in order to evaluate the association between this key dependent variable and several independent variables. Bivariate analysis in the form of the chi-squared test was used to identify potential independent variables. The final logistic regression model included age, gender, race, marital status, professional ranking, having children, possessing higher qualifications in physiotherapy, the type or level of institution, and being a breadwinner. In the case of variables with more than two categories, such as race, appropriate dummy variables were produced for inclusion in the model. The analysis is reported in the form of adjusted odds ratios, which describe the independent likelihood of one event occurring over another (Beaglehole et al, 1993). In this case, the analysis was concerned with the likelihood of staying in 2007. Again a p-value of less than 0.05 was regarded as significant for each variable.

3.11. Ethical Considerations

As this study involved the participation of qualified professionals, who understood and appreciated the value of continuing education and research, the main ethical issues to consider was to ensure that they were fully informed about the purpose of the study, as well as their rights to participate or to decline, without the risk of adverse consequences. Furthermore, they were also given the assurance that their responses would be held in strict confidentiality, and that their names, as well as those of the institutions, were not required for the study's database. In order to ensure that patient care was not

compromised in any way during this process, participants were asked to complete their questionnaires only when they were not attending to patients.

Approval to conduct this study on the premises of the institutions concerned was sought in writing and received from the persons responsible at the various institutions (Appendix 3). Ethics approval was also granted by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand (Appendix 4).

CHAPTER 4

RESULTS

4.1. Introduction

In this chapter, the results are presented in five parts. The first part summarises the basic descriptive information, including the response rate, the participants' socio-demographic profile and qualifications. The second part deals with issues surrounding the participants' overall employment history, including current, past and other employment. The next part of the results provides information regarding their current work-related decisions and motivations for the following year (2007). This is followed by the fourth part which deals with issues surrounding the participants' job satisfaction at their current workplaces, as well as how they rated and ranked certain motivation factors according to their levels of importance for physiotherapist retention. The final part presents the participants' responses concerning their knowledge of retention strategies being in place at their workplaces, as well as their general feelings and attitudes towards working in the South African public sector.

4.2. Descriptive and Demographic Data

4.2.1. Response Rate

As mentioned in the previous chapter, the total number of questionnaires delivered was 93. Of these, 87 were returned and, for reasons unknown, 6 were not. The final number of completed questionnaires collected was 76, which produced a response rate of 82% (Figure 1). 18% of the collected questionnaires were not completed and this was due to several reasons, which included participants being away on leave and others refusing to participate in the study. Others said that they simply did not have the time to complete them, despite having been given up to two weeks (or longer, where necessary) do so. Although it was not a pre-requisite of the study for these participants to give reasons why they did not complete the questionnaires, a few made brief notes on their questionnaires to state their reasons for not completing them.

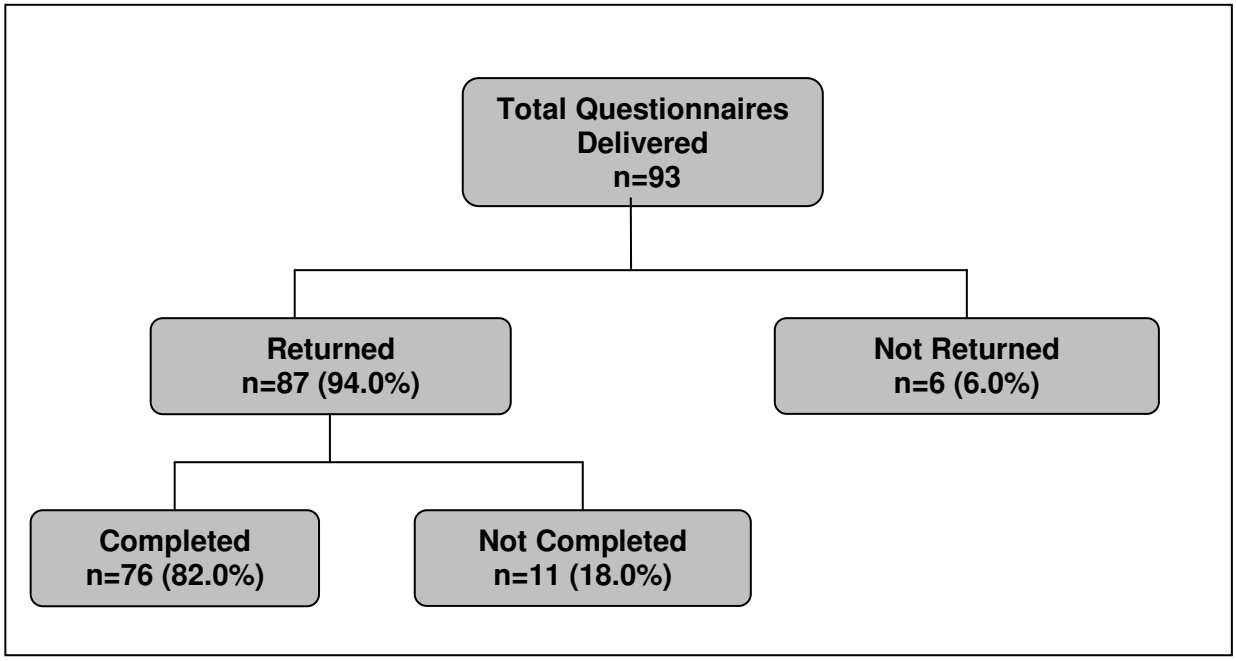

Figure 1: Response Rate

4.2.2. Socio-Demographic Information

The mean age of the respondents was 34.8 (standard deviation: 11.1), the youngest being 22.0 years old and the oldest 63.0 years old. Other key socio-demographic information is summarised in Table 2.

As the results show, 51.3% of the participants were black and 30.3% white. There was only one coloured participant in this sample. The majority, 84.2%, were female and 63.2% were married. 63.2% of respondents also reported having children. 56.6% of the participants claimed to have financial dependents, although only 38.2% were the main breadwinners in their families.

Table 2: Socio-demographic Information (n=76)

Variable		No. of Participants	% Participants
Race	**Black**	39	51.3%
	White	23	30.3%
	Asian	13	17.1%
	Coloured	1	1.3%
Gender	**Male**	12	15.8%
	Female	64	84.2%
Marital Status	**Married**	48	63.2%
	Single	27	35.5%
	Divorced	1	1.3%
Participants with Children	**Yes**	48	63.2%
	No	28	36.8%
Participants with financial dependents	**Yes**	43	56.6%
	No	33	43.4%
Family breadwinners	**Yes**	29	38.2%
	No	47	61.8%

4.2.3. Education and Qualifications

When participants were asked questions about their education and qualifications, the results revealed that 84.2% of them had BSc degrees in physiotherapy and 15.5% diplomas in physiotherapy (Table 3).

Of those who had physiotherapy diplomas, 83.0% were females and all had qualified as physiotherapists before 1985. At 26.3%, it was only a relatively few respondents who already had postgraduate degrees in physiotherapy, and 6.6% who said that they were

currently pursuing them. Furthermore, 21.0% of the respondents already had other qualifications besides physiotherapy.

Table 3: Educational Information (n=76)

Variable		No. of Participants	% Participants
Undergraduate physiotherapy qualification	**Diploma**	12	15.8%
	BSc Degree	64	84.2%
With postgraduate physiotherapy qualification	**Yes**	20	26.3%
	No	51	67.1%
	Currently Pursuing	5	6.6%
Additional qualifications other than physiotherapy	**Yes**	16	21.0%
	No	55	72.4%
	Currently Pursuing	5	6.6%

Various reasons for pursuing further studies in either physiotherapy or other qualifications were expressed by the participants. These are summarised in Tables 4 and 5.

Table 4: Reasons for Pursuing Postgraduate Studies in Physiotherapy (n=25)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
To improve clinical knowledge and skills	12	48.0%
To gain expertise in specific field, i.e. specialise	11	44.0%
For personal growth and fulfilment	3	12.0%
To improve professional status and chances of promotion and better pay	3	12.0%

The results, as seen in Table 4, revealed that 48.0% of the respondents who already had or were currently pursuing physiotherapy postgraduate studies were doing so in order to improve their clinical knowledge, skills and reasoning, as well as to keep

abreast of changes and developments within the profession. 44.0% stated that they wanted to specialise in a specific field of physiotherapy, expressed their interest in understanding injuries and pathology more. Some of these said that they wanted to pursue more academic careers in order to become lecturers. 12.0% of the participants reported that having postgraduate physiotherapy qualifications would enhance their professional status.

Table 5: Reasons for Pursuing Studies other than Physiotherapy (n=21)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
To change my profession	9	42.9%
I already had the qualification before studying physiotherapy	5	23.8%
To advance my career within the public health sector e.g. management	3	14.3%
For self development and personal interest	3	14.3%

Table 5 shows that, of those participants who had already completed or were in the process of pursuing studies other than physiotherapy, 42.9% reported doing so in order to leave the profession completely. These other qualifications included Bachelor of Commerce (BCom) degrees and business management. 23.8% stated having already had other qualifications before studying towards physiotherapy degrees. A further 14.3% stated that they simply wanted to advance their careers into higher levels whilst remaining within the health sector, particularly in healthcare management, policy development and quality assurance. Lastly, another 14.3% of respondents were pursuing other qualifications simply out of interest, or for self development and growth. Those that were reported included short courses in '"entrepreneurship" in order to develop business skills which they thought they could use in the future, and fire-fighting.

4.3. Employment and Remuneration

4.3.1. Current Employment

Participants were also asked various questions about their current work place, including the number of years that they had been working there, the type of institution, their professional ranking, as well as their general feelings about where they were working. The mean number of years worked was 3.1 years (standard deviation:6.0), and 44.0% of all respondents had been working at their current work places for less than one year, whilst one respondent had been working for 30.0 years.

As illustrated in Table 6, 56.6% of respondents were employed at the tertiary and academic hospitals, followed by 25.0% at the secondary level hospitals. At 94.7%, most of them were full- time employees. In terms of professional ranking, 43.4% of the respondents were senior physiotherapists, followed by 32.9% who were chief physiotherapists. Since assistant director positions for physiotherapists exist primarily at tertiary institution levels, these were predictably very few at only 7.9%.

Table 6: Current Employment Information (n=76)

Variable		No. of Participants	% Participants
Current Institution Level	**District Services**	6	7.9%
	District Hospital	8	10.5%
	Regional/ 2º Level Hospital	19	25.0%
	Tertiary and Academic Hospital	43	56.6%
Type of Employment	**Full-time**	72	94.7%
	Part-time	4	5.3%
	Junior physiotherapists	12	15.8%

	Senior physiotherapists	33	43.4%
	Chief physiotherapists	25	32.9%
	Assistant Directors	6	7.9%

Once again, a wide variety of reasons for working at their current workplace were given, as summarised in Table 7.

Table 7: Reasons for Working at Current Work Place (n=76)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
The public sector is best for gaining experience and developing skills. Especially the academic and tertiary hospitals	26	34.2%
I work close to where I stay, therefore it is convenient in terms of travel	25	32.9%
I enjoy working here and I like the work environment, team work and support	12	15.8%
I am hoping to get a promotion soon here	2	2.6%
I am currently stationed in an area that I wish to specialise in	2	2.6%
I need the income	2	2.6%
I have no better options	1	1.3%

The results, as illustrated in the table above, revealed that 34.2% of the respondents were working at their current workplaces in order to gain experience in physiotherapy, as there were opportunities for continuing professional development as well as a wide variety of conditions to treat. The same group also said that they wanted to develop their skills further and that the public sector provided the best opportunity for this, particularly at tertiary and academic facilities for this. 32.9% stated that since they did not live very far from where they worked, it provided more travel convenience for them. A few respondents (2.0%) also stated that they needed the financial stability that came with working in the public sector, despite the low salaries.

4.3.2. Current Financial Remuneration

In terms of gross monthly salary, 36.8% of the participants earned between R7, 001 and R9, 000, which is the salary range for senior physiotherapists in the South African public sector. These were followed closely by the chief physiotherapists, who earn between R9, 001 and R11, 000 (Table 8).

Table 8: Summary of Financial Remuneration (n=76)

Variable	Salary Range	No. of Participants	% Participants
Gross monthly salary	**<R5000**	1	1.3%
	R5001-R7000	14	18.4%
	R7001-R9000	28	36.8%
	R9001-R11000	24	31.6%
	>R11000	9	11.8%

4.3.3. Other Employment for Financial Remuneration

Next, in order to try to get an indication of the extent to which poor salaries are a factor that causes physiotherapists to leave the South African public sector ,and if indeed they are, it was necessary to find out how many of them felt the need to have additional jobs and why. As shown in Table 9, below, 60.5% [95% CI:55.6;65.2] of the respondents said that they did have other jobs as physiotherapists, and 96% of these were in the private sector, including the Folateng private wards in certain designated hospitals.

Table 9: Respondents with Additional Employment (n=76)

Staying in 2007	No. of Respondents	% Respondents	95% Confidence Interval

yes	46	60.5%	55.5 – 65.2
no	30	39.5%	34.8 – 44.4

Several reasons for having additional paid work were given, the most common of which was to supplement low salaries. Other respondents reported wanting to gain experience working in the private sector, some stating that they needed to do this before they decided to leave the public sector for good. A few stated that they felt that they needed to work in different work environments in order to expose themselves to a wider variety of conditions and to break the monotony of working in the same work environment, with the same people. These reasons are summarised in table 10 below.

Table 10: Reasons for Additional Work for Pay (n=46)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
To supplement my low income	38	82.6%
To gain experience in the Private Sector	5	10.9%
For work diversity and to break job monotony	2	4.3%

4.3.4. Leaving and Returning to the Public Sector

When the participants were asked about whether they had ever stopped working for the South African public sector for any length of time, 68.9% of the respondents stated that they had never taken a break off work for any length of time. The remaining 31.1% (25 respondents) who had broken service for various reasons were asked to explain why they left. A summary of some of the reasons given is shown in Table 11 below.

As the results in Table 11 show, 40.0% of the respondents' reasons were related to family responsibilities, such as spending time to have and raise small children. 36.0%

went to try out work in the private sector and 8.0% tried to set up their own private practices mainly due to dissatisfaction with the low salaries that they were getting in the public sector.

Table 11: Reasons for Breaking Service (n=25)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
To attend to family responsibilities	10	40.0%
I went to work for someone in the private sector	9	36.0%
I got married and had to relocate between provinces	2	8.0%
I went to work overseas	2	8.0%
I tried setting up my own private practice	2	8.0%

Similarly, the reasons given by these respondents to explain why they had all decided to return to work in the South African public sector are summarised in Table 12 below. As in the tables above, some respondents gave more than one reason as they were encouraged to elaborate on their responses.

Table 12: Reasons for Returning to the Public Sector (n=25)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
For the financial stability in the public sector, especially since starting a family	7	28.0%
I was disappointed with the private sector.	7	28.0%
I find it convenient to travel to work here	4	16.0%
The public sector has good benefits, including more flexible working hours than in private	4	16.0%
My business plans did not succeed. Setting up a private practice is difficult	2	8.0%
I came back to study and to keep in touch with the changes within the profession	2	8.0%

As the results in Table 12 show, 28.0% of the respondents who had left the South African public sector returned because they felt that it provided them with greater financial stability than other alternatives, particularly in the case of those that had new family responsibilities, such as spouses and children. Another 28.0% responded that they had gone out to try their luck in the private sector but expressed their disappointment by stating that "the grass was not greener on the other side". Some explained that in the private sector they had to work longer hours; the patients and doctors were difficult and they had to take responsibility for their own continuing professional development, including paying for their own courses, with no subsidies from the practice owners. Others returned for reasons such as travel convenience, good fringe benefits despite low salaries and to pursue further studies.

4.3.5. Employment Tenure

The mean number of years employed in the South African public sector as a whole was 9.3 years, the shortest being 0.6 years and the longest 42.0 years (Table 13).

Compared to 44.3% of the female participants, only 27.3% of the male participants had worked for 9 years or more. None of the male participants had been employed by the South African public sector for more than 20 years.

Table 13: Total Years Employed in the South African Public Sector (n=76)

No. of Participants	Mean Years	Standard Deviation	Minimum Number of Years	Maximum Number of Years
76	9.3	8.2	0.6	42.0

4.4. Staying or Leaving in 2007

4.4.1. Leaving or Staying at the Current Workplace in 2007

In order to gain further understanding about what caused some physiotherapists to leave and others to stay at in the South African public sector, the author decided to ask them about whether they intended to stay for the duration of the following year, 2007 or not, in the hope that this and the reasons given would achieve this objective (Table 14).

Table 14: Respondents Intending to Stay or Not Stay at their Current Workplaces in 2007 (n=76)

Staying in 2007	No. of Respondents	% Respondents	95% Confidence Interval
yes	42	55.3%	50.3 - 60.1
no	12	15.8%	12.5 - 19.7
not sure	22	29.0%	24.7 - 33.6

As the table above shows, 55.3% [95% CI: 50.3; 60.1] of the respondents said that they did intend to remain at their current workplaces for the duration of 2007. On the other hand, 29.0% said that they were 'not sure'.

4.4.2. Motivations for Staying in 2007

Various reasons for staying in 2007 were given (Table 15), including those that have already been mentioned in the previous section, such as enjoying the work environment, travel convenience and gaining experience. Once again, 11.9% of the respondents stated that they were staying for the financial stability that was afforded them in the public sector. 9.5% felt that they were too old to leave, had invested many years in the public sector and would simply wait for their retirement. A few respondents had government bursary obligations which required them to remain in the public sector for a specified period of time. Other respondents stated that they felt called to the

profession and enjoyed helping underprivileged people, and that they would remain in the public sector for these reasons.

Table 15: Reasons for Staying at Current Workplace in 2007 (n=42)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
I enjoy the work environment and have found no reason to leave so far	7	16.7%
This is a good place for gaining Physiotherapy experience.	6	14.3%
I enjoy the work, regardless of institution.	4	9.5%
I am too old to go anywhere. I am waiting to get my pension	4	9.5%
I am completing further studies.	3	7.1%
I must pay for my government bursary	3	7.1%
Other	3	7.1%

In terms of those who were definitely leaving, or not sure if they were staying or leaving, Table 16 below, reveals that 23.3% of the respondents who were definitely not staying in 2007 reported reasons such as job dissatisfaction, frustration and lack of fulfilment. 15% stated that they simply needed a change of working environment, whereas 13.3% felt that there were no promotion opportunities for them at their current workplaces. A further 13.3% reported low salaries as their reasons for leaving.

Some of those who were not sure if they were staying or leaving said that it depended on a variety of factors, including whether they would get promoted or get part-time posts within their current institutions. Others stated that if physiotherapist salaries and working conditions, such as poor management and lack of supervision, did not improve in 2007, they would definitely consider leaving.

Table 16: Reasons for Not Staying or Not Sure if Staying at Current Workplace in 2007 (n=34)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
I feel frustrated and unfulfilled. There is no job satisfaction for me here	7	20.5%
There are no promotion opportunities here.	4	11.8%
My salary is too low	4	11.8%
I am going to look for a job in the Private sector	4	11.8%
There are inadequate and insufficient resources – equipment and staff	3	8.8%
other	3	8.8%
I applied for a higher position. I shall stay only if I get it.	2	5.9%
I need a change of environment	2	5.9%
I receive no support from my supervisors and management.	1	2.9%

4.4.3. Characteristics of Participants Intending to Stay in the Public Sector in 2007

Another objective of the study was to try to establish if there are any significant characteristics about the physiotherapists who chose to remain at their current workplaces in 2007. In addition to some of the factors that have been mentioned previously, such as tenure in the South African public service and reasons for returning after leaving, it was felt that this information, including the participants' reasons, would also be useful and relevant information in this regard.

The key outcome variable, "Intention to Stay in 2007", was measured against nine selected variables, namely gender, age, race, marital status, being a breadwinner,

having children, having postgraduate physiotherapy qualifications, professional ranking and institution level. Multiple logistic regression was used to determine the significance of the independent predictors of intending to stay in the public sector in 2007. These results are summarised in Table 17 below, with the comparison groups for each variable shown for completeness.

The results of the logistic regression analysis reveal several interesting findings. Firstly, there is clear evidence that race, marital status, being the family breadwinner and age are significant determinants of whether the study participants intended to stay at their current workplaces in 2007. However, other factors such as gender, having children, type of institution, professional ranking and whether or not participants have postgraduate qualifications were not statistically significant. Interestingly, though, in terms of odds ratios, the female participants and those that have children seem to be twice as likely as their counterparts to stay.

Table 17: Association of Intention to Stay in 2007 and Different Participant Characteristics using Logistic Regression

Variable	Category	Odds Ratio	95% CI		P-value
			Lower limit	Upper limit	
Gender	Females	2.0	1.0	4.2	0.055
	Males	1.0	-	-	-
Race	Whites	3.0	1.5	6.1	0.003
	Asians	0.2	0.1	0.4	<0.001
	Blacks	1.0	-	-	-
Marital Status	Married	0.4	0.2	0.7	0.004
	Single	1.0	-	-	-
Having Children	Children	1.7	0.8	3.6	0.150
	No children	1.0	-	-	-
Being Family Breadwinner	Breadwinner	2.6	1.4	4.9	0.002
	Not breadwinner	1.0	-	-	-
Type of Institution	Tertiary and academic institutions	0.9	0.7	1.1	0.302
	Non-tertiary institutions and district services	1.0	-	-	-
Professional Ranking	Assistant director/ chief physiotherapist	1.3	0.9	1.8	0.152
	Junior/senior physiotherapist	1.0	-	-	-
Age	31 years old and older (≥ 31)	4.6	2.4	8.5	<0.001
	30 years old and younger (≤ 30)	1.0	-	-	-
Postgraduate Physiotherapy Qualification	With postgraduate physiotherapy qualification	1.3	0.7	2.2	0.353
	No postgraduate physiotherapy qualification	1.0	-	-	-

4.5. Job Satisfaction

4.5.1. Levels of Job Satisfaction at Current Workplaces

Participants were asked to rate how satisfied they were at their current workplaces with each of the motivation and retention factors listed in the questionnaire, using a rating between 1 (very dissatisfied) and 10 (very satisfied). The mean satisfaction level and 95% confidence interval for each factor are represented in Figure 2 below. The values can be interpreted in comparison to a mean of 5.0, so that ratings below 5.0 indicate those factors where, overall, respondents were dissatisfied with the current situation.

As the figure shows, benefits such as leave and having medical aid, team work, having the support of colleagues and pension benefits received relatively high mean satisfaction ratings between 6.2 and 7.2. On the other hand, many respondents were dissatisfied with their current salaries and lack of promotion opportunities, which had mean satisfaction ratings of 3.1 and 3.2, respectively. Not feeling valued, the lack of recognition of their professional status and good performance, as well as the lack of career development opportunities, also all received low ratings between 4.3 and 4.6. Interestingly, the scarce skills allowance also had a relatively low mean satisfaction rating of 4.3.

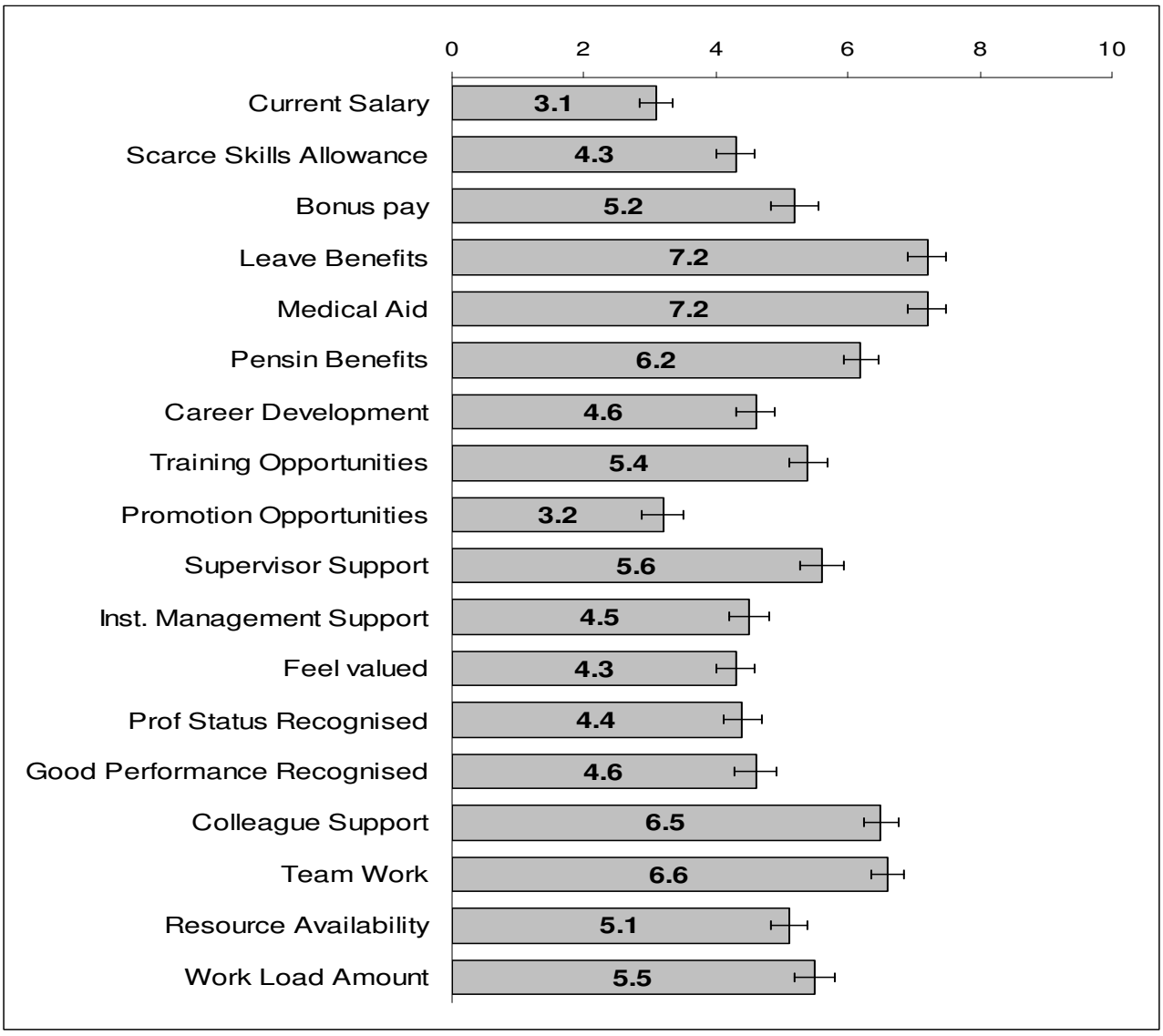

Figure 2: Illustration of Mean Satisfaction Levels (n=76)

Shaded bars represent and are labelled with the mean satisfaction for each factor, the error bars represent the 95% confidence interval of the mean.

4.5.2. Rating Importance of Motivation Factors for Retention

The participants were then asked to rate each of these factors according to how important they perceived it to be as an effective and essential retention factor for physiotherapists in the South African public sector, on a scale from 1 (very unimportant)

to 10 (very important). Once again, mean levels of importance, and the 95% confidence intervals of each are shown in Figure 3.

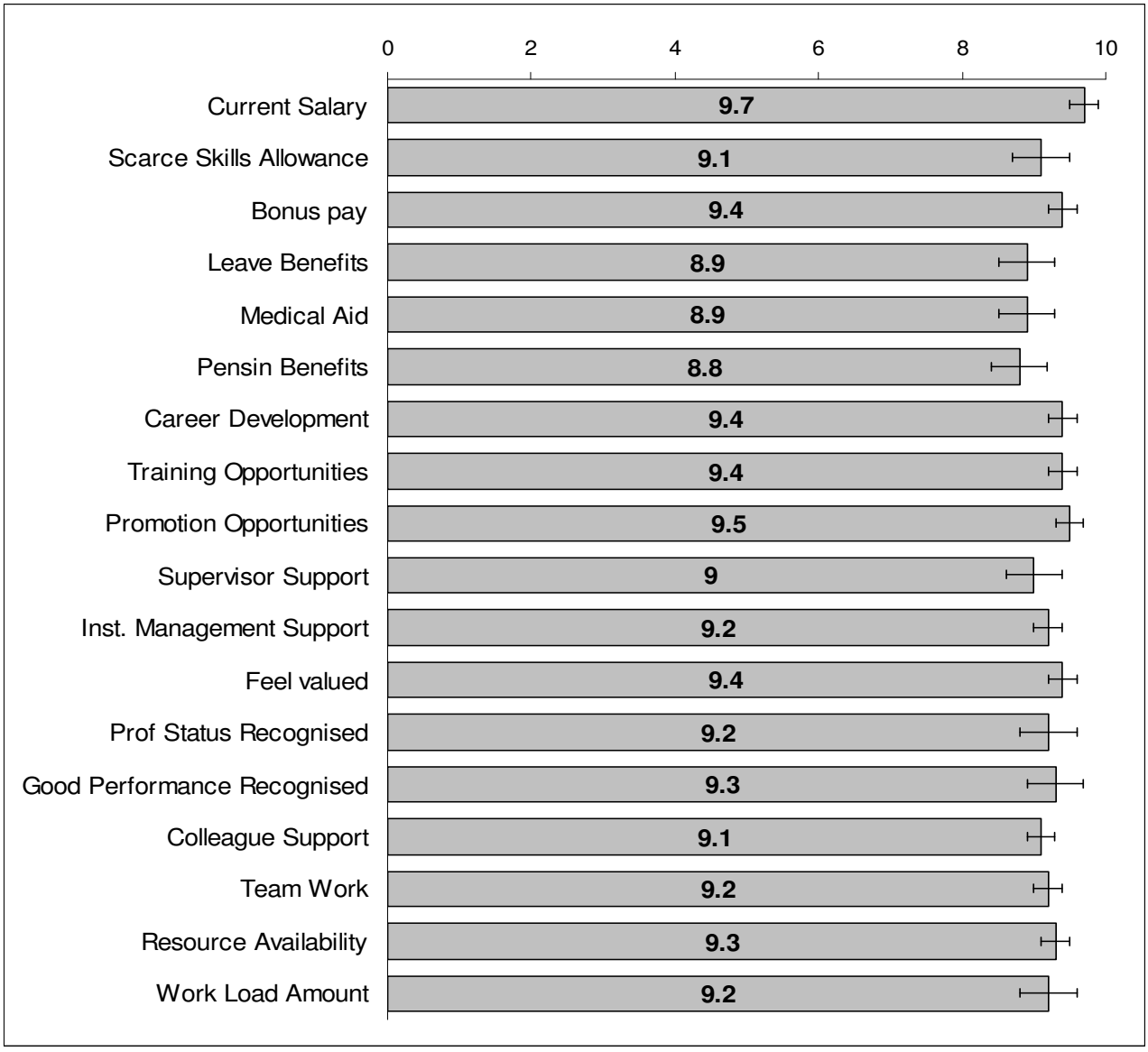

Figure 3: Illustration of Mean Levels of Importance (n=76)

Shaded bars represent and are labelled with the mean satisfaction for each factor, the error bars represent the 95% confidence interval of the mean.

As expected, most of the participants rated all the factors very high in terms of their levels of importance. Salaries received the highest mean importance rating of 9.6, followed very closely by factors, such as promotion opportunities and feeling valued, which both received a mean importance rating of 9.5. Career development and training

opportunities were also regarded as relatively important by participants with mean importance ratings of 9.4. Interestingly, standard benefits such as Medical Aid, Leave and Pension received relatively lower ratings of between 8.8 and 8.9.

4.5.3. Ranking of Motivation Factors According to Level of Importance

Anticipating that respondents might rate all factors equally highly, they were also asked to rank, in order, the five most important motivational factors. The ranks received for each factor and the weighted total ranking (see Chapter 3) are shown in Table 18.

With a total weighted ranking score of 320, better salaries was clearly identified as the most important factor. This was more than double the score of 133 for the second most important factor, which was the availability of promotion opportunities. With a score of 128, career development opportunities were ranked as the third most important retention factor overall, followed by training and opportunities for continuing education, which had a score of 78. Receiving a scarce skills allowance was, in this case, ranked as the fifth most important factor for the retention of physiotherapists in the South African public sector. Interestingly, factors such as having the support of supervisors, management and colleagues were ranked relatively low.

Table 18: Respondents' Ranking of the Importance of Motivational Factors for Retention

Factor	No. of Ranking Votes Received					Weighted Ranking Score
	First	Second	Third	Fourth	Fifth	
Better Salary	53	7	5	6	0	320
Promotion Opportunities	5	12	11	11	5	133
Career Development	6	15	9	4	3	128
Training and CPD Opportunities	2	5	9	7	7	78
Scarce Skills Allowance	0	12	4	4	1	69
Bonus Benefits	1	6	7	3	7	63
Leave	5	2	5	3	3	57
Feeling Valued	2	4	0	5	5	41
Availability of Required Resources	0	4	2	5	8	40
Team Work	0	2	6	5	4	40
Recognition of Professional Status	0	2	5	5	4	37
Recognition of Good Performance	0	0	4	7	5	31
Work Load	1	1	2	4	7	30
Medical Aid	1	0	2	2	6	21
Support by Supervisors	0	0	2	4	3	17
Pension Fund Benefit	0	2	1	0	2	13
Support by Colleagues	0	1	1	0	5	12
Support by Management	0	1	1	1	1	10

4.6. Knowledge of Retention Strategies and Attitudes towards Public Sector Employment

4.6.1. Participants' Knowledge of their Institutions' Retention Strategies

Respondents were also questioned about whether they knew if their departments had retention strategies in place or not. As illustrated in Figure 4 below, 71.0% stated that they did not know of any being in place. This included a 60.0% of the chief physiotherapists and 67.0% of the assistant directors who participated in the study.

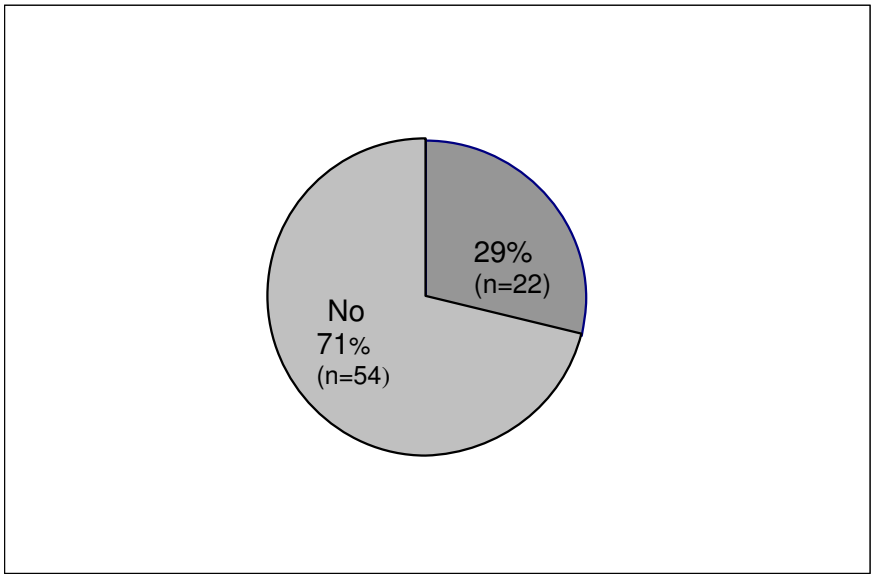

Figure 4: Participants' Knowledge of the Existence of Retention Strategies in their Departments (n=76)

Only 29.0% reported any knowledge of the existence of retention strategies in their institutions or departments. As shown in Table 19 below, 45.0% of the responses were the scarce skills allowance

Table 19: Physiotherapist Retention Strategies Known (n= 20)

Retention Strategy	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
Scarce skills allowance	9	45.0%
Folateng private practice	5	25.0%
Managers motivating for more posts and internal promotions	4	20.0%
CPD opportunities	3	15.0%
Service bonus	1	5.0%

4.6.2. Recommending Employment as a Physiotherapist in the South African Public Sector

Finally, in order to further gain an understanding of how the participants really felt about working as physiotherapists for the South African public sector, a question about whether or not they would recommend working as physiotherapists in the South African public sector to their colleagues outside was asked (Figure 5).

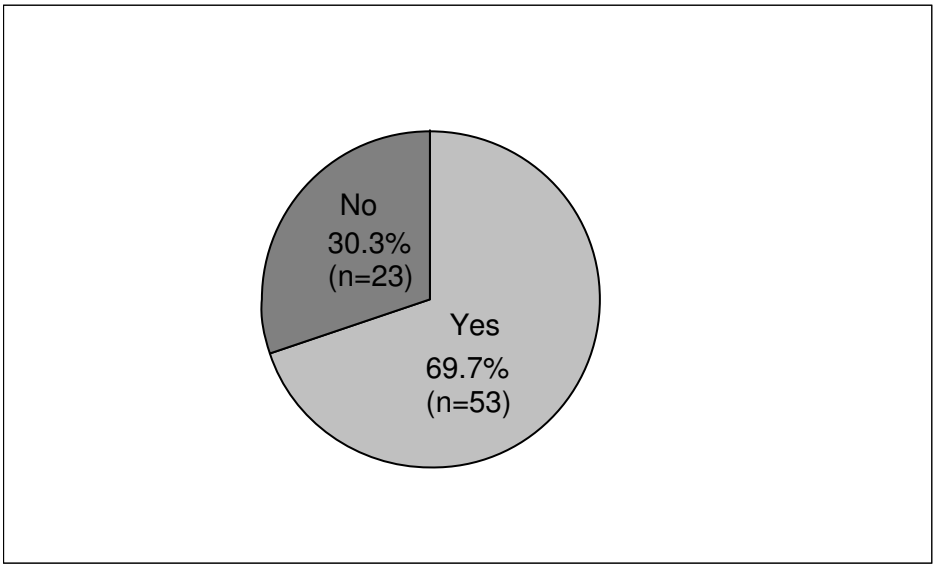

Figure 5: Recommending Physiotherapy in the SA Public Sector (n=76)

As illustrated above, 69.7% (53 respondents) felt that they would definitely recommend working as a physiotherapist in the South African public sector to their colleagues. On the other hand, 30.3% said that they would not do so. The reasons listed for the former response included the fact that they felt that the public sector was a better place to gain experience in physiotherapy than the private sector, particularly for newly qualified physiotherapists. They stated that the reason for this was that the public sector offered a wider variety of conditions to treat, in addition to opportunities for continuous learning from members of multidisciplinary teams, as well as supervisor support. These they said were lacking in the private sector, which they felt was also more cutthroat and had a general focus of making as much money as quickly as possible. However, 12.0% of the respondents felt that in order to experience the benefits of working in the South African public sector, physiotherapists were better off working in the tertiary and academic hospitals instead of district hospitals, where they felt opportunities to learn and improve oneself professionally were limited due to staff shortages and lack of adequate supervision and continuing professional development (CPD) support. These reasons are summarised below in Table 20 below.

Table 20: Reasons for Recommending Physiotherapy Employment in the SA Public Sector (n=49)

Most Common Reasons "Yes"	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
The public sector is best for gaining experience in Physiotherapy	22	45.0%
One can work in a supportive multidisciplinary environment	7	14.0%
It depends on the institution. Tertiary and Academic institutions are best	6	12.0%
The public sector provides better more security and satisfaction than the private sector	4	8.0%

Similarly, the reasons why some respondents said that they would not recommend physiotherapy employment in the South African public sector are summarised in Table 21 below. Once again, the most common reason cited was the low salaries, followed by the lack of promotion opportunities. 14.0% of the respondents stated that the work environment in South African public sector health institutions was so stressful and frustrating that they would never recommend it to any of their physiotherapist colleagues. However, a few of these respondents also stated that they agreed with the former group that the public sector provided better learning opportunities and excellent work experience, but were upset with the fact that they had to go through four rigorous years of university studies, followed by community service, only to get paid poor salaries and receive no recognition. For this reason, they felt that working for the South African public sector was not worth it and they would not recommend it to other physiotherapists, as they did not want them to feel their kind of frustration.

Table 21: Reasons for Not Recommending Physiotherapy Employment in the SA Public Sector (n=21)

Reasons	No. of Respondents Mentioning Reason	% of Respondents Mentioning Reason
Salaries in the SA public sector are very low	9	43.0%
There are no promotion opportunities	4	19.0%
The work and environment can be frustrating and emotionally stressful	3	14.0%
Physiotherapists in the SA public sector are neither valued nor recognised as professionals	3	14.0%
The private sector is a better for employer in terms of all reasons mentioned above	1	5.0%

CHAPTER 5

DISCUSSION

5.1. Introduction

In this chapter, there will be an overall discussion of the study results, which will begin with an overview of some of the more descriptive results will be given. This will be followed by a discussion of the key findings concerning the reasons why the participants choose to either stay or leave in 2007. Next, the results of the job satisfaction rating and importance ranking will be discussed, which will be followed by the findings from the knowledge, attitudes and opinions section of the study. The limitations to the study will also be presented and discussed at the end of this chapter.

5.2. General Demographic and Socio-Economic Findings

Being a traditionally female dominated profession in most parts of the world, including South Africa, it was not surprising to find that, at 84.2%, there were more female participants than males. Also consistent with physiotherapist samples in other international studies, the majority of participants (68.4%) were under the age of 35 years. In the study from Northern Ontario mentioned previously, for example, approximately 80.6% of all physiotherapists were female and 52% were under the age of 35 (Beggs and Noh, 1991). Similarly, in terms of marital status, 63.2% of the participants in this study reported being married, compared to 70.9% in the Canadian study (Beggs and Noh, 1991).

Racially, with 51.3% of the participants being black, 30.3% being white and 17.1% of Asian descent, the sample was not quite representative of the racial demographics of the country or Gauteng. In Gauteng, black people form about 74% of the province's population, followed by whites at 20%, coloureds at 4% and Asians at 3% (Census, 2001). The country's racial demographics are also quite similar. Although it may seem that these demographic results do not have clear or direct relevance to the subject of staff retention, they do however serve to confirm that there are still not enough black physiotherapists, which is a matter that was discussed in Chapter 2. Secondly, demographic information is important in terms of ensuring that the country's employment equity standards are adequately met during staff recruitment and promotion initiatives.

In terms of financial compensation, most of the participants earned gross monthly salaries between R7, 000 and R9, 000 which is in line with what senior physiotherapists in the South African public sector, who also made up the highest percentage of participants, earn. Furthermore, the results revealed that 56.6% of all the participants had people who depended on them financially. However, on further investigation, only 38.2% of the participants were the breadwinners in their families, which is not surprising, given the fact that most of them were married females, and in most South African households the male spouse continues to be the primary breadwinner (Budlender, 2002).

The results from the job satisfaction rating and participants' responses also revealed that the issue of dissatisfaction with salaries for South African public sector health professionals, including physiotherapists, continues to contribute to the country's high turnover levels. Most of them reported being unhappy with their salaries, including those

that chose to stay, and they felt that they deserved more market-related salaries and, which are also in line with their BSc degree qualifications. Similarly, the findings of the available retention studies quoted earlier reveal that salaries are also reported to be very significant for ensuring the retention of physiotherapists (Beggs and Noh, 1991; Wolpert and Yoshida, 1992).

5.3. Education and Qualifications

As in most other counties in the world, physiotherapy is offered as a four year degree qualification in South Africa. However, this is a change that took place as recently as the early 1980's. Indeed, before 1984, physiotherapy in South Africa was offered as a diploma course, which as mentioned before, was mainly offered at those tertiary institutions that were reserved for white people according to the past segregation laws of the country (Mbambo, 2004). The results of this are somewhat reflected in this study, where 15.5% of the participants have physiotherapy diplomas. All of these participants, both black and white, qualified as physiotherapists before 1985. At 84.2%, the percentage of physiotherapists with Bachelors degrees was consistent with that of countries, such as Australia, where between 80 to 100% of all qualified physiotherapists have undergraduate degrees or higher (O'Kane and Curry, 2002).

The value of engaging in continuing professional education and evidence-based research are some of the issues that most physiotherapists in South Africa embrace. Although the results reveal that only 26.3% have postgraduate qualifications in physiotherapy and a further 6.6% are currently pursuing them, there are many more physiotherapists who possess certificates for various continuing education short courses. However, for the purpose of this study, specific details on these were not required.

In terms of qualifications other than physiotherapy, almost a third of all participants either already had, or were currently pursuing, them. However, with further investigation, 25% of the former had left other professions or careers in favour of a degree in physiotherapy. On the other hand, a relatively high 45% of those that either had or were currently pursuing other qualifications were doing so with clear intentions of leaving the profession. The two most common alternative qualifications cited were the Bachelor of Commerce (BCom) and Masters in Business Administration (MBA) degrees. In South Africa, professionals possessing these qualifications are generally guaranteed better paying jobs and provide wider scopes of practice in industries and sectors other than physiotherapy.

5.4. Employment

The fact that physiotherapists are quite a mobile group of professionals, which was mentioned in one of the Canadian studies cited earlier (Miles-Tapping et al, 1992), is confirmed by the relatively low mean number of years worked by the participants of this study. According to that study, physiotherapists generally tend to have short work experiences from the time that they graduate to the time that they leave their public sector jobs. Furthermore, due to their mobility, which is not necessarily from the public to other sectors, but is often from one public sector institution to another, 43.3% of all participants had been employed at their current workplaces for less than one year. Since community service physiotherapists were excluded as participants, this is a reliable figure, as it suggests that there is indeed a fair amount of mobility amongst physiotherapists between public sector institutions.

Most of the participants (56.6%) were employed in the tertiary and central academic hospitals, which are situated in the major city centres of Gauteng. Only 10.5% and 7.9% were employed in district hospitals and for district services, respectively, both of which involve working in the semi-urban to “rural” parts of Gauteng. Again, this seems to be a phenomenon that is common in Australia (O’Kane and Curry, 2002), where the authors attributed it to factors such as possible professional preferences, the lack of dedicated positions in rural and remote locations and the possible flexible work environments that suit physiotherapists in the more urban locations. In the case of the participants of this study, those who worked in district hospitals and services gave reasons, such as enjoying community-based physiotherapy and helping people who live in previously disadvantaged areas.

The two most common reasons cited by the participants for working where they were currently working were in order to gain professional experience and for travel convenience. These reasons are consistent with some of the reasons given by physiotherapists in some of the studies quoted earlier on in the report. In the case of the Northern Ontario physiotherapists (Beggs and Noh, 1991), similar reasons of family proximity and improving academic credentials were given. Other similarities in reasons included job satisfaction and promotion prospects.

According to Noh and Beggs (1991), longer tenured employees tend to be among the more stable staff members of an organisation. From this study, the average number of years worked by the participants in the South African public sector was 9 years, the shortest duration being 16 months and the longest 42 years. 44.3% of the participants who had been employed for 9 or more years were women, compared to only 27.3% of the men.

These findings include the 31.1% of participants who stated that they had stopped working for a period of time, and decided to return to the South African public sector according to the results, the majority of them had done so in order to attend to family responsibilities, particularly having and raising small children.

As far as having additional sources of remuneration, one of the key findings of this study was the fact that 60.5% of all participants in this study reported having other paid jobs in outside their full-time employment, most of them citing the supplementation of their monthly incomes as reasons. Most of them worked for private physiotherapists outside and others worked in the Folateng wards after working hours on weekdays or weekends. This is a large percentage of the public sector physiotherapist workforce, and the implication of this is that there are probably many physiotherapists that are not performing their work duties optimally at their permanent workplaces due to the potentially high stress levels and burn-out that arise from working these extra hours. This is also a potential cause of frequent absenteeism, which is often a direct consequence of elevated stress levels and fatigue. The result of frequent absenteeism can be loss of productivity and disruptions to proper service delivery, which has been reported on in several studies on nursing staff who work for additional remuneration at places other than their permanent jobs (Cullinan, 2006).

5.5. Staying in 2007

The participants' responses when asked about whether they intended to stay at their current work places in 2007 or not, as well as the results of the ranking analysis, provided some of the most valuable and relevant information to what the study sought

to achieve, which was to determine the factors that influence the retention of South African public sector physiotherapists.

55.3% of all respondents reported that they did have intentions of staying at their current workplaces throughout the following year of 2007. Furthermore, according to the results of the logistic regression analysis, those participants over the age of 31 were almost five times more likely to stay than those under the age of 31. This result is similar to that which was reported by Noh and Beggs (1993) in one of their Northern Ontario studies, where they found that levels of physiotherapist turnover were five to six times higher amongst physiotherapists who were under thirty years of age than above.

Other significant determinants of whether participants were intending on staying or leaving in 2007 included was gender and race, where the female and white participants, respectively, were found to be twice as likely as the males and other races to stay. Furthermore, being the family breadwinner, as well as marital status were also found to be quite significant, which was consistent with the findings of the 1991 study by Noh and Beggs.

In terms of their reasons for staying in 2007, some noteworthy responses included the fact that 17.5% of these participants wanted to stay because they enjoyed their work environments and did not have reasons to leave. Once again the reasons of gaining experience and living close to work, which made travelling convenient were cited as important contributory factors.

Many also said that they enjoyed the financial stability that the public sector gave them, despite the low salaries. This was compared to the private sector, where payment is

often proportional to the number of patients treated. This is generally true for small private practices. It was also good to note that many of these participants reported that they enjoyed the work that they do so much that where they worked did not matter.

When planning for retention, these are undoubtedly some of the factors that managers need to take into account. By conducting regular staff attitude surveys amongst their staff, physiotherapy managers would be better able to establish those factors that enhance their levels of job satisfaction and those that decrease them, and then try to address those issues that are within their power when they plan their retention strategies.

Interestingly, those factors which did not seem to have any major significance as determinants of whether participants were intending to stay or not in 2007, include having children, the type or level of institution, professional ranking and having postgraduate qualifications. This is in contrast to other studies, including the one that has already been quoted by Noh and Beggs (1991), where these factors are described as being significant determinants of whether physiotherapists leave or stay at their workplaces.

The results of the satisfaction and importance rating, as well as those of the ranking analysis and the participants' responses for staying in 2007 can be used as key contributors to baseline information about the extent of and reasons for physiotherapist retention problems. They may serve to provide managers with a clearer indication about the characteristics of physiotherapists who tend to be more stable and committed to service, despite low salaries and other challenges. In other words, managers may be

able to make more informed recruitment decisions and retention strategies when they have this type of information.

5.6. Job Satisfaction

The results also revealed that current South African public sector salaries for physiotherapists are by far the greatest source of demotivation and dissatisfaction. This finding, which is also the main reason why participants said they would leave, was further illustrated and confirmed by the importance ranking. However, for those who said that they would stay in 2007 and those who returned to the South African public sector after a period of absence, there seemed to be greater benefits to staying than leaving, despite what they also readily admitted were poor salaries. Indeed, there seemed to be a definite willingness on their part to weigh the options of staying or leaving and they chose the latter based on other reasons, such as having more readily available opportunities for continuing professional development, colleague support and teamwork. Many also felt that in the public sector they were making a difference in the lives of disadvantaged people who could not afford private sector rates. Others cited factors, such as leave, travel convenience and working close to home

It was clear that there are physiotherapists who are aware of the problems and challenges of working in the public sector, but they are so motivated and driven mainly by the sheer enjoyment of their work and fulfilment that comes with the feeling of helping others, financial stability and well-defined working hours that these problems end up being challenges that come with the territory and need to be addressed whilst the work is being done. One would assume that for them, physiotherapy is not a job, but a calling, and many of them are optimistic that the situation will soon change for them as long as they continue to apply pressure on the government to value them more and

recognise the profession as a major contributor to health promotion here in South Africa. They have also shown very clearly that although they do want to get better salaries, the other benefits and job security that are offered by the public sector, as well as the desire to keep promoting the role of physiotherapy in the public sector, are the major factors that are keeping them there.

Apart from poor salaries, many physiotherapists in the South African public sector complain about the lack of promotion opportunities. According to the study by Wolpert and Yoshida (1992), physiotherapists in Ontario also reported a strong desire for upward mobility within the profession. In Ontario, as is the case in South Africa, the profession is structured with limited opportunities for upward mobility after entry at the junior physiotherapist level. Again, as in the case of South Africa, there are relatively few vacant senior and clinical specialist positions, and any further promotion has to be at the managerial level, where vacant positions are even more limited. This becomes a problem for those physiotherapists who wish to remain as clinicians and never want to become managers. The result of this is highly mobile physiotherapists who are continually leaving their workplaces in search of more senior positions in other public sector institutions or, if there are none available, they join the private sector or migrate overseas.

Another important source of dissatisfaction and low morale amongst physiotherapists working in the South African public sector is that of not having their professional status recognised in the same way that the professional status of their western counterparts is recognised in their home countries. However, in the case of South African physiotherapists, the question that needs to be asked is how much they are doing to actively promote their own profession and prove its relevance in today's primary health

care, context. Fortunately, according to the study by van der Spuy and van Rooyen (2000), physiotherapists started to take proactive steps to adapt to this new health model, show the importance of the work that they do and to prove their relevance as professionals of note as soon as health sector reform began.

5.7. Knowledge and Attitudes Towards Retention

In terms of knowledge and awareness concerning their own departments' retention strategies the results revealed that only 29% of all the participants responded positively to this question and, remarkably, this included several heads of departments. As expected, the scarce skills allowance seemed to be the most widely known retention strategy. Several participants also mentioned the Folateng private wards as possible retention factors, which formed a part of their institutions' staff retention efforts.

The fact that the percentage of physiotherapists who know something about their departments or institutions' retention plans and strategies is so small partly reveals that communication within their departments and institutions could be improved. Furthermore, it also partly reveals a lack of awareness, on the part of institution managers, of the importance of retaining physiotherapists, the role that they play in the health system, as well as the need to include them in planning and decision-making processes.

5.8. Limitations

One of the factors which needed to be taken into account as a potential limiting factor was non-respondent bias. Indeed, due to some levels of participant non-compliance, it is possible that the responses of those who did not participate could have contributed different results and points of view, which could have impacted on the final findings.

According to Wolpert and Yoshida (1992), non-respondent bias can be a real limiting factor, as they found out in the case of their study that those physiotherapists that had declined to participate in their survey had either graduated in other countries or were recent graduates and appeared to represent a young, “transient” group who may have been unresponsive to retention strategies. Had they responded, this may have had a more significant impact on the final outcome of their results, as there is a possibility that their responses would have been slightly different from those of the participants, thus affecting statistical measures such as frequencies, percentages and chi-square significance values.

Another potentially limiting factor is the fact that the study focused exclusively on those physiotherapists that were still employed by the South African public sector, instead of including input from those that had left and were either working in the private sector, overseas, or other places in order to establish their exact reasons for leaving and what would have made them stay. Indeed, the responses of, and reasons given by, those that have already left can often differ once they make hindsight reflections when they are in different working environments.

Thirdly, by limiting the study to physiotherapists in Gauteng only, it is possible that many of the findings of this study are unique to them and do not necessarily apply to those working in other provinces. For example, due to differences in population demographic distributions between the different provinces, there would have been different responses and racial representation according to response, which could have produced different findings.

Fourthly, due to the predominantly quantitative nature of this study, respondents may have felt restricted in terms of the range of responses that they were able to give on the questionnaire. As a result, it was not possible to determine the complexities of their lives as individuals and to have a more in-depth look into what drives their decision making processes.

Additionally, in the case of such studies, there is always the possibility of participants not trusting the research process, including the researcher's motives, completely, which results in them not expressing their true feelings or intentions freely.

Lastly, another potential limitation was the absence of a control group which could have been used for comparing the participants' responses and findings. An example of a control group for this type of study would be a similar sample size of registered physiotherapists, who also meet the selection criteria but work for the public sector in another province. Similarly, those physiotherapists that work in the private sector could also be used. However, the methodology would have to be adapted accordingly in order to accommodate the control group.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1. CONCLUSIONS

Several conclusions can be drawn from the findings of this study. These include the fact that despite the unsatisfactory salaries and certain working conditions that were mentioned by the participants, there are physiotherapists who choose to remain in the South African public sector. The results have revealed that most of them choose to do so because of they feel that there are benefits to working for the public sector, such as receiving a stable income, service bonus, a scarce skills allowance, medical aid and 'free' opportunities for continuing education as a result of regular interdisciplinary lectures and visiting guest speakers who are often willing to address physiotherapists for very little or no fees. Furthermore, when they compare it to the private sector, these physiotherapists believe that the public sector provides them with more flexibility in terms of working hours, greater autonomy in terms of clinical decision-making, support from colleagues, interdisciplinary team work, appreciative and friendly patients, as well as a wider range of conditions to treat in the hospitals and clinics.

Indeed, in the private sector, physiotherapists very often work long hours on their own in order to treat as many patients as possible in any given day, as each patient treated means more money for the practice, which in turn often translates to more pay for them. Often, private patients can be very demanding and difficult to work with, and private physiotherapists sometimes have to adhere to strict and inflexible treatment protocols,

which are not always necessary, but have prescribed tariffs, thus making it simpler for the private practitioner in question to pre-determine the cost of each treatment.

In terms of the characteristics that the author was determined to investigate, the study has revealed age plays a significant role as a determinant of whether physiotherapists are likely to remain at their workplaces or leave, where the older physiotherapists (31years and older) tend to stay longer in the public sector than those that are younger. Indeed, according to Noh and Beggs (1991), longer tenured employees tend to be among the more stable staff in an organisation. Furthermore, female physiotherapists, those that are married and those that are family breadwinners also seem to be more likely to stay once employed than their male, single and non-breadwinner counterparts.

These are very important observations which must neither be overlooked nor ignored when recruiting physiotherapists. Very often, managers tend to select younger, newly-qualified physiotherapists as employees of choice, deliberately avoiding those that are older and have more years of experience, believing that the former are more likely to approach their tasks with greater energy and enthusiasm and still have many years of service ahead of them. Although this may be true, several studies have shown that there is greater mobility amongst younger physiotherapists than their more experienced and older counterparts (Beggs and Noh, 1993). Indeed, very often when the latter apply for positions it is because they have decided to settle down and work at the same place until they retire. This is equally true for those physiotherapists who may have stopped working for many years due to family responsibilities. Quite often, these physiotherapists are keen to show their younger colleagues that they are still productive, eager and committed professionals. In the end, however, the ability to recruit the best physiotherapists in terms of their knowledge, skills, attributes and ‘fit’

within the department, regardless of age and experience, will depend largely on how skilled and qualified the manager is at doing so.

According to the results of this study, salaries are undoubtedly the most important motivators and potential retention factors for physiotherapists in the South African public sector. By drawing from their own experiences, the participants in this study have stated that salaries are by far the most important retention factors for physiotherapists. Furthermore, many of them reported that they were prepared to discourage interested physiotherapists from working for the South African public sector solely on this basis, despite the benefits.

South Africa continues to lose health professionals from all disciplines, including physiotherapists, who are seeking better pay elsewhere. According to Yumkella (2006) salary outranked all other factors when health workers in different African countries, such as Ghana, Cameroon and South Africa were asked what would make them remain in their home country. The financial implications of this to the government are potentially great, and possibly higher than what it would cost to increase their salaries and invest more money into their retention efforts.

Another strong deterrent for physiotherapists remaining in the South African public sector is the perceived lack of opportunities for promotion. Indeed, many of the participants felt that the only way of advancing professionally and in status was to leave their work places in search for more senior positions elsewhere, usually in other public sector institutions or in the private sector.

Many of the respondents also reported poor management as one of the reasons why they would stop working for the South African public sector. Furthermore, as

highlighted in Chapter 1, the absence of accurate and reliable records of exit interviews, turnover records, vacancy rates and the results of regular staff attitude surveys from physiotherapy departments, which could be used to inform effective retention strategies, partly indicates a lack of proper management.

Many of the participants also reported the perceived lack of recognition and appreciation for their profession, as well as not feeling valued as important professionals with a meaningful contribution to make in the South African public sector, as other sources of their dissatisfaction in the workplace. This can mostly be attributed to the continuing lack of awareness for the role of physiotherapy amongst key decision makers, other health professionals and the public that, as was highlighted in Chapter 2. It can also be attributed to a lack of relevant evidence-based research by physiotherapists, which could help to create more awareness for the profession and plight of public sector physiotherapists. As mentioned earlier, most of the human resource studies that have been conducted in the country focus on nurses and doctors, and this partly explains why these two professions are known to the South African government to be 'endangered species' (Health Systems Trust, 2003) and are perceived to be more important than the allied health professions, including physiotherapy.

Finally, the fact that there were such few participants who had any form of knowledge about their institutions' retention strategies partly confirms that there could indeed be insufficient levels of communication and inclusion in decision making processes regarding these matters both between institution and physiotherapy managers, as well as physiotherapy managers and their staff.

6.2. RECOMMENDATIONS

This is probably not the first time that a recommendation is being made to the government for regular engagements in discussions with physiotherapy managers to be made by the relevant government officials in order to review and improve the salaries of public sector physiotherapists as a direct measure of ensuring their retention. However, these must be accompanied by the formulation of definite strategies, follow-up action, dead-lines, monitoring and evaluation. The findings of this study can be used to contribute to and support existing evidence that reveals the fact that physiotherapists are leaving the South African public sector mainly due to their dissatisfaction with their salaries. Until something is done about this by the relevant government stakeholders, there will be no changes in the status quo and this subject will continue to be a key matter of discussion in most physiotherapy and allied health management meetings.

Secondly, it is recommended that physiotherapy managers at healthcare facilities become more proactive and creative in terms of developing specific retention strategies. According to Michael Armstrong (1998), issues of staff recruitment, retention and turnover are very closely linked and have an impact on each other. He states that it is the responsibility of managers to properly analyse and understand why staff members leave in order to adequately and effectively plan for their retention. He also believes that one of the ways of gaining some understanding into the reasons why staff members leave in large numbers is to conduct formal, written exit interviews and regular attitude surveys within work departments. Often the information that is derived from these, such as lack of commitment and dissatisfaction, is usually crucial and honest information that needs to be addressed by any good retention plan. This same idea is reiterated by Yumkella (2006), who states that in order to understand the causes of turnover “health managers and organisations have to…understand the characteristics of those health

workers who are at risk of moving, their patterns of movement and the reasons why they make decisions to leave." The author further states that due to the absence of complete and accurate worker flow data sets in most developing countries, health managers are unable to measure turnover and vacancy rates in a precise manner. The implication of this are that in order for retention plans to be effective on-going staff surveys, monitoring and evaluation of existing strategies and impeccable staff record keeping are essential, including formal, written exit interviews.

Thirdly, given the fact that solving the financial remuneration problem is not within the control of physiotherapy managers, they need to focus more on developing retention strategies that address non-financial incentives that they are able to exercise control over. Some suggested non-financial retention strategies that are already being employed in many physiotherapy departments in Gauteng, but could be improved, include promoting and encouraging continuing professional development through the attendance of courses, as well as scientific and professional meetings. Furthermore, as mentioned before, mentorship programmes are also useful in terms of keeping staff members motivated at work, as they contribute towards making individuals feel more valued, appreciated and cared for. In addition to these, and depending on the organisation's rules and management support, discussing the possibilities of introducing flexible working hours and job sharing have also been suggested by some authors as factors that promote staff retention.

In the same way that physiotherapists engage in evidence-based clinical research, another recommendation is that they extend their research efforts into the field of human resources. Scientifically presented findings of such studies in professions such as medicine and nursing, have demonstrated that they have a greater impact in terms of

creating awareness about the importance and relevance of their respective roles in South Africa's health sector today, as well as informing decision-making processes that are essential for policy development and human resource planning. Some suggestions for future research are to investigate the exact financial implications of losing and recruiting physiotherapists, as well as how these impact on the delivery of efficient and effective service and to conduct a study similar to this one on a national scale.

In relation to the previous recommendations, another one would be to ensure that physiotherapy managers are adequately equipped to function optimally within their management roles. Without proper management skills and training, none of these recommendations can be effectively addressed. Indeed, in many South African public sector institutions, physiotherapy managers did not undergo formal management training, but were simply promoted from being clinicians to management positions through the ranks of the profession. A recommendation in this regard is to ensure that basic management training is included in the undergraduate physiotherapy curriculum at universities. In addition to this, once physiotherapists are faced with the task of becoming departmental managers, they need to be sent for specific courses in management. As several studies have shown, including the study by Wolpert and Yoshida (1992) and the study by Turner (2001), which were referred to earlier, professional recognition and authority are some of the factors that lead to the retention of physiotherapists, and by formally training those who are interested in becoming managers they are given an added level of responsibility and heightened professional status which may indeed serve as an incentive for them to stay.

Furthermore, recruitment and retention are management responsibilities which require specific training. As long as physiotherapy managers do not have the necessary human

resource management skills to conduct professional interviews and to recruit effectively, they will not be able to identify and employ the best candidates for their departments. Similarly, by having these skills, there would be less of an overlapping in terms of the human resource management responsibilities of the different health managers, such as the compiling and maintaining of advanced statistical data sets, as highlighted in Chapter 1.

A final recommendation, which is also within the powers of physiotherapists themselves, is the issue of enhancing and promoting their own professional image by educating doctors, nurses, institution managers, other key health workers, as well as the public on the scope of physiotherapy practice. Physiotherapists need to strengthen their efforts of claiming and clearly stating their rightful place in the current South African health care system. It may also be useful for them to monitor and evaluate their progress and rate of transformation as far as the issue of adapting to the changing health care system is concerned, and make improvements where necessary. Without this, they face the real risk of being perceived as irrelevant in the country today, both by health managers, other health workers and the public, which in turn creates feelings of them feeling unappreciated and having low morale at work, resulting in high levels of turnover. However, public sector physiotherapists cannot successfully overcome this challenge on their own, and it is further recommended that they form stronger partnerships with their private sector counterparts. The current reality is that every time physiotherapists enter and leave the public sector and move into the private or other sectors, they tend to stop being concerned with and addressing the challenges that are being faced by those that choose to remain behind. The result of this is an on-going cycle of many years of unresolved problems, which benefit neither the physiotherapists nor the country in the long term.

REFERENCES

1. Anthonisen, P., Riis, P., Sogaard-Andersen, T. 1964. **The Value of Lung Physiotherapy in the Treatment of Acute Exacerbation Chronic Bronchitis.** Acta Med Scandinavia, vol. 175. pp175-719
2. Armstrong, M. 1998. **A Handbook of Personnel Management Practice.** 6th ed. London: Kogan Page. pp 433-436
3. Baumann, A. Yan, J. Degelder, J. Malikov, K. 2006. **Retention Strategies for Nursing: A Profile of Four Countries.** Human Health Resource Series, no.5, pp.5-11
4. Beaglehole, R. Bonita, R. Kjellstrom, T. 1993. **Basic Epidemiology.** World Health Organisation, Geneva. p. 69
5. Beggs, C.E. and Nosh, S. 1993. **Job Turnover and Regional Attrition Among Physiotherapists in Northern Ontario.** Canadian Journal of Physiotherapy, vol. 45, no. 4, pp 239-244
6. Beggs, C.E. and Noh, S. 1991. **Retention Factors for Physiotherapists in an Under serviced Area: An Experience in Northern Ontario.** Physiotherapy Canada, vol.43, no.2, pp 15-21
7. Buchan, J. Calman, L. **The Global Shortage of Registered Nurses: An Overview of Issues and Actions.** Geneva, Switzerland: International Council of Nurses (ICN), 2004. <http:www.icn.ch/global/shortage.pdf>
8. Buchan, J. and Dolvo, D. 2004. **International; Recruitment of Health Workers to the UK: A Report for DFID, London**. DFID Health Systems Resource Centre.
9. Budlender, D. 1998. **Women and Poverty: An Executive Summary**. South African Human Rights Commission. <http:www.genderstats.org.za>
10. Cullinan, K. 2006. South Africa: Hospitals in Crisis. Health-e (Cape Town). <http: **www.worldproutassembly.org>**
11. Cullinan, K. 2002. **Private Patients Swell Public Hospital's Coffers.** Health Systems Trust, South Africa. <http:www.hst.org.za>
12. Cutchin, M.P., Norton, J.C., Quan, M.M., Bolt, D., Hughes, S. and Lindeman, B. 1994. **To Stay or Not to Stay: Issues in Rural Primary Care Physician**

Retention in Eastern Kentucky. Journal of Rural Health, vol. 10, no. 4, pp. 273-278

13. Dennill, K. et al. 1995. **Aspects of Primary Health Care.** Halfway House: Southern.
14. Dovlo, D. and Martineau, T. 2004. **A Review of the Migration of African Health Professionals.** JLI Working Paper 4-4 <http:www.globalhealthtrust.org>
15. Eales. C. 2000. **Who Are We?** South African Journal of Physiotherapy, vol.56, no.2, p. 2
16. Forti, E.M., Martin, K.E., Jones, R.L. and Herman, J.M. 1995. **Factors Affecting the Retention of Rural Pennsylvania Family Physicians.** Journal of the American Board of Family Practice, vol. 8, no. 6, pp. 496-499
17. Gauteng Department of Health. **Annual Report, 2002/3**.
18. Health Statistics. 2006. **Number of Physiotherapists**. Health Systems Trust, South Africa. <http:www.hst.org. za>
19. Hodgson, I. 2006. **The Price of the Ticket.** Open Democracy: Free thinking for the World. <http:www.openDemocracy.net>
20. Huddart, J. and Picazo, O. 2003.**The Health sector Human Resource Crisis in Africa: An Issue Paper.** Washington, DC: SARA Project, AED; USAID.
21. Human Resources for Health. 2006. **A National Agenda for Human Resource for Health.** National Department of Health, South Africa. <http:www.doh.gov.za>
22. Humphreys, J.S., Michael, P.J., Jones, J.A. and Mara, P.R. 2002. **Workforce Retention in Rural and Remote Australia: Determining the Factors that Influence Length of Practice.** The Medical Journal of Australia, vol.176, no. 10, pp 472-476
23. Johannesburg Hospital, Physiotherapy Department, 2004.
24. Lehmann, U. and Sanders, D. **Human Resources for Health in South Africa. Background and Overview of Paper for JLI National Consultation.** 2004. Cape Town, South Africa
25. Mackenzie, C.F., Ciesla, N., Impe, P.C., Kemie, N. 1981. **Physiological Changes Following Chest Physiotherapy.** Chest Physiotherapy in the Intensive Care Unit. Baltimore: Williams and Wilkins. Pp 215-250
26. Mafubelu, D. 2004. **Using Bilateral Arrangements to Manage Migration of Health Care Workers: The Case of South Africa and the United Kingdom.** <http:www.old.iom.int/PP_ bilateral SAfrica.pdf>

27. Matthauer, I and Imhoff, I. 2003. **Staff Motivation in Africa. The Impact of Non-financial Incentives and Quality Management Tools: A Way to Retain Staff.** Eshcborn,Germany:GTZ.<http:www2.gtz.de/migrationdevelopment/download/documentation2-en-pdf>
28. Mbambo, NP. 2004. **Widening Access of Black Students to Physiotherapy Programmes in South Africa.** South African Journal of Physiotherapy, vol.60, no.4, pp. 3-4
29. Miles-Tapping, C. Rennie, G.A., Duffy, M., Rooke, L., Holstein, S. 1992. **Canadian Physiotherapists' Professional Identity: An Exploratory Survey.** Physiotherapy Canada, vol.44, No.4, pp31-34
30. Naidoo, N. 2000. **South Africa is Losing hundreds of Nurses Each Year.** Natal Witness, 24 May.
31. Narins, P. 1999. **The Finite Population Correction.** SPSS
32. National Department of Health, South Africa. 2006. **National Human Resource Plan for Health**. <http:doh.gov.za.>
33. Nawaal,D. 2003. **Despondent Healthcare Workers Flee.** Health Systems Trust, South Africa. <http:www.hst.org. za>
34. Newfoundland and Labrador Physiotherapy Association. 2005. **Issues and Impact Statement Regarding the Discontinuation of the Seat Purchase Agreement.** <http:www.physiotherapynb.ca>
35. O'Kane, A. and Curry, R. 2002. **Unveiling the Secrets of the Allied Workforce.** 7th National Rural Health Conference
36. Okerlund, V.W., Jackson, P.B. and Parson, R.J. 1994. **Factors Affecting Recruitment of Physiotherapy Personnel in Utah.** American Journal of Physical Therapy, vol. 74, no. 2, pp. 177-184
37. Randolph, D.S. 2005. **Predicting the Effects of Extrinsic and Intrinsic Job Satisfaction Factors in the Recruitment and Retention of Rehabilitation Professionals.** Journal of Health Management, vol. 50, no. 1, pp.49-60
38. Sim, J. 1985. **Physiotherapy: A Professional Profile.** Physiotherapy Practice, vol.1, pp.14-22
39. Smith, P., Schiller, M.R., Grant, H.K. and Sacks, L. 1995. **Recruitment and Retention Strategies Used by Occupational Therapy Directors in Acute Care, Rehabilitation and Long-term-care Settings.** American Journal of Occupational Therapy, vol. 49, no.5, pp. 412-419

40. Solomon, P., Salvatori, P. and Berry, S. 2001. **Perceptions of Important Retention and Recruitment Factors by Therapists in North-western Ontario**. Journal of Rural Health, vol. 17, no. 3, pp. 278-285
41. South African Department of Health, 2001. **The District Health System in South Africa: Progress Made and Next Steps.** <http:www.doh.gov.za>
42. Stilwell, B. Diallo, K. Zurn, P. Dal Poz, M.R. Adams, O. Buchan, J. 2003. **Developing Evidence-based Ethical Policies on the Migration of Health workers: Conceptual and Practical Challenges.** <http.www.pubmedcentral.nih.gov>
43. Stratton, T.D., Dunkin, J.W., Juhl, N. and Geller, J.M. 1995. **Retainment Incentives in Rural Practice Settings: Variations in Job Satisfaction Among Staff Registered Nurses.**
44. Turner, P. 2001. **The Occupational Prestige of Physiotherapy: Perceptions of Student Physiotherapists in Australia**. Australian Journal; of Physiotherapy, vol. 47, pp.191-197
45. Van Rooijen, AJ and Van der Spuy, AA. 2000. **The Role of Physiotherapy in a Changing Health Care System.** South African Journal of Physiotherapy, vol.56, no.2, pp. 3, 6-8
46. Vujic, M. Zurn, P. Diallo, K. Adams, O. Dal Poz, M.R. 2004.**The Role of wages in the Migration of Health Care Professionals from Developing Countries.** Human Resources For health, vol.2, no.1, p.3. <http:www.numan-resources-health.com/content/2/1/3>
47. Wolpert, R. and Yoshida, K. 1992. **Attrition Survey of Physiotherapists in Ontario.** Physiotherapy Canada, vol.44, no.2, pp17-24
48. Wikepedia. <http:www.wikepedia.org/wiki/Gauteng>
49. Yumkella, F. 2006. **Retention if Health Care Workers in Low resource Settings: Challenges and Responses.** The Capacity Project, UK. <http:www.capacityproject.org>

APPENDIX 1: QUESTIONNAIRE

APPENDIX 2: STUDY INFORMATION SHEET

APPENDIX 3: LETTER OF REQUEST TO CONDUCT STUDY

APPENDIX 4: ETHICS CLEARANCE CERTIFICATE