

# EMPLOYEE RETENTION: A MULTIPLE CASE STUDY OF SOUTH AFRICAN NATIONAL GOVERNMENT DEPARTMENTS

Submitted in fulfilment of the requirements of the degree of Doctor of Technology: Business Administration in the Faculty of Management Sciences at the Durban University of Technology

Sagaren Pillay

SEPTEMBER 2011

PROMOTER: Dr Marie de Beer: M Comm ; Ph.D CO-PROMOTER: Prof Kevin Duffy: Ph.D

## DECLARATION

I, the undersigned, hereby declare that the work contained in this dissertation is my own original work, and that I have not previously in its entirety or part submitted it to any university for a degree

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## ABSTRACT

The purpose of the research is to identify key factors influencing employee retention in the South African national government departments as a guide towards developing effective employee retention strategies.

The research was conducted in three phases. For the determination of employee turnover rates and benchmarks, 33 national departments were classified into three homogenous subgroups with respect to their number of employees (Phase one). Thereafter the employee turnover rates for each department and benchmarks for each subgroup were determined (Phase two).

These employee turnover statistics were analysed for all 33 national departments in the three subgroups and used as guidelines for the selection of cases for the multiple case (Phase three). Four departments were selected from each subgroup for the case study where selection was based on a department's turnover rate relative to the benchmark rate. These departments participated in a cross sectional survey. The data from the survey was analysed both quantitatively and qualitatively.

The analysis confirmed a significant relationship between employee turnover rates and responses for the combined subgroups of selected small, medium and large departments. Significant relationships were also observed for the subgroups of small and large departments. Employee turnover has a significant impact on business performance primarily due to the fact that it takes too long to fill vacant posts together with uncompetitive salary scales and the lack of skilled candidates. Further, the lack of human resourcing strategies, recruitment difficulties, problems related to monitoring and measuring of employee turnover and employee retention difficulties were important issues that influence employee retention.

Future research on knowledge and systems for managing employee turnover is recommended.

## ACKNOWLEDGEMENTS

With appreciation, I acknowledge my doctoral promoter Dr Marie de Beer. The patience and the direction you provided over the past few years were unparalleled. I also acknowledge my co-promoter Prof Kevin Duffy for the invaluable technical guidance that he provided.

I would also like to thank Ms Helen Richter for sharing her expertise in language editing. Your contribution is greatly appreciated.

Finally, I thank the DUT Postgraduate Development and Support division for the financial assistance and incentives they provided.

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## **CHAPTER 1**

## **ORIENTATION OF THE STUDY**

### **1.1 INTRODUCTION**

Official employment data from Statistics South Africa's Quarterly Employment Statistics (QES) (2009) survey show that the government is the largest employer in the South African formal sector. To quantify this, the numbers of employees in the national and provincial departments alone comprise approximately twenty percent of the total formal sector workforce. These employees are contracted to the Department of Public Service and Administration (DPSA). One of the major challenges facing policy makers involves the effective management and reduction of the high employee turnover in government. Within this context, it is crucial for government to design and implement innovative ways to manage its human resources and make the public service more effective than it presently is. There are policies and acts in the public service promoting human resource management and in particular, employee retention. The question is - are these acts and policies adequate and effectively implemented?

Throughout this study, topics related to the issues raised above are addressed. As an introduction, the following is covered: an introduction to the problem; key factors influencing employee retention; current practices and challenges of employee retention; important drivers of employee attraction and retention; and the research methodology employed.

#### **1.2 BACKGROUND**

There are many challenges that the government has to deal with to reform human resource practices in the public sector. The provision of good service delivery requires an effective and efficient public service. Some of the factors affecting service delivery include: the problems of skills shortages, high employee turnover and high vacancy rates. This means that the high turnover in the public sector imposes a cost to tax payers due to the costs of attracting, hiring and training workers. When employees leave the public service, they take with them the skills and experience gained during their period of employment. Filling of these vacated posts attracts recruitment and training costs (DPSA, 2006:2).

According to the report, "Managing People in a Transformed Public Service", DPSA (1997:7), national departments and provincial administrations are required to develop human resource strategies, which are integrated with their strategic and operational plans, in order to ensure that future staffing needs are met. These strategies should include specific employment equity objectives and targets for achieving a representative workforce. To this end, the public service must offer opportunities for development and advancement through improved performance and career management. Thus far, these strategies have not been effective in managing employee turnover.

Even though a regulatory framework for human resource management in the South African public service exists, high labour turnover has been identified by government as one of the major problems affecting service delivery. This will continue to present a problem unless an effective staff retention strategy is developed and implemented. The development of an effective staff retention strategy becomes possible when the underlying reasons for the high turnover rate are better understood. In order to achieve this, employee hires and separations (retirements, resignations and dismissals) data need to be periodically collected and modelled, so that employee turnover trends can be analysed. When the main factors driving the high turnover trends have been identified, the appropriate monitoring and redress mechanisms can be put in place as part of a corporate staff retention strategy.

In response to concerns about the high levels of staff turnover within the senior management ranks of the Eastern Cape Provincial Administration (ECPA), the Office of the Premier of the Eastern Cape was mandated to develop an attraction and retention strategy for the ECPA. The ECPA (2006:16), recommends the development of a labour turnover database, with statistics that are easy to access and linked to metrics, as an essential tool for evaluating and monitoring turnover. The measurement and benchmarking of turnover is also explored. However, despite the existence of attraction and retention strategies, high turnover levels among senior management continue to persist throughout the public service (PSC, 2008:7).

### **1.3 RESEARCH STATEMENT AND OBJECTIVES**

#### 1.3.1 Research statement

High labour turnover in the public sector has been identified by government as one of the problems affecting service delivery (DPSA, 2006; ECPA, 2006; Hendriks, 2006). Without any urgent positive intervention from policy makers, this will continue to present a problem and will become worse if not dealt with immediately. It must be noted that there are currently mechanisms in the public service that could be used to retain staff. These are primarily policies and acts promoting human resource management and staff retention. The problem is, even though these acts and policies exist, they may be inadequate and not properly implemented (Hendriks, 2006).

Employee turnover problems at organisational level have been rigorously researched for many years (Anderson & Meyer, 1994; Haltiwanger & Schuh, 1996; Morrel, Loan-Clarke & Wilkinson, 2004; Zimmerman & Darnold, 2009).

According to Kirschenbaum & Mano-Negrin (1999:1236), turnover is affected by organisational size, with size being the key factor of an organisation's internal labour market. They further suggest that organisational size impacts on turnover primarily through wage rates but also through career progression paths. There is thus a complex interactive effect of both size and organisational structure on employee retention. No study to date has analysed practices of employee retention in the South African public service according to organisational size. This study will fill a research gap by identifying organisational variables (as opposed to individual characteristics) that impact on turnover and contribute to a better understanding of employee turnover at organisational level.

## 1.3.2 Research objectives

The aim of the research is to identify key factors and existing policies which influence employee retention, in terms of benchmarks for turnover rates, through a critical analysis of the current practices of employee retention, in order to develop guidance/recommendations for employee retention strategies. The objectives include the following:

- An analysis of national government departments with respect to employment and earnings and their classification into subgroups according to employment size;
- The determination and analysis of employee turnover rates and employee turnover benchmarks for each of the subgroups;
- The selection of multiple cases per subgroup based on the analysis of departmental employee turnover rates relative to the benchmark turnover rates;
- A cross-sectional survey of selected multiple cases to determine the current practices with respect to employee attraction and retention per subgroup;
- An analysis of selected multiple cases to determine the factors influencing employee attraction and retention using quantitative and qualitative analysis techniques;
- The development of guidance/recommendations for employee retention strategies.

## **1.4 RATIONALE FOR THE STUDY**

There is a need for employee turnover in the public service to be kept to a minimum because it imposes a huge cost to the taxpayer in terms of recruitment and training, as well as loss of productivity. Employers need to focus their attention on addressing this problem and investigate strategies on how to effectively manage employee turnover in the public service. The reduction of employee turnover will lead to better service delivery, lower costs and lower vacancy rates. In order to effectively manage employee turnover it first needs to be measured. The rate and type of turnover needs to be readily available to managers, so that they can be in a position to regularly monitor and evaluate employee turnover against benchmarks. Failure to monitor labour turnover may result in a situation where there are insufficient skills to achieve efficient service delivery. Public sector managers must know why turnover takes place and what amount of turnover is acceptable.

The information from this study will add to the existing body of knowledge on employee turnover and will help to understand and manage the future dynamics of the public workforce. This understanding will, in turn, lead to better planning and control of the workforce supply.

## **1.5 OVERVIEW OF EMPLOYEE TURNOVER ISSUES**

The DPSA (1997) report, "Managing People in a Transformed Public Service", provides a regulatory framework for human resource management in the South African public service. This framework consists primarily of policies formulated by the DPSA, with the implementation of these policies being left to each individual department. Consequently, the lack of adequate monitoring mechanisms has led to the ineffective implementation of these policies.

In terms of the present policies, national departments are responsible, within nationally defined parameters, for planning and managing their human resources to meet their own strategic and operational objectives (DPSA, 1997:13). The many implementation weaknesses that continue to exist after 14 years of transformation, suggest that these units are themselves not adequately capacitated (PSC, 2008a:83).

According to Hendriks (2006), a well implemented staff retention strategy can minimize turnover in the public sector significantly. He goes on to say that the analysis of staff mobility, turnover trends and the establishment of monitoring mechanisms for periodic assessment of turnover, are important steps in developing a staff retention policy.

The problem of high employee turnover is not restricted to the public sector. The Chartered Institute of Personnel and Development (CIPD) has researched employee retention strategies in private sector organisations. According to the CIPD (2005:1), private sector organisations need to focus more attention towards reducing turnover; it is important for employers to have an understanding of their rates of employee turnover and how this affects the organisation's effectiveness. Depending on the size of the business, an appreciation of the levels of turnover, across occupations, locations and particular groups of employees, can help inform a comprehensive resourcing strategy (CIPD, 2005:2).

Forbes & McGill (1985:11) provide information on measures for involuntary turnover that can be used to analyse and monitor employee turnover. They also confirm the need for organisations to collect reliable information on employee turnover, so that they can benchmark their performance against "good performers" and gauge the impact of measures designed to reduce excessive turnover. These turnover benchmarks are used by managers to undertake effective planning, determine future staffing and recruitment needs, as well as estimate future training budgets.

It is held by Morrel et al. (2004:1272) that firms should simultaneously measure and manage turnover. Measuring involves surveys, consultation

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processes, intra- and extra-firm career guidance, exit interviews and leaver profiling.

High employee turnover can occur in different areas of an organisation at different time periods. Managing employee turnover is therefore needed in key operational areas so that the effects of change to key business areas can be minimized. Both the measurement and management of employee turnover are important elements to negotiate the complexities inherent in implementing widespread change.

### **1.6 RESEARCH METHODOLOGY**

The research was conducted starting with an exploratory study whereby data from the QES (2009) survey was analysed for 33 national departments, excluding the South African Police Service (SAPS). The purpose was to classify these departments into homogeneous subgroups (with respect to their number of employees).

Once the departments were classified into three subgroups, turnover rates were established and benchmarks calculated for each subgroup. Data was captured on a database and analysed using Statistical Analysis Software (SAS) programs, while turnover rates were computed using SAS software. The turnover benchmarks for each subgroup were computed over twelve months from January to December 2009.

This was followed by a multiple case study analysis. Four departments were selected from each subgroup for the case study. The selection criteria used for the case study was based on a departments' turnover rate relative to the benchmark rate. This ensured that the departments selected for the case

study comprised of a mix of both "good performers" and "poor performers" from each group. The selection criteria were similar to that used in the Warwick study (Pettigrew, 1990:270). Data was analysed using both quantitative and qualitative methods.

## **1.7 SCOPE/LIMITATIONS OF THE STUDY**

The study was confined to national government departments (excluding the SAPS). Provincial and local government organisations were not part of this study, therefore this study may be generalised to national governments but not to all government departments. It is also important to note that since South Africa is currently in its developmental stage, national departments are still being created, restructured and combined with other departments when the need arises. Notwithstanding, any future restructuring in government will have little impact on large and medium departments, as this process normally affects only some of the small, less stable departments.

Another limitation is that the study analysed general employee turnover within the organisations and not employee turnover and benchmarks according to occupational categories.

Any other limitations that may arise during the course of the study will be dealt with in the final chapter.

## **1.8 STRUCTURE OF DISSERTATION CHAPTERS**

The dissertation is divided into six chapters. The first chapter provides an introduction to the research. This includes a discussion on the background to

the problem, the purpose of the research, as well as defining the research questions.

The second chapter focuses on a literature review. The literature review proceeds in two parts, the first identifies existing acts and policies currently employed by the public service, with respect to employee retention, while the second examines past and current labour market research relevant to this study.

Chapter three contains the research design and methodology for both the case study and the establishment of turnover benchmarks. This chapter also provides a description of the empirical research design and grounds for the multiple case study design.

Chapter four clarifies the findings of establishing turnover rates and calculating benchmarks for each subgroup. The descriptive statistics and turnover benchmarks for the three subgroups are presented. This is followed by the findings of the multiple case study analysis in chapter five. In this chapter the sampling for the multiple case studies, as well as the quantitative analysis and the qualitative within-case and cross-case analysis, are presented.

Chapter six and seven conclude the study with recommendations and discusses avenues for future research.

### **1.9 CONCLUSION**

One of the major challenges for policy makers in government concerns the high employee turnover in national departments. In response to this

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challenge, the purpose of this study was to identify key factors and existing policies influencing employee retention in national government departments, in order to develop guidance/recommendations for employee retention strategies according to organisational size.

The literature review will present the past and current research on employee turnover at organisational level.

## **CHAPTER 2**

## LITERATURE REVIEW

## 2.1 INTRODUCTION

The problems confronting policy makers in government departments, with respect to high employee turnover, have been dealt with, together with the problem statement and the objectives of the research. The rationale for the study, as well as the scope and limitations, were also provided.

In this chapter a literature review on labour turnover is presented. To begin, the regulatory framework for human resource management in the South African public sector is outlined. This framework is currently used by public sector organisations and has an influence on employee attraction and retention strategies. A review of studies on employee retention strategies in the public sector follows, with a discussion of the meaning and measures of turnover in the context of the organisational goal of effectively managing turnover.

## 2.2 EMPLOYEE TURNOVER AND RETENTION IN THE PUBLIC SECTOR

The regulatory framework was found to contain gaps in public sector employee turnover studies, especially in the South African context, where very little information is present. Further search revealed that there are numerous studies on the measurement of employee turnover and development of employee retention strategies, but these are limited to international studies. Both the local and international studies on employee turnover form the basis of this report.

## 2.2.1 The South African public sector

The DPSA (1997:13) holds national departments responsible, within nationally defined parameters, for planning and managing their human resources to meet their own strategic and operational objectives. Given the fact that national departments vary significantly in employment size, factors influencing their employee turnover will also vary (Kirschenbaum & Mano-Negrin, 1999:1252).

There is a need for reliable information on employee turnover, in order to benchmark an organisations performance against "good performers" and gauge the impact of measures designed to reduce excessive turnover (Lynch & Tuckey, 2008:7). The turnover benchmarks will help managers undertake effective planning, determine future staffing and recruitment needs and estimate future training budgets.

## 2.2.1.1 The current regulatory framework

In 1999, a new human resource management framework was introduced in the South African public service. According to this framework, government departments were given the responsibility to develop and implement their own human resources management policies, practices and processes. These policies were to be guided by the following regulatory framework.

- The Constitution and in particular section 195(1)(h)(i);
- White Paper on Human Management in the Public Service;
- Public Service Act, 1994;
- Public Service Regulations,2001;
- Labour Relations Act, 1995;
- Employment Equity Act, 1998;
- Public Service Coordinating Bargaining Council Resolutions;
- Senior Management Service Handbook;

- Promotion of Administrative Justice Act, 2000;
- Framework for the Determination and Compensation for Scarce Skills in the Public Service, Annexure 1 to circular 1 of 2004.

Despite the existence of the regulatory framework, high turnover still persists in the public service. The many implementation weaknesses that continue to exist after 14 years of transformation suggest that these units are themselves not adequately capacitated (PSC, 2008a:83).

The Public Service Act, 1994 section 7(3), holds the head of department responsible for the efficient management and administration of his or her department, including the effective utilization and training of staff. Thus, national departments have the power to develop and implement their own management strategies within the regulatory framework.

The Public Service Regulation, 2001, provides regulations to deal with human resource planning, procedures for appointment, promotions and termination of service, performance management and development, as well as training and education.

Once drawn up, the human resource strategy will have to drive all human resource management activities. Its effectiveness will, however, depend on its continuing relevance in the light of experience. The strategy will, therefore, need to be supported by human resource management information systems, which provide accurate and timely information on how the strategy operates in practice.

### 2.2.1.2 A new approach to management

In order to support the effective management of human resources, the South African Public Service has sought to shift away from past management practices, which were more compliance driven, impersonal, non-developmental and authoritarian. The new approach aims to harness human potential through practices that privilege diversity, emphasize peer support, institute lifelong learning, promote professionalism and recognize and reward good performance (PSC, 2008a:76).

The PSC (2008a:76) reports, however, that the application of this strategic approach has given rise to the need for building strong capacity within departments. An important consideration would be to ensure that departments consolidate their capacity to implement the strategic frameworks for human resource management, and to urgently address those areas where progress is unsatisfactory.

The following critical areas need to be addressed:

- The average turnover rate of the Public Service (this was 8.5% between 2001 and 2002).
- The management of poor performance and the lack of capacity to hold managers accountable.
- A richer appreciation is needed of the strategic importance of human resource components and their functions to the overall operation of departments.
- An urgent priority is to accelerate the development and retention of priority skills in the Public Service.

In South Africa, the DPSA (1997:54) gives national departments the responsibility to develop a comprehensive strategy to close the gap between existing policies, practices and capacity against those articulated in the White Paper on Human Management in the Public Service, with regard to the future needs of national departments. The strategy should include:

- Clearly articulated objectives, aligned to the organisation's strategic and operational goals;

- Time-bound targets for the transformation of individual human resource management practices;
- Assignment of responsibilities and resources for implementation.

Each national department is required to continuously monitor and evaluate the implementation of the strategy, in order to ensure that targets are met and policies and practices improved.

## 2.2.1.3 Summary of employee turnover and retention in South Africa

Much of the available literature in the public sector focuses on the causes of turnover and are often premised on the perspective that turnover is costly and should be prevented. However, a deeper analysis of the literature reveals that while turnover can be negative for public service organisational performance, too little leadership turnover can also be problematic (PSC, 2008b:33). Some level of turnover in the administrative leadership of organisations can have positive consequences for organisations. The possibility of turnover can reduce complacency, lead to change and innovation and facilitate the displacement of poor performers. Conversely, a high rate of turnover might affect productivity, service delivery and the spread and retention of important organisational knowledge (PSC, 2008b:33).

## 2.2.2 International public sectors

International studies focusing on employee attraction and employee retention that are relevant to this study, recommend workforce planning and the management of turnover as an integral component to the human resource strategy of public sector organisations.

#### 2.2.2.1 The state of Queensland

A study titled, "Quality Public Service Workplaces", undertaken by the Public Service Commission of the State of Queensland, (2006:2), indicates that regular, effective monitoring and use of workplace quality indicators are critical components of a quality public service workplaces framework.

Skilful analysis and reporting of key workplace quality indicators can help to answer questions about the extent, nature, frequency and cost impacts of differing levels of quality in the workplace. It can also be used to encourage an improvement focused culture, identify where the organisation is achieving or failing to achieve agreed workforce management and productivity outcomes, analyze internal variations and make evidence-based decisions about improvements or the continuation of strategies and practices that are working well.

Workplace quality information should be presented in a form that makes it straightforward for managers to understand. This allows for comparisons to be easily made over time and to identify trends and exceptions that may require corrective action or more detailed investigation. Regular information persuades people to act differently. It changes their understanding and their attitudes, influencing the actions they take and the decisions they make (State of Queensland, 2006:4).

In the Australian public sector, there are concerns about shortfalls in the number of persons applying for public service jobs and some evidence that fewer younger people are attracted to working in the public service. Technical, professional, leadership and management skill shortages are further concerns, as is the impact these may have on the delivery of public services (State of Queensland, 2006:12).

To address the problem of staff retention a report, titled "Retention Resource", was published by the Queensland Government's Public Service Commission in 2008.

This report recommended the following retention metrics, to be collected in five phases (Table 2.1):

Phase	Definition	
1. Pre-recruitment	Why join? What is our employer value proposition and branding?	
2. Recruitment	Why stay? Review amongst unsuccessful candidates, those who declined an offer and those wh accepted to determine strengths and weaknesses of recruitment process, competition etc.	
3. Commencement	Why perform? Track new recruits quarterly in first year to determine connection and disconnect factors, alignment with expectations, preferred changes to role, manager assessment and more.	
4. Retention	Why resign? Annual/regular research amongst random selection of current employees to determine wh they stay, why they would resign, future expectations, current employer strengths and more.	
5. Exit	Interviewing ex-employees about their join and stay factors, why they left, salvage options, re- employment attitude, alumni participation and more.	

Source: State of Queensland, 2008

Each phase has a unique purpose to provide information that can inform and improve retention strategies.

- Phase 1: To enable the targeting of preferred candidates using mediums which are suitable to them, emphasizing attributes that they want and that you can deliver.
- Phase 2: To determine how recruitment practices can be improved so as to better align these to candidate expectations.
- Phase 3: To establish whether employee expectations align with reality.
- Phase 4: To identify and protect retention strengths and identify potential attrition factors.
- Phase 5: To identify attrition factors, behaviours and retention strengths.

In order to be effective, retention efforts require a joint effort on the part of the department, human resources, training and development and employees. Each of these can pro-actively take action, no matter how small or large, to address retention challenges.

#### 2.2.2.2 The United States of America

A recent study of turnover in public sector organisations in the USA showed that organisations often do not know what to measure or cannot readily access the necessary data to determine measures or benchmarks that are valuable in day-today management and decision making. Measures that most organisations already track, due to requirements or other efforts, may be useful in the present but are not always informative about the future or trends within the workforce. In short, these reactive measures likely don't provide enough information early enough in the process to avoid major challenges that end up costing an organisation money and time (Davidson, Lepeak & Newman, 2007:4).

The study concluded that public sector organisations must take a proactive and direct approach to dealing with the issues associated with their workforces. Organisations must assess and understand what pending retirement trends mean in the context of their own organisations. They need to know as much as possible about their current workforces and their dimensions of recruitment, retention, training and retirement. Education and self-assessment are keys to rationally assessing the ageing workforces' actual potential impact and determining how best to respond to it. Utilizing a combination of both proactive and pre-planned responsive measures will allow organisations to recognize potential and real challenges before these issues become a crisis that endangers the organisations and their abilities to deliver service (Davidson *et al.*, 2007:14).

### 2.2.2.3 The United Kingdom

The H M Treasury- Spending Report (2007) contained a chapter on the review of the public sector labour market in the United Kingdom. This chapter explored a number of issues around the productivity of the sector, and the need to attract and retain workers in a tight labour market. This review also identified trends affecting the size

and composition of the public sector workforce and assessed policies to improve recruitment and retention.

One of the key outcomes of this review was the need for better workforce planning. Departments were advised to improve workforce planning tailored to their individual service programmes so that they may attract and retain workers in specific fields. The review went on to recommend that the elements of planning should include improved and expanded recruitment, better benefits to workers and more flexibility to deal with specific vacancy problems.

### 2.2.2.4 Canada

In a recent study by Towers (2006) the top drivers of attraction and the top drivers of retention in Canada were identified (Table 2.2). There are a number of factors that influence government's ability to attract and retain employees. A few examples include: leadership, policy, compensation and benefits, diversity, healthy workplaces and succession management.

#### Table 2.2 Attraction and retention drivers

Rank	Attraction Drivers	Retention Drivers
1	Competitive base pay	Senior management interest in employee well being
2	Work/life balance	Opportunities to learn and develop new skills
3	Career advancement opportunities	Base salary
4	Competitive benefits	My manager understands what motivates me
5	Challenging work	Satisfaction with organisation's people decisions
6	Salary increases linked to individual performance	Retirement options
7	Learning and development opportunities	Senior management acts to ensure organisation's long-term success
8	Competitive retirement benefits	Fairly compensated compared to others doing similar work in my organisation
9	Caliber of coworkers	Appropriate amount of decision-making authority to do my job well
10	Reputation of the organisation as a good employer	Reputation of organisation as a good employer

Source: Towers Perrin, 2006

### 2.3 EMPLOYEE TURNOVER PRIVATE SECTOR ORGANISATIONS

#### 2.3.1 Measures of turnover

According to Campion (1991:201), the need for organisations to measure employee turnover is substantial. Turnover is an index of organisational effectiveness (Vandenberg and Nelson, 1999), and as such it warrants attention and some understanding per se. The message for organisational leaders is that they must develop clear strategies for attracting and retaining good employees (Holthom, Mitchell, Lee & Inderrieden, 2005:337).

#### 2.3.1.1 Voluntary and involuntary employee turnover

Where employee turnover is thought to be associated with organisational commitment, or to be preceded by a psychological state such as intent to quit, drawing the distinction between voluntary and involuntary employee turnover is important. If this is not done, the assessment of such a relationship in terms of 'all organisational leavers' will be flawed (Morrell. Loan-Clarke & Wilkinson, 2001:6).

Involuntary employee turnover may occur for many reasons, such as the need to cut costs, restructure or downsize. A clear distinction should be made between involuntary and voluntary employee turnover cases in any study of organisational leavers. Employee turnover is often not measured in a sophisticated enough manner to enable discrimination between cases where employees have chosen to leave and cases where they had to leave for reasons beyond their control. Organisations often use a relatively crude measure of turnover, such as the ratio of the number of leavers in a year, to the average number of staff during the year. This does not distinguish between those cases where people left because of ill health, retirement, or redundancy. Such a measure is not very useful for resource planning (Marchington &Wilkinson, 1997:97).

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Firms should simultaneously measure and manage employee turnover. Measuring involves surveys, consultation processes, intra- and extra-firm career guidance, exit interviews and leaver profiling. Managing, on the other hand, is needed in key operational areas to minimize the effects of change to key business areas. Both elements are important to negotiate the complexities inherent in implementing widespread change (Morrel *et al.*, 2004:172). Where turnover is unavoidable, it is important to manage the effects of turnover and minimize indirect costs.

#### 2.3.1.2 Job turnover and labour turnover

The Organisation for Economic Cooperation and Development (OECD) (1996:237), notes that there are two related measures of turnover, namely job and labour turnover. Job turnover refers to the net change in employment over time. On an economy wide basis, the job turnover rate is the absolute sum of net employment changes across all establishments or organisations. Labour turnover, however, is a wider measure and includes the movement of workers into and out of ongoing jobs. The OECD (1996: 240) gives the following as an example of the two measures. An establishment could have 100 employees in one period and 110 at another. During this period 10 people were therefore hired to fill new jobs, giving a job turnover rate of 10 percent. If, however, during the same period 10 people also left and 10 were hired to replace them, then total movement is 10 separations and 20 hires. This gives a labour turnover of 30 percent but the job turnover rate remains at 10 percent.

Measures of employee turnover derived from cross sectional surveys will tend to be lower than those derived from longitudinal studies (OECD, 1996:237). The example above shows that some employee losses and gains, those that occur between observation points, will cancel each other out and will not be observed. Thus, for the purposes of this study, the measures of voluntary employee turnover will be derived from a longitudinal study. Official statistical collections on labour market trends have generally not kept pace with apparent changes in work. In addition, where statistics in the areas of interest have been collected, this has often only occurred in recent years, with the result that long term data series have yet to build up. This lack of official data series is particularly evident in South Africa. Private surveys are sometimes developed within this gap, but there are often difficulties such as ensuring representative samples.

There is a range of approaches for collecting data on tenure and employee turnover. However, the most important source of data in South Africa currently, appears to be the QES survey. Already existing administrative data sets, such as tax data, UIF data, appear to offer promise in some areas of interest but are currently underutilised. While longitudinal datasets have the potential to offer the best data on tenure and turnover, cross sectional studies can also provide useful information.

### 2.4 INTERNATIONAL STUDIES ON EMPLOYEE TURNOVER

Numerous studies on employee turnover have been conducted by the OECD and independent researchers, with the OECD having published studies on employee turnover for both developing countries, as well as first world countries.

#### 2.4.1 Studies on employee turnover by the OECD

The OECD (1996:245) has attempted to track trends in employee turnover since the late 1970s through to the early 1990s for a range of countries. Such comparisons have presented the OECD with methodological problems. According to the OECD, New Zealand data has only been available since 1987. Overall the data show relatively high employee turnover rates in most countries, ranging from a high of thirty-five percent in New Zealand to fifteen percent in Belgium, the Netherlands and the United Kingdom. According to their analysis, the high employee turnover rate for New Zealand was driven by both a very high rate of job losses in the period measured and relatively high levels of job creation.

The long-term series indicated little upward trend in employee turnover in most nations. The exceptions are Canada, particularly amongst small firms, Norway (in manufacturing), and one US dataset (OECD, 1996:245).

The OECD (1996:250) discusses the idea that relatively constant employee turnover rates may hide increasingly unstable employment in small establishments, which counterbalances increasing stability in large ones. The OECD (1996: 250) also suggest that the pattern of employee turnover may vary over the business cycle, although noting that there are much bigger turnover cycles in the United States of America (USA) than in many European countries.

#### 2.4.2 Studies on employee turnover by independent researchers

In studying employee turnover in the USA, Anderson & Meyer (1994: 177), argue that it is important to not only understand changes in employee turnover, but also the components of such turnover.

If a dominant form of turnover is temporary separations without a permanent job change, theories of temporary lay-off unemployment (based on a view of the labour market in which firms and workers form long-term attachments) gain importance. Similarly, the problems associated with structural unemployment are most likely to be of concern if permanent separations due to plant closings or cutbacks make up a large part of turnover (Anderson and Meyer, 1994: 177).

According to Anderson & Meyer (1994: 177), labour turnover can be broken down into three parts:

- Temporary turnover.
- Permanent turnover due to job-position creation and destruction or job reallocation.

• Permanent turnover due to other causes, or simply job-match creation and destruction at continuing positions.

In another study Galarneau (1992:49) used data from the 1988, Canadian Labour Market Activity Survey (LMAS). The LMAS surveyed the characteristics of the jobs respondents held, up to five a year, during one calendar year. The research notes that there are high levels of exit and re-hiring in certain industry sectors. Examples are agriculture, fishing, forestry and tourism. Galarneau also suggests that there are other sectors that have a relatively unskilled labour force and low training costs. It may therefore be less expensive for employers to lay people off in slack periods and rehire them when activity resumes.

Galarneau (1992:55) argues that high hiring rates and monthly fluctuations are to be found in primary industries, construction, trade and personal services. The researcher suggests that all these may reflect seasonal fluctuations. It was further noted that 44 percent of those hired were in paid employment just before starting a new job. The other 56 percent may have been unemployed, discouraged workers, people entering the labour market for the first time, returnees from some kind of leave, or people who were offered work without having looked for it.

### 2.5 A FLOW APPROACH TO ANALYSING EMPLOYEE TURNOVER

There are numerous labour market transactions that are taking place on a daily basis in national departments due to retirements, appointments and dismissals. The flow approach can be used to analyse these labour market dynamics, dependant on accurate and reliable data being available.

Haltiwanger & Schuh (1996:88) maintain that a microeconomic-based flow approach to labour markets has become the dominant paradigm for modern macroeconomic theories of unemployment and labour market dynamics. This flow approach explains the behaviour of employment and unemployment by introducing dynamic changes in the number and location of workers and jobs. In the flow approach, heterogeneous organisations continuously offer a variety of job opportunities, and heterogeneous workers (each of whom has distinct skills) continuously offer their services. Thus, the labour market is characterized by a continuous search, organisations seeking the best workers, and workers seeking the best jobs (Mortensen & Pissarides, 1994:397).

The level of employment is jointly determined by the net result of two types of labourmarket flows, worker flows and job flows. Workers flow among three states of the labour market: employment, unemployment, and not in the labour force.

On the supply side of the labour market, employment increases when the flows into employment rise, or the flows out of employment fall, or both. Some workers flow from job to job but do not affect employment. From the employers' perspective, jobs flow among firms that continuously create new jobs and destroy old jobs.

On the demand side of the labour market, employment increases when job creation rises and more vacant jobs are filled, or when job destruction falls and fewer existing jobs become vacant.

Haltiwanger & Schuh (1996:91), note that worker flows and job flows are not synonymous. For example, if unemployed workers merely replace newly retired workers, employment doesn't change. In particular, these worker flows occur without changes in the stock of jobs (labour demand) through greater job creation. Similarly, if a firm replaces newly destroyed jobs with newly created jobs, and its employed workers are simply reassigned jobs within the firm, then worker flows do not change. In practice, however, the labour-market matching is much more complex and all worker and job flows tend to occur simultaneously.

# 2.6 EMPLOYEE TURNOVER AND ORGANISATIONAL FACTORS

One of the objectives of this study was to determine employee turnover benchmarks according to the employment size of the organisation. Within this context, the literature was reviewed on how employee turnover is modelled in different organisational settings.

# 2.6.1. Employee turnover from the organisational perspective

Although there is no standard framework for understanding the turnover process as a whole, a wide range of factors have been found useful when it comes to interpreting employee turnover. These factors have been used to model turnover in a range of different organisational settings. They include job satisfaction, various forms of commitment, equity, and many others (Morrel *et al*, 2004:162). Zheng & Lamond (2009:439), recommend that companies should look at the issue of employee turnover from the organisational perspective, especially for those operating in transition economies, rather than from the individual and cultural perspective.

Most of the studies on employee turnover focused on understanding why employees leave. There were few studies at the organisational level of analysis to investigate whether and how employers could reduce turnover (Barrick & Zimmerman, 2005:160).

### 2.6.2 Measuring and managing employee turnover

Broad-based surveys have the advantage of providing insight into why current employees have considered leaving their organisation and why they have left other organisations in the past. The information can address organisational issues raised by incumbents and thereby increase the probability of their staying. This information can also be used in developing recruiting and selection procedures with which to reduce the likelihood of hiring people with a high probability of leaving the organisation.

Organisations concerned about dysfunctional employee turnover should conduct research to better understand the types of shocks most likely to prompt their employees to consider leaving. Such information would also help managers anticipate when employee expectations might be violated (unexpected, job-based shocks). Such events might include performance appraisals, salary decisions and promotion activities (Holthom *et al.*, 2005:347).

While abstract models of 'turnover rates' that influence 'staffing levels' or 'headcount' may provide organisations with sufficient numbers (an efficiency measure), the understanding of turnover within organisations lies in the ability to manage employee turnover effectively. There is evidence that rates of employee turnover correlate with aggregate data such as underlying labour market trends, or base rates for employee turnover in organisations, but these offer little to the organisation or manager seeking to improve turnover in a particular department, or to retain selected staff (Terborg & Lee, 1984: 808). This severely limits the utility of such aggregated measures, as they fail to offer information in sufficient detail to manage turnover effectively.

From a managerial perspective, the analysis of employee turnover as an organisational attribute has a number of advantages. Conceptualizing and measuring employee turnover at the organisational level allows for the monitoring and assessment of employee turnover. This opens the way for administrative intervention through changes in organisational design and staffing arrangements. It is also one aspect of human resources management that is commonly monitored for both intervention and for making personnel policy projections (Alexander, Bloom & Nichols, 1991:4).

Detailed analysis of employee turnover statistics, particularly the magnitude and profile of voluntary turnover across different groups and in contrast to other

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organisations, can play an important role in evaluating the functioning of organisations. Benchmarking turnover statistics with other organisations provides the opportunity to view how an organisation's turnover rates compare with rates in similar agencies. Reviewing characteristics of the turnover profile within an organisation allows particular demographic groups and/or areas in need of attention to be recognized and explored. In this way, a comprehensive examination of turnover statistics can assist in isolating turnover hot spots within an organisation and, in turn, guide the development of appropriate interventions to assist in minimizing voluntary turnover (Lynch & Tuckey, 2008:8).

#### 2.6.3 Retention difficulties: Internal and external factors

In order to understand employee turnover within an organisation, it is important to determine whether retention difficulties are caused by internal or external factors. Although tight labour markets affect an employer's ability to attract and retain staff, looking outwards at the local labour market cannot be a substitute for understanding what is going on within the organisation (IDS, 2000).

Environmental characteristics may also play a key role. For example, when unemployment rates are high, employees may not be as likely to intend to quit due to the difficulty in finding alternate employment. Also, when poor performing individuals are members of organisations with large internal labour markets they may see alternatives within the organisation, thus reducing their perceived need to seek external employment opportunities. When low performing individuals perceive high levels of organisational support, they may believe that the organisation will work with them to improve their performance through training programs and solid supervisory leadership (Zimmermann & Darnold, 2009:155).

# 2.6.4 Factors influencing employee retention

There are many factors that influence employee retention. These factors play an important role in an organisation's ability to retain employees and include the size of the organisation, employee benefits, organisational efficiency, communication, and performance management.

# Size of organisation

Kirschenbaum & Mano-Negrin (1999:1252), found that an organisation's size and competitive ability to recruit and retain employees due to its market location, were important factors in the improvement of an actual employee turnover behaviour model. They were able to provide evidence on the negative impact of organisational size as well as the positive impact of organisational competition on actual employee turnover behaviour. Internal organisational opportunities for the advancement of employees have an impact on reducing actual turnover.

# **Employee benefits**

Offering benefits improves employee retention. When a firm offers benefits, it decreases the probability of an employee's leaving in a given year by 26.2 percent and increases the probability of staying an additional year by 13.9 percent (Hope & Patrick, 2007:1).

A study by Vandenbergh & Tremblay (2008:283) offered supporting evidence that compensation satisfaction, whatever its dimensions, is a key element in retention policies because it helps strengthen the employee's link with the organisation.

# **Organisational efficiency**

In organisations where there was a high level of inefficiency there was also a high level of employee turnover. Therefore, in instances where organisations are not stable, employees tend to quit and look for stable organisations that will provide them with better career advancement opportunities. It is also possible that the problems caused by higher rates of employee turnover in some parts of the organisation actually mask the negative effects of lower rates occurring in other work units within the organisation (Alexander *et al.*, 1994:21).

# Communication

Employees have a need to be informed and are empowered in their work by means of clear standards and good information. Managers have realized the importance of collecting and sharing data that will enhance the effectiveness of the work performed. Reporting systems must, therefore, provide staff with clear benchmarks for performance and improvement.

Communication in organisations has improved vastly over the years. Technology has altered the way people traditionally communicate in organisations. The ease and availability of communication channels (e.g., company intranet and e-mails) have opened up employee access to senior management and key decision makers. Middle level management is increasingly irrelevant as formal and hierarchical organisational structure is becoming less necessary. The "information is power" cliché has shifted the relative power of managers to subordinates and workers as knowledge networks have placed information in the hands of everyone. The result of all this is the flattening and levelling of corporate structures (Burke & Ng, 2006:91).

## Performance management

Productivity has been increased and employee turnover reduced through employee commitment gained through positive workplace culture, attention to the job satisfaction and reward of employees, and through clearly communicating performance expectations and actual results with all staff. This results in unifying staff towards their role in achieving the organisational goals (Harris & Williamson, 2008:12).

# 2.7 CONCLUSION

This overview of the literature provided a premise for the study on employee turnover in public and private sector organisations. The various definitions relating to turnover, as well as organisational factors affecting turnover, were also explored along with the need for measuring, monitoring and, managing turnover. This review also provided a basis for the questionnaire design, with reference to retention strategies in the public sector, and the main attraction and retention drivers. This will be covered in detail in the research design of the study.

# **CHAPTER 3**

# **RESEARCH METHODOLOGY**

# **3.1 INTRODUCTION**

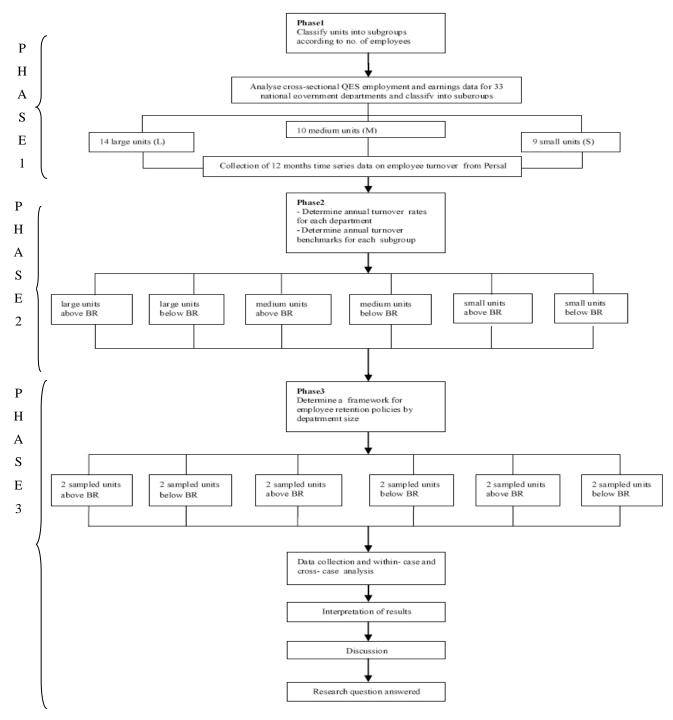
In the preceding literature review, employee turnover in both public and private sector organisations was presented.

In this chapter, the research methodology is presented, with a description of the steps and techniques used in the collection and analysis of data. The methodology used was a systematic and objective process of collecting and analysing data, with the aim of effectively answering the research questions.

The research was conducted in three phases (Figure 3.1). In the first instance employment and earnings data from the QES (2009) survey was used to classify national departments into three subgroups (small, medium and large) according to employment size (Phase one).

Thereafter, employment and turnover data from Persal, (the personnel and salaries management system used by the national and provincial government), was analysed over a period of 12 months (Phase two). During this phase the average annual turnover rate, average monthly turnover rate and the benchmark rate for each subgroup were determined. An analysis for employee retention strategies followed from a multiple case study (Phase three). The benchmarks for the three subgroups obtained from the analysis of employment and turnover data (Phase two) were used as the criteria for the selection of cases for the multiple case study (Phase three).

# **3.2 ORGANISATION OF THE STUDY**





Source: Developed for study by author

# **3.3 AIM AND OBJECTIVES**

Before presenting the research method and design of this study, this section briefly summarizes the aim and objectives of the study. The aim of the study was to determine guidance/recommendations for employee retention strategies in terms of the employing size of the organisation. This was done in three phases.

# 3.4 EXPLORATORY RESEARCH (PHASE ONE)

Currently, not much is known about the distribution of employment and earnings among national government departments and no study to date has analysed practices of employee retention according to organisational size. In essence, this exploratory study was undertaken to classify the departments into subgroups according to the number of employees so that more rigorous research, with respect to employee turnover and retention, could then proceed within these subgroups.

The exploratory research conducted, showed that the national government departments can be classified into three employment size subgroups: small, medium, and large.

### 3.4.1 Introduction and background

The first research objective was to do an analysis of the national government departments with respect to employment and earnings and their classification into subgroups according to employment size. For this data from the QES (2009) survey was analysed for 33 national departments (excluding the South African Police Service - SAPS). The purpose was to establish whether these departments could be classified into homogeneous subgroups (with respect to their number of employees), so that distinct benchmarks could be determined during analysis of employment and turnover data.

The QES survey is an official employment survey conducted by Statistics South Africa. The survey covers a sample of approximately 22 000 private and public enterprises in the formal, non-agricultural, business sector of the South African economy. All the national departments are completely enumerated and the data is collected by postal questionnaires. The survey provides data items on total employment and gross earnings but does not provide any information on employee turnover statistics. The employment data are reported by respondents of each national department for a given reference period and includes employees that are currently on the payroll. The statistical release that is officially published, provides employment figures at an aggregated level and does not provide data on a unit level for any government department.

This exploratory study required unit level employment data that had to be obtained from the QES database. Once obtained, the data was able to provide a measure of size for each national department, in terms of employment and gross earnings for the month.

#### 3.4.2 Data analysis for small, medium and large national departments

Departments (units) were classified into three subgroups, small from 0 to 1000 employees, medium from 1001 to 5000 employees and large, with employment above 5000. This was done by analysing the differences in employment after ranking each of the 33 units. The difference in employment between the last small unit (S14) and the first medium unit M1 is approximately 29 percent and the difference in employment between M10 and L1 is approximately 42 percent. The tables below show the size group classification for each department. The total number of employees in the 33 national government departments is approximately 237 000, with the total gross earnings for December 2008 approximately R3.3 billion (Table 3.1).

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Department	No. of empl.	No. of units	salaries R'm	% of total empl.	% of total salaries
Small (S)	6 375	14	153.6	2.7	4.6
Medium (M)	22 946	10	433.3	9.7	13.0
Large (L)	207 557	9	2742.3	87.6	82.4
	000.070			400.0	100
Total	236 878	33	3329.2	100.0	100

 Table 3.1.
 Distribution of National Departments

Source: Statistics South Africa: Quarterly Employment Survey, March 2009

The subgroup of small, national departments represents 14 departments (units) with the employment range from 134 to 935 employees and the total salaries range from R4.5 million to R21.9 million. There is a strong correlation (r= 0.96) between salaries and employment in this subgroup (Table 3.2).

The small, national departments account for approximately 2.7 percent (6375) of the workforce and 4.6 percent (R153.6 million) of the total monthly gross earnings of the 33 national departments. The average monthly salary is approximately R24000. This subgroup of the public sector may consist of more skilled and highly paid workers than the other two groups. This subgroup will be classified as a homogeneous group for the purpose of calculating a turnover benchmark.

Table 3.2	Number of employees and monthly salaries for small national departments
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Units	S1	S2	S3	S4	<b>S</b> 5	S6	S7	S8	S9	S10	S11	S12	S13	S14
Empl.	134	189	205	255	286	330	406	425	523	553	603	739	792	935
Salaries														
(R'm)	4.5	5.7	4.5	6.6	5.1	10.0	11.3	11.0	14.2	13.3	10.0	16.3	19.2	21.9

Source: Statistics South Africa: Quarterly Employment Survey, March 2009

#### 3.4.2.1 Medium national departments

The subgroup of medium, national departments represents 10 units, with the employment range from 1208 to 4407 employees and the total salaries range from R22.5 million to R72.9 million (Table 3.3).

The medium, national departments account for approximately 9.7 percent (22946) of the workforce and 13 percent (R433.4 million) of the total monthly gross earnings of the 33 national departments. The average monthly salary is approximately R19000. This subgroup also has a strong correlation (r= 0.94) between employment and salaries and will be classified as a homogeneous subgroup for the calculation of a turnover benchmark.

Units	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10
Empl.	1 208	1 213	1 580	1 621	1 654	1 928	2 300	2 835	4 200	4 407
Salaries										
(R'm)	22.5	30.9	29.3	39.2	32.7	30.5	55.1	43.7	76.5	72.9

Source: Statistics South Africa: Quarterly Employment Survey, March 2009

#### 3.4.2.2 Large national departments

The subgroup of large, national departments represents nine units, with the employment range from 6248 to 80403 employees and the total salaries range from a minimum of R26 million to a maximum R885.8 million (Table 3.4).

The large, national departments account for approximately 87.6 percent (207557) of the workforce and 82.4 percent (R2742 million) of the total monthly gross earnings of the 33 national departments. The average monthly salary is approximately R13000. These large, national departments, when compared to the other two groups of small and medium sized departments, may consist of a greater proportion of less skilled workers. Again, this subgroup has a strong correlation (r= 0.93) between employment and salaries and will be classified as a homogeneous group for the calculation of a turnover benchmark.

 Table 3.4 Number of employees and monthly salaries for large national departments

Units L	1	L2	L3	L4	L5	L6	L7	L8	L9
Empl. 6	6 248	6 709	8 624	8 972	14 649	16 127	24 366	41 459	80 403
Salaries									
(R'm) 7	78.5	91.9	113.3	26.0	290.7	169.4	555.5	531.2	885.8

Source: Statistics South Africa: Quarterly Employment Survey, March 2009

Average monthly earnings can be derived by dividing the total monthly earnings of each department by the number of employees. Employment is a better measure of size than earnings. Changes in the average earnings may be affected, not only by the changes in the level of earnings of employees but also by changes in the overall composition of the workforce in the department.

#### 3.4.3 Summary of findings of exploratory research

The analysis of the employment data provided meaningful insights that led to the classification of the 33 national departments into 14 small, 10 medium and 8 large departments. Using this classification, employee turnover rates and turnover benchmarks were computed for the three subgroups.

# 3.5 DETERMINATION OF TURNOVER RATES AND BENCHMARKS (PHASE TWO)

The second research objective was the determination and analysis of employee turnover benchmarks for each of the subgroups. In the exploratory study (Phase one) the national government departments were classified into three size groups, according to their employment size. The aim of this phase was to determine the average turnover rates for each department and the benchmark rates for the small, medium and large subgroups. During this phase data was collected from Persal over a 12 month period and analysed (Appendix 1). The analyses provided statistics on average annual turnover rates, average monthly turnover rates and benchmark rates for each of the three subgroups.

#### 3.5.1 The population

The target population for the determination of employee turnover rates and benchmarks were the 33 national departments that were stratified into small, medium and large subgroups (Phase one). The population was completely enumerated, so that accurate and reliable turnover benchmarks could be determined for each subgroup.

#### 3.5.2 Data collection from Persal

Data was collected monthly from Persal, the personnel and salaries management system used by the national and provincial government. The system is standardized for all the central government departments and provincial administrations. This ensures better control of the facility to provide quick and accurate response to high level enquiries. Online help is available for all the screens and there is a full user manual that is maintained on the system.

The system is operated online and full online validation is done to ensure data integrity. Transactions are written to a suspense file (when captured by each department) with approval and authorization functionality. The transactions are then periodically batch processed and the relevant data is updated. Due to this lag, between the capturing and processing of data, recalculation of salary data has to be done in order to have up-to-date data available.

With the system being fully integrated between the personnel and salary sub systems, capturing of data is only done once. If personnel data is captured that has a financial implication, e.g. promotions, the salary data will be updated accordingly. A full audit trail is kept of all actions performed on the system.

An Excel template spreadsheet was designed in consultation with the Persal administrators. The construction of this template was guided by some general principles: that the format and content should facilitate the collection of required and relevant data and not include unnecessary or extraneous information that, when possible, the data collected should not duplicate any information and; that the template should be clear and user friendly (Appendix 2).

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The Persal data was collected electronically at the end of each month. Once the data was received it was exported to a database. One of the main advantages of this approach, was that the data was immediately available for analysis and the results were continuously monitored during the research. In addition, timeliness was improved and the risk of manual capturing errors eliminated.

#### 3.5.3 The variables

The key variables for the study are explained below. These variables were collected for each month, comprising of Persal transactions from the first to the last day of each month.

In calculating turnover, the numerator measures the number of employees in a national department that left (separations) over a specified time period (one month). However, according to Barry, Kemper and Brannon, (2008:398), extrapolating a 6-month turnover rate into an annual rate can be inaccurate. Some organisations could experience seasonal variability that may not be reflected if the turnover rate is collected during a 6-month period. These data series are not representative of the organisations true turnover trends.

The employment and separations data for the determination of employee turnover rates and benchmarks was, therefore, collected monthly for a period of one year.

#### 3.5.3.1 Number of employees

Information on turnover and appointments were obtained from employee payroll records (Persal), where the average number of employees was calculated for the 12-month time period. This measure was used, since the average number of employees during a time period is preferable to measuring the number at a point in time, because of possible changes in staffing ratios and vacancies over time. This is particularly important if the organisation is expanding or downsizing.

# 3.5.3.2 Hires

Appointments (hires and recalls for the entire month): refers to all new additions to the payroll during the reference month.

# 3.5.3.3 Total employment

Total employment for the pay period: Refers to every person who receives a salary during the reference month and is counted once per department.

# 3.5.3.4 Separations

Measurement of turnover needs to be sophisticated enough that those responsible for resource planning are able to identify various categories of leavers from cases where people left because of ill health, retirement, or redundancy (Forbes and McGill, 1985:11).

Separations are the total number of terminations of employment occurring at any time during the month. They are reported by type of separation - quits, lay-offs and discharges, and other separations. Quits are voluntary separations by employees (except retirements). Lay-offs and discharges are involuntary separations initiated by the employer. Other separations include retirements, inter-departmental transfers, deaths and separation due to disability. Separations do not include transfers within the same national department.

The accepted measure of turnover is a ratio of the number of separations during a specified period of time, to the total number of workers employed. There are several aspects to consider when defining the numerator and denominator.

The numerator of the turnover measure is the number of employees that separated from the organisation during the time period specified. Defining separations is not straightforward. Although gross measures of turnover that include both voluntary and involuntary separations may be useful in some situations, they are less useful in others (Barry *et al.*, 2008:397). For example, precipitants of terminations vary between voluntary and involuntary conditions. Gross measures are thus not very informative when solutions to the turnover problem are being sought.

Accordingly, in this study, data was collected on voluntary separations. This provided an opportunity to conduct analysis on the trends of voluntary turnover rates.

# 3.5.3.5 Quits

Quits (excluding retirements) refers to all voluntary separations during the reference month.

### 3.5.3.6 Turnover rates

This rate is calculated by measuring the number of leavers in a period, as a percentage of the number employed during the same period. The turnover rate was computed for the voluntary separations for a period of twelve months (Appendix 3).

Unless there are special circumstances such as a sudden increase in the size of the workforce, the average number employed is usually taken to be the number working at the start of the period, added to the number working at the end, divided by two.

This index was calculated for each national department and an overall index (benchmark) was calculated for each of the small, medium and large subgroups (Appendix 3). Descriptive statistics for the turnover rates were also computed.

As a guide for the selection of cases for the multiple case study, the turnover rates of each national department was compared to the respective benchmark rate of each subgroup, ensuring a satisfactory mix of good and poor performers.

# 3.5.4 Data analysis process

The data analysis was completed in two stages. The first stage involved analysing monthly unit data in each subgroup. This primarily involved the editing and cleaning of data, comparing month on month changes and outlier detection. This was done over a period of twelve months.

In the second stage, the 12 months time series data (from stage one) was used to compute the average annual turnover rates for each department and the annual turnover benchmark rates for each subgroup.

# 3.5.4.1 Editing and cleaning

The data sets received each month were examined for inconsistencies and incompleteness at the end of each month. This had to be done once all the data was received.

Data for a unit was regarded as incomplete if cells corresponding to a variable were blank. Incomplete responses were investigated and rectified. Duplicates occurred when two transactions for a given department on a given date contained exactly the same data for all the variables. All duplicate responses were deleted programmatically.

Thereafter, exploratory analysis was conducted to detect inconsistencies in the data. Box plots, using the statistical software SAS, were run to identify outliers. These extreme cases, when detected, were investigated and resolved. The data was analysed according to the size of the organisation, since greater staff numbers correlate with higher turnover levels.

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#### 3.5.4.2 Time series analysis

In order to monitor and compare the month on month data, time series analyses were set up, to see whether there were any trends and seasonal variations. Correlation coefficients between turnover and employment were computed for each of the subgroups to establish data quality.

### 3.5.5 Summary

The employee turnover rates and benchmarks were determined for each of the three subgroups (Phase two). These benchmarks were used as performance indicators for each subgroup. To provide a basis for the selection of cases within each subgroup, the turnover benchmark rate was compared to the employee turnover rate of each department in that subgroup. Two pairs of cases from each subgroup were selected for the multiple case study. The determination of employee turnover rates and benchmarks is outlined in the findings and analysis of data (Chapter 4).

### 3.6 MULTIPLE CASE STUDY (PHASE THREE)

The third objective was to do a selection of multiple cases per subgroup based on the analysis of departmental employee turnover rates relative to the benchmark turnover rates. After the turnover rates and respective benchmark rates were determined for each subgroup, the multiple cases were selected. The aim being to critically analyse current practices of employee retention in national government departments with the use of a multiple case study methodology. To ensure a representative sample, a pair of good performers and a pair of poor performers were selected from each subgroup as cases. This was done relative to the benchmark of the subgroup. The data obtained from the multiple case study was analysed both quantitatively and qualitatively. The findings of this phase are covered in the findings and analysis of data (chapter 5).

# 3.6.1 Introduction

The focus of the study required an in-depth understanding of those human resource management practices that relate to employee retention strategies in national government departments. In terms of the research design, cases (departments) were selected according to organisation size and turnover performance. The objective of this phase of the research suggested a need for detailed data, which case studies provide.

Multiple case studies were further chosen to enhance the quality of the research, so that retention strategies could be investigated for within-group similarities, coupled with inter-group differences. If the study examined only one department, it would be difficult to draw unbiased conclusions about the reasons for the effectiveness of the retention strategies.

# **3.6.2 Case study as a methodological framework**

Every type of empirical research has an implicit or explicit research design. It is held that the research design can be defined as the logical sequence that connects the empirical data to the initial research questions and, ultimately, to its conclusions (Yin, 2009:26).

A descriptive, exploratory survey strategy was followed to obtain and categorize the data, since no previous research regarding retention strategies in national government departments has been conducted. The data yielded from this phase of the study was both quantitative and qualitative. Having identified employee turnover as a major problem in national government departments, this multiple case study was designed to contribute knowledge to improve employee retention strategies in these organisations.

The theoretical basis and practical considerations of this proposed phase further suggested the use of a multiple case methodology. The choice for multiple cases was appropriate, given that multiple-case studies follow a replication, not sampling, logic. This means that two or more cases should be included within the same study precisely because the investigator predicts that similar results (replication) will be found. If such replication is found for several cases, you can have more confidence in the overall results. The development of consistent findings, over multiple cases, can then be considered a very robust finding (Yin, 2009:53).

Case studies build theory from multiple cases that sequentially enrich the conceptual framework (Cepeda & Martin, 2005:861). It was therefore particularly suited in this study of multiple cases, as it allowed for within-case and cross-case analyses between the departments, with turnover rates above and below the benchmark rate. The design also provided a facility for the confirmation of key information gathered from the exploratory study (triangulation).

Case studies typically combine data collection methods such as archives, interviews, questionnaires, and observations. The evidence may be qualitative (e.g. words), quantitative (e.g. numbers), or both (Eisenhardt, 1989:535). The common element of qualitative research is the collection of data in the form of words and statements, which is analysed by methods that do not include statistics or quantification (Cepeda & Martin, 2005:852).

For the purposes of this phase of the study, qualitative evidence was obtained from surveyed cases using self-administered questionnaires.

#### 3.6.3 The selection criteria of units of analyses and validity

The case study examined issues related to employee recruitment, retention and turnover in performing and non performing national government departments. In this comparative study, multiple units of analyses (four units from each of the three subgroups) were chosen.

Multiple-case rationales also derive from prior hypothesizing of different types of conditions and the desire to have subgroups of cases covering each type (Yin, 2009:59). The research design in this study catered for two pairs of "similar" cases within each subgroup. This is one of the tactics recommended by Yin (2009:42) to increase *construct validity* and enhance the quality of the research design.

Further, given the limited number of cases which can usually be studied, it makes sense to choose cases, such as extreme situations and polar types in which the process of interest is "transparently observable" (Pettigrew, 1990:270).

The goal of the selection criteria, for the multiple cases within each subgroup was thus to allow for comparisons and for the findings to be generalised beyond the immediate case study. This increased the *external validity* and enhanced the quality of the research design (Yin, 2009:41). Four units from each subgroup, two with separation rates "far above" the benchmark turnover rate and two with a turnover rate "far below" the benchmark turnover rate, were selected. This was done to ensure that the selected departments represented extreme cases. Otherwise it would be difficult to draw valid conclusions about the successes or failures of their existing retention strategies.

The pairs of departments selected as cases were, therefore, similar in terms of organisation size but very different in terms of performance, in order to allow for meaningful comparisons within each subgroup. This selection criterion also ensured that the departments selected for the case study was comprised of a mix of both "good performers" and "poor performers" from each subgroup.

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Furthermore, the quality of the research design (external validity) allowed for the study's findings to be generalised to the three subgroups of national government departments.

In the Warwick empirical research study of Imperial Chemicals Industries (Pettigrew, 1990:270), the investigators also followed a deliberate theoretical sampling plan. They chose polar types: one case of clearly successful firm performance and one unsuccessful case, within each of the four markets.

# 3.6.4 Establishing reliability of the research design

To test the reliability of the research design, the objective is to be sure that, if a later researcher followed the same procedures as described in this study and conducted the same case study all over again, the later researcher should arrive at the same findings and conclusions. The goal of reliability is to minimize the errors and biases in the study (Yin, 2009:45). The reliability problem was approached by making as many steps as operational as possible, allowing for an easy audit of the processes followed.

Finally, internal consistency refers to the amount of homogeneity present in the research. Cronbach's alpha ( $\alpha$ ) measures the internal consistency and reliability of the instrument, while Cronbach's alpha coefficient was computed for each item in section A of the questionnaire. This coefficient (Cronbach's  $\alpha$ ) was used to estimate the proportion of variance that was consistent in the entire set of scores. The alpha coefficient ranges in value from 0.00 (if no variance is consistent) to 1.00 (if all variances are consistent). When the correlation is strong (greater than 0.7) there is internal consistency which indicates reliability of the survey instrument (Santos. 1998).

The data analysis section in the findings and analysis (chapter 5) for the multiple case study provide the results of the reliability tests using statistical methods.

#### 3.6.5 Data collection instrument

The fourth research objective required a cross-sectional survey of the selected multiple cases to determine the current practices with respect to employee attraction and retention per subgroup.

A self-administered survey-questionnaire was used for the data gathering process. The questionnaires were sent (by email) to the human resource manager of each selected department, with a cover letter requesting them to answer the questionnaires. The respondents were assured that their employer's and their own identity would not be revealed. A return email address was also provided.

An obvious advantage of using email is that the costs of duplicating a number of paper survey questionnaires are totally eliminated. Secondly, distribution time would seem to be greatly reduced as the email would route the survey electronically. Third, response times and rates should increase because of the ease of distribution and response (Samuel, 1994: 26).

#### 3.6.6 Content and structure of questionnaire

The questionnaire (Appendix 4) consisted of two sections and was structured in such a way that respondents were able to easily answer it. The questions were clear and unambiguous, with the type and form of question structured to elicit the clearest answer. For section A, answers to closed questions were sought, while all the questions in section B were open-ended. This offered greater depth of discussion, such as asking respondents what the main objectives of the organisations human resourcing strategy are.

The closed questions in section A were designed to collect data for quantitative analysis and contained free-standing, (not dependent on other questions), multiple choice questions with two possible answers, "yes" or "no". Each of the thirty two questions were equally weighted and designed in such a way that a "yes" response reflected a favourable outcome.

The open-ended questions in section B were primarily designed to provide a facility where respondents could expand on positive responses from section A. These responses were analysed qualitatively, using cross-case and within case analysis.

### 3.6.6.1 Focus of questionnaire

Organisations need to develop clear strategies for attracting and retaining good employees (Holthom *et al*, 2005:337).

The aim of the survey was to determine the factors that influenced the government's ability to attract and retain employees. These factors should identify the top drivers of attraction and the top drivers of retention. Therefore, the questionnaire focussed on current practices in areas related to resourcing strategies, recruitment difficulties, attracting and selecting candidates, diversity, employee turnover, and employee retention (Table 3.5 and Table 3.6).

# Attracting and recruiting employees

The questions related to recruitment were designed to explore the nature and scale of recruitment activity taking place in the organisation. It also examines the challenges that recruitment professionals faced over the last year, employer's use of initiatives to overcome recruitment difficulties and information on trends and changes in attraction and selection methods.

### Managing employee turnover

The questions on employee turnover were designed primarily to establish whether turnover is measured and monitored in the organisation. Questions also investigated the impact of employee turnover on the organisation and the employer's initiatives with which to manage employee turnover.

### **Retention Strategies**

Questions related to retention strategies focused on the organisation's employee retention strategy and the challenges faced with respect to employee retention.

#### 3.6.6.2 The Questions

In the following analysis the closed questions from section A that were repeated in the open ended questions of section B, are cross-referenced and appear under the relevant headings.

 Table 3.5
 Section A: Quantitative: attraction and retention drivers

Factors influencing attraction and retention	Questions
Attraction drivers	A1.1 – A1.6, A1.8-A1.9 ,A1.20 ,A1.23-A1.27
Retention drivers	A1.7 ,A1.10-A1.19, A1.21-A1.22, A1.28-A1.32

#### Table 3.6 Section B: Qualitative: attraction and retention drivers

Factors influencing attraction and retention	Questions
Attraction drivers	B1 –B6, B14-B15
Retention drivers	B7 – B13,B16

The questions are structured to determine the drivers of attraction and retention of employees.

### Q A1.1 and Q B1: Resourcing strategies and key objectives?

To establish whether the department surveyed had a formal resourcing strategy in place. A human resource strategy is central to an organisation achieving its strategic objectives. The key objectives should include attracting, recruiting and training of staff and planning to meet the future skills requirement of the organisation. A formal resourcing strategy is central to an organisations ability to attract and retain staff.

# Q A1.2: Hired assistance from human resource services/consultants in the past year?

It was expected that organisations lacking capacity with respect to human resource management, should hire experts to assist in areas where capacity is lacking.

### Q A1.3 and Q B2: Recruitment difficulties experienced?

To establish to what extent the department surveyed experienced recruitment difficulties and the steps taken to overcome these difficulties. Some of the key reasons for recruitment difficulties are a lack of necessary specialist skills in candidates, followed by high pay expectations and insufficient experience of candidates.

Initiatives that are often used to overcome recruitment difficulties include the following: appointing people who have the potential to grow, looking beyond qualifications, redefining jobs, increasing salaries or benefits and the provision of additional training to allow internal staff to fill posts. An organisations ability to overcome recruitment difficulties impacts positively on attracting the right candidates for the job.

#### Q B3: Methods used to attract candidates?

Recruitment agencies, corporate websites and local newspaper advertisements are often used to attract applicants. The aim here is to determine whether the current practices are adequate.

#### Q A1.4 and Q B4: List pre-employment checks

This question was included to establish whether the current practice of preemployment checks, such as most recent employment history and absence records, are effective. Do organisations take up candidate references?

#### Q A1.5 and Q B5: Any withdrawal of job offers?

Were any job offers withdrawn in the last year?

Job offers should be withdrawn when a candidate lies or misrepresents their application. The quality of references and the extent to which references are used to confirm information provided in a candidates application, may influence decisions to withdraw job offers.

#### Q A 1.6 and Q B6: Is a reference check conducted and how is it done?

Conducting reference checks plays a key role in attracting prospective candidates. The question was included to determine what the current practice is. At minimum, reference checks should be done by fax or emails and not telephonically.

#### QA1.7: Is a counter-offer policy used?

Organisations must have a formal counter offer policy. This is essential for retaining people with scarce skills. In most cases counter offers can assist in the retention of valued staff but this has to be informed by policy.

#### Q A1.8: Are the qualifications of candidates verified?

Validation off qualifications (prior to appointment) is essential to safeguard against employing candidates with fraudulent qualifications. This process is key to attracting the most suitable candidates.

#### Q A1.9: Is the workforce plan up to date and used?

An up to date workforce plan is necessary for the management of turnover and retention.

#### Q A1.10 and B 7 – 11: Is employee turnover monitored and examined?

One of the objectives of this study is to provide guidance/recommendations to improve employee retention by managing turnover. This question was included to determine whether employers were monitoring turnover. In analysing employee turnover, it is necessary to distinguish between voluntary and involuntary turnover. The further dissection of turnover into occupational categories will help to determine the main drivers of turnover. Differentiating between turnover of full time and contract employees is important as full time employees are more important to the stability of an organisation. It is essential for employers to monitor and manage turnover.

### Q A1.11: Are exit interviews conducted?

Exit interviews provide valuable information on how to improve recruitment and also provide direct indications for improving staff retention.

#### Q A1.12: Are skills audits conducted?

A skills audit of the workforce provides vital information that can be used to conduct training needs analysis.

#### Q B12: Retention difficulties in different occupational categories?

An analysing retention difficulty, with respect to the different occupational categories, makes it easier to understand where the actual problems lie.

#### Q A1.13: Are alternate career paths offered?

Alternate career paths may assist in retaining valuable employees.

#### Q A1.14: Is there access to training and capacity development?

The provision of training and capacity development is essential for the retention of staff at any level in the organisation.

# Q A1.15: Are talent pools identified?

For an organisation to thrive and maintain a competitive advantage, identifying and developing talented employees is a critical business task.

#### Q A1.16: Succession planning policy used?

Talent pool development encompasses the cultivation, development, motivation and succession planning of those who are seen as crucial to an organisation's success.

# Q A1.17: Do you have a rotation plan for managers?

At management level, job rotation, which is frequently referred to as management rotation, is tightly linked with succession planning. (Develop a pool of people capable of stepping into an existing job).

## Q A1.18: Do you have an induction programme for new employees?

An induction programme is an important process for bringing staff into an organisation. It provides an introduction to the working environment and the set-up of the employee within the organisation.

# Q A1.20: Is the culture of the organisation inductive to the attraction and retention of staff?

A good workplace culture assists with the attraction and retention of staff.

#### Q A1.21 and Q B13: What actions were taken to address retention?

Developing an employee retention strategy is one step organisations can take to avoid high levels of turnover.

#### Q A1.22: Was job redesign considered?

Job redesign assists in attracting and retaining high quality employees.

#### Q A1.23 and B14-15: Performance management and evaluation measures

Performance management allows you to tap the full potential of staff. This comprehensive process includes essential components, starting with the monitoring and development of staff to rating their progress and rewarding them for their achievements.

#### Q A1.24: Were staff competencies evaluated?

One of the essential components of a performance management system is the evaluation of staff competencies.

# Q A1: 25: Do all employees have a performance plan?

A performance plan should precede the performance evaluation.

### Q A1.26: Have all employees been evaluated against their performance plans?

The performance of employees must be measured against the objectives set out in the performance plan.

#### Q A1.27: Have good performers been rewarded?

It is preferable to have some sort of reward system for good performers as this assists in employee retention.

#### Q A1.28: Is there a health and wellness programme for all employees?

Health and wellness programs can have an impact in reducing absenteeism and promoting good health among employees.

#### Q A1.29: Are all current jobs graded?

All jobs should be graded in a consistent way and remunerated accordingly.

#### Q A1.30: Is job grading fair and equitable?

Job grading should be fair and equitable across the organisation.

# Q A1.31 and Q B16-17: Is communication easy and senior management accessible?

The development of a strategic internal communication strategy and its implementation can provide a number of benefits to organisations. To achieve those benefits a coordinated, comprehensive, long term communication approach is needed.

## Q A1.32: Have employee satisfaction surveys been conducted?

Employee satisfaction surveys provide useful information with respect to the performance of the various divisions of an organisation.

## 3.6.7 Validity of collection instrument

Although validation of data collection instruments is a necessary step in research, there is little detailed and practical guidance on how validation should be conducted (Petric and Czarl, 2003:190).

If the validity can be maximised or tested then the result of the research may be more credible. The quality of research is thus enhanced by testing and increasing the validity or trustworthiness of the research (Golafshani, 2003:603).

Establishing validity was an important step during the construction of the questionnaire. As a pilot study the draft questionnaire was given to two experts, who are researchers as well as current human resource professionals, to obtain expert opinions on the relevance of items to the purpose of the questionnaire, possible wording and interpretation problems, along with the instructions.

Once the questionnaire was modified it was tested with three human resource professionals. Neither these respondents, nor their answers were part of the actual study process and were only used as a pilot study. After the questions were answered, suggestions and necessary corrections were made to improve the instrument further. The content and order of the questions on the questionnaire were also changed based on the assessment and suggestions of the pilot test respondents.

### 3.6.8 Data analysis

The closed questions from section A were analysed using statistical analysis while the open ended questions from section B were analysed qualitatively. The findings and analysis of data cover both the quantitative and qualitative analysis (chapter 5).

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#### 3.6.8.1 Data analysis methods: Section A-quantitative analysis

Each closed question in section A was designed to allow for two possible responses, either "yes" or "no". The "yes" responses were given a score of 1 and the "no" responses were given a score of 0. The responses were then summed for each category using 2x2 contingency tables. Statistical methods involving categorical analysis were applied to assess the relationship (association) between employee turnover and the responses. These analyses were first done for the entire group of all the national departments surveyed and then for each of the three subgroups.

In order to determine whether there were any relationships between the current practices, with respect to employee attraction/retention and employee turnover, the hypothesis was centred on whether there is a relationship between employee turnover and responses for each of the categories. Acceptance of the null hypothesis implies that employee turnover in national departments is not associated with the responses. Rejection of the null hypothesis shows a probable association.

Thereafter, when a relationship was observed, the next step of the analysis was to determine which items (from the questionnaire) contributed mainly to this relationship.

This involved comparing the cumulative "yes" scores (for each question/item) for the above and below the benchmark categories. Each question with a score of 3 or more from the category below the benchmark was compared to the corresponding score in the category above the benchmark. If the difference (cumulative score for category below the benchmark minus the cumulative score for category above the benchmark) between the scores was greater than or equal to two, then the corresponding items were selected for further analysis. These selected items were considered to be the main factors influencing employee retention in small, medium and large national departments.

The integration of the quantitative results and the results of the qualitative analysis of data obtained from section B, are presented in the findings of the multiple case study.

#### 3.6.8.2 Data analysis methods: Section B, open-ended questions

The data gathered from section B was analysed with qualitative techniques and was done separately for each subgroup. The cross-cases analysis applies to the two selected departments within a subgroup with turnover below the benchmark, when compared to the two departments with turnover above the benchmark from the same subgroup.

The paired case applies to the departments from the same subgroup with their turnover either above the benchmark or below the benchmark.

Cross-case synthesis is a technique that applies specifically to the analysis of multiple cases (Yin: 2009:156). This technique is especially relevant since this study consisted of twelve cases (four per subgroup).

One tactic, according to Eisenhardt (1989:540), is to select categories or dimensions, and then to look for within-group similarities coupled with inter-group differences. Dimensions can be suggested by the research problem, by existing literature, or the researcher can choose some dimensions.

A second tactic, according to Eisenhardt (1989:540), is to select pairs of cases and then list the similarities and differences between each pair. This tactic forces researchers to look for the subtle similarities and differences between cases.

Accordingly, the data analysis followed two steps, within-case analysis followed by cross-case analysis. Initially each pair of similar cases within each sub group was analysed for similarities and differences with respect to their recruitment and retention strategies and thereafter cross-case analysis is done between the extreme cases in each sub group.

Cross-case analyses between extreme cases were used to search for patterns. This type of analysis counteracts information processing biases and provides the possibility of achieving accurate and reliable results. The key to good cross-case comparison is to look at the data in many divergent ways (Eisenhardt, 1989:550).

A third strategy, according to Eisenhardt (1989:541), is to divide the data by data source. This tactic exploits the unique insights possible from different types of data collection. When a pattern from one data source is corroborated by evidence from another, the finding is stronger and better grounded. When evidence conflicts, the researcher can reconcile the evidence through deeper probing of the meaning of the differences.

These tactics were used to improve the likelihood of accurate and reliable theory. In fact, cross-case and within-case analysis techniques have been employed in this study, as proposed by Eisenhardt (1989). In specific, the cases are compared within each size group for similarities and differences with respect to recruitment, retention and turnover. Cross-case analysis techniques were then employed in the analysis of the retention strategies of paired cases within each group, against the benchmark turnover rates.

# **3.7 CONCLUSION**

In this chapter, the research methodology for the study was presented. Methodologies were presented for the exploratory study conducted, where the 33 national departments were classified into three subgroups according to employment size (Phase one). This was followed by methods on how the turnover statistics and turnover benchmarks were determined for each subgroup (Phase two). The information obtained was used as a guide for the selection of multiple cases for the case study (Phase 3). The data from the selected multiple cases was analysed both quantitatively and qualitatively. These findings are presented in the following chapters.

# **CHAPTER 4**

# FINDINGS AND ANALYSIS OF DATA: DETERMINATION OF TURNOVER STATISTICS (PHASE TWO)

# 4.1 INTRODUCTION

The research methodology outlined the steps and techniques used in the collection and analysis of the data for both the determination of employee turnover rates and benchmarks (Phase two) and the multiple case study (Phase three). In this chapter, the findings and analysis of data for the determination of employee turnover rates and benchmarks (Phase two) is covered. The aim of this phase was to determine the turnover rates for each department within their respective subgroups and the benchmark rates for each of the small, medium and large subgroups. These employee turnover statistics were used as a guide for the selection of multiple cases for the case study (Phase three).

# **4.2 DATA COLLECTION**

To reiterate, data was collected from Persal, the personnel and salaries management system used by the national and provincial government. This was done over a 12 month period from January to December 2009. The data was collected and analysed for 33 national government departments, which were classified into three subgroups. The subgroups consisted of 14 small departments, ten medium departments, and nine large departments (Table 4.1).

## 4.3 FINDINGS

The unit data for voluntary turnover was aggregated for each subgroup (Table 4.1), with the mean and median of the annual turnover levels for each subgroup also covered (Table 4.6).

# 4.3.1 Benchmark voluntary turnover rates

The benchmark for voluntary turnover rates measures the percentage of the total workforce who voluntarily left the organisation during 2009. It is highest for the small departments, 31.5 percent, followed by 22.5 percent for medium departments and, smallest for large departments at 9.2 percent (Table 4.1).

Dept.	Employees	No.	Total Employees	%	Total Turnover	%	Annual rate	Monthly rate
	<1000	14		2.	2079	7.9	31.5	2.6
Small			6603	8				
	1001-5000	10		9.	5169	19.6	22.5	1.9
Medium			22943	6				
	>5001	9		87	19176	72.5	9.2	0.8
Large			209018	.6				
				10				
Total		33	238564	0	26424	100	11.1	0.9

 Table 4.1 Benchmark voluntary turnover rates from Jan to Dec 2009

# 4.3.2 Hire rates

The overall employment levels remained relatively constant, showing that not much job creation occurred during 2009. This stability in employment levels was due to departments hiring new employees to fill vacated posts. The hire rates were relatively consistent for the twelve months, ranging between 1.0 and 2.9 percent (Table 4.2).

The combined number of hires and separations during 2009 was 88393. This is made up of 26424 separations (Table 4.1) and 61969 hires (Table 4.2).

The summary information (Table 4.1) shows that the benchmark turnover rates for each of the three subgroups vary considerably, with 2.6 percent for small departments, 1.9 percent for medium departments, and 0.8 percent for large departments. This supports the objective of analysing employee retention separately for each subgroup.

		% m/m		% m/m	
2009	Hires	change	Employment	change	% Hire rate
Jan	6 541		235 470		2.8
Feb	5 281	-19.3	240 431	2.1	2.2
March	4 823	-8.7	235 414	-2.1	2.0
April	6 612	37.1	240 692	2.2	2.7
May	6 443	-2.6	239 329	-0.6	2.7
June	4 440	-31.1	239 777	0.2	1.9
July	6 556	47.7	243 701	1.6	2.7
Aug	4 665	-28.8	243 546	-0.1	1.9
Sept	4 027	-13.7	241 710	-0.8	1.7
Oct	5 649	40.3	242 756	0.4	2.3
Nov	4 527	-19.9	245 334	1.1	1.8
Dec	2 405	-46.9	241 655	-1.5	1.0
Total	61 969		238 563		26.0

Table 4.2 Total monthly hire rates

#### 4.3.3 Findings and interpretation: small national departments

There is a strong correlation (r=0.878) between the employee turnover levels and the average annual employment for the small national departments subgroup. Thus, an increase in the employment levels indicates a likely increase in employee turnover levels. This means that, for the subgroup of small departments, when employment increases employee turnover is likely to increase (Appendix 5).

The annual turnover rates of the 14 small departments range from 20.4 percent to 55.7 percent. The annual benchmark rate is 31.5 percent and the average monthly benchmark rate is 2.6 percent. In this subgroup five departments are above the monthly benchmark rate (Figure 4.1). Department S3, with the largest annual turnover rate of 55.7 percent, employs 3.5 percent of the workforce in this subgroup, while department S13, with the smallest annual turnover rate of 20.4 percent, employs 12.6 percent of the workforce in this subgroup (Table 4.3).

When compared to the benchmark average monthly turnover rate, departments S3 (4.6) and S9 (3.3) have relatively high average monthly employee turnover rates for 2009, while departments S13 (1.7) and S6 (1.9) have relatively low average monthly

employee turnover rates. In order to gain insight into the current employee retention practices that led to this very divergent employee turnover in this subgroup, departments S3, S9 ,S13 ,and S6 were selected for the multiple case study (Phase three). An in-depth qualitative analysis of the retention practices of these paired cases and cross-cases is covered in the findings and analysis of data for the multiple case study (chapter 5).

Small	Total annual	Average annual	Percentage of	Annual turnover	Average monthly
Department	turnover	employment	employment	rate	turnover rate
S13	170	834	12.6	20.4	1.7
S6	77	334	5.1	23.1	1.9
S4	65	258	3.9	25.2	2.1
S5	81	294	4.5	27.6	2.3
S11	171	610	9.2	28.1	2.3
S12	223	781	11.8	28.6	2.4
S1	39	135	2.0	29.0	2.4
S2	64	213	3.2	30.0	2.5
S7	142	462	7.0	30.7	2.6
S8	141	430	6.5	32.8	2.7
S10	197	587	8.9	33.6	2.8
S9	204	509	7.7	40.1	3.3
S14	377	929	14.1	40.6	3.4
S3	128	230	3.5	55.7	4.6
Total	2079	6606	100.0	31.5	2.6

 Table 4.3 Small national departments ranked by voluntary turnover rates

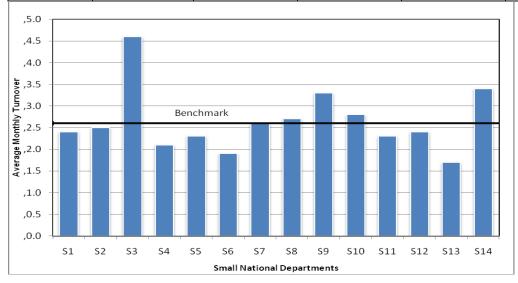


Figure 4.1 Average monthly turnover rates of small national departments

## 4.3.4 Findings and interpretation: medium national departments

There is a strong positive correlation (r=0.730) between the total annual employee turnover levels and the average annual employment for the subgroup of medium national departments. An increase in the employment levels therefore indicates a likely increase in turnover levels (Appendix 5).

The annual turnover rates of the 10 medium departments range from 9.9 percent to 45.6 percent. The annual benchmark rate is 22.5 percent and the average monthly benchmark rate is 1.9 percent. Of the 10 departments, six are below the benchmark rate and four above (Figure 4.2). Department M8, with the largest turnover at 45.6 percent, employs 15.7 percent of the workforce in this subgroup. Department M2, with the smallest turnover at 9.9 percent, employs 5.3 percent of the workforce in this subgroup (Table 4.4).

When compared to the benchmark average monthly turnover rate, departments M6 (2.3) and M8 (3.8) have relatively high average monthly employee turnover rates for 2009, while departments M2 (0.8) and M3 (1.0) have relatively low average monthly employee turnover rates. In order to gain insight into the current employee retention practices that led to this very divergent employee turnover in this subgroup, departments M6, M8, M2, and M3 were selected for the multiple case study (Phase three). An in-depth qualitative analysis of the retention practices of these paired cases and cross-cases is covered in the findings and analysis of the multiple case study (chapter 5).

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	Total	Average	Percentage	Annual	Average
Medium	annual	annual	of	turnover	monthly
department	turnover	employment	employment	rate	turnover rate
M2	120	1207	5.3	9.9	0.8
M3	227	1826	8.0	12.4	1.0
M10	566	4492	19.6	12.6	1.1
M7	310	2334	10.2	13.3	1.1
M1	174	1274	5.6	13.7	1.1
M9	466	3066	13.4	15.2	1.3
M4	440	1649	7.2	26.7	2.2
M6	476	1716	7.5	27.7	2.3
M5	753	1788	7.8	42.1	3.5
M8	1637	3592	15.7	45.6	3.8
Total	5169	22 944	100.0	22.5	1.9

Table 4.4 Medium national departments ranked by voluntary turnover rates

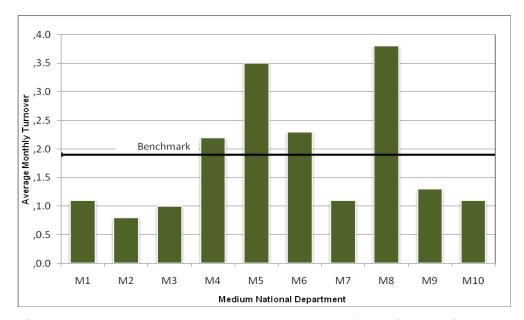


Figure 4.2 Average monthly turnover rates of medium national departments

# 4.3.5 Findings and interpretation: large national departments

There is a strong positive correlation (r=0.760) between the total annual turnover levels and the average annual employment for the subgroup of large national departments. An increase in the employment levels thus indicates a likely increase in turnover levels (Appendix 5).

The annual turnover rates of the nine large departments range from 3.6 percent to 34.3 percent. This subgroup has the smallest turnover rates when compared to the other two subgroups. The annual benchmark rate is 9.2 percent and the average monthly benchmark rate is 0.8 percent. Of the nine departments, five are below the benchmark rate and four above (Figure 4.3). Department L7, with the largest turnover at 34.3 percent, employs 11.8 percent of the workforce in this subgroup, while department L9, with the smallest turnover at 3.6 percent, employs 38.9 percent of the workforce in this subgroup. Department L7 has an unusually large annual turnover rate when compared to other departments in this subgroup (Table 4.5).

When compared to the benchmark average monthly turnover rate, departments L6 (1.3) and L7 (2.9) have relatively high average monthly employee turnover rates for 2009, while departments L3 (0.4) and L5 (0.4) have relatively low average monthly employee turnover rates. In order to gain insight into the current employee retention practices that led to this very divergent employee turnover in this subgroup, departments L6, L7, L3, and L5 were selected for the multiple case studies (Phase three). An in-depth qualitative analysis of the retention practices of these paired cases and cross-cases is covered in the findings and analysis of the multiple case study (chapter 5).

Large		Average		Annual	Average
Department	Total annual	annual	Percentage of	turnover	monthly
	turnover	employment	employment	rate (2009)	turnover rate
L9	2942	81373	38.9	3.6	0.3
L8	1622	41289	19.8	3.9	0.3
L5	676	15342	7.3	4.4	0.4
L3	360	7818	3.7	4.6	0.4
L2	457	6867	3.3	6.7	0.6
L4	1003	9359	4.5	10.7	0.9
L6	2471	15528	7.4	15.9	1.3
L1	1184	6780	3.2	17.5	1.5
L7	8461	24664	11.8	34.3	2.9
Total	19176	209020	100.0	9.2	0.8

Table 4.5 Large national departments ranked by voluntary turnover rates

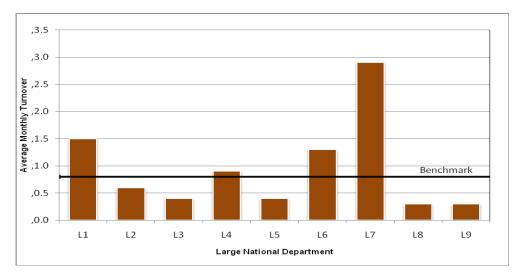


Figure 4.3 Average monthly turnover rates of large national departments

#### 4.3.6 Findings and interpretation: all national departments

The analysis of turnover levels for each of the three subgroups showed that there were no significant fluctuations in the employee turnover levels, within the group and across the groups over the 12 months in 2009. This also shows that the data is consistent for each of the 12 months and there are no outliers that could have a serious impact on the turnover benchmarks determined for each of the subgroups. No significant problems were identified during this exercise (Table 4.6).

The minimum turnover rate for the subgroup of small departments was 3.6 percent in December 2009, while the maximum was 15 percent in May 2009. For the subgroup of medium departments, the minimum turnover rate was 6.3 percent in October 2009, while the maximum was 10.5 percent in April 2009. The minimum turnover rate for the subgroup of large departments was 7.1 percent in December 2009, while the maximum was 11.3 percent in April 2009 (Table 4.6).

The combined turnover for all three subgroups was the largest in April 2009 and the smallest in December 2009 (Figure 4.4).

The relationship between current employee retention practices and employee turnover for each of the selected cases in the subgroups will be covered in the findings and analysis of the multiple case study (chapter 5).

2009	Turnover small departments (S)	Turnover medium departments (M)	Turnover large departments (S)	Total
Jan	155	510	1 376	2 041
Feb	140	469	1 606	2 215
March	184	362	1 441	1 987
April	280	545	2 161	2 986
May	312	532	1 557	2 401
June	171	506	1 494	2 171
July	227	462	1 947	2 636
Aug	206	401	1 607	2 214
Sept	102	333	1 560	1 995
Oct	109	325	1 569	2 003
Nov	118	381	1 504	2 003
Dec	75	343	1 354	1 772
Total	2 079	5 169	19 176	26 424
Min	75 (3.6%)	325 (6.3%)	1 354 (7.1%)	1 772
Max	312 (15%)	5 45 (10.5%)	2 161 (11.3%)	2 986
Mean	173 (8.3%)	431 (8.3%)	1 598 (8.3%)	2 202
Median	163 (7.8%)	431 (8.3%)	1 558 (8.1%)	2 106.0

Table 4.6 Monthly turnover levels for all the national departments

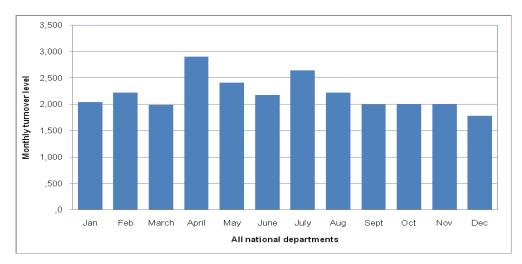


Figure 4.4 Monthly turnover levels of all national departments

## **4.4 CRITERIA FOR SELECTION**

The findings show that employment size is an important factor for the measurement and analysis of employee turnover. The findings also show that employee turnover rates decrease with larger organisations. This is consistent with other research that found employees of large organisations stay in their jobs longer than employees of small establishments (Hope & Patrick, 2007:1).

The average monthly benchmark rate is 2.6 percent for the subgroup of small national departments (less than 1000 employees), followed by 1.9 percent for the subgroup of medium national departments which employ between 1001 and 5000 employees and 0.8 percent for the subgroup of large national departments (more than 5001 employees). These benchmarks allow for targeted intervention to manage employee turnover in departments where the employee turnover rate is higher than the benchmark rate.

Even if a department measures its employee turnover, it will not know whether its turnover rate is acceptable or not, unless there is a benchmark rate to compare to. The findings have shown that there are extreme cases (with respect to employee turnover rates) within each of the three subgroups S3 (4.6), S13 (1.7), M8 (3.8), M2 (0.8), L7 (2.9), and L3 (0.4). This reinforces the need for national departments to measure and manage turnover against employee turnover benchmarks.

A study by Lynch & Tuckey (2008:8) has also shown that benchmarking employer turnover statistics with other organisations provides the opportunity to view how an organisation's employee turnover rates compare with rates of similar organisations.

A methodology on the selection of multiple cases using turnover statistics was also covered. The employee turnover benchmarks and departmental employee turnover rates were used as a guide for the selection of multiple cases. Two pairs of cases, one pair above and one pair below the respective benchmark turnover rates, were selected from each subgroup.

# 4.5 CONCLUSION

The employee turnover statistics and benchmarks were used to compare the relative performance of each department within each subgroup. The analysis of the employee turnover benchmarks provided guidelines for the selection of cases (departments) from each subgroup. This ensured that the selected cases from each subgroup were comprised of a mix of both "good performers" and "poor performers", relative to the benchmark rate. Meaningful within case and cross case analyses was guaranteed.

# **CHAPTER 5**

# FINDINGS AND ANALYSIS OF DATA: MULTIPLE CASE STUDY (PHASE THREE)

## **5.1 INTRODUCTION**

The findings and analysis of data followed from the determination of employee turnover rates and benchmarks rates (Phase 2). The aim of this was to determine the turnover rates for each department and benchmark rates for the respective subgroups. This analysis covered the 33 national departments. These findings provided statistics that were primarily used for selecting the multiple cases. For the multiple case study, the findings and analysis covers the 12 selected cases, this is comprised of four from each subgroup (Phase 3).

#### 5.1.1 Analysis of selected multiple cases

The fifth research objective was to analyse the selected cases to determine the factors influencing employee attraction and retention using both quantitative and qualitative analysis techniques.

## **5.2 SELECTION OF CASES**

The criteria for selection was based on the average monthly turnover rate relative to the monthly benchmark rate of the respective subgroup. From the subgroup of small departments S13 and S6, below the benchmark, and departments S3 and S9, above the benchmark, were selected. Similarly, departments M2 and M3, M6 and M8, L3 and L5 and, L6 and L7 were selected relative to the benchmarks (Table 5.1).

Cases S13 and S6 were selected since the average monthly employee turnover rates were relatively low in their subgroup, while cases S3 and S9 were selected

because their turnover rates were relatively high in their subgroup. This allowed for the comparison of similarities in employee attraction and retention practices within each pair of cases and differences amongst the different pairs. For a similar reason, paired cases M2 and M3, M6 and M8, L3 and L5 and, L6 and L7 were selected.

Department	Average annual employment	Average monthly turnover rate	Benchmark turnover rate
S13	834	1.7	2.6
S6	334	1.9	2.6
S3	213	3.2	2.6
S9	509	3.3	2.6
M2	1207	0.8	1.9
M3	1826	1.0	1.9
M6	1716	2.3	1.9
M8	3592	3.8	1.9
L3	7818	0.4	0.8
L5	15342	0.4	0.8
L6	15528	1.3	0.8
L7	24664	2.9	0.8

Table 5.1 Selected small, medium and large national departments

#### **5.3 ANALYSIS OF RESPONSES: QUANTITATIVE QUESTIONS**

The analysis of the responses for section A consisted primarily of statistical analysis, in respect to reliability and relationships tests. Categorical analysis was used to test for relationships between the current retention practices (responses) and employee turnover, with Cronbach's alpha ( $\alpha$ ) used for reliability tests. The research objective also requires a cross-sectional survey of the selected multiple cases to determine the current practices with respect to employee retention per subgroup.

## 5.3.1 Reliability tests

The internal consistency reliability for each of the items was determined to show that the instrument used will always elicit a consistent and reliable response, even if questions are replaced with other similar questions. Cronbach's alpha ( $\alpha$ ) coefficient was computed for each item (Appendix 6).

The results of the analysis of the selected cases could be considered to be statistically reliable, since the value of  $\alpha$  is equal to 0.7732 for the entire set. In addition, the  $\alpha$  values for each of the 32 questions are all above 0.7 (Appendix 6). This is acceptable, as a Cronbach's  $\alpha$  score of 0.7 or more would indicate satisfactory agreement between items (Santos, 1998).

#### 5.3.2 Tests for relationships

Tests for relationships between the responses and turnover performance, relative to the benchmark, were conducted separately for:

- The group of all national departments;
- The subgroup of large national departments;
- The subgroup of medium national departments;
- The subgroup of small national departments.

Contingency analysis was conducted for each group of the selected cases, based on the cumulative sum of the scores for each of the 32 questions from section A (Table 5.2).

Category	Cumula	Cumulative (Yes) responses						
	Large	%	Medium	%	Small	%	TOTAL	%
Above BM	27	39.7	39	46.4	28	36.8	94	41.2
Below BM	41	60.3	45	53.6	48	63.2	134	58.8
TOTAL	68	100	84	100	76	100	228	100
Category	Cumula	tive (No)	responses					-
	Large	%	Medium	%	Small	%	TOTAL	%
Above BM	37	61.7	25	56.8	36	69.2	98	62.8
Below BM	23	38.3	19	43.2	16	30.8	58	37.2
TOTAL	60	100	44	100	52	100	156	100

#### Table 5.2 Summary of cumulative responses

# 5.3.2.1 Findings and interpretation: All national departments

The aim of the analysis was to determine whether there is a relationship between the current employee retention practices and turnover for the 12 national departments surveyed. The analysis was based on the total cumulative responses (Table 5.2).

The statistical categorical analysis (Appendix 7) showed that an extremely significant relationship between the cumulative responses and employee turnover exists in this group. This means that, for the 12 selected departments surveyed, the important factors that contribute to employee turnover and retention could be derived from section A of the questionnaire. These questions are closed questions, free-standing, and equally weighted. Each of the thirty two questions was designed such that a "yes" response reflected a favourable outcome. The factors influencing employee retention are thus a subset of the items from section A of the questionnaire (Appendix 8).

# 5.3.2.2 Findings and interpretation: large departments

The aim of the analysis was to determine whether there is a relationship between the current employee retention practices and turnover for the subgroup of selected large national departments. The analysis is based on the responses from the four large departments surveyed (Table 5.2).

For this subgroup the statistical categorical analysis (Appendix 7), showed that an extremely significant relationship exists between the responses and turnover. This means that, for the four large departments surveyed, there are important factors contributing to turnover. These factors are a subset of the items from section A of the questionnaire (Appendix 8).

#### 5.3.2.3 Analysis of responses from medium departments

The aim of the analysis was to determine whether there is a relationship between the current employee retention practices and employee turnover for the subgroup of medium national departments surveyed. The analysis is based on the responses from the four medium departments surveyed (Table 5.2).

For this subgroup the statistical categorical analysis (Appendix 7) showed there is no relationship between the responses and employee turnover. This means that, for the four medium departments surveyed, there is no conclusive evidence to show that the factors influencing employee turnover are a subset of the items from section A of the questionnaire. The finding of no significant relationship can be confirmed from an examination of the responses of the selected medium departments. The cumulative "yes" and "no" responses for both the above and below the benchmark categories are within 10 percent of each other (the "yes" responses is approximately 46 percent of the total for the category above the benchmark and the "yes" responses is approximately 53 percent of the total for the category below the benchmark). However, the difference between the "yes" responses of the small departments approximately 25 percent and the difference between "yes" responses of the large departments is approximately of 20 percent for the respective benchmark categories (Table 5.2).

While the results show no evidence of association between employee turnover and positive responses for this selected subgroup of medium sized departments, there is a highly significant association between both these variables for the combined group of small, medium and large departments. This implies that the responses from large and small departments are the major contributors to the overall relationship, given that relationships were also observed for the subgroups of small and large departments.

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# 5.3.2.4 Findings and interpretation: small departments

The aim of the analysis was to determine whether there is a relationship between the current employee retention practices and employee turnover for the four small national departments surveyed (Table 5.2).

The statistical categorical analysis (Appendix 7) showed that an extremely significant relationship exists between the responses and employee turnover in this subgroup. This means that, for the four departments surveyed, there are important factors that contribute to employee turnover. These factors are a subset of the items from section A of the questionnaire (Appendix 8).

## 5.3.3 Summary of process followed to determine relationships

The reliability analysis showed internal consistency reliability for both the instrument and each item in the instrument. The statistical categorical analysis showed an extremely significant relationship between the responses and turnover for the group of 12 selected departments. Since the findings showed no significant relationship between the responses and turnover in the subgroup of selected medium departments, further analysis was restricted to the group of 12 selected departments comprised of the selected subgroups of small, medium, and large departments.

## 5.3.4 Determining the factors

The next step of the analysis was to determine which items (from the questionnaire) contributed mainly to this relationship. This involved comparing the "yes" counts (for each question) for the above and below the benchmark categories. The average "yes" count for the category above the benchmark was computed to approximately three. Each question with a count of three or more from the category below the benchmark was compared to the corresponding score in the category above the

benchmark. If the difference (BM-AM) between the scores was greater than or equal to two, then the corresponding items were selected for further analysis (Appendix 8).

Factors	Cronbach's $\alpha$
1.7 Counter-offer policy	0.7298
1.9 Up-to-date workforce plan	0.7593
1.10 Monitoring of employee turnover	0.7298
1.13 Alternate career paths and skills development	0.7580
1.15 Identification of talent pools	0.7658
1.16 Succession planning policy for key positions	0.7580
1.22 Job re-designs to reflect the diversity of skills/ capabilities required	0.7510
1.24 Performance system to evaluate staff competencies	0.7704
1.25 Employee performance plans	0.7551
1.26 Evaluation of employees performance	0.7551
1.29 Equitable job grading	0.7551
1.31 Accessibility to senior management	0.7656

Table 5.3 Important factors which can influence employee attraction and retention

These factors that were determined (Table 5.3) are crucial to the management of employee turnover and the improvement of retention in the selected departments with high employee turnover.

## 5.3.4 Summary of analysis of responses for the quantitative questions

Based on the significant relationship between the responses and turnover for the selected group of 12 national departments and the analysis of counts, 12 factors were determined to influence employee attraction and retention. These factors are primarily retention drivers.

The questions in section A were designed so that a "yes" response indicated good performance and a "no" response, poor performance. The statistical analysis on the selected departments confirmed a significant relationship between turnover and

responses for the combined subgroups of small, medium and large departments. A relationship was also observed for the subgroups of small and large departments (Appendix 7).

Having established this relationship, the next step of the analysis involved the determination of the factors that could influence employee retention based on this relationship.

These factors (Table 5.3) relate to areas that are crucial to the management of employee turnover and the improvement of retention in departments, irrespective of their size. This will be covered in the interpretation and analysis of findings (Chapter 6).

# 5.4 RESEARCH RESULTS OF SELECTED CASES: QUALITATIVE QUESTIONS

This section deals with the analysis of data obtained through open-ended questions B1 to B17, in Section B (Appendix 4). The responses to each question were analysed for similarities and differences in current practices relating to employee retention. Data was analysed for the four selected departments in each of the three subgroups.

The data for each subgroup was classified into two major areas:

- Recruitment challenges,
- Retention challenges.

# 5.4.1 Findings and Interpretation: Recruitment Challenges

This section presents the case study findings on:

- resourcing strategies (Questions B1, B1.1, B1.2)
- recruitment difficulties (Questions B2, B2.1, B2.1.1, B2.1.2, B2.2, B2.2.1)
- methods used to attract candidates (Questions B3, B4, B5, B6)

## 5.4.1.1 Human resourcing strategy

The questions B1, B1.1, and B1.2 were designed to establish whether the respondents have a human resource strategy and what the key objectives of this strategy are. The key objectives include attracting, recruiting and training of staff and planning to meet the future skills requirement of the organisation.

## **Small departments**

Both departments S9 and S3, above the benchmark, indicated that they did not have a human resourcing strategy. Department S9 was in the process of developing a human resourcing strategy, while the other, department S3, was unsure why their organisation did not have a human resourcing strategy.

The two small departments, S6 and S13, below the benchmark, indicated that they do have a human resourcing strategy. This positive response was confirmed in their response in section A (Q1.1) (Appendix 4). The main objectives of their resourcing activities are:

- To recruit suitably qualified people;
- To ensure an equitable distribution of human resources across the organisation;
- To provide human resources to cater for present and future needs of the organisation.

The aim of the multiple case study was to determine the current practices influencing employee attraction and retention, the data from the selected cases show that the pair of good performing departments S6 and S13 had a human resourcing strategy while the pair of poor performing departments S9 and S3 did not have one. This shows that the absence of a human resourcing strategy may have a negative impact on employee turnover and increase retention difficulties in small departments. The absence of a human resourcing strategy can thus be considered as an important factor that impacts negatively on employee retention in small departments.

#### **Medium departments**

Both departments M6 and M8, above the benchmark, indicated that they have a human resourcing strategy. The main objective of their resourcing strategy is to fill vacant posts with suitably qualified people and to train new recruits.

For the pair of medium departments, M2 and M3, below the benchmark, M2 indicated that they did not have a human resourcing strategy as they were undergoing restructuring. The main objective of the resourcing strategy of M3 was to appoint the most competent people, given the limited funding available.

The findings show that three of the four selected medium departments have a human resourcing strategy. The findings are inconclusive since the two departments with relatively high employee turnover indicated that they do have a human resourcing strategy.

#### Large departments

The two poor performing departments L6 and L7, above the benchmark, indicated that they did not have a human resourcing strategy. The two good performing departments L3 and L5, below the benchmark, had a human resourcing strategy. The objective of this strategy was to provide the various components of the organisation with staff to meet current and future needs.

The data from the selected cases show that the pair of good performing departments L3 and L5 had a human resourcing strategy while the pair of poor performing departments L6 and L7 did not have one. The findings for the selected large

departments confirm that the lack of a human resourcing strategy may have a negative impact on employee turnover. Thus, for this subgroup, the absence of a human resourcing strategy can be considered as an important factor that impacts negatively on retention.

#### Summary of findings: Human resourcing strategy

In total there are six departments with employee turnover below the benchmark rate and six departments with employee turnover above the benchmark rate. The findings show that the majority (five) of departments (S6, S13, M3, L3, and L5) with turnover below the benchmark indicated they have a human resourcing strategy and the majority( four) of departments (S3, S9, L6, and L7) with turnover above the benchmark indicated they did not have a human resourcing strategy (Table 5.4). This finding is significant as it shows that it is highly likely that the lack of a human resourcing strategy in the selected departments has a negative influence on employee turnover. Further, respondents that did not have a human resourcing strategy did not provide any valid reasons for not having one.

Dept	Benchmark	QB1	QB1.1	QB1.2
		HR strategy (Yes/No)	Objectives of HRS	Reasons for not having HRS
S6	Below	Yes	Recruit skilled staff Equitable HR/needs	-
S13	Below	Yes	Unsure	-
S3	Above	No	-	Unsure
S9	Above	No	-	In development process
M2	Below	No	-	Restructuring
M3	Below	Yes	Recruit skilled staff	-
M6	Above	Yes	Recruit skilled staff Train new recruits	-
M8	Above	Yes	Recruit skilled staff Train new recruits	-
L3	Below	No	Provide skilled staff	-
L5	Below	Yes	Provide skilled staff	-
L6	Above	No	-	Unsure
L7	Above	No	-	Unsure

 Table 5.4 Summary of responses on human resourcing strategy

#### 5.4.1.2. Recruitment difficulties

Questions B2, B2.1, B2.1.1, B2.1.2, B2.2, and B2.2.1 (Appendix 4) are relevant to recruitment difficulties and were included to establish to what extent the selected departments experienced recruitment difficulties, as well as the steps taken to overcome these difficulties. Some of the key reasons for recruitment difficulties are a lack of necessary specialist skills in candidates, followed by high pay expectations and insufficient experience of candidates (CIPD, 2008:2).

#### Small departments

The two small departments above the benchmark, S3 did not experience any recruitment difficulties, while S9 did experience recruitment difficulties, citing the problem of attracting the right candidates as the key reason. Advertising in more than one newspaper during the same week was one of the steps taken to overcome recruitment difficulties.

Those below the benchmark, department S6 stated that they do not experience any recruitment difficulties whereas S13 stated that they do experience recruitment difficulties. The reason forwarded for this was that they experienced difficulty in finding suitable candidates for certain posts. In an attempt to overcome this they tried to recruit internally before advertising externally.

The findings show that small departments experienced varying difficulties with recruitment. This was primarily due to being unable to attract people with the right skills.

#### **Medium departments**

Of the four selected medium, departments, M6 and M8, above benchmark and M2, below benchmark, experienced difficulties with recruitment. The two key reasons

reported for this was the problem of finding skilled candidates for certain posts and the uncompetitive salary in the public service compared to the private sector. To overcome difficulties with respect to finding people with scarce skills, both the departments often resorted to head hunters.

One of the medium departments, M3, did not experience any difficulties with recruitment. This was mainly due to what they term as advertising in the "correct" media and utilising head hunters for recruiting people with scarce skills.

The findings show that medium departments experienced difficulties with recruitment. The reasons for this was twofold, firstly the lack of skills in the workforce and secondly being unable to match or better private sector salaries.

#### Large departments

None of the four large departments experienced any recruitment difficulties. The key elements of their recruitment plan entailed selecting the best possible candidate for the job.

#### Summary of findings: Recruitment difficulties

The findings show that the four of departments (S6, M3, L3, and L5) with turnover below the benchmark indicated they did not experience any difficulties with recruitment and three of departments (S9, M6, and M8) with turnover above the benchmark indicated they did experience difficulties with recruitment(Table 5.5). This finding is significant as it shows that in the selected departments, those that are experiencing difficulties with the recruitment of staff are likely to have employee retention problems. The key reasons for recruitment difficulties are the lack of skilled candidates in the workforce and the uncompetitive salary in the public sector.

Dept	Benchmark	QB2	QB2.1.1	QB2.1.2
		Recruitment difficulties?	Key reasons	Initiatives to overcome difficulties
S6	Below	No		
S13	Below	Yes	Cannot find suitable people for some posts	Recruit internally before advertising externally
S3	Above	No		
S9	Above	Yes	Cannot attract right staff	Advertising in more than one newspaper
M2	Below	Yes	Cannot find skilled staff Uncompetitive salary	Head hunting
M3	Below	No	-	-
M6	Above	Yes	Cannot find skilled staff Uncompetitive salary	Head hunting
M8	Above	Yes	Cannot find skilled staff Uncompetitive salary	Head hunting
L3	Below	No	-	-
L5	Below	No	-	-
L6	Above	No	-	-
L7	Above	No	-	-

 Table 5.5 Summary of responses on recruitment difficulties

## 5.4.1.3 Attracting candidates

Candidates may be attracted to vacant posts in many ways. The aim of this question (B3) was to determine how the selected departments attracted people to fill vacant posts.

All 12 departments used the media, internal bulletins and the Department of Public Service and Administration (DPSA) website to attract candidates.

## 5.4.1.4 Pre-employment checks

Question B4 related to pre-employment checks, which are conducted to determine the validity of information provided by job applicants.

All 12 selected departments conducted pre-employment checks on prospective candidates. The checks are:

- Security vetting;
- Verification of qualifications;
- Reference checks.

The findings show that all the selected departments have similar procedures to conduct pre-employment checks.

# 5.4.1.5 Withdrawal of job offers

Question B5 related to the withdrawal of job offers. There are various reasons why job offers may be withdrawn. The selected departments were surveyed to determine whether they withdrew any job offers and the reasons for doing so.

None of the 12 departments withdrew any job offers during the survey period. These responses were consistent with those provided in Q1.5. However, they indicated that job offers will be withdrawn if candidates are found to have bogus qualifications.

# **5.4.1.6 Reference checks**

Question B6 related to reference checks. There are many ways that reference checks could be done. The selected departments were surveyed to determine how they conducted reference checks.

All 12 departments conducted reference checks on prospective candidates. These responses were consistent with those provided in Q1.6 .The referees were contacted either by email or telephone and were requested to submit a written report on relevant competencies.

# 5.4.2 Findings and interpretation: Retention challenges

This section covers the case study findings on:

- Employee turnover (Questions B7-B11) (Appendix 4);
- Retention difficulties (Questions B12-B17) (Appendix 4).

# 5.4.2.1 Employee turnover

In order to manage employee turnover it is essential to have monitoring mechanisms in place. It is also useful to differentiate between voluntary and involuntary turnover within occupational categories (Forbes and McGill, 1985:11).

# Small departments

The four small departments reported leaving for a higher salary and better prospects as the most common cause of voluntary turnover (Q B7). The occupational categories where most of the turnover occurred ranged from non management staff to middle management staff. The findings (Q B8) showed that employee turnover in the senior management category were not as prevalent.

None of the respondents were able to separate the voluntary turnover into part and full-time categories (Q B9). This was due to the fact they did not have any mechanisms in place to monitor employee turnover (Q B10). The two below the benchmark departments S6 and S13 indicated that, while there were no formal processes in place to monitor turnover, they raised issues relating to turnover in their monthly divisional meetings.

When asked how employee turnover impacts on business performance, all four respondents indicated that when it takes too long to fill vacancies, it puts a lot of pressure on existing staff by overburdening them with additional responsibilities. This has a huge impact on the quality of work (Q B11).

#### **Medium departments**

The responses from the four medium departments reported that leaving for a higher salary and better prospects are the most common cause of voluntary turnover (Q B7). The findings (Q B8) showed that the occupational categories, where most of the turnover occurred in departments (M2) and (M3), ranged from non management staff to middle management staff. Departments (M6 and M8), above benchmark, did not have any statistics on the occupational categories where turnover occurred in their organisations.

The findings (Q B9) showed that the two respondents (M6 and M8) were unable to separate the voluntary turnover into part-time and full-time categories. This was due to the fact they did not have any processes in place to monitor employee turnover (Q B10). The other two respondents indicated that the majority of voluntary separations involved fixed term contract workers.

As with small departments the impact of employee turnover on business performance, all the respondents indicated that the length of time it took to fill vacated positions was a problem. These vacant posts led to a loss in productivity and poor service delivery (Q B11).

## Large departments

All four responses indicated that the most common cause of voluntary employee turnover was people leaving for better salaries and career opportunities (Q B7). In these departments, most of the employee turnover occurred in the non management category (Q B8). It was not possible for these departments to provide details on the percentage of part-time and full-time turnover, as there were no monitoring systems and processes in place (Q B9, B10).

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Once again the impact of turnover on business performance was mainly due to the difficulty and time taken to fill vacancies (Q B11).

## Summary of findings: Employee turnover

Dept	Benchmark	Q B7	Q B8-B10	Q B11
·		Causes of turnover	Turnover stats 1.Catogory 2.Dissections 3.Monitoring	Impact of turnover
S6	Below	Salary	1.Non –management	Too long to fill vacancies
00	Delow	Better prospects	2.Unable to dissect 3.No monitoring	Pressure on staff
S13	Below	Salary Better prospects	1.Non –management 2.Unable to dissect 3.No monitoring	Too long to fill vacancies Pressure on staff
S3	Above	Salary Better prospects	1.Non –management 2.Unable to dissect 3.No monitoring	Too long to fill vacancies Pressure on staff
S9	Above	Salary Better prospects	1.Non –management 2.Unable to dissect 3.No monitoring	Too long to fill vacancies Pressure on staff
M2	Below	Salary Better prospects	1. Non- management Middle-management 2. Contract workers. 3. No formal process	Too long to fill vacancies Loss of productivity Poor service delivery
M3	Below	Salary Better prospects	1. Non- management Middle-management 2. Contract workers 3.No formal process	Too long to fill vacancies Loss of productivity Poor service delivery
M6	Above	Salary Better prospects	1. Don't know 2.No information 3.No monitoring	Too long to fill vacancies Loss of productivity Poor service delivery
M8	Above	Salary Better prospects	1. Don't know 2.No information 3.No monitoring	Too long to fill vacancies Loss of productivity Poor service delivery
L3	Below	Salary Better prospects	1.Non-management 2.No information 3.No monitoring	Difficulty and time taken to fill vacancies
L5	Below	Salary Better prospects	1.Non-management 2.No information 3.No monitoring	Difficulty and time taken to fill vacancies
L6	Above	Salary Better prospects	1.Non-management 2.No information 3.No monitoring	Difficulty and time taken to fill vacancies
L7	Above	Salary Better prospects	1.Non-management 2.No information 3.No monitoring	Difficulty and time taken to fill vacancies

Table 5.6 Summary of responses on employee turnover

All 12 responses show that the most common cause of voluntary employee turnover was people leaving for better salaries and career opportunities. The problem of high employee turnover is prevalent in the non-management category of the majority of selected departments. This is evident from the responses even though these departments do not have any formal mechanisms in place to monitor employee turnover. The respondents also indicated that it takes too long to fill vacancies resulting in a loss of productivity and poor service delivery (Table 5.6).

## 5.4.2.2 Retention difficulties

It is held that organisations that experience problems with staff retention should have a process in place to identify areas that need intervention (Terborg and Lee, 1984: 808).

#### Small departments

The two departments S3 and S9, above the benchmark, were not sure of the occupational category that presented the most retention difficulties. The other two S6 and S13 indicated that junior staff and middle management presented the most retention difficulties (Q B12).

To address retention, departments S6 and S13 used strategies comprising of skills development, performance rewards and top to bottom communication (Q B13).

The findings show that small departments, with turnover below the benchmark, have processes in place to identify areas that need intervention with respect to employee retention. These departments are able to address retention with training and performance rewards (Q B13).

#### Medium departments

The departments M6 and M8, above the benchmark, were unable to identify areas that presented problems with respect to staff retention. Counter offers were made to the staff (with scarce skills) intending to resign (Q B12).

Most of the retention difficulties occurred in the management category for departments M2 an M3, both below the benchmark. To address retention, the following actions were often taken (Q B13):

- Counter offers;
- Addition of more challenging functions;
- Study opportunities;
- Secondments;
- Job rotation.

The findings show that medium departments with turnover below the benchmark seem to have processes in place to identify areas that need intervention with respect to employee retention.

## Large departments

Departments L6 and L7, above the benchmark, were unable to provide any information on areas of the organisation where retention difficulties were experienced. They indicated that they did not monitor employee turnover. Furthermore, there was no strategy in place to address retention (Q B12, B13).

In departments L3 and L5, below the benchmark, retention difficulties were prevalent in all occupational categories, with particular emphasis on employees with scarce skills. Department L5 had no strategy in place to address retention while department L3 addressed retention by focussing on (Q B13):

- Training
- Improved communication
- Team building
- Performance rewards

The findings show that in large departments where employee turnover is below the benchmark, there are processes in place to identify areas that need intervention with respect to employee retention.

Dept	Benchmark	Q B12	Q B13
		Occupational category	Actions taken to address retention
S6	Below	Junior staff and middle mgmt.	Skills development
			Rewards based on performance
			Improved communication
S13	Below	Junior staff and middle mgmt.	Skills development
			Rewards based on performance
			Improved communication
S3	Above	Not sure where difficulties are	No actions taken
S9	Above	Not sure where difficulties are	No actions taken
M2	Below	Management	Counter offers
			Make job more challenging
			Study opportunities
			Secondments
			Job rotation
M3	Below	Management	Counter offers
			Make job more challenging
			Study opportunities
			Secondments
			Job rotation
M6	Above	Not sure where difficulties are	Counter offers
M8	Above	Not sure where difficulties are	Counter offers
L3	Below	All categories (scarce skills)	Training
			Improved communication
			Team building
			Performance rewards
L5	Below	All categories(scarce skills)	No strategy in place
L6	Above	Could provide information	No strategy in place
L7	Above	Could provide information	No strategy in place

 Table 5.7 Summary of responses on retention difficulties

# Summary of findings: Retention difficulties

The findings show all selected departments with turnover below the benchmark were able to identify the employment categories where they experienced retention difficulties. After identifying the problem areas, these departments made counter offers, engaged in skills development programmes, applied performance rewards and job rotation to address the retention problems in their departments (Table 5.7). This finding is significant as it shows that the selected departments that are identifying retention problem areas and taking actions to address retention have lower employee turnover rates than those that are ignoring retention problems. Thus, selected departments with high employee turnover rates will benefit from introducing strategies to monitor and address employee retention.

## 5.4.2.3 Performance evaluation

The comprehensive process starting from monitoring and developing the staff to rating their progress and rewarding them for their achievements are essential components of an employee retention strategy (Hope and Patrick, 2007:1). This is also an important attraction driver when salary increases are linked to individual performance. Offering these benefits improves employee retention.

All twelve departments had performance evaluation processes in place. Employees were evaluated against a performance plan that was drawn up through a consultative process between staff and respective managers (Q B14).

The percentages of staff that received rewards based on performance evaluation ranged from 30 percent to 50 percent of the total staff compliment (Q B15).

## 5.4.2.4 Communication

The most common mode of communication used by all twelve departments was email, followed by newsletters and internal circulars. In most cases staff had easy accessibility to senior management in small departments. For the medium and large departments, junior staff had little or no access to their senior managers (Q B16).

# 5.5 SUMMARY OF MULTIPLE CASE STUDY

The main objective of the qualitative analysis of the selected cases was to analyse the current practices of employee retention in the three subgroups of national departments and to determine the important factors influencing employee retention.

## Relationships

A strong relationship between the cumulative yes/no responses and turnover for the above the benchmark and below the benchmark categories was found. However, no relationship was found for medium national departments. This was concluded from the fact that for both categories, above and below the benchmarks, the cumulative yes/no responses were very similar, within 10 percent of each other, unlike the small and large departments (Table 5.2).

# Determining the factors

The calculation of the factors was based on the weighting of the responses. The nature of the response was taken into account and set off against the corresponding counts of the above and below the benchmark categories (Appendix 8).Twelve factors with a Cronbach's alpha ( $\alpha$ ) greater than 0.7 were determined (Table 5.3).The research shows that these factors have an important influence on employee retention practices.

## Human resources strategy

It was found that the lack of a human resource strategy has a significant negative impact on employee turnover. Five of the good performing departments (S6, S13, M3, L3 and L5) had a human resource strategy whilst four of the poor performing departments (S3, S9, L6 and L7) did not have one (Table 5.4).

## Recruitment difficulties

The most significant reason for recruitment difficulties is the lack of skilled candidates in the workforce and the uncompetitive salary in the public sector (Table 5.5). Four of the good performing departments (S6, M3, L3, and L5) did not have any recruitment difficulties whereas three of the poor performing departments (S9, M6, and M8) indicated hat they did experience recruitment difficulties.

## Employee turnover

All three subgroups reported that high employee turnover was caused by employees pursuing better salaries and career opportunities (Table 5.6). This occurs mostly in the non-management occupational category. Without formal employee turnover monitoring systems the filling of positions lags to what is required. This has a serious impact on productivity and service delivery (Table 5.6).

## Retention difficulties

The poor performing departments (S3, S9, M6, M8, L6 and L7) were unable to identify the categories where retention difficulties were experienced. It was found that the good performing departments were able to identify the areas where they experienced retention difficulties. They were able to take corrective action (Table 5.7).

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# Significant Factors

The analysis showed that these factors were influencing employee retention (Table 5.8) and because of that should be incorporated in a workforce plan

1.7	Counter offer policy
1.9	Up-to-date workforce plan
1.1	Monitoring of employee turnover
1.13	Alternate career paths and skills development
1.15	Identification of talent pools
1.16	Succession planning policy for key positions
1.22	Job re-designs to reflect diversity of skills
1.24	Performance system to evaluate staff competencies
1.25	Employee performance plans
1.26	Evaluation of employees performance
1.29	Equitable job grading
1.31	Accessibility to senior management

Table 5.8 The most important factors

## **5.6 CONCLUSION**

The quantitative analyses as well as the qualitative analysis have highlighted important factors that influence employee retention in national government departments. These factors overlap in many regards and will be presented, together with recommendations for guidance to improve employee retention, in the interpretation and analysis of findings (Chapter 6).

# **CHAPTER 6**

# INTERPRETATION OF THE ANALYSIS OF FINDINGS

## **6.1 INTRODUCTION**

The findings and analysis of data for the multiple case study highlighted important factors that influence employee retention (Phase three). The aim of the multiple case study was to critically analyse current practices of employee retention in national government departments and to determine the factors influencing employee retention in these selected cases. The multiple case study consisted of two components, a quantitative and a qualitative component. In this chapter, the interpretations of the analysis of findings are covered.

# 6.2 INTERPRETATION: DETERMINATION OF TURNOVER STATISTICS (PHASE TWO)

The employee turnover rates for each department and benchmarks for their respective subgroups were determined for two purposes. The turnover statistics for the 33 national departments were firstly analysed within their respective subgroups in order to identify departments with relatively high turnover levels (Tables 4.3-4.5). Thereafter, the turnover rates and benchmarks were used as a guide for the selection of cases for the multiple case study.

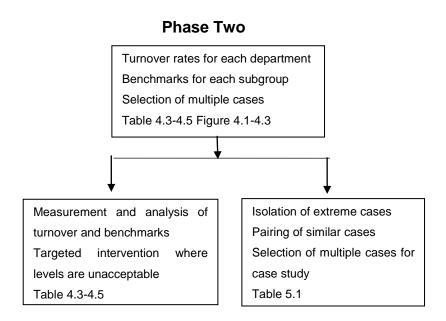


Figure 6.1 Schematic representations of phase two activities

### 6.2.1 Small departments

This subgroup consisting of 14 small departments has a benchmark employee turnover rate of 2.6 percent. In this subgroup there are five departments with the average employee turnover rate above the benchmark rate and nine with the average employee turnover rate below the benchmark rate. This means that the majority (64 percent) of departments from this subgroup have employee turnover rates below the benchmark rate. These turnover benchmarks provide a means to compare the employee turnover performance of each small department within the subgroup to the benchmark rate to determine whether the employee turnover level is acceptable or not. This assists to identify where interventions are needed to minimise employee turnover. Department S3 has a relatively high turnover rate of 4.6 percent relative to the subgroup benchmark rate of 2.6 percent (Table 4.3). Departments S3 and S9 were selected for the multiple case study and the data obtained was analysed both quantitatively and qualitatively to provide insights into the factors that are influencing employee retention in these departments.

#### 6.2.2 Medium departments

This subgroup consisting of 10 medium departments has a benchmark employee turnover rate of 1.9 percent. In this subgroup there are four departments with the average departmental employee turnover rate above the subgroup benchmark rate. The other six with has an average employee turnover rate below the benchmark rate. For this subgroup as well the majority (60 percent) of departments have employee turnover rates below the benchmark rate. The benchmarks can be used to identify departments with unacceptable employee turnover levels and implement strategies to minimise employee turnover in these departments. Department M8 has a relatively high turnover rate of 3.8 percent relative to the benchmark rate of 1.9 percent in this subgroup (Table 4.4).Departments M8 and M6 were selected for the multiple case study and the data obtained was analysed both quantitatively and qualitatively to provide insights into the factors that are influencing employee retention in these departments.

#### 6.2.3 Large departments

This subgroup consisting of nine large departments has a benchmark employee turnover rate of 0.8 percent. There are four departments with the average employee turnover rate above the benchmark rate and five with the average employee turnover rate below the benchmark rate. This means that the majority (56 percent) of departments from this subgroup have employee turnover rates below the benchmark rate. The benchmarks can be used to identify those departments with unacceptable employee turnover levels and in turn implement strategies to minimise employee turnover rate of 2.9 percent relative to the benchmark rate of 0.8 percent for this subgroup(Table 4.5). Departments L7 and L6 were selected for the multiple case study and the data obtained was analysed both quantitatively and qualitatively to provide insights into the factors that are influencing employee retention in these departments.

# 6.3 RECOMMENDATIONS: DETERMINATION OF TURNOVER STATISTICS (PHASE TWO)

The findings show that national departments vary significantly in employment size (Table 3.1). The employee turnover benchmark rate is the lowest for the subgroup of large departments (0.8), followed by the subgroup of medium departments (1.9) and highest for the subgroup of small departments (2.6) (Table 4.1). A similar study, that explored the relationship between employee turnover and firm size, found that the employee turnover rates of large firms were much lower than the employee turnover rates of small firms (Hope & Patrick, 2007:1). Apart from the consistency of the results, the classification of national departments into subgroups and the determination of employee turnover rates and benchmarks have thus made it possible to determine whether the levels are acceptable or not. These employee turnover statistics can assist in identifying turnover problem areas within the organisation and be used to guide the development of appropriate interventions to assist in minimising turnover (Lynch & Tuckey, 2008:8).

The issues of employee turnover and retention were researched from an organisational perspective to investigate how employers could manage employee turnover and improve retention. There were few studies at the organisational level of analysis to investigate whether and how employers could reduce turnover. Most of the studies on employee turnover focused on understanding why employees leave (Barrick & Zimmerman, 2005:160).

In this study, the determination of employee turnover rates and benchmarks made it possible to identify extreme cases (with respect to employee turnover) in each of the subgroups. These cases were included in the multiple case study to determine the factors that were influencing employee retention and to determine how employee retention can be improved in these departments.

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With respect to the determination of turnover statistics, the study has shown how these statistics can be used for monitoring and managing of employee turnover as well as a method for the selection of multiple cases to analyse retention practices. The recommendation is that managers in national departments should use this study as a guideline, to measure, benchmark, and monitor and manage employee turnover in their organisations. The determination of employee turnover rates and benchmarks at the departmental level will allow for the monitoring and assessment of employee turnover. Employee turnover rates can be monitored against benchmarks for both intervention and for making personnel policy projections (Alexander *et al.*, 1991:4).

# 6.4 INTERPRETATION OF THE FINDINGS: MULTIPLE CASE STUDY (PHASE THREE)

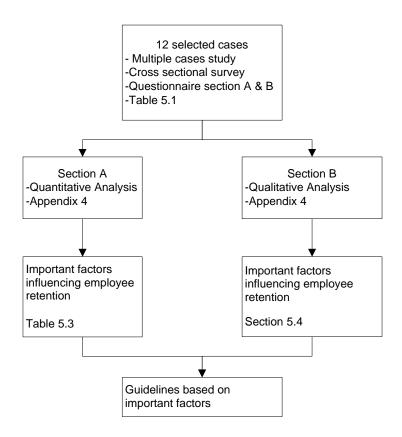
The findings and interpretation are presented separately for the quantitative and qualitative analyses.

### 6.4.1 Interpretation of the findings: quantitative data

The data from section A of the questionnaire was quantitative. This part of the questionnaire was tested for reliability using Cronbach's  $\alpha$  test (Appendix 6). The analysis showed internal consistency reliability for both the instrument and each item in the instrument since the computed  $\alpha$  values were greater than 0.7(Santos, 1998).

The next step of the analysis was to determine whether there is a relationship between the current employee retention practices and employee turnover for the group of 12 national departments and each of the three subgroups .The analysis was based on the total cumulative responses.

The statistical analysis showed significant relationships between current employee retention practices and employee turnover for the group of all national departments and the subgroups of small and large departments.



## Figure 6.2 Schematic representation of phase three

The findings have shown an extremely strong relationship between the responses and employee turnover in the group of all national departments. This is followed by analysis to determine which items (from the questionnaire) contributed mainly to this relationship.

## Important factors

This involved analysing the "yes" counts (for each question) for the above and below the benchmark categories. The analysis showed that there were several important factors that were influencing employee retention (Table 5.3). The factors were grouped into three categories (Table 6.1).

Table 6.1	Factors	grouped	in categories
-----------	---------	---------	---------------

Human resource strategy
Performance system to evaluate staff competencies
Employee performance plans
Evaluation of employees performance
Equitable job grading
Employee turnover
Monitoring of employee turnover
Retention drivers
Counter-offer policy
Up-to-date workforce plan
Alternate career paths and skills development
Identification of talent pools
Succession planning policy for key positions
Job re-designs to reflect the diversity of skills and capabilities required
Accessibility to senior management

These findings from the quantitative analysis are very similar to the findings form the qualitative analysis and provide important information on the factors that are influencing employee retention in the selected departments (Appendix 8).

# 6.4.2 Interpretation of the findings and recommendations: qualitative data

The data from section B of the questionnaire was analysed qualitatively. The key findings and interpretation are followed by the recommendations.

## Human resourcing strategy

It was found that the lack of a human resources strategy has a significant negative impact on employee turnover. The findings of the case study showed that the majority of departments surveyed did not have a formal resourcing strategy (Table 5.4). This shows that there is lack of monitoring by the DPSA since in terms of regulations, national departments are required to develop human resource strategies that are integrated with their strategic and operational plans DPSA(1997:7). Those departments that did have resourcing strategies were not implementing them effectively. Organisational success depends on having the right employees with the right competencies at the right time. Workforce planning provides managers the means of identifying the competencies needed in the workforce not only in the present but also in the future and then selecting and developing that workforce (H M Treasury-Spending Review, 2007).

An up to date workforce plan is essential to any human resource strategy. To support this, the findings from the case study revealed that departments with up to date workforce plans experienced relatively lower employee turnover than departments without any workforce plans. A well developed workforce plan should provide a guideline for making staffing decisions based on the department's mission, strategic objectives, available budget, and desired workforce competencies. A study held by the public service commission of the State of Queensland (2006:2) indicates that workforce planning is a critical component of an effective public service.

For an effective workforce plan, strategic planning, budget constraints, and human resources should be the key elements. Human resources provides tools for identifying competencies needed in the workforce for recruiting, developing, and training employees to build the workforce for the future. Generally, a workforce plan should include a clear statement of what it is trying to achieve, its details, as well as expected benefits and risks (Curson, Dell, Wilson, Bosworth, & Baldauf, 2009:112).

### **Recruitment difficulties**

The findings show that the departments experienced varying degrees of recruitment difficulties, primarily due to not being able to attract people with the right skills for the job. The most significant reason for these difficulties is the lack of skilled candidates

and uncompetitive salary scales. Departments below the benchmark did not have any recruitment difficulties (Table 5.6).

The focus should be on key skills retention. This could be achieved by increasing salaries and benefits and incurring employee development costs, in return for secured ongoing employment of highly skilled employees (Glen, 2006:37).

#### Employee turnover

The findings show that none of the departments surveyed had any mechanisms in place to monitor employee turnover. They were thus not able to provide accurate turnover statistics or report on the employment categories where turnover was most prevalent. However, the findings did confirm that employee turnover impacts negatively on business performance with the main reason for this negative impact on business performance being that it takes too long to fill posts that require scarce skills (Table 5.6).

In order to effectively manage employee turnover it needs to be measured (Morrel et al, 2004:172). Departments need to devote resources to the process of measuring and monitoring employee turnover. Statistics that relate to the rate and type of turnover needs to be readily available to managers. This will allow managers to be in a position to regularly monitor and evaluate employee turnover against benchmarks (Lynch & Tuckey, 2008:8). Failure to monitor labour turnover may result in a situation whereby there are insufficient skills to achieve efficient service delivery. Such managers need to know why turnover takes place and what amount of turnover is acceptable.

While managers often recognised the negative effects of employee turnover they were unclear about average industry employee turnover (benchmark) figures and the actions of competing firms with respect to minimising employee turnover. Managers must engage in employee turnover contingency planning and knowledge

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management strategies to create strong future business plans (Stovel & Bontis, 2002: 320).

In a study (Stovel & Bontis,2002: 320) it was found that while managers often recognised the negative effects of employee turnover, they were unclear about average industry employee turnover (benchmark) figures and the actions of competing firms, with respect to minimising employee turnover. Furthermore, they did not seem concerned about the implications of losing skilled employees to competition, nor were they motivated to minimise the effects of this turnover. The study recommends that managers must engage in employee turnover contingency planning and knowledge management strategies in order to create strong future business plans.

#### Retention difficulties

The findings show the good performing departments with employee turnover below the benchmark have strategies to address employee retention. These strategies included performance awards to deserving employees, counter offers, training, teambuilding, improved communication and job rotation. These strategies overlap with the factors determined from the quantitative analysis component of the multiple case study (Phase three).

### 6.5 RECOMMENDATIONS: GUIDANCE FOR EMPLOYEE RETENTION

The findings of both the quantitative and qualitative components of the multiple case study overlap. The three categories from qualitative findings (human resources strategy, employee turnover and retention drivers) include the 12 factors from the qualitative findings (Table 5.3). Thus, the following recommendations are based on the results of the both the quantitative and qualitative analysis in the multiple case study (Figure 6.3).

The study has shown that the inclusion of performance evaluation systems for staff competencies, employee performance plans and the evaluation of employee's performance should be part of a formal human resources strategy. Employee turnover can be reduced through rewarding employees and clearly communicating performance expectations and actual results with staff (Harris &Williamson, 2008:12).

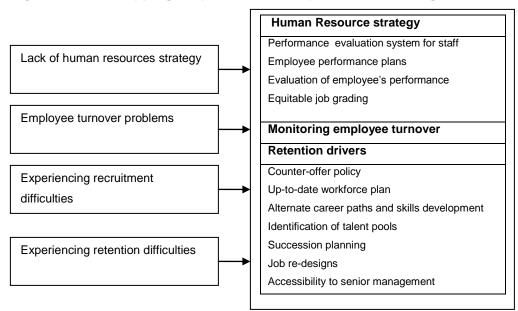


Figure 6.3: Overlapping of qualitative and quantitative findings

# 6.5.1 Counter -offer policy

The making of counteroffers is a useful tool for retaining highly skilled and talented employees. It should be common practice for departments to make counter-offers to employees who are in critical positions or who are identified as high performers. Failure to exercise sound and disciplined judgement in making counter-offers could lead to turmoil for companies in an increasingly competitive environment for talent (Scott, McMullen & Nolan, 2005:4).

Each department should have a formal policy on the making of counter-offers aimed at retaining highly skilled employees. Managers need to understand the policies and practices pertaining to the use of counter-offers and these should be dealt with in a fair and transparent manner (Table 5.3).

### 6.5.2 Monitoring employee turnover

High employee turnover is avoidable and needs to be managed. The case study revealed that departments with low employee turnover had some sort of monitoring mechanism, while those departments with a relatively higher turnover did not monitor their employee turnover (Table 5.3).

In order to effectively manage employee turnover it first needs to be measured. Departments need to devote resources to the process of measuring and monitoring employee turnover. Statistics that relate to the rate and type of turnover need to be readily available to managers. This will allow for the assessment of employee turnover and open the way for administrative intervention through changes in organisational design and staffing arrangements (Alexander *et al.*, 1991:4).

## 6.5.3 Alternate career path and skills development

The offering of alternate career paths through internal skills development, as an alternative to leaving, will assist in reducing turnover. Departments that are unable to retain their current employees will have difficulty in attracting new high calibre workers. Each employee should have a detailed personal development plan (Table 5.3).

Identifying and attracting new employees are very important, but effective training may make the difference in whether or not an employee succeeds and stays with the organisation. Training is often overlooked as an important component in workforce planning due to constraints in time and resources. This results in limited opportunities for employee development (Davidson *et al.*, 2007:12).

### 6.5.4 Talent pools

Talent pools need to be identified within each department and maintained over time. Employee turnover needs to be monitored with specific attention focussed on identifying trends where talented and skilled employees leave to pursue new opportunities. These talented employees, on leaving the public service, impact on the government's ability to achieve both short- and long-term strategic goals.

When experienced workers leave they take valuable institutional knowledge with them. It takes time to develop new recruits to meet the specifics need of the organisation. With respect to talent acquisition, Srivastava & Bhatnagar (2008:258) suggest that organisations should make efforts to build effective and practical talent strategies with which to attract talent, address employee engagement and ensure the retention of key skills. Resourcing the best candidate's form a bigger talent pool rather than just from the available applicants, would result in a more efficient talent acquisition.

## 6.5.5 Succession planning

Succession planning assists in improving employee retention and reducing human resource costs with respect to training and skills development.

Departments should put systems in place to identify and develop strategic talent and critical roles for both short- and long-term needs. These plans will assist in the development of talent for the future and help identify talent gaps before they occur. Succession planning should be based on the competencies of the employees and not on job titles. Organisations should not wait too long to conduct forward thinking succession planning. This should be done before important talent exits the organisation (Guinn, 2000:392).

## 6.5.6 Job re-designs

Minor changes in job design can dramatically improve an employee's view of a job and improve retention. Where possible, jobs should be re-designed to be challenging, attractive, and to encourage employees to use the skills that they possess. People are most responsive to jobs early in their careers when the jobs are seen as challenging and motivating. Managers should rotate employees to new, more challenging jobs or redesign their jobs at three year intervals (Taylor, Murphy & Price, 2006:650).

## 6.5.7 Job grading/evaluation

Each department needs to grade all jobs in their establishment. This should be done in a consistent and equitable way. The salary scales must reflect the overall importance of each person's job to the success of the organisation. For salaries to be internally consistent, the department must first determine the overall importance or worth of each job through a systematic process of job evaluation. For this purpose, rating scales should be developed.

In order to minimize subjectivity, the rating scales used to evaluate jobs must be clearly defined, with evaluators being thoroughly trained on how to use them.

### 6.5.8 Performance evaluation

Evaluating the performance of staff is a very powerful tool that serves both the needs of the organisation and the needs of the employees. If properly implemented and performed, the performance evaluation can assist in assuring that each employee is successful in his or her job. This personal success leads to high retention rates (Tanke, 2001:219).

The performance appraisal system must have clearly defined instruments with which to evaluate the competence of employees and provide information on what steps should be taken if performance improvement is needed. The effectiveness of the performance appraisal and reward system should be formally assessed on a continuous basis.

Current research, based on case studies, has concluded that there are a number of common components to a process of evidence-based reward management. The components identified are, setting strategic objectives, conducting reward reviews of current policies and practices, measuring reward effectiveness, and using data generated by reviews and measurements, to evaluate reward outcomes. This serves as a basis for introducing new or improved reward practices (Armstrong, Brown &Reilly, 2011:117).

### 6.5.9 Accessibility to senior management

The management styles and leadership ability of senior officials in national departments play an important role in employee retention. Employees who enjoy supportive, communicative relationships with their managers are much more likely to report high job satisfaction and are unlikely to leave. Managers at all levels of an organisation are expected to behave with integrity, treat employees with respect, communicate effectively, involve employees in decision making and foster personal relationships with direct reports (Hughes & Rog, 2008:750).

### 6.6 CONCLUSION

The turnover rates for each department and the benchmarks for each subgroup facilitated the selection of multiple cases for the case study. It also enabled the isolation of extreme cases and the pairing of similar cases (Table 5.1). The recommendations arising from both the quantitative and qualitative research of the multiple case study are based on the important factors that were found to influence employee retention in the selected cases (Figure 6.3).

# **CHAPTER 7**

# **CONCLUSIONS AND RECOMMENDATIONS**

## 7.1 OVERVIEW OF RESEARCH PROJECT

The aim of the research was to identify key factors and existing policies which influence employee retention in national departments in order to give guidance to improve employee retention. This was achieved in three phases starting with an exploratory study where the employment and earnings data of national government departments was analysed and the 33 national departments were classified into three subgroups. Then the employee and benchmark turnover rates for each subgroup were determined (Phase 2). Thereafter, the employee turnover statistics were analysed and used as a guide for the selection of cases which formed the basis of the multiple case study of 12 selected departments (Phase 3). These objectives have been successfully achieved.

## 7.2 MAIN FINDINGS

## 7.2.1 Factors influencing employee retention

The exploratory research provided insights into the distribution of employment and earnings in national government departments. Furthermore, the classification of the 33 national departments into three subgroups allowed for the determination and analysis of employee turnover rates and benchmarks according to employment size (Table 3.1).

Employee turnover rates and benchmark rates were determined for each of the subgroups. These turnover statistics were used for the analysis of employee turnover rates for each department relative to the benchmark rate of the subgroup. The main findings, on the determination and analysis of employee turnover rates and

benchmark rates, show that in all three subgroups there were extreme cases of high employee turnover relative to the benchmark turnover rate. From the subgroup of large departments a turnover rate of 2.9 percent relative to the benchmark rate of 0.8 percent was found. For the subgroup of medium departments a turnover rate of 3.8 percent relative to the benchmark rate of 1.9 percent and from the subgroup of small departments a turnover rate of 3.3 percent relative to the benchmark rate of 2.6 percent. These extreme cases were analysed in the multiple case study to determine the retention practices in the departments that led to this high employee turnover (Table 5.1).

The findings, of the quantitative component of the case study of selected departments, showed that an extremely significant relationship exists between the responses and employee turnover for most of the departments other than the subgroup of selected medium departments. The selected cases comprised of all selected national departments and the subgroup of selected small national departments and selected large national departments. Twelve factors were found to influence employee retention in these departments (Table 5.3).

#### 7.2.2 Important factors

It was possible to group the factors into three categories, human resources strategy, employee turnover, and retention drivers. Of these the factors of human resources strategy and employee turnover were the most important.

#### Human resources strategy

Most of the departments did not have a formal human resources strategy and this lack had a significant impact on employee turnover (Table 5.4). This is a serious breech of the DPSA regulations which require this level of monitoring. Over and above that, an up to date workforce plan is considered essential for managing

employee turnover as it was found that workforce planning caused relatively lower employee turnover

### Employee turnover

This control feature with respect to the monitoring of turnover is sadly neglected by most departments with very few mechanisms in place to monitor employee turnover. It was found that employee turnover has a significant impact on business performance primarily due to the fact that it takes too long to fill vacant posts. This is exacerbated by uncompetitive salary scales and the lack of skilled candidates

Finally, the findings of the qualitative component of the case study showed that the lack of human resourcing strategies, recruitment difficulties, problems related to monitoring and measuring of employee turnover and employee retention difficulties were important issues that influence employee retention. These findings overlap with the findings from the quantitative component of the multiple case study (Figure 6.3). Based on these findings, the recommendations follow.

### 7.3 RECOMMENDATIONS

#### Employee turnover

The measurement of employee turnover across different size national departments can play an important role in managing employee turnover. The benchmarking of employee turnover rates with other similar employment size departments gives managers a means to compare the turnover performance of their departments to determine whether the level is acceptable or not. The analysis and monitoring of turnover statistics can further assist in identifying key areas within the department that may need interventions to assist in minimising employee turnover (Alexander et al., 1994:4). The following guidelines for measuring and monitoring employee turnover are:

- Stratify departments according to employment size into small, medium and large subgroups.
- Determine employee turnover rates and benchmarks for each subgroup.
- Monitor the turnover of each department against the benchmark rate as well as against the turnover rates of other departments in the subgroup.
- Isolate the departments with unacceptable employee turnover rates relative to the turnover statistics from that subgroup.
- Implement the necessary interventions.

### Human resource strategy

One of the major factors affecting employee recruitment is the lack of skilled candidates (Table 5.5). Training and skills development practices combined, with human resource activity such as performance reviews, enables senior managers to better understand their employees. These practices will improve employee retention in the long term (Stovel & Bontis, 2002:304). There needs to be direct communication from the senior management team to reinforce the importance of developing the right competencies for achieving the departments strategic direction (Guinn,2000:392).

Managers need to place more emphasis on the workforce planning. Investing in more training opportunities to sharpen employee skills and a clearly defined career path, will lead to engagement and improved retention of employees (Srivastava & Bhatnagar,2008:256)

### 7.4 LIMITATIONS OF THE STUDY

There are three tiers of government but the study was confined to national government departments and excluded provincial and local government organisations.

Another limitation is that the study analysed general employee turnover within the organisations and not employee turnover and benchmarks according to occupational categories.

## 7.5 FUTURE RESEARCH

It is recommended that the following be researched:

- Developing systems to monitor and measure employee turnover in the public service. These systems must provide decision makers with relevant turnover statistics at regular intervals. The statistics should, at minimum, include the amount of turnover, the occupational category where it occurs and the reasons why it occurs.
- Existing administrative systems should be evaluated to determine the type and quality of statistics from these systems that may be useful for the analysis of employee turnover.
- In addition to monitoring employee turnover, developing models to monitor and vary employee retention goals and strategies, according to organisational circumstances, will assist in enhancing employee retention.

## 7.6 CONCLUSION

The objectives of the research have been satisfied. It was possible to identify the important factors that influence employee retention. The main findings showed the important factors influencing employee retention and the weaknesses in human resource strategy which could be improved. The study has made recommendations for the measurement and monitoring of employee turnover in the public service.

Recommendations for future research are made for developing systems and managing employee turnover. This study forms the basis for the recommended research.

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# Appendix 1

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Employment and turnover statistics: Em	ployment small departments
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Obs	Code	M200901 e <sub>1</sub>	M200902 e <sub>2</sub>	M200903 e <sub>3</sub>	M200904 e <sub>4</sub>	M200905 e <sub>5</sub>	M200906 e <sub>6</sub>	M200907 e <sub>7</sub>	M200908 e <sub>8</sub>	M200909 e <sub>9</sub>	M200910 e <sub>10</sub>	M200911 e <sub>11</sub>	M200912 e <sub>12</sub>	$\frac{\text{Average}}{\frac{(e_1+e_{12})}{2}}$
1	S1	136	135	141	136	135	137	136	135	133	137	136	133	135
2	S2	194	198	201	212	189	207	229	243	249	247	267	266	230
3	S3	205	205	190	187	186	190	181	180	208	216	218	221	213
4	S4	253	250	249	250	246	249	252	251	250	253	261	263	258
5	S5	285	279	284	284	287	289	301	296	299	301	306	303	294
6	S6	333	332	335	333	333	354	337	336	335	334	333	334	334
7	S7	442	440	447	451	446	445	461	460	459	479	481	482	462
8	S8	405	413	415	436	434	436	437	443	447	452	453	454	430
9	S9	527	532	534	527	526	518	513	511	495	494	502	490	509
10	S10	556	554	553	551	549	554	576	586	582	600	609	617	587
11	S11	591	600	600	562	584	584	622	608	600	623	618	628	610
12	S12	750	742	757	765	782	781	786	800	817	814	810	812	781
13	S13	795	799	807	812	826	865	878	888	894	888	876	873	834
14	S14	893	918	905	926	900	967	971	999	999	1013	956	964	929

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Employment medium departments

Obs	Code	M200901 e <sub>1</sub>	M200902 e <sub>2</sub>	M200903 e <sub>3</sub>	M200904 e <sub>4</sub>	M200905 e <sub>5</sub>	M200906 e <sub>6</sub>	M200907 e <sub>7</sub>	M200908 e <sub>8</sub>	M200909 e <sub>9</sub>	M200910 e <sub>10</sub>	M200911 e <sub>11</sub>	M200912 e <sub>12</sub>	$\frac{\text{Average}}{\frac{(e_1+e_{12})}{2}}$
1	M1	1210	1227	1226	1237	1264	1276	1304	1297	1297	1321	1326	1338	1274
2	M2	1227	1247	1220	1216	1214	1209	1206	1201	1196	1190	1190	1187	1207
3	М3	1664	1719	1727	1740	1740	1775	1831	1864	1902	1938	1968	1987	1826
4	M4	1587	1567	1566	1559	1733	1751	1751	1721	1731	1750	1713	1711	1649
5	M5	1923	1930	1922	1909	1905	1908	1886	1880	1858	1819	1680	1653	1788
6	M6	1682	1683	1707	1742	1645	1660	1786	1748	1773	1787	1766	1750	1716
7	M7	2306	2303	2315	2376	2368	2374	2381	2368	2358	2359	2361	2362	2334
8	M8	4305	4293	4041	4255	4314	4269	4437	4128	2975	3103	3096	2879	3592
9	M9	3088	3448	3509	3686	3762	3166	3021	2995	3036	3027	3023	3043	3066
10	M10	4413	4433	4441	4490	4464	4488	4510	4532	4552	4595	4567	4570	4492

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## Employment large national departments

Obs	Code	M200901 e <sub>1</sub>	M200902 e <sub>2</sub>	M200903 e <sub>3</sub>	M200904 e <sub>4</sub>	M200905 e <sub>5</sub>	M200906 e <sub>6</sub>	M200907 e <sub>7</sub>	M200908 e <sub>8</sub>	M200909 e <sub>9</sub>	M200910 e <sub>10</sub>	M200911 e <sub>11</sub>	M200912 e <sub>12</sub>	$\frac{\frac{\text{Average}}{(e_1 + e_{12})}}{2}$
1	L1	6199	6217	6246	6449	6711	6933	7033	7034	7151	7295	7241	7360	6780
2	L2	6714	6685	6677	6692	6694	6685	6700	6696	6751	6877	6918	7019	6867
3	L3	9023	9108	9182	9243	9415	9507	9564	9628	9772	6577	6606	6613	7818
4	L4	8629	8651	8815	8930	9048	8860	8989	9461	9974	10057	10132	10088	9359
5	L5	15671	15620	15577	14972	15059	14990	14990	14970	14960	15003	15038	15013	15342
6	L6	15799	15584	16027	16107	15601	15679	15618	15716	15579	15426	15771	15257	15528
7	L7	24531	24636	24703	24672	24554	24596	24772	24780	24715	24813	24802	24797	24664
8	L8	41397	41352	41301	41250	41197	41524	41551	41482	41427	41357	41298	41180	41289
9	L9	77737	82331	76794	81735	80218	80551	83691	83309	81936	85611	88012	85008	81373

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Obs	Code	M1	M2	М3	M4	М5	M6	М7	M8	М9	M10	M11	M12	Total
1	S1	4	4	5	4	4	2	2	4	2	4	4	0	39
2	S2	4	6	6	40	15	10	4	28	1	4	6	4	128
3	S3	10	4	10	12	14	6	4	0	2	0	2	0	64
4	S4	5	4	8	4	5	8	5	10	2	5	3	6	65
5	S5	7	6	6	8	8	9	8	10	2	6	6	5	81
6	S6	8	8	6	10	11	6	6	6	4	6	6	0	77
7	S7	16	18	20	11	7	10	12	14	6	12	8	8	142
8	S8	12	14	12	12	29	12	6	14	12	5	8	5	141
9	S9	12	12	18	14	31	20	51	13	4	14	9	6	204
10	S10	12	18	16	15	42	12	13	16	22	13	14	4	197
11	S11	15	14	12	14	16	14	16	17	11	14	16	12	171
12	S12	18	15	13	13	17	31	38	20	18	12	20	8	223
13	S13	14	7	15	14	25	14	16	16	12	12	12	13	170
14	S14	18	10	37	109	88	17	46	38	4	2	4	4	377
	Total	155	140	184	280	312	171	227	206	102	109	118	75	2079

Employee turnover for small national departments

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Obs	Code	M1	M2	М3	M4	М5	M6	M7	M8	M9	M10	M11	M12	Total
1	M1	20	21	8	4	16	15	20	18	12	20	12	8	174
2	M2	5	14	6	10	6	9	5	13	21	13	4	14	120
3	M3	34	37	12	14	8	14	31	16	12	19	14	16	227
4	M4	64	30	58	46	30	30	36	26	16	12	48	44	440
5	M5	56	34	61	104	54	46	102	46	38	82	42	88	753
6	M6	44	44	18	22	78	25	72	23	18	32	60	40	476
7	M7	20	20	28	56	16	28	14	22	44	26	22	14	310
8	M8	68	224	36	196	182	190	124	162	132	88	142	93	1637
9	M9	68	22	60	12	40	84	36	30	30	30	30	24	466
10	M10	131	23	75	81	102	65	22	45	10	3	7	2	566
	Total	510	469	362	545	532	506	462	401	333	325	381	343	5169

Employee turnover for medium national departments

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Obs	Code	M1	M2	М3	M4	M5	M6	M7	M8	M9	M10	M11	M12	Total
1	L1	74	130	145	86	79	24	68	102	124	124	116	112	1184
2	L2	26	68	12	56	34	66	36	26	35	28	24	46	457
3	L3	37	35	21	18	36	15	36	36	36	28	50	12	360
4	L4	52	39	44	57	20	46	86	45	55	86	38	108	676
5	L5	72	60	54	62	68	76	54	54	54	162	164	123	1003
6	L6	186	176	174	124	124	144	56	156	356	554	209	212	2471
7	L7	585	482	758	1418	872	331	968	984	586	317	864	296	8461
8	L8	234	418	82	45	56	332	190	90	90	59	16	10	1622
9	L9	110	198	151	295	268	460	453	114	224	211	23	435	2942
	Total	1376	1606	1441	2161	1557	1494	1947	1607	1560	1569	1504	1354	19176

## Employee turnover for large national departments

### Template with codes

### Appendix 2 Page 1/3

CODE	DESCRIPTION	Description	Description - More detail	
EFF	EC DATE			
		4010502 4020503	Amended appointment date Assumption of duty	
		4021302	Shortened assumption of duty	Used to re-appoint a person that was previously appointed as all the information does not have to be re- captured
		4034802	Amend appointment date transaction	To change appointment or leave start date
NEW APPOINTMENTS	TRANSACTION CODES	5080103	abnormal appointments	Appointments of session workers (normally doctors who work at different hospitals), Abnormal appointments and periodical appointments (paid hourly for specific project until completed) - employees not appointed in posts
NEW APPOINTMENTS	Total			
		4060503	Transfer( test for province on table 069)	Test against table 069 if a valid province
TRANSFERS INTO A SPECIFIC DEP PROVINCE	TRANSACTION CODES	4060504	Component transfer same bureau(test for organisation)	
		4060506	Component transfer from another bureau	
		4020503	Assumption of duty (with transfer <b>yes</b> )	

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				Page 2/3	
TRANSFERS INTO A SPECIFIC DEP PROVINCE	Total				
		4060402	Relocation	Within the same organisation but to a different component	
		4060503	Transfer ( test for province on table 069)	Test against table 069 if a valid province	
		4060504	Component transfer same bureau (test for organisation)		
		4060602	movement	Movement within the same organisation and component - different post and/or sub- component	
		4060702	Promotion/translation in rank	component	
		4060799 Occupational adjustment rank			
INTERDEPARTMENTAL PROMOTIONS OR CHANGE (WITHIN THE SAME DEPT OR PROV)	TRANSACTION CODES	4061302		Cancel relocation within the same organisation but to a different	
		4063102	Cancel relocation Exchange of two persons in a post	component	
		4063302	Relocation with post		
		4063402	Cancel Movement	Cancel movement within the same organisation and component - different post and/or sub- component	
		4063502	Mass Relocation of personnel	component	
		4063602	Promotion/translation senior/middle package		
		4063702	Mass movement of post and personnel		
		4063802	Relocation with post to a specific post class		
		4064002	Promotion/ translation in rank/adjustment(test of rank change		

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				Page 3/3
INTERDEPARTMENTAL PROMOTIONS OR CHANGE (WITHIN THE SAME DEPT OR PROV)	Total			
		4070102	Service termination	
		4070302	Withdrawal service termination	The service termination is cancelled
RESIGNATIONS	TRANSACTION CODES	4070602	Amend service termination	Amend certain data elements of a service termination
	CODES	5080401	Service termination- abnormal appointments	Service termination of session workers and employees not appointed in posts
RESIGNATIONS	Total			
		4060503	Transfer ( test for province on table 069)	Test against table 069 if a valid province
TRANSFERS OUT	TRANSACTION CODES	4060504	Component transfer same bureau(test for organisation)	Test if a valid organisation
		4060505	Component transfer to other bureau	Same as transfer, just a mass transfer
		4090102	Transfer to other persal	
TRANGEERO OUT	Tatal		bureau	
TRANSFERS OUT	Total OTALS		Service termination	
I	UTALS	CATEGORY	Service termination	
		01	Death/ Demise	
		CATEGORY		
		03	Contract Expiry	
OTHER SERVICE TERMINATION CATEGORIES	TRANGACTION	CATEGORY	Dismissal-operational	
	TRANSACTION CODE 4070102	05 CATEGORY	requirements(retrenchments)	
		06	dismissal-ill health	
		CATEGORY 07	Dismissal-misconduct	
		CATEGORY 08	dismissal-incapacity	

#### Formulae

Turnover rate = (no. of leavers / average no. employed) X 100 More specifically, the turnover rate for the  $n^{th}$  large unit (total of 14) is

$$TR \, \mathbf{C}_n = \frac{\sum_{i=1}^{12} l_{ni}}{\frac{1}{2} \, \mathbf{I}_{n1} + e_{n12}} \times 100 \, ,$$

where  $l_{ni}$  is the number of leavers for the  $n^{th}$  large unit as at the  $i^{th}$  month and e is the employment level of the  $n^{th}$  large unit of the first and last month. In the denominator of the above quotient, the average employment level is calculated by summing the employment levels for the first and twelfth month and then dividing by two.

#### Turnover rate for each subgroup

Benchmark turnover rate = (no. of leavers per subgroup/average no. employed per subgroup) X 100

Therefore, the benchmark turnover rate for the subgroup of 9 large units (L) is given by:

$$BR \P = \frac{\sum_{n=1}^{9} \sum_{i=1}^{12} l_{ni}}{\frac{1}{2} \sum_{n=1}^{9} \P_{n1} + e_{n12}} \times 100$$

Similarly, for the subgroup of 14 small units;

$$BR \, \P = \frac{\sum_{n=1}^{14} \sum_{i=1}^{12} l_{ni}}{\frac{1}{2} \sum_{n=1}^{14} \P_{n1} + e_{n12}} \times 100$$

And, for the subgroup of 10 medium units

$$BR \P = \frac{\sum_{n=1}^{10} \sum_{i=1}^{12} l_{ni}}{\frac{1}{2} \sum_{n=1}^{10} \P_{n1} + e_{n12}} \times 100$$

Questionnaire

#### Appendix 4 Page 1/8

	Fage 1/0		
Sec	tion A	YES	NO
1.1	Does your organisation have a human resourcing strategy (any form)?		
1.2	Have you hired assistance from HR services/ consultants in the past year?		
1.3	Does your organisation experience any recruitment difficulties?		
1.4	Do you conduct pre-employment checks?		
1.5	Did you withdraw any job offers in the last year?		
1.6	Do you conduct reference checks?		
1.7	Do you have a counter-offer policy?		
1.8	Do you confirm and validate qualifications of candidates?		
1.9	Have you an up-to-date workforce plan?		
1.10	Do you monitor employee turnover?		
	Have you undertaken exit interviews to understand why people leave?		
1.12	Have you undertaken a skills audit of the workforce?		
1.13	Have you offered staff enhanced/alternate career paths through internal skills development as an alternative to leaving?		
1.14	Have you provided access to training and professional development opportunities?		
1.15	In the last year have you identified any talent pools?		
1.16	Do you have a succession planning policy for key positions?		
1.17	Do you have a rotation programme for managers?		
	Do you have an induction programme for new employees?		
	Have you identified alignment or adjustment difficulties for new starters to manage expectations?		
1.20	Have you a culture which makes your agency attractive to both current and future employees?		
1.21	Have you established what your measures of success will be for your retention strategies?		
1.22	Have you considered job re-design as an option to reflect the diversity of skills and capabilities required?		
1.23	Do you have an integrated performance management system?		
1.24	Does your performance system provide you with the information to evaluate staff competencies?		
1.25	Do all employees have a performance plan (quarterly/bi-annual or annual)?		
1.26	Have all employees been evaluated against their performance plans?		
1.27	Have good performers been rewarded?		
1.28	Do you have health and wellness programs for employees?		
1.29	Are all current jobs graded?		
1.30	Is the job grading process equitable amongst different divisions?		
1.31	Do all employees have easy accessibility to the senior management?		
1.32	Have you conducted an employee satisfaction survey in the last year?		

#### Section B

yes

no

1. Does your organisation have a human resourcing strategy (any form)?

1.1 If yes, what are the main objectives of your organisation's human resourcing activities?

#### 1.2 If no, explain why?

2. Does your organisation experience any recruitment difficulties?

yes no

#### 2.1 If yes:

2.1.1 Explain the key reasons for recruitment difficulties.

2.1.2 What initiatives (if any) were taken to overcome these difficulties?

#### 2.2 If no:

2.2.1 What are the key elements of your organisations recruitment plan?

3. List the methods that you use to attract candidates?

4. List the pre- employment checks that you conduct (if any).

5. On what occasions do you withdraw job offers?

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6. How do you conduct reference checks?

7. What is the most common cause of voluntary turnover?

8. In which occupational category (senior management, middle management, and nonmanagement) does the most turnover occur? 9. What percentage of voluntary separations are (a) part-time and (b) fixed-term contracts?

10. How do you monitor employee turnover?

11. Explain how employee turnover impacts on business performance?

12. In which occupational category (senior management, middle management, and nonmanagement) do you have the most retention difficulties?

13. Describe briefly the actions you take to address retention?

14. How do you evaluate the performance of your employees?

15. What percentage of staff (senior/middle management/non management) received rewards based on performance evaluation?

16. How do you communicate happenings in the organisation?

17. Do all employees have easy accessibility to the senior management?

NAME OF ORGANISATION: .....

#### Correlations

Small Department	Total annual turnover	Average annual employment	Percentage of employment	Annual turnover rate	Average monthly turnover rate
S13	170	834	12.6	20.4	1.7
S6	77	334	5.1	23.1	1.9
S4	65	258	3.9	25.2	2.1
S5	81	294	4.5	27.6	2.3
S11	171	610	9.2	28.1	2.3
S12	223	781	11.8	28.6	2.4
S1	39	135	2	29	2.4
S3	64	213	3.2	30	2.5
S7	142	462	7	30.7	2.6
S8	141	430	6.5	32.8	2.7
S10	197	587	8.9	33.6	2.8
S9	204	509	7.7	40.1	3.3
S14	377	929	14.1	40.6	3.4
S2	128	230	3.5	55.7	4.6

#### Small national departments

Correlation between average annual employment and total annual turnover for small departments

Pearson Correlation Coefficients, N = 14					
Prob >  r  under H0: Rho=0					
Total annual turnover					
Average annual employment	0.87771				
Average annual employment	<.0001				

#### Appendix 5 Page 2/3

#### Medium national departments

Medium department	Total annual turnover	Average annual employment	Percentage of employment	Annual turnover rate	Average monthly turnover rate
M2	120	1207	5.3	9.9	0.8
M3	227	1826	8	12.4	1
M10	566	4492	19.6	12.6	1.1
M7	310	2334	10.2	13.3	1.1
M1	174	1274	5.6	13.7	1.1
M9	466	3066	13.4	15.2	1.3
M4	440	1649	7.2	26.7	2.2
M6	476	1716	7.5	27.7	2.3
M5	753	1788	7.8	42.1	3.5
M8	1637	3592	15.7	45.6	3.8
Total	5 169	22 943	100	22.5	1.9

# Correlation between average annual employment and total annual turnover for medium departments

Pearson Correlation Coefficients, N = 8					
Prob >  r  under H0: Rho=0					
	Total annual turnover				
Average annual employment	0.73006				
Average annual employment	0.0398				

# Large national departments

Large Department	Total annual turnover	Average annual employment	Percentage of employment	Annual turnover rate (2009)	Average monthly turnover rate
L9	2942	81373	38.9	3.6	0.3
L8	1622	41289	19.8	3.9	0.3
L5	676	15342	7.3	4.4	0.4
L3	360	7818	3.7	4.6	0.4
L2	457	6867	3.3	6.7	0.6
L4	1003	9359	4.5	10.7	0.9
L6	2471	15528	7.4	15.9	1.3
L1	1184	6780	3.2	17.5	1.5
L7	8461	24664	11.8	34.3	2.9
Total	19176	209018	100	9.2	0.8

Correlation between average annual employment and total annual turnover for large departments

Pearson Correlation Coefficients, N = 8					
Prob >  r  under H0: Rho=0					
	Total annual turnover				
Average annual employment	0.7602				
Average annual employment	0.0286				

#### Appendix 6

Questions	S13	<b>S6</b>	<b>S</b> 3	<b>S</b> 9	M2	M3	M6	M8	L3	L5	L6	L7	Cronbach's $\alpha$
1.1	1	1	0	0	0	1	1	1	1	1	1	1	0.7654
1.2	1	1	0	0	1	0	1	1	1	1	1	1	0.7789
1.3	1	0	0	1	1	1	1	1	0	0	1	1	0.7939
1.4	1	1	1	1	0	1	1	1	1	1	1	1	0.7825
1.5	0	0	0	0	0	1	0	0	0	0	0	0	0.7638
1.6	1	1	1	1	0	1	1	1	1	1	1	1	0.7825
1.7	1	1	0	0	1	1	1	1	1	1	0	0	0.7298
1.8	1	1	1	1	1	1	1	1	1	1	1	1	0.7740
1.9	1	1	0	0	0	1	0	0	1	0	1	0	0.7593
1.10	1	1	0	0	1	1	1	1	1	1	0	0	0.7298
1.11	1	1	0	1	1	1	1	1	1	1	1	1	0.7670
1.12	0	0	0	0	1	1	1	1	0	0	1	1	0.7986
1.13	0	1	0	0	1	1	0	0	0	0	0	0	0.7580
1.14	1	1	1	1	1	1	1	1	1	1	0	1	0.7670
1.15	1	0	0	0	1	0	0	0	0	0	0	0	0.7658
1.16	1	1	0	0	0	0	0	0	1	1	0	0	0.7580
1.17	0	0	0	0	0	0	0	0	0	0	0	0	0.7740
1.18	1	1	1	1	1	1	1	1	1	1	1	1	0.7740
1.19	0	0	0	0	0	0	1	1	0	0	0	0	0.7817
1.20	1	1	1	0	0	0	0	0	0	0	0	0	0.7750
1.21	0	0	0	0	0	1	0	0	0	0	0	0	0.7638
1.22	1	0	0	0	0	1	0	0	0	0	0	0	0.7510
1.23	1	1	1	1	1	1	1	1	1	1	1	1	0.7740
1.24	1	1	1	1	0	1	0	0	1	1	0	0	0.7704
1.25	1	1	1	1	1	1	1	1	1	1	0	0	0.7551
1.26	1	1	1	1	1	1	1	1	1	1	0	0	0.7551
1.27	1	1	1	1	1	1	1	1	1	1	1	1	0.7740
1.28	1	1	1	1	1	1	1	1	1	1	1	1	0.7740
1.29	1	1	0	0	1	1	0	0	1	1	0	0	0.7367
1.30	1	1	1	0	1	1	1	1	1	1	1	0	0.7551
1.31	1	1	1	1	1	1	0	0	1	1	0	0	0.7656
1.32	0	0	0	0	1	0	1	0	0	0	0	0	0.7792

# Response per department for section A (Yes=1, No=0)

# Statistical analysis

Contingency table for turnover by response for all national departments

Count Total % Col % Row %	No	Yes	
Category Above BM	98 25,52 62,82 51,04	94 24,48 41,23 48,96	192 50,00
Category Below BM	58 15,10 37,18 30,21	134 34,90 58,77 69,79	192 50,00
	156 40,63	228 59,38	384

# Tests table for all national departments

Responses(N)	Degrees of freedom(DF)	-LogLike	RSquare (U)
384	1	8,7129271	0,0336
Test		ChiSquare	Prob>ChiSq
Likelihood Ratio		17,426	<,0001*
Pearson		17,274	<,0001*
Fisher's Exact Test			Probability
Left			1,0000
Right			<,0001*
2-Tail			<,0001*

Count Total % Col % Row %	No	Yes	
Category Above BM	37	27	64
	28,91	21,09	50,00
	61,67	39,71	
	57,81	42,19	
Category Below BM	23	41	64
	17,97	32,03	50,00
	38,33	60,29	
	35,94	64,06	
	60	68	128
	46,88	53,13	

Contingency table for turnover by response for large national departments

# Tests table for large national departments

Responses(N)	Degrees of freedom(DF)	-LogLike	RSquare (U)
128	1	3,1000213	0,0350
Test		ChiSquare	Prob>ChiSq
Likelihood Ratio		6,200	0,0128*
Pearson		6,149	0,0131*
Fisher's Exact Test			Probability
Left			0,9962
Right			0,0105*
2-Tail			0,0209*

Count Total % Col % Row %	No	Yes	
Category Above BM	25 19,53 56,82 39,06	39 30,47 46,43 60,94	64 50,00
Category Below BM	19 14,84 43,18 29,69	45 35,16 53,57 70,31	64 50,00
	44 34,38	84 65,63	128

Contingency table for turnover by response for medium national departments

## Tests table for large medium departments

Responses(N)	Degrees of freedom(DF)	-LogLike	RSquare (U)
128	1	0,62483658	0,0076
Test		ChiSquare	Prob>ChiSq
Likelihood Ratio		1,250	0,2636
Pearson		1,247	0,2642
Fisher's Exact Test			Prob
Left			0,9038
Right			0,1761
2-Tail			0,3522

Count Total % Col % Row %	No	Yes	
Category Above BM	36	28	64
	28,13		50,00
	69,23		00,00
	56,25		
Category Below BM	16	48	64
	12,50	37,50	50,00
	30,77	63,16	
	25,00	75,00	
	52	76	128
	40,63	59,38	

Contingency table for turnover by response for small national departments

# Tests table for large small departments

Responses(N)	Degrees of freedom(DF )	-LogLike	RSquare (U)
128	1	6,6099080	0,0765
Test		ChiSquare	Prob>ChiSq
Likelihood Ratio		13,220	0,0003*
Pearson		12,955	0,0003*
Fisher's Exact Test			Probability
Left			0,9999
Right			0,0003*
2-Tail			0,0006*

Appendix	8
Page 1/2	

Fre	equency of total responses for section A	Units (BM)	below	Units (BM)	above
Que	stions	Yes	No	Yes	No
1.1	Does your organisation have a human resourcing strategy (any form)?	5	1	4	2
1.2	Have you hired assistance from HR services/ consultants in the past year?	5	1	4	2
1.3	Does your organisation experience any recruitment difficulties?	3	3	5	1
1.4	Do you conduct pre-employment checks?	5	1	6	0
1.5	Did you withdraw any job offers in the last year?	1	5	0	6
1.6	Do you conduct reference checks?	5	1	6	0
1.7	Do you have a counter-offer policy?	6	0	2	4
1.8	Do you confirm and validate qualifications of candidates?	6	0	6	0
1.9	Have you an up-to-date workforce plan?	4	2	1	5
1.10	Do you monitor employee turnover?	6	0	2	4
1.11	Have you undertaken exit interviews to understand why people leave?	6	0	5	1
1.12		2	4	4	2
1.13	Have you offered staff enhanced/alternate career paths through internal skills development as an alternative to leaving?	3	3	0	6
1.14		6	0	5	1
1.15	In the last year have you identified any talent pools?	3	3	0	6
1.16		4	2	0	6
1.17	Do you have a rotation programme for managers?	0	6	0	6
1.18		6	0	6	0
1.19		0	6	2	4
1.20	Have you a culture which makes your agency attractive to both current and future employees?	2	4	1	5
1.21	Have you established what your measures of success will be for your retention strategies?	1	5	0	6
1.22	Have you considered job re-design as an option to reflect the diversity of skills and capabilities required?	3	3	0	6
1.23	Do you have an integrated performance management system?	6	0	6	0
1.24	Does your performance system provide you with the information to evaluate staff competencies?	5	1	2	4
1.25	Do all employees have a performance plans (quarterly/bi-annual or annual)?	6	0	4	2
1.26	Have all employees been evaluated against their performance plans?	6	0	4	2
1.27	Have good performers been rewarded?	6	0	6	0
1.28	Do you have health and wellness programs for employees?	6	0	5	1
1.29	Are all current jobs graded?	6	0	0	6
1.30	Is the job grading process equitable amongst different divisions?	5	1	5	1
1.31	Do all employees have easy accessibility to the senior management?	6	0	2	4
1.32	Have you conducted an employee satisfaction survey in the last year?	1	5	1	5

Responses

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# Important factors influencing retention

Questien				>= 2
Question	Yes	Yes	Difference	7-2
1	5	4	1	
2	5	4	1	
3	3	5	-2	
4	5	6	-1	
5	1	0	1	
6	5	6	-1	
7	6	2	4	У
8	6	6	0	
9	4	1	3	У
10	6	2	4	У
11	6	5	1	
12	2	4	-2	
13	3	0	3	У
14	6	5	1	
15	3	0	3	У
16	4	0	4	У
17	0	0	0	
18	6	6	0	
19	0	2	-2	
20	2	1	1	
21	1	0	1	
22	3	0	3	У
23	6	6	0	
24	5	2	3	У
25	6	4	2	У
26	6	4	2	У
27	6	6	0	
28	6	5	1	
29	6	0	6	У
30	5	5	0	
31	6	2	4	У
32	1	1	0	
	135	94		

**Appendix 9** 

#### **Cover letter**

2010-07-21

The Human Resources Manager

Dear Sir/Madam

I am a Doctor of Business Administration candidate at the Durban University of Technology (DUT). I will appreciate your participation in a research study I am conducting for fulfilment of the requirements of my degree programme in business administration.

The focus of my study is to determine a framework to improve employee retention in the South African public service. Your organisation has been selected to participate in a survey. All the surveys will be number coded and the name of your organisation will not be divulged. Your participation will be treated as confidential.

The results of the study may be published or used in a presentation, but your details will not be used. Published results will be presented in summary form.

If you have any queries about this research project please call me at 0820952665 or send an email to sagarenp@statssa.gov.za.

Thanking you

Sagaren Pillay

#### Definitions

Definitions of terms used in the research follow.

#### Accuracy

Refers to the closeness of computations or estimates to the exact or true values that the statistics were intended to measure (OECD, 2007:13).

#### Administrative source

Administrative source is the organisational unit responsible for implementing an administrative regulation (or group of regulations), for which the corresponding register of units and the transactions are viewed as a source of statistical data (OECD, 2007: 22).

#### Benchmarking

Benchmarking refers to the case where there are two sources of data for the same target variable, with different frequencies, and is concerned with correcting inconsistencies between the different estimates, e.g. quarterly and annual estimates of value-added from different sources (OECD, 2007: 63).

#### Benchmark

A standard, or point of reference, against which things can be compared, assessed, measured or judged (OECD, 2007: 63).

#### Data confrontation

Data confrontation is the process of comparing data that has generally been derived from different surveys or other sources, especially those of different frequencies, in order to assess their coherency, and the reasons for any differences identified (OECD, 2007: 171).

#### Enterprise

An enterprise is defined as the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations (OECD, 2007:250).

#### Employees (establishment surveys)

Employees in establishment surveys include all persons who work in or for the establishment and receive pay, in cash or in kind, as a rule at regular intervals. Persons include all persons in the establishment as defined for employment (establishment surveys) other than working proprietors and unpaid workers (OECD, 2007:243).

#### Establishment

An establishment is an enterprise, or part of an enterprise, which engages in one, or predominantly one, kind of economic activity at or from one location or within one geographic area, for which data are available, or can meaningfully be compiled, that allow the calculation of the operating surplus (OECD,2007:264).

#### Estimation

Estimation is concerned with inference about the numerical value of unknown population values from incomplete data such as a sample (OECD, 2007:264).

General government accountsGeneral government accounts are consolidated central, state and local government accounts, social security funds and non-market non-profit institutions controlled and mainly financed by government units (OECD, 2007:326).

# Good governance

Good governance is characterized by participation, transparency, accountability, rule of law, effectiveness, equity, etc. (OECD, 2007:335).

# Homogeneity

This term is used in statistics in its ordinary sense, but most frequently occurs in connection with samples from different populations which may or may not be identical. If the populations are identical they are said to be homogeneous, and by extension, the sample data are also said to be homogeneous (OECD, 2007:363).

# Input editing

Input editing is editing that is performed as data is input. The editing may be part of a data entry system (OECD, 2007:396).

# Integrity

Integrity refers to values and related practices that maintain confidence in the eyes of users in the agency producing statistics and ultimately in the statistical product (OECD, 2007:403).

# Invisible underemployment

Invisible underemployment refers to individuals who are working in jobs where their skills are not adequately utilized (OECD, 2007:424).

# Irregular component of a time series

The irregular component of a time series is the residual time series after the trend-cycle and the seasonal components (including calendar effects) have been removed. It corresponds to the high frequency fluctuations of the series OECD, 2007:425).

# Job tenure

Job tenure is typically measured by the length of time workers have been in their current job or with their current employer, and so refers to continuing spells of employment rather than to completed spells (OECD, 2007:429).

# Job turnover

Job turnover, at the level of an individual establishment or firm, is simply the net change in employment between two points in time – the total number of jobs created less the number of jobs which have disappeared.

It does not include job vacancies which remain unfilled and jobs that begin and end over the interval of observation, which is most often one year (OECD, 2007:429).

# Labour market dynamics

Labour market dynamics refers to changes in jobs that take place as well as entries into and departures from economic activity affected by hirings, separations and the establishment and closure of self-employment activities (OECD, 2007:435).

# Labour market flows

Statistics on labour market flows describe the labour market experience of individuals over the reference period, that is, how many persons have moved into and out of jobs and into and out of being unemployed or outside the labour market, rather than just changes in the number of persons in these situations and in the labour force characteristics of groups (OECD, 2007:436).

# Labour turnover

Labour turnover is concerned with movements of individuals into jobs (hirings) and out of jobs (separations) over a particular period. Labour turnover is the sum of job turnover, which relates to the expansion and contraction of establishments or firms, and the movement of workers into and out of ongoing jobs in establishments or firms. Workers leave firms and firms hire other workers to replace them, regardless of whether the firm itself is growing or declining (OECD, 2007:437).

# Level (monthly, quarterly, annual) data

Data expressed as levels are expressed in absolute terms (values, numbers, units) for a given period (month, quarter, year) (OECD, 2007:444).

## Measurement errors

Measurement errors occur when the response provided differs from the real value; such errors may be attributable to the respondent, the interviewer, the questionnaire, the collection method or the respondent's record-keeping system. Such errors may be random or they may result in a systematic bias if they are not random (OECD, 2007:477).

#### Multi-phase surveys

Multi-phase surveys involve the collection of information in succeeding phases, with one phase serving as the forerunner to the next. These represent a special kind of multi-subject survey. They may be partially integrated to the extent that all of the information is collected for at least some of the sample units (OECD, 2007:500).

## Non-interview (non-response)

The type of non-response in which no information is available from occupied sample units for such reasons as: not at home, refusals, incapacity and lost schedules (OECD, 2007:527).

#### Not seasonally adjusted

This term is used to describe data series not subject to the seasonal adjustment process. In other words, the effects of regular, or seasonal, patterns have not been removed from these series (OECD, 2007:537).

#### Official statistics

Official statistics are statistics disseminated by the national statistical system, excepting those that are explicitly stated not to be official (OECD, 2007:546).

## Organisation

An organisation is a unique framework of authority within which a person or persons act, or are designated to act, towards some purpose (OECD, 2007: 556).

# Organisational innovation

An organisational innovation is the implementation of a new organisational method in the firm's business practices, workplace organisation or external relations (OECD, 2007: 556).

# Out-of-scope units

Out-of-scope units are units that should not be included in the sampling frame because they do not belong to the target population in the reference period. If enumerated, they cause over coverage (OECD, 2007: 563).

## Outlier

An outlier is a data value that lies in the tail of the statistical distribution of a set of data values (OECD, 2007:556).

## Performance appraisal

Assessment against a set of predetermined criteria of the efficiency and effectiveness with which an individual fulfils an agreed set of tasks. Such appraisals are frequently used in assessing whether managers should qualify for pay increases or promotion (OECD, 2007: 583).

# Public sector

The public sector comprises the general government sector plus all public corporations including the central bank (OECD, 2007: 631).

# Quarter-on-previous quarter growth rates

Quarter-on-previous-quarter growth rates are rates of change expressed with respect to the previous quarter (OECD, 2007: 643).

## Questionnaire

A group or sequence of questions designed to elicit information upon a subject, or sequence of subjects, from an informant (OECD, 2007: 644).

# Questionnaire design

Questionnaire design refers to the design (text, order, and conditions for skipping) of the questions used to obtain the data needed for the survey (OECD, 2007: 644).

# Response rate

The number of respondents who complete a questionnaire compared to the number assigned, usually expressed as a percentage. The response rate can also apply to individual questions (OECD, 2007: 678).

# Statistical confidentiality

The protection of data that relate to single statistical units that are obtained directly for statistical purposes or indirectly from administrative or other sources against any breach of the right to confidentiality. It implies the prevention of unlawful disclosure (OECD, 2007: 740).

## Time series

A time series is a set of regular time-ordered observations of a quantitative characteristic of an individual or collective phenomenon taken at successive, in most cases equidistant, periods /points of time (OECD, 2007: 787).