



Investigating factors affecting efficiency of pension administration system in North-West province

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ABSTRACT

The study seeks to investigate the factors affecting the efficiency of pension fund system in the North West Province. Government employees in South Africa subscribe to the Government Employee Pension Fund (GEPF) to preserve money for retirement. The processing of pension claims by GEPF utilises a pension case management system for processing pension pay-outs. The system was introduced as an intervention to the challenges that were raised by members about the delays in the pension pay-outs. The objective of this study was to investigate the quality of the GEPF system and to determine the factors responsible for the poor quality, including the impact of system inefficiencies on the lives of the beneficiaries in the North West province. The study explores frameworks used by other researchers to analyse pension fund management systems across the world and its impact on the lives of beneficiaries. The study adopted a qualitative research approach derived from post positivism.

Data was collected using questionnaire from both customers (beneficiaries) and employees of the GPAA. The data was captured and SPSS was used to analyse the data. Key findings show that the perception of employees, and customers (beneficiaries) based on service quality, information quality and system quality concur with the notion that the pension fund system in the North West province operates efficiently and effectively. However, the study found that delays in payments of pension pay-outs were caused by employees operating the system. These key findings are supported by Delone and Maclean (2003:75) model which explains that when analysing the effectiveness of the system, these constructs must be considered. The majority of the respondents concur that the GEPF system satisfies all these constructs. The respondents have indicated that the system is easy to use, accurate and produces reports on time. With regard to the three constructs; system quality, information quality and service; the model explains that they contribute positively to how the system is used and the user satisfaction which ultimately produces net benefits for the individuals, groups and the organisation. Although customers have raised concern with delays in pension pay-outs, the study has established that the problem is not with the system per se.

List of abbreviations

ANOVA	Analysis of Variance
AS	Automated System
GEPF	Government Employee Pension Fund
GPAA	Government Pensions Administration Agency
IS	Information System
ISSM	Information System Success Model
IT	Information Technology
MS	Manual System
NWP	North West Province
PCM	Pension Case Management System
SEM	Structural Equation Model

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1. Introduction

The study aimed at analysing factors that affect efficiency of pension fund administration system in the North West province of South Africa. Chapter one focuses on the background to the study and problem statement. The research questions, objectives and sub objectives of the study, motivation for the study and significance of the study are also discussed in this chapter. The chapter further outlines the delimitation of the study, the definition of key concepts and closes with a chapter summary.

1.2. Background to the study

Globally, the use of technology and innovative practices has become instrumental in enhancing the performance of institution, contributing to an emergent model of doing business (Loudon and Loudon, 2012: 375; Shaikh and Karjaoluoto, 2015: 550). Developed and developing economies are investing in research to improve service delivery and systems infrastructure to enhance performance and increase efficiency in public services (Llyod-Sherlock and Agrawal, 2014: 1600). Investments in systems infrastructure have evolved in many functional areas of business operations, including the pension case management system (Andersen et al., 2014: 1050) - a development that has resulted in improved and efficient performance of the pension systems across the world. Cumulatively, these improvement have shown improved service delivery benefits to recipients (Lippi, 2016: 23).

In Sub-Saharan Africa, the pension funds schemes and systems implemented across the continent are not homogenous. The reason is that there are differences in policies and legislations under which the pension fund management systems operate. In South Africa, the legislation governing the pension fund scheme include: the Pension Act 24 of 1956 (Government 1956), which over time, has undergone different amendments and reforms (Sigwadi 2013: 1150), leading to the establishment of the Government employees'

Pension Funds (hereafter refer to as GEPPF) to manage the pension fund of public servants in South Africa (Sigwadi 2013: 1094)

According to the Government Employees Pension Funds Report (2014:10), the GEPPF was mandated to perform a number of reforms which, among others, were aimed at ensuring effective, reliable, and timely provision of pension services with focus on funds such that pensioners are socially and economically well supported (Sigwadi 2013: 1099). This was accompanied by the enactment of the Retirement Act of 2014 that principally ensured that the retirees are efficiently supported and their well-being properly looked after. In spite of these legislations, little is known about the factors that affect the efficient operations of the pension funds system in South Africa and the North West Province in particular. Numerous capacity development initiatives aimed at improving the pension funds management system have been introduced and implemented over the years, ranging from employees development, office automation, and putting in place structures aimed at improving the efficient and effective service delivery of the pension funds.

Furthermore, several studies (Lloyd-Sherlock & Agrawal 2014:1575; Chatz, Gómez-Olivé, Ralston, Menken & Tollman 2012:1577) in South Africa posit that the rapid increase in poor households can be attributed to the increasing number of retirees who depend on their pension for survival. The efficient implementation of the GEPPF system is very crucial in alleviating the challenges retirees confront in accessing their pension benefits. The majority of elderly retirees in the country suffer challenges ranging from delays in the payment of monthly pension benefits, inadequate communication from the pension administrators to the retirees or poorly trained administrators who do not understand the workings of the system. Furthermore, there have been studies in South Africa on the elderly which have explored the income stabilisation among the elderly. These studies focus on the social safety nets in general (Harenberg, Ludwig & Maus 2013:8; Lloyd-Sherlock, Barrientos, Moller & Saboia, 2012:12). However, research associated with factors affecting pension funds efficiency and systematic implementation of the system to ensure that the safety net of retirees are properly implemented at a local level is scarce. Based on this outline in the argument, this investigation into the factors affecting the efficiency of the pension funds systems at the provincial level is crucial.

1.3. Background to the problem statement

In South Africa, the Government Pensions Administration Agency (GPAA) is a government component that reports to the Minister of Finance and administers funds and schemes on behalf of the Government Employees Pension Fund (GEPF). The GEPF is the largest pension fund system in South Africa (GPAA, 2018: 175). The agency administers the pension affairs of approximately 1, 7 million government employees and pensioners, as well as the affairs of their spouses and dependants in South Africa (GPAA, 2018:176). In 2012, a report by the International Organisation of Pension Supervisors revealed that the South African pension fund system has challenges with 'coverage of the pensioners' demographics, means test accuracy and 'leakage' that led to the government proposing reforms (Sigwadi 2013: 1098). In 2017, there was an acknowledgment by the Public Service Commission and the Public Service and Administration Performance Monitoring and Evaluation Committee in the South African National Assembly that there were delays in the pay-out of pension benefits to retirees in South Africa (Parliamentary Monitoring Group, 2017:10). Hunter (2017: 5) added that in South Africa there exist a large number of retirees who witness delays in unpaid pension fund benefits that can be attributed to inefficiencies in the administration of the pension fund system. This indictment on the inefficiency of the system spurred this investigation so that plausible solutions and recommendations could be submitted to the relevant stakeholders.

1.3.1. Problem statement

In North West Province, majority of the pensioners are not satisfied with prolong delays in accessing their pension funds from the pension administrators. A study by Purce, (2014:10) points out that, the delays are caused partly by failure of the employees within the organisation to understand fully the requirement needs of the pensions funds systems as well as delays in operations reconciliation to meet the needs of the customers (pensioners) on time (Cabeza, 2015:825, Chaudhry et al., 2006:760). Consequently, pensioners are experiencing financial difficulties in meeting their daily needs. The delay in accessing their monthly financial benefits from the pension funds systems caused by delays in the fund's administration system have led to many customers (pensioners,

beneficiaries) to borrow money from microfinance firms at exorbitant interest rates which further entrench poverty and suffering amongst beneficiaries. Although some studies have attributed the delays in operational inefficiencies in the funds management system (Harenberg et al., 2013:22-23), there have been limited studies on the factors and causes of the delays in the fund's operational management systems resulting to these delays especially at local or provincial levels in South Africa.

1.4. Research Questions

Based on the research problem as well as the background to the study, the following research questions are raised:

- What are the personal characteristics of beneficiaries and employees involved with the GEPF system?
- What is the quality of GEPF system used in South Africa?
- What are the factors responsible for poor quality services provided to beneficiaries?
- Are poor quality services to customers a result of administration inefficiencies or operational system failure?
- What are the impact of system inefficiencies on customers (beneficiaries)?

1.5. Objectives of the study

Based on the problem statement and research questions, the main objective of the study was to investigate the factors affecting the efficiency of the Pension Fund Administration system known as the Pension Case Management system in the North West Province in the delivery of quality services to customers. The main objectives of the study are further categorised under the following sub objectives in order to close the existing gap in literature identified in the problem statement.

- To investigate the personal characteristics of beneficiaries and employees using the GEPF system.
- To investigate the quality of the GEPF system used in the North West province.

- To determine factors responsible for the provision of poor service quality to customers (beneficiaries).
- To determine if the poor quality service are cause by administration inefficiencies or operational failure in the system.
- To determine the impact of the system inefficiencies on the lives of beneficiaries.
- To determine the overall satisfaction in use of the Government Pension Administration Agency (GPAA) system in the North West province.

1.6. Motivation for the study

The South African Pension fund management system has received a lot of attention from the media in the past few years (Hunter, 2017:11). The main focus was on funds that have remained unclaimed in the private sector. The unclaimed funds in the GEPF system can either be attributed to administrative inefficiencies, operational failures or both caused by unknown factors, especially at a local and provincial level. Furthermore, literature with regard to the GEPF management system as a whole in South African is limited and studies on this facet have largely not focused on the factors affecting the efficiency of the Pension fund Administration System.

1.7. Significance delimitation of the study

This study is significant in contributing knowledge to the existing literature on the Pension Case Management System of South Africa especially at a local level. The study adds to researchers' understanding of the dynamics of developing an efficient Pension Fund Administration system. The study further helps in understanding the complex nature of Government Pension Fund Systems and how these affect efficiencies in the system in South Africa and Africa. The study therefore significantly contributes to knowledge and it is expected to inform many future studies on pension case management systems in the future.

Findings from the study can contribute to the limited literature available on efficiency of the Pension Case Management System at a local level since most studies have focussed on the national, continental and international level. In addition, the findings of the study

add to the understanding towards improvement in the information quality of the Pension Case Management System to the benefit of the organisation as well as beneficiaries. The results of the study could be used by the National and Provincial GPAA in the development of effective pension management system, which will result in improved service delivery. Since there is limited literature on the Pension Case Management system in the South African context, the study aims to fill in a gap in literature. The study is also expected to enlighten policy makers and implementers on the requirements for Pension Case Management System, to adopt best practices and recommendations from successful Government Pension Funds of other countries.

The focus of this study is on the GPAA at a provincial level in South Africa. The study was conducted at the North West provincial branch of the GPAA due to time and resources constraints. Data used in the study was collected only from employees and beneficiaries of GPAA authorised to use the Pension Case Management System and beneficiaries serviced by the system in the North West province.

1.8. Research design and Methodology

The study adopted a quantitative research approach to analyse the research problem in questioned using a survey-based research design. The study utilises a cross-sectional data obtained from employees and beneficiaries of the system. The study adopts triangulation to validate the cross-sectional data as a scientific methods to verify accuracy and diligence for rigour and reliability. Information, gaps and weaknesses from an extensive literature review were used to develop the study instrument. The study instrument was questionnaire used to collect data. A probability sample process was followed and participants identified. The data was analysed using Statistical Package for Social Sciences (SPSS) version 25.0 and suitability tests performed. Inferential statistics tests were performed and results from the analysis used to test the hypothesis.

1.9. Theoretical Framework

The study undertook an extensive literature study to assess pension fund management systems and focuses on the quality of the GEPF system; factors responsible for the poor service quality offer to beneficiaries; whether the poor service quality is caused by

administration inefficiencies or operational system failures as well as the impact of such inefficiency on the lives of beneficiaries in the North West province of South Africa. The study explains the legislative framework and its effects on eligible beneficiaries of the pension fund systems. The study explores frameworks used by other researchers to analyse pension fund management systems across the world and its impact thereof on the lives of beneficiaries. The study focuses on the work of Ojo (2017:62), Dumais, Cutrell, Jancke, Sarim and Robbins (2016:30), Choi et al., (2015:8), Petter et al., (2008:240) and Sederal and Gable (2004:37). The study is designed with the intention of investigating factors affecting efficiency in the delivery of quality service by the Pension fund Administration System in North West province of South Africa to beneficiaries.

1.10. Definition of the key concepts

Pension fund – This is also referred to as a retirement fund. It is a non-profit making institution that administers employees and employers provisions for when employees are no longer physically or mentally able to work (Fourie, Falkena and Kok 1999: 33). Van Wyk, Botha and Godspeed (2012: 122) added that they are organisations whose members become entitled to benefits upon the occurrence of certain events such as resignation or retrenchment, death or retirement. All retirement funds must be registered in terms of the Pension Funds Act 24 of 1956 (Van Wyk et al 2012:16).

Pension fund organization - a) “This refers to any association of persons established with the objective of providing annuities or lump sum payments for members or former members of such association upon them reaching retirement dates, or for the dependants of such members or former members upon the death of such members or former members b) any business carried on under a scheme or arrangement established with the object of providing annuities or lump sum payments for persons who are members or has to benefit from the business under the scheme established when they reach their retirement dates as well as their dependants upon the death of those members” (Juta's Statutes Editors 2013:14)

Retirement funds – These are found in two forms which are the defined benefit and defined contribution.

Defined benefit funds - provide members with guaranteed benefits, where the amount of the benefit is usually determined by a formula based on salary and years of membership (Fourie et al 1999: 40; Van Wyk et al., 2012:179).

Defined contribution- This works like a “normal savings product where the member and sponsor contributions are invested by the retirement fund and the retirement benefit is determined by the accumulated value of contributions on retirement date” (Van Wyk, 2012:178)

System quality – is defined as the system reliability, accessibility, adaptability, integration, response time and privacy (Ji-fan Ren, Fosso Wamba, Akter, Dubey & Childe, 2017:122).

Information quality - is defined as completeness, accuracy, format and currency of the information (Ji-fan Ren et al, 2017:124).

1.11. Summary of chapter one

The chapter sought to identify the factors that influence the efficiency of the GEPF in the North West Province. The study was influenced by complaints from users of the system about the long delays experienced in using the system and also the quality of information that was generated by the system. This study is significant from both the theoretical and practical perspectives in that it sought to add to the existing knowledge on pension fund systems by identifying factors that can be used to improve a system. The study is limited to employees at the GEPF and the beneficiaries of the pension fund. Chapter one provided insight into the background and motivation for conducting the study. The study focusses on the challenges faced with regards to pension fund management. The aim of the study is to investigate the factors that affect the efficiency of the Pension fund Administration System in North West. Based on previous literature and the motivation to do this study, research questions and research objectives were formulated. Chapter two provides comprehensive literature on the variables and existing literature and gaps to bolster this study.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

In chapter one, the problem statement, research questions and objectives were presented and discussed. This chapter focuses on the literature review and consists of an introduction, a segment that highlights the nature of the pension administrative system in SA, administration of the pension fund administrative system in the North West Province, quality of the pension administrative system as well as the factors responsible for poor quality information to beneficiaries. The chapter further discusses inefficiency and operational failures in the GEPF system, factors causing inefficiency in the system, impact of the GEPF inefficiencies to the beneficiaries, method used to investigate pension fund system and lastly the chapter summary.

2.2. Nature of the pension administrative system in SA

A pension is defined as the sum of funds that an employee invests during his employment years from which the benefits are derived at the end of the employment period in the form of a lump sum or monthly payments (Schawrz et al., 2014:1868). A system, on the other hand, is defined as an investment process and the strategy of investment. A pension system is therefore defined as “a benefit plan” in which a fixed contribution is invested which is accessed upon retirement of the employee (Antoin et al., 2010:1178). It is worthy to note that in literature different pensions have existed over time and Angelis and Tessarimatis (2010:222) argue that the most notable and remarkable of such pension regimes were employment pension funds, social and state pensions as well as disability pension.

Angelis et al (2010:167) further define an employment pension scheme as a scheme in which the employee has a contribution plan invested into the fund in order to save for retirement. They argue that the pay as you go system is among the common methods that is applied in most countries around the world, South Africa included. The second category, which is the socio and state pension, is facilitated and financed by the state's

national annual budget in order to meet the socioeconomic wellbeing of the people within that state.

In countries such as Brazil and South Africa, such pension funds target specific people either experiencing some chronic and health care challenges (Lloyd, Sherlock et al., 2012: 234). In disability pension, the pension regime aims at supporting those with physical disabilities or those who are unable to contribute rationally towards socioeconomic development of the country due to their physical infirmities (Antoin et al., 2010:156).

Yet, around the world, scholars have been debating on which pension regime is the best and most feasible that could be adopted to support people after retirement in order to enhance a retiree's socioeconomic welfare (Antoin et al., 2010:676; Angelis et al., 2010 and Tran et al., 2014:65). It is on this basis that the study explores the pension case management system in the South Africa's Government Employee Pension fund in order to assess its effectiveness in meeting the needs of the stakeholders. According to Scholes, Johnston and Whittington (2012:13), pension management systems stakeholders are the people or entities who are directly involved in a designated undertaking in a pension system operation. The stakeholders are defined as employees who are responsible for the management and disbursement of the pension funds, regardless of the type of scheme and retirees who serve as beneficiaries of such a scheme.

van der Merwe (2004:123) adds that there is a difference between a pension fund and a provident fund. The main difference is that with a pension fund, only one third of accumulated amounts may be withdrawn as a lump-sum when a person retires (the remaining two-thirds must be taken as a pension-monthly benefit), while the total accumulated amount of a provident fund may be withdrawn at retirement (van der Merwe 2004:165). Pension funds can further be divided into ordinary pension funds (where membership is restricted to employees) and retirement annuity funds (where membership is open to self-employed persons).

In South Africa, old age pension was introduced in 1928 with the aim of providing income for only the poor elderly whites who had reached retirement without sufficient provision from private occupational pension schemes and beneficiaries were subject to both age and means test (Muchiri & Garen 2018:55). In 1944 the system was extended to Africans, but still pension pay-outs were determined by race (Muchiri & Garen 2018:56) and pension fund was legislated on the first of January 1958.

The legislation was referred to as the Pension Funds Act No. 24 of 1956. Since its promulgation in 1958, the Act was only amended in the Government Gazette 41549 on 29 March 2018. The South African Pension Funds Act 24 of 1956 which was promulgated into law in 1956 was aimed at providing “registration, incorporation, regulation and dissolution of pension funds and for matters incidental thereto.” Amongst these incidental matters are the retirement fund and death benefits (Nevondwe, 2010:167; Nevondwe, Odeku, and Raligilia, 2017:33).

van der Merwe (2004:320) argues that pension is an important aspect of the social security system, and forms an integral part of the social insurance and social assistance components of social security in South Africa. Social insurance entails the programmes that provide some insurance against life’s contingencies, such as disability, unemployment and old age (van der Merwe 2004:322). Lloyd-Sherlock and Agrawal (2014b:1571) add that pensions in South Africa are important for two main reasons - increased personal income to boost consumption and assist older people afford direct and indirect costs of treatment and medication.

There are various retirement legislations in South Africa and those legislations are different from the Pension Funds Act, 24 of 1956 which also include the Pension Funds Amendment Act 11 of 2007 and the Financial Services Laws General Amendment Act, 22 of 2008. The focus of these amendments is on the principle which allows the non-member spouses to withdraw their pension interest on the date of the divorce order as opposed to the date when the member exited the fund either as a result of resignation / retrenchment/dismissal, disability, death and retirement (Nevondwe 2010:310). Other legislation is with regard to pension fund systems in South Africa and these include the

Government Employees Pension Law, 1996, Transnet Pension Fund Act and the South African Post Office Retirement Fund Act. According to Cadoni, Melis and Trudda (2017:513), effective from first January 2012, the preamble of Regulation 28 of the Pension Funds Act states that:

“Prudent investing should give appropriate consideration of any factor which may materially affect the sustainable long-term performance of the fund’s assets, including factors of an environmental, social and governance character.”

In addition, Sigwadi and Sigwadi (2009:1030) posit that pension funds are usually established by governments with the objective to provide retirement income for their members and beneficiaries. This requires that pension fund benefits are protected and that members, dependants, or beneficiaries are able to receive their benefits after the retirement or death of a member. The provisions that protect retirement fund benefits are contained in section 37A of the Pension Funds Act of South Africa and states that ‘pension benefits may be reduced, transferred, ceded, pledged, hypothecated, or attached only to the extent permitted by section 37D of the Pension Funds Act 24 of 1956, the Income Tax Act 58 of 1962, the Maintenance Act 99 of 1998, section 65 of the Magistrates Courts Act 32 of 1944, and the Divorce Act 70 of 1979’ (Sigwadi & Sigwadi 2009:1038).

Mangammbi (2015:344) reports that in 2007, the Financial Services Board of South Africa issued a Pension Funds Circular 130 on good governance for retirement funds. Circular 130 requires that trustees put in place a documented code of conduct, an investment statement, communication strategy to members, and have a performance appraisal system for trustees. The circular also obliges new board members to receive comprehensive training and all board members to be trained on a continuing basis. Although the circular extensively covers elements relevant to the sound operation, conduct, duties and obligations of boards of trustees, it is not enforceable.

2.3. Administration of pension fund system in the North West Province

This section provides an account of experiences by employees with the administration of pension fund system in the North West Province as well as documented best practices and guidelines.

The Government Pensions Administration Agency (GPAA) system used in the administration of pension fund in the North West Province is the Pension Case Management (PCM). GPAA is the agency administering pension benefits on behalf of the Government Employees Pension Fund (GEPF). The GEPF may be considered the pride of South Africa. It is the largest pension fund in Africa and administers a national integrated pension scheme ahead of China government pension fund (Wang, 1995:2). According to the official website, GEPF currently has in excess of 1.2 million active members, and more than 400 000 pensioners and beneficiaries. The asset base is in excess of R1.6 trillion - a distinguishing feature of GEPF. The task of GEPF is to ensure that members and pensioners get quality service and financial security after retirement. GEPF guarantees this by ensuring that all funds in safekeeping are diligently invested and accounted for, and that benefits are paid out efficiently, accurately and on time.

GEPF is responsible for protecting its pensioners against the devaluation of their pensions and maintaining the savings value of members yet to retire. How well has GEPF done in achieving these goals and expectations remains a challenge. These are the concerns the current research seeks to answer as motivated in the research question in chapter one. To make pension administration more effective, the GPAA has implemented a Pension Case Management (PCM) software to automate all pension administration processes and procedures and to allow for innovative products and innovative ways of addressing customer needs. How flexible and sophisticated is the GEPF Pension Case Management System cannot be judged from the mission and vision statements. In terms of geographical presence to cover the national client base, GPAA has a Client Walk-in Centre in all the nine provinces of South Africa and in the North West Province there is a provincial office serving as the Walk-in Centre for GEPF members, pensioners and the beneficiaries. However, employees responsible for the implementation of the system are

experiencing challenges due to the perception that there are gaps in the GPAA system that the current research intends to provide solutions in the North West Province.

2.4. Quality of the Pension Administrative System

According to Zwetsloot (2003:205), for a system to work efficiently, the South African Pension Fund Quality Management and Management Systems based on ISO 9000 and the quality approach derived from the European Foundation for Quality Management's (EFQM) business excellence model need to be implemented correctly. The approach is based on ISO 9000 and aims to contribute to better quality, greater efficiency, and higher value added per product and greater customer satisfaction.

Literature on the quality management of pension funds systems provides different quality management cycles. However, the "Deming cycle" which starts with plans (rational, of course) made by top management, including the allocation of personal accountabilities and responsibilities is the one used in South Africa. Once the plan is finalised by top management, the rest in the organisation follows with the implementation of the plan and stakeholders (staff, customers) are informed of the rationale of the plan. The supposition is that, rational arguments will convince the stakeholders in the organisation to behave accordingly (Zwetsloot 2003:205). This approach often presupposes that there is "no one size fits all" solution for every (potential) problem and that decent people always behave rationally which makes it very attractive for people with technical or scientific background with regard to the quality of the pension administration systems.

2.5. Factors responsible for poor quality of services to beneficiaries

The South African pre 1990 pension system catered for a segment of the white population only to the neglect of the vast majority of the people. Post 1990 saw the pension fund extended to cover other population groups that had been previously excluded and in 1993, the benefits to recipients were twice the median per capita income in rural areas. According to Duflo (2006L:1), more than a quarter of previously disadvantaged household children under age five live with a pension recipient. In South Africa, post 1990 witnessed an exponential growth in number of pension beneficiaries, an increase in geographic scope and the corresponding increase in budget for staff and infrastructure.

Such a massive change in a GPAA system can be described as a revolutionary change rather than evolutionary or transformative change: this came with excessive pressure in the demand for services. The increased demand for services invariably affects the quality of services offered to beneficiaries caused by human factors such as skills, accessibility, geographic location, information dissemination, quality of products offered and procedures applying pension benefits. Technology was invested into as the key solution to these challenges, specifically with regard to administration and operational processes to bring about efficiency within the system. The GEPF adopted the Pension Case Management (PCM) as the national Enterprise Resource Planning (ERP) solution referred to in the research as the GEPF system. The effectiveness of customer service and operations therefore hinges on the effectiveness of the GEPF system.

The adoption of the PCM also came with new challenges that arose from the use of information communication system (ICT), notably operational failures in the ICT system, complexity in ICT system, ease of accessing documents, tracking of files, time used to complete forms online, requisite skills to operate the system and training staff. South Africa initially started with a national centralized pension fund which required specific expertise and resources as reported by Wang (1995:3). The argument was based on reports of a highly defragmented Chinese government pension fund which gives an insight into the complexity relating to the administration and provision of pension contrary to the simplistic assumptions made by many citizens and experts. Wang (1995:1-5) identifies key pension administration variables which if not properly handled lead to poor quality of services. They include enumeration, record keeping, contribution collection, benefit determination, benefit payments and other clientele services, regulating pension funds, supervising the operation of the system and protecting insured persons from errors and abuse.

However, the extent to which the North West Provincial GEPF fares when rated against the eight parameters as identified by Wang (1995: 1-5), cannot be immediately ascertained in the absence of a research study on challenges by GEPF beneficiaries in the province. The pension administration in the North West province also has challenges with regard to type of Old-Age Protection, Range of Coverage, Unit of Pooling, Source

of Funds, Method of Financing, Qualifying Conditions for Benefits, (7) Benefit Formula and Management funds. Wang (1995: 6) posit that pension administration and pension provision involve diligence on the part of the government, the staff, and the ICT solutions for customers to get good service. There is need for proficient and standardized provision and administration parameters outlined for an effective integration and efficient administration and operation of a pension fund system.

2.6. Inefficiency and operational challenges the in the GEPF system

South African citizens and permanent residents over the age of 60 with an annual income below R47, 400 and assets worth below R792, 000 living in South Africa are eligible to receive the pension grant. In practice, the income but not the assets criterion is normally used in the means test due to difficulties to ascertain the valuation of assets (Abel 2013:5). Furthermore, eligibility requirements do not stipulate that recipients are prevented from gainful employment. As a result of these low barriers to access and the substantial monetary value, more than 90% of South African citizens and permanent residents over the age of 60 years are eligible to receive a pension grant. The increase in the number of beneficiaries handled by the system put strain on the operational capacity and capability of personnel operating the system. Mamabolo (2015:8) argues in a study that the Government Employee Pension Fund cannot continue to accommodate a large number of retirees due to the social security funding model of South Africa which is not contributory in nature to the fund and such a practice is unsustainable.

Since the legislation of the South African Government Employee Pension Act in 1956, the administration and operations have been characterised by some undesirable challenges as it was designed to cater for a small privileged segment of the population as opposed to the entire population. Mamabolo (2015:7) further argued that some of the fractures exhibited by the administration and operations of the system can be attributed to the post democratic dispensation amendments of the original legislation which makes the GEPF system inclusive of all citizens and permanent residents of South Africa. Furthermore, the modes of funding pre-democratisation further create a gap between social old age grant

for the poor and tax incentivized private pension sector that is favourable to high income earning individuals as opposed to low income individuals (Mamabolo 2015:13). The means test applied by government is not consistent and as a result present a challenge to the poor for the little that they save precluding them from accessing the government grant and diminishes as their income rises while the tax incentive for the rich rises in value as lifetime income increases.

2.7. Factors affecting efficiency of the system

Dumais, Cutrell, Cadiz, Jancke, Sarin and Robbins (2016:29) found that most information retrieval systems are designed to facilitate information discovery. Hence, good quality and efficient system must enable users to determine what clues, where information is available for the system to retrieve such information.

DeLone and McLean (2016:78) are of the opinion that when investigating a system such as the pension fund management system of South Africa, there are six important dimensions that need to be considered when analysing its effectiveness. In the study, “quality (technical level); information quality (semantic level); use of the system; user satisfaction; individual impact and organizational impact (influence level)” are key important dimensions to consider. The study further posits that these dimensions and related measures are not independent success measures, but are interdependent variables. Therefore, in the measurement of an operational system success, all constructs must be considered and controlled for the system to be efficient.

In a situation where there is failure in one of these constructs, there is a possibility of confounding results or an incomplete understanding of the system under investigation (DeLone & McLean 2016:79). The current study adopts the model by DeLone and McLean (2016:80) in the analysis of the stated objective (determine if the poor quality service is caused by administration inefficiencies or operational system failure) based on whether “(1) the constructs of the model provide a classification for the many information system evaluation measures reported in the prior literature, (2) their approach begins to identify relevant stakeholder groups in the process of evaluation, and (3) they suggest a model of interdependencies among the constructs as shown below.

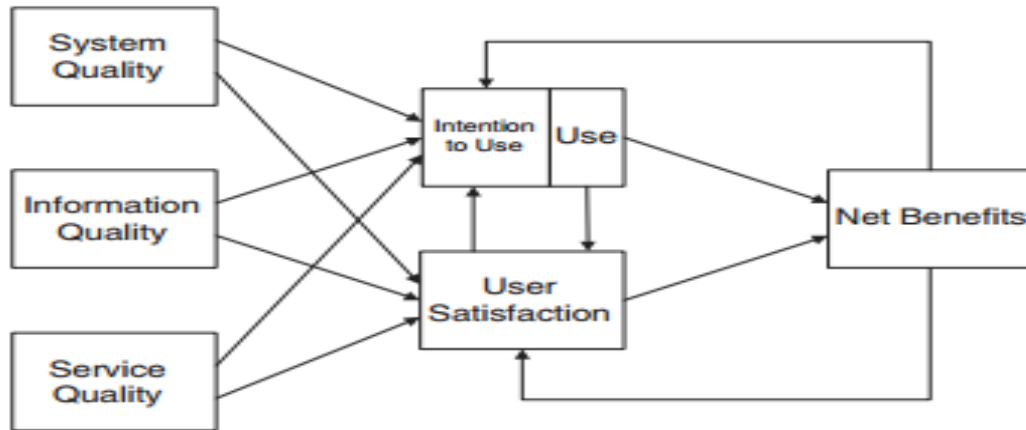


Figure 2. 1: DeLone and McLean (2003:75)

In the DeLone and McLean (2008:75) model, the dimensions were as follows:

- a. **System quality:** This describes the desirable characteristics of an information system which include aspects such as ease of use, systems flexibility, system reliability and ease of learning, system features of intuitiveness, sophistication and response times.
- b. **Information quality:** This describes the desirable characteristics of the system outputs which include aspects of management reports and Web pages as well as relevance, understand ability, accuracy, conciseness, completeness, currency, timeliness and usability.
- c. **Service quality:** Service quality describes the quality of the support that system users receive from the information system (IS) department and information technology (IT) support personnel which regard to responsiveness, accuracy, reliability, technical competence and empathy of the personnel staff.
- d. **System use:** This focusses on the degree and manner in which staff and customers utilize the capabilities of an information system (IS) and include aspects of amount of use, frequency of use, nature of use, appropriateness of use, extent of use and purpose of use.
- e. **User satisfaction:** It focuses on users' level of satisfaction with reports, Web sites, and support services.

- f. **Net benefits:** This focuses on the extent to which the system is contributing to the success of individuals, groups, organizations, industries, and nations in aspects of improved decision-making, improved productivity, increased sales, cost reductions, improved profits, market efficiency, consumer welfare, jobs creation and economic development.

According to Petter *et al.* (2008:9), there is an abundance of methods to measure net benefits of a system at both the individual and organizational level as well as perceived usefulness of which job impact is the most common measure at the individual level. Furthermore, Torkzadeh & Doll (1999:101) as cited in Petter *et al.* (2008:12) further created an instrument to measure different aspects of impact and task productivity, task innovation, customer satisfaction, and management control. In the study, Petter *et al.* (2008:8) argues that at the organizational level, a variety of measures are employed but profitability measurements seem to be preferred. Ojo (2017:63) further supports the six dimensions of DeLone and McLean (2016:80) in analysing a system to include:

System quality which measures the desirable characteristics of an information system such as perceived ease of use, system features, response time and flexibility;

Information quality focuses on the content issues and characteristics of the information systems output and it is measured by examining the output of an information system in terms of timeliness, accuracy, reliability, and trustworthiness;

Service quality is measured in terms of the quality of support rendered by the information system's developer and assesses the service quality dimensions, such as assurance and responsiveness by the systems support department, as well as the provision of user training;

Intention to use/Use is concerned with assessing the manner in which an information system is used and focus on the attributes of actual usage or sometimes, the frequency of use;

User satisfaction is considered one of the most important measures of system success, often measured by overall user satisfaction and can be assessed by capturing overall user satisfaction with an information system and

Net benefits is one of the most important measures of information system success, and constitutes the extent to which an information system contributes to the success of various stakeholders, whether positive or negative and is measured by assessing individual impact or organizational impact. This classification is similar to that of DeLone and McLean (2016:79).

Furthermore, Sedera and Gable (2004:40) proposed the following attributes for measuring system quality, information quality, individual impact and organisational impact.

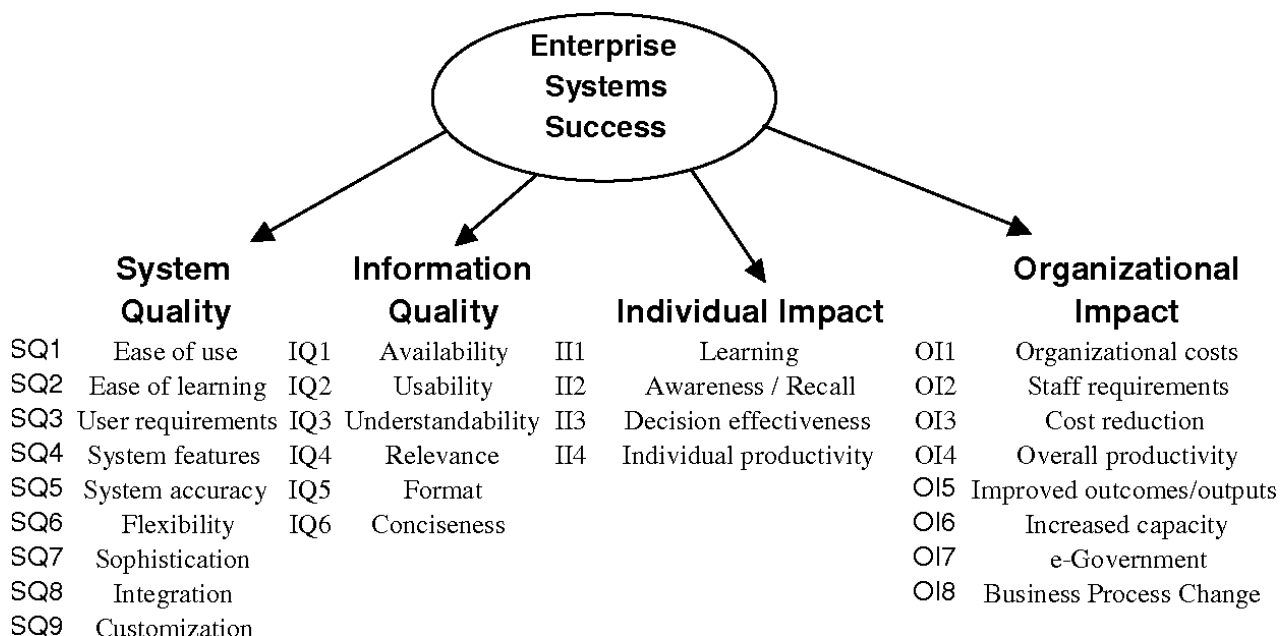


Figure 2. 2 Enterprise systems success (Sedera & Gable, 2004:45)

On the other hand, Petter *et al.* (2008:123) report that Li (1997:87) in a study found that accuracy of output, reliability of output, relationship between users and the information systems staff, user's confidence in the systems, and timeliness of output were the most important factors. The work by Li introduces the need to examine the relationship between the staff using the system and the organisation's Information System Department. Choi,

Kang and Moon (2015:2) highlighted that the most widely applied service quality framework is SERVQUAL, “which articulates customers’ salient perceptions about a vendor’s service reliability, assurance, empathy, and responsiveness as well as the tangible aspects of the vendor’s infrastructure or appearance.” Service quality is defined as a customer’s global, subjective assessment of the quality of an interaction with a vendor, including the degree to which specific service needs have been met (Choi *et al.* 2015:44). The relationship factor is again evident as there is need to examine the nature of the relationship between the vendor of the system and the end users.

2.8. Impact of the GEPF inefficiencies to the beneficiaries

Lloyd-Sherlock and Agrawal (2014:) found that in South Africa, there are a number of studies that have found pensions have a positive and significant effect on the health status of older citizens. The study sampled 300 households in the Langeberg Health District of the Western Cape in 1999. The results of this study found that older people in receipt of non-contributory state pensions reported a significantly better health status compared to household members. The finding reveals that the availability of a pension improves the lifestyle of pensioners and inefficiencies in terms of administration and operations may have adverse effects on beneficiaries.

Duplo (2003:1) confirms that “more than a quarter of black South African children under age five live with a pension recipient.” This highlights the indirect impact the pension grant have on the South African on the wellbeing of the majority of South Africans. Further impact extends to accessibility of proper nutrition, health and education of the majority of South African families.

2.9. Methods used to investigate inefficiencies in the pension fund system

Literature shows that there are limited studies focusing on factors affecting efficiency of Pension fund Administration System in South Africa. However, there are studies that have been conducted focusing on administration and operational inefficiencies systems associated with different industries and organisation.

Nguyen ,Bellucci,and Nguyen (2014:120) used a systematic literature review from peer-reviewed scholarly journal publications from 2001-2011 as an extension of DeLone and

McLean's information system (IS) evaluation framework to develop an extended framework for systems measurement. The extended framework from the study integrates DeLone and McLean's dimensions which include information quality, system quality, service quality, intention of use and usage, user satisfaction and net benefits, together with contingent dimensions such as systems development, implementation attributes and organisational aspects. The study by Nguyen *et al.* (2014) was useful in that it provides dimensions that can be used in this study to evaluate the pension system.

Petter *et al.* (2008:240) examined the evaluation of dimensions of system effectiveness. Measuring system quality was undertaken by measuring the perceived ease of use in addition to information quality as a key dimension of end-user satisfaction instruments. The measurement of service quality in the study included the skill, experience and capabilities of the support staff while measuring user satisfaction was usually undertaken through the user satisfaction instruments developed by Doll *et al.* (1994:34).

Rivard *et al.* (1997:124) developed and tested an instrument that consists of 40 items that measure eight system quality factors: namely, reliability, portability, user-friendliness, understandability, effectiveness, maintainability, economy and verifiability. The study utilises exploratory factor analysis and applies both qualitative and quantitative research approach. These approach and methods yielded good results for other countries and the current study intends to adopt similar approach and method.

Choi *et al.* (2015:40) undertook a quantitative study with the purpose to evaluate the performance of the newly developed information system in three public hospitals to determine if the system was effective in improving user satisfaction and reducing medication errors and personnel costs. The study specifically used the KPI satisfaction scores for six information system success factors based on the DeLone and McLean model and end user satisfaction was compared before and after system introduction. The study further analyse the relationships among the six Information system (IS) success factors by using path analysis for the Structural Equation Model (SEM) in order to identify the important factors influencing the three information system success factors (Intention to Use, User Satisfaction, and Net Benefits). The results of the study found all three quality

factors had a significant influence on user satisfaction and that user satisfaction strongly influenced net benefits. The results suggest that hospitals should not only focus on systems and information quality; rather, they should also continuously improve service quality to improve user satisfaction and eventually reach the full potential of organisational performance.

Tate, Sedera, McLean and Burton-Jones (2014:113) found that self-reports and user perceptions, often based on surveys, are popular forms of measurement in studies that have measured a system. They argue that other methods for evaluating the success of information systems are decidedly challenging (Tate *et al.*, 2014) because establishing a relationship between the characteristics of a specific information system, and individual or firm outcomes is difficult because information systems may be only one of many factors that affect such outcomes. A further study on “IT outcomes have focussed on measuring the value of information technology (IT) directly on how much value is added, but the value from IT also arises indirectly through IT-enabled augmentation of non-IT inputs” (Tate *et al.* 2014:1240).

Ojo (2017:61) used a survey research design and structured questionnaire to collect data from health information management personnel in five Nigerian teaching hospitals. A structural equation modelling technique was used to validate the model's constructs. The results found that system quality significantly influenced use ($\beta = 0.53$, $p < 0.001$) and user satisfaction ($\beta = 0.17$, $p < 0.001$). Information quality significantly influenced use ($\beta = 0.24$, $p < 0.001$) and user satisfaction ($\beta = 0.17$, $p < 0.001$) (Ojo 2017:60). The results of the study validated the DeLone and McLean information system success model in the context of a hospital information system in a developing country. Importantly, system quality and use were found to be important measures of hospital information system success (Ojo 2017:63). The study reveals that information systems should be designed in such ways that are easy to use, flexible, and functional to serve their purpose. The current study uses survey research design that has been found to be effective in the studies discussed in this section. The research instrument development is guided by the dimensions that were proposed by DeLone and McLean (2003:236) and have been used in other studies.

2.10. Summary of the chapter

The review of the literature highlighted the depth of research in the area of the GEPF system and other pension funds. The literature on pension in South Africa focuses on the legal aspects such as the issue of divorce settlements and changes on legislation. The review of the literature focused on how other similar information systems have been evaluated. The focus on the evaluation of the efficiency of an information system is the model by DeLone and McLean (2003) which focuses on dimensions that should be considered when evaluating a system. This study uses the dimensions advocated by DeLone and McLean (2003) in the review of the efficiency of the GEPF system in the North West province of South Africa.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

The purpose of this study was to investigate factors that affect efficiency of pension fund administration system in the North West province of South Africa. The study employs a mixed study exploratory design to seek an understanding of factors that are contributing to inefficiencies in the administration and operations of the pension fund system. The study applied elements of DeLone and McLean (2016: 228) six important dimensions that need to be considered when analysing the effectiveness of a system. The chapter includes a description of the research design, participants and sample selection, data collection procedures, data analysis procedures, reliability and validity and ethical considerations.

3.2. Research Paradigm

A philosophical paradigm a system in which research ideas are devised by researchers in order to create knowledge of importance that will be adopted and used to solve the problem at hand. Foster *et al.* (2002:70), in a quest to explain philosophical paradigm presented a set of assumptions, strategies, axioms, and criterion that any research must adopt and use in order to define its rigor. The rigor is best embraced in a framework to ensure that efficient research artwork that is perfect is devised and this is critically chosen if proper best fit paradigm is in line with the beliefs of reality is designed (Mills *et al.*, 2006:79). However, in order to understand the philosophical paradigm, three schools of thoughts, namely, post-positivism, constructivism and pragmatism are to be adopted in the study. Post-positivists have the belief that any research is knowledge based which is interpreted scientifically using either quantitative or qualitative approach.

It is imperative to note that post-positivism does challenge the notion of absolute truthfulness in knowledge due to its contextual evaluative approach (McEvoy and Richards, 2003). Therefore, an objective investigation of a key research issues is paramount if and only if the aspect of truth is to be uncovered and presented. Therefore,

using this philosophical paradigm the current study is to use a quantitative approach as a way of certifying post positivism ideological thinking.

In as far as constructivism is concerned, researcher sought to understand an environment in the research under taking is taking place. This philosophy does combine all aspects of post-positivism and related interpretivist paradigms in a quest of explaining a situation. In this approach, a researcher has a subjective meaning of the work at hand and prior experiences. This is based on the participants' perspectives in order to understand any situation under investigation. This aspect of the research focuses on the effect of the interaction between people in their environment and are qualitatively defined (Lever, 2013:78). In a pragmatism research approach, researcher uses diverse approaches to comprehend the research problem (Creswell, 2014:155) and pragmatism approach encompasses both qualitative and quantitative approaches to address the research questions.

3.3. Research design that will be influenced by Research Paradigm

Babbie and Mouton (2011:74) submit that, a research design is a plan of how the researcher intends conducting a study and a research methodology focuses on the process, the type of tools to be used and the procedure to be followed. Further they state that there are two types of research approaches available to researchers namely: Quantitative and Qualitative. The data in the quantitative approach is mostly numbers and this approach provides objectivity because the respondents are the ones who provide the numbers. However, the data in qualitative approach is generally collected by observation or unstructured interviews. They are usually in the form of words, phrases and pictures. This approach provides a deeper understanding into what the researcher wants to find and applying this approach, a researcher can choose a small sample sizes from a population.

The current study made use of quantitative research approach with the intention to gain objective understanding of the factors that influence the efficiency of the pension fund system in the North West Province. Therefore, questionnaires were used to collect data relevant to the research questions. Cross-sectional quantitative data was obtained through face to face administration of questionnaires by the researcher.

The adoption of a cross sectional study design was as a result of the non-availability of secondary data with regard the specific constructs use to investigate the factors causing inefficiencies in the administration and operations of the GEPF system in the North West province of South Africa. In this aspect, each employee or beneficiary participating was either an employee working for the Government Pension Administration Agency or a beneficiary from the GEPF system regardless of the level or contribution. Such a sample was to allow the researcher acquire a holistic perspective of the system performance and thereafter understand its level of efficiency. The study is to adopt a quantitative approach to address the research questions.

3.4. Population and Sampling

The main purpose of this section is to identify the target population of the study, the sample size, and the sampling procedure that used in the study.

3.4.1. Target Population

According to Borg and Gall (1989; 56), target population refers to all members of real set of people, events or objects to which we generalize hypothetical results of the research. Thus, the target population of this study includes all employees and customers of pension fund system in the North West province of South.

3.4.2. Sample size and sampling procedure

A sample is a subset or portion of the total population to which research intends to generalize the results (Wiersma: 1989; 47). The current study draws it samples from employees working with the pension fund systems (staff members) and beneficiaries from the pension fund system (pensioners,customers,clients, stakeholder). The study adopted a probability sampling approach in which every individual in the population has an equal chance to be included in the sample. Therefore, in this type of sampling, participants are selected following a simple random method (Kothari: 2004; 59). The propose sample population was stratified into two categories, namely, employees of the pension fund and beneficiaries of the pension. The reason being the heterogeneous nature of the population and was important to draw samples from a homogeneous set of population. The proposed sampling procedure is suitable for the study because the researcher

selects participants at a point of entry into the GEPF facility based on the willingness of individuals to participate in the process and avoiding time and distance constraints.

3.4.3. Response rate

A total of 140 participants were selected out of an estimated 150 employees and an average of 300 beneficiaries who visit the centre daily. From the estimated total population of 450, a sample of forty (70) questionnaires were distributed to the customers and forty (70) were distributed to staff members of GPAA and beneficiaries in a week and a 92.8 % response was rate achieved. Out of the total of forty three (70) questionnaires distributed to beneficiaries, 67 were completed and returned resulting in a response rate by beneficiaries of 95.7% compared to the total of 70 questionnaires distributed to staff, they also completed and returned 63 resulting to a response rate of 90%.

3.4.4. Inclusion and exclusion of criteria

Inclusion criteria of participants refers to characteristics that the prospective subjects must have if they are to be included in a study, whereas exclusion of criteria are those characteristics that disqualify prospective subjects from inclusion in the study (Dawson: 2012; 25). The inclusion criteria for this is that participants must be a GEPF employee or a GEPF beneficiary resident in the North West province of South Africa and visit the GEPF centre during the data collection week. Employees and customers of pension fund system in the North West province of South Africa not resident in the province was not included in the samples.

3.5. Data collection and instrument used to collect data

In the study, data was collected using a structured questionnaires design in line with the construct as guided by the dimensions proposed by DeLone and McLean (2003). This is a common method of collecting cross-sectional quantitative data and the researcher intends to gather specific information that directly answers the research questions and test the hypothesis (Dawson, 2002; 28-29). A sample of the Instrument (questionnaires) used in this study is attached as Appendix I.

The development of constructs contain in the questionnaire was derive from knowledge the researcher got from the literature review. In order to remain objective in the design of

questionnaire and its content, the research objectives, questions and hypothesis were of paramount consideration to avoid collecting data that may not be used in the study as this is unethical. The questionnaire was divided into subsections, each section covering a specific research construct. The last section asks demographic questions from the respondents, and the other sections are evaluative measures of each research construct that directly relate to the research hypothesis.

3.5.1. Pilot testing

Pre-testing of the questionnaire was performed and a total of 14 questionnaires were with seven from each strata. Challenges identified with regard to completion of the questionnaires as well as clarity of questions and construct were fixed before the final instrument was used to collect data. After the pretesting, questionnaire was edited and comments and suggestions raised incorporated into the final instrument.

3.6. Data analysis and tools

The data was collected using a questionnaire and the data was captured using SPSS version 25. Descriptive statistics were performed and frequency tables and percentages derived from the data. The t-test and the analysis of variance (ANOVA) test were performed with the assistance of a software package (Statistical Package for Social Sciences-SPSS) and AMOS graphics software. The results of the study are compared with the literature review for a better understanding of the factors leading to the administration and operational inefficiencies in the pension fund system in the North West province of South Africa. Furthermore, the data was organised according to construct, structure and sequence of the questions outlined in the questionnaire. The data was stored in an organised, categorised, complete, and available for easy access. The storage of the data is also done on cloud accounts for safety purposes.

3.7. Validity and Reliability

Fruhling and Lee (2005:2395) differentiated between the validity and the reliability. Fruhling and Lee (2005:2395) is of the view that validity is all about confirming or trustworthiness of the findings that will be provided by the researcher while reliability focuses on identifying and documenting the accurate and consistent themes or features.

Krishnaswamy et al. (2009) further explained that validity has to do with the extent a research instrument assesses what it is supposed to be assessing. According to Coopers and Schindler (2011), Cronbach's Alpha is used to measure the reliability and internal consistency of the research instrument. The Cronbach's Alpha coefficients is used to determine how well the different items in a research instrument are correlated to one another. The Cronbach's Alpha coefficients of 0,7 or higher is regarded as acceptable levels of reliability (Coopers and Schindler, 2011). The Cronbach's Alpha results are presented in Table 3.1.

Table 3. 1 Reliability test

Data	Cronbach's Alpha	Items	Comments
Customers	0.921	12	Excellent and consistent
Staff	0.919	32	Excellent and consistent

The reliability analysis test revealed Cronbach's alpha values for customer and staff stated at 0.921 and 0.919 respectively. The Cronbach's alpha values of 0.921 and 0.919 is an indication of the reliability of the instrument in measuring the system inefficiencies and was greater than the cut-off point of 0.7. Therefore, the instrument was very reliable measurement of all the constructs for the measurement of factors leading to administration and operational inefficiencies in the pension fund system in the North West province of South Africa.

3.8. Ethical Consideration

Before the administration of questionnaires, the researcher adequately briefs the participants about the aim of the study. This is done to avoid any misunderstandings that could arise during administration of questionnaire with regard to the purpose of the study. Participants gave consent, and during the study confidentiality of the respondents were guaranteed. To obtain the ethical clearance, an ethical clearance application was completed and sent to the North West University Business School. The ethical clearance application was approved and a letter to that effect was received from the Business School.

3.9. Summary of the chapter

The chapter dealt with the research methodology used in the study, and focused on the research philosophy, the research design of the study, the population and sampling, data collection instruments, pilot testing, data collection procedures, data analysis and organization, and ethical consideration of the study. The chapter covered the research paradigm that alludes to research ideas developed by researchers to resolve the existing problem. The chapter discussed the approach that the study adopt in understanding the factors that impact on the efficient operation of the pension fund system in North West. The focus area for the collection of data was indicated to be from employees and customers who are using the system in the North West province.

CHAPTER 4

DATA ANALYSIS AND RESULTS

4.1. Introduction

Two streams of data are presented herein, the first being that of beneficiaries (customers) obtained from semi-structured questionnaires administered and the second that of employees' data administered. The questionnaires were distributed to a sample of beneficiaries and staff members of the GPAA within a week following a simple random process. Both sets of questionnaires were divided into two sections. Section A deals with personal information and Section B with statements relating to the three constructs. The first part of analysis focuses on customers in the presentation of the results and the second section on GPAA employees.

The findings from the data analysed and interpretation of the results are presented in this chapter. The data was collected from staff of the Government Pensions Administration Agency (GPAA) in the North West Province and beneficiaries (customers, retirees, pensioners) utilising the pension case management system (PCM). The data from the questionnaire were captured and analysed in order to address the research objectives presented in Chapter one.

The research questions that guided this study were:

- What are the personal characteristics of customers and employees involved with the GEPF system?
- What is the quality of GEPF system in used in South Africa?
- What are the factors responsible for poor quality services provided to beneficiaries?
- Is the poor quality service a result of administration inefficiencies or operational system failure?
- What is the impact of system inefficiencies on beneficiaries?

Following a detailed analysis of the data, the quantitative data got was grouped into four sub headings for interpretation:

- Personal characteristics of beneficiaries and employees involved with the Pension Case Management System,
- Statistical analysis based on four perceived constructs (service quality, system use, information quality and user satisfaction) by beneficiaries and employees

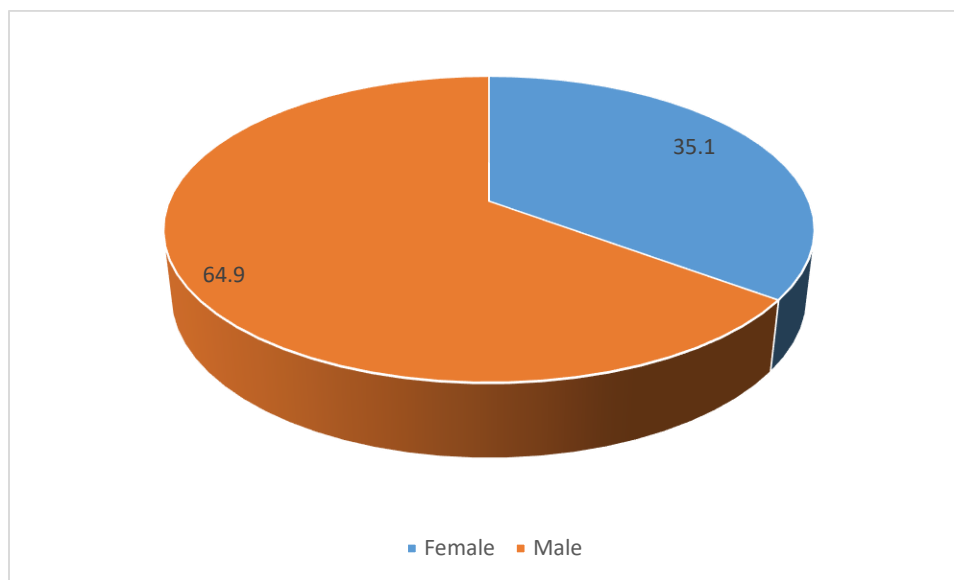
4.2. Personal information of customers

This section presents the results on personal characteristics of the beneficiaries and how these characteristics relate to the objectives of the study.

4.2.1. Gender of sample Beneficiaries

The figure below shows the gender distribution of the sampled beneficiaries.

Figure 4. 1 Gender

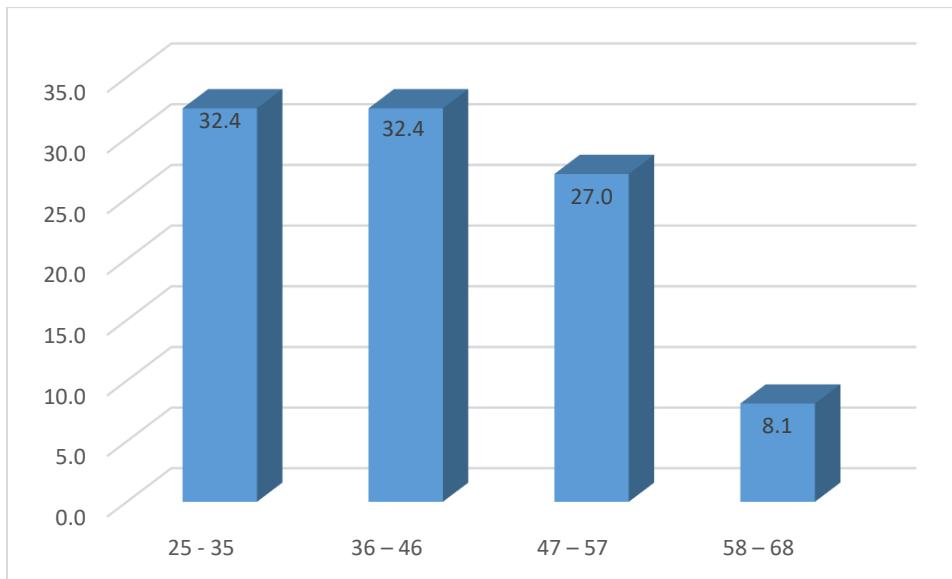


From Figure 4.1, it is evident that 64.9% of respondents were males compared to 35.1% females. The analysis reveals that there are more male customers than female. The results show that more males participated in the survey than females. It has been indicated in the study that around 1944, pension pay-outs were determined by race (Muchiri & Garen 2018:60) but currently the survey shows that irrespective of the race, the number of males who took part in the survey exceeded the number of female customers.

4.2.2. Age distribution of beneficiaries by group

The figure below shows the age distribution of beneficiaries who visited the GPAA centre during the week when the survey was done. The beneficiaries were grouped and the findings presented in a bar-graph as depicted in Figure 4.2.

Figure 4. 2 Age group

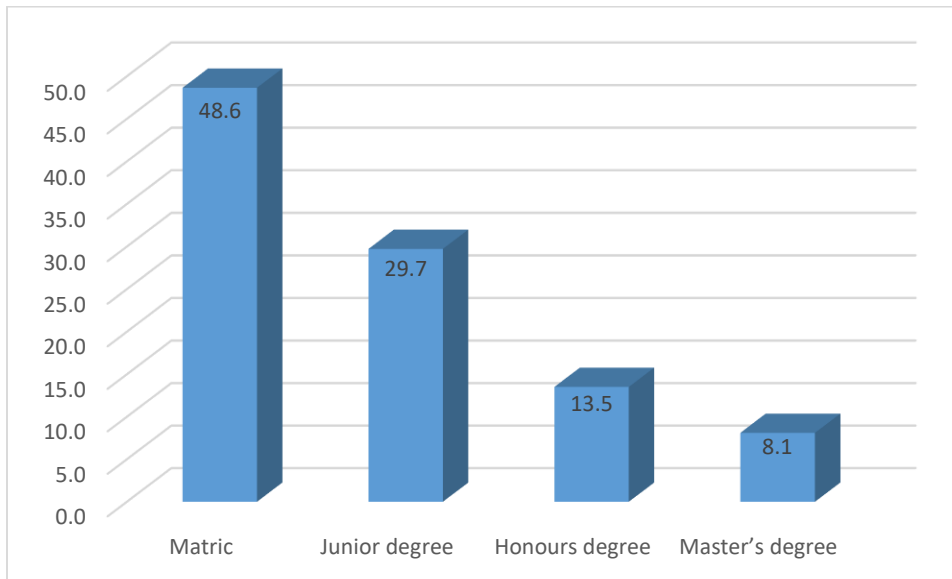


The Figure 4.2 reveals that the majority of beneficiaries who visit the GPAA centre for services are in the age range 36-46 years old, followed by 25-35 years of age, 47-57 years and 58-68 years of age respectively. The analysis demonstrates that approximately 64.8% of the respondents falls in age category below 46 years and the least being the age group 58 to 68 years with 8.1%. This is contrary to the perception that GEPF services are mostly utilised by pensioners. However, the analysis also shows that those who utilised the services most are citizens who just got employment and those who have been employed for a period of time but are not close to retirement. Employees of age group 58-68 years who make 8.1% aspiring retirees in the survey. The finding shows that the factors impacting the efficiency of the pension fund system not only affect the young people but also affects older people who are about to exit the fund (Mamabolo, 2015:10).

4.2.3. Beneficiaries level of Education

The figure below presents the level of education of the beneficiaries who visited the GPAA centre during the week when the survey was done. Different levels of education were established from Matric to Master's degree and these are presented in bar-graph as depicted in Figure 4.3.

Figure 4. 3 Level of education



As shown in the Figure 4.3 above, most of the respondents have at least a matric qualification, junior degree, honours degree and Master's degree. From Figure 4.3, there is a total of 88.6% of respondents who have matric, 29.7% have a junior degree, 13.5% have honours degree and 8.1% have Master's degree. This finding is consistent with findings in age distribution of respondents which reveal the majority of GPAA customers were of age lower than 46 years. The implication of this finding is that the majority (57.4%) of the respondents have some formal tertiary qualification and the remainder (48.6%) of the respondents have matric. The measurement of service quality in the study included the skill, experience, and capabilities of the support staff while measuring user satisfaction and this was undertaken through the user satisfaction instruments developed by Doll et al. (1994:38). It is evident the contributing factor to the inefficiency of the system could be

that employees lack skills of using the system. Evidently, management have to devise a plan of empowering employees and customers on how to utilise the system effectively.

4.2.4. Nature of customers employment

The figure below presents the nature of customers' employment of the beneficiaries who visited the GPAA centre during the week when the survey was conducted. Types of employment contracts were provided for and presented in bar-graph as depicted in Figure 4.4.

Figure 4. 4 Nature of employment

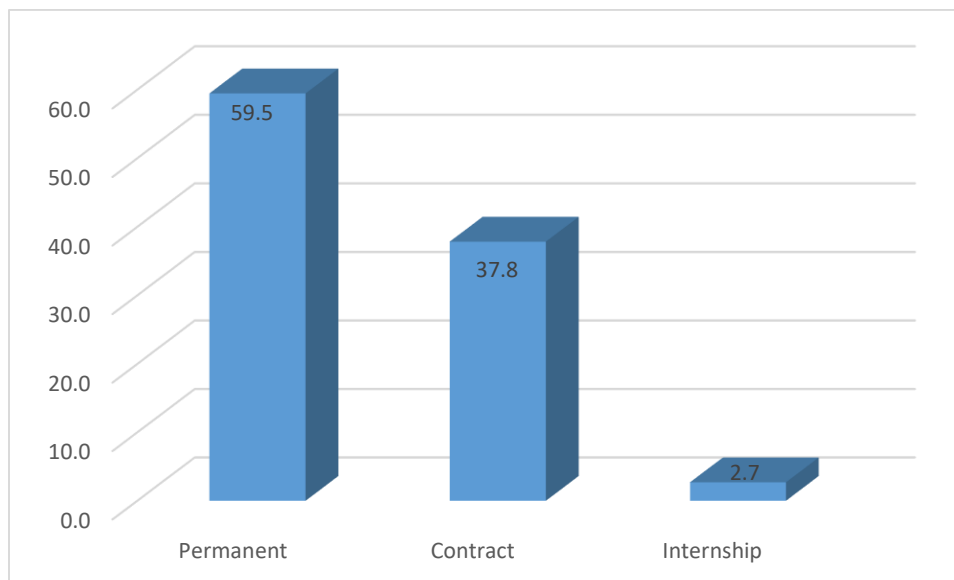


Figure 4.4 shows that the majority (59.5%) of them are employed on a permanent basis, 37.8% are on contract basis and the remaining 2.7% were serving as interns. User satisfaction was undertaken through the user satisfaction instruments developed by Doll et al. (1994:66). Commitment and lack skills of contract workers could also contribute as a factor that has a direct impact on the efficiency of the pension fund system. This challenge calls for management to come up with strategies of empowering the interns and contract workers.

4.2.5. Designated official to customers

The figure below presents the designated official to customers. Different levels of designated official were provided for ranging from client service agent to senior manager and presented in bar-graph Figure 4.5.

Figure 4. 5 Designation

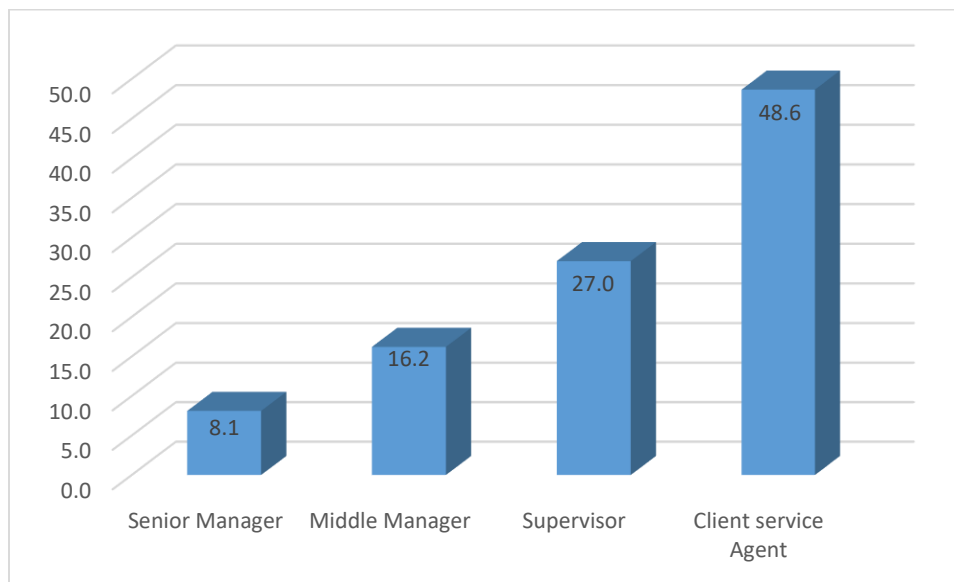


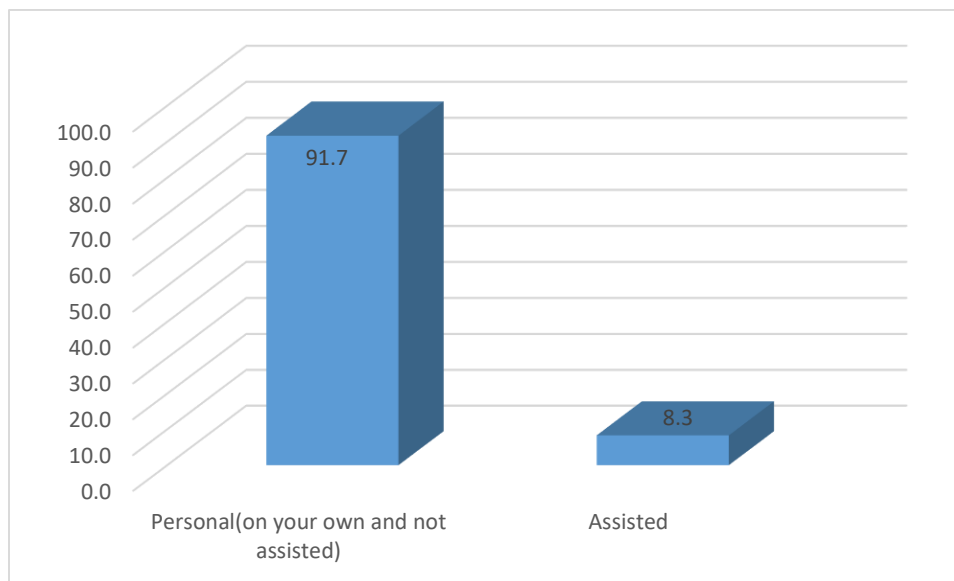
Figure 4.5 above shows that the majority (48.6%) of the respondents are designated client service agents, followed by supervisors (27.0%), middle managers (16.2%), and the least is senior managers (8.1%). In contrast, the study by Njuguna and Arnolds (2010) on the financial efficiency of pension funds in Kenya found that the majority of the respondents were middle managers.

4.2.6. Access to GEPF systems by beneficiaries

The figure below presents the access to GEPF systems by beneficiaries who visited the GPAA centre during the week when the survey was conducted. The results obtained are presented in bar-graph Figure 4.6. With reference to the problem statement which reflects basically the delays in the pension pay-outs cause dissatisfaction amongst recipients of the money which again is attributed to the inefficiency of the pension fund system. The findings reveal that the access to the system remains not a factor that has an impact on

the efficiency of the system. The findings show that the majority; 91.7% of users are able to access the system on their own. Sedera and Gable (2004:44) highlighted attributes that measure system quality and the impact of the system to individuals and organisations. The model by DeLone and McLean has been adopted (2016:82) in the analysis of the objectives in determining if the inefficiency of the system could be attributed to operational issues; however as per the findings operational issues remain not a problem as 91.7% of users can operate the system independently.

Figure 4. 6 Access to the system



The above Figure 4.6 illustrates that majority (91.7%) of the respondents access the system on their own with no assistance and only the remaining 8.3% were accessing the system through some form of assistance.

4.3. Statistical analysis on perception by beneficiaries based on three constructs

This section of the study presents the results related to three constructs. The constructs were Service quality, System use and User satisfaction. The respondents were asked to choose from the following descriptive ranges: 1 = strongly disagree; 2 = disagree; 3 = somewhat disagree; 4 = neutral, 5 = somewhat agree, 6 = agree and 7 = strongly agree. To assist in the interpretation of the results, the researcher used the following interpretive

scale for the results: at most 1.50 = strongly disagree; 1.51 – 2.50 = disagree; 2.51 – 3.49 = somewhat disagree; 3.50 – 4.49 = neutral; 4.5 – 5.49 = somewhat agree, 5.50 – 6.49 = agree and at least 6.50 = strongly agree.

The results are summarised in the table below. The focus therefore dictates that any value less than 3.50 is considered as not agreeing and the value greater than 4.49 is considered as concurring. The results are summarised in Table 4.1.

Table 4. 1 Analysis on the perception beneficiaries based on three constructs

Analysis of service quality by customers/beneficiaries			
Statements	Mean	Standard deviation	N
Is ICT support personnel responsive	5,62	1,738	63
Is ICT support personnel reliable	5,41	1,518	63
Is ICT support personnel competent	5,44	1,501	63
Is ICT support personnel empathic	5,55	1,287	61
Analysis of system use by customers/ beneficiaries			
Statements	Mean	Standard deviation	N
I'm a frequent user of the system	6,38	0,982	63
I use the system to meet my requirements	5,92	1,256	63
I make appropriate use of the system	6,38	0,681	63
I make adequate(enough) use of the system	5,95	1,490	63
I use the system for the intended purpose	6,64	0,593	62
Analysis of user satisfaction by customers/employees			
Statements	Mean	Standard deviation	N
The system generates satisfactory reports	5,03	1,833	63
I'm satisfied with web services	4,84	1,878	63
I'm satisfied with user support services	5,70	1,392	63

4.3.1. Analysis on service quality by beneficiaries

The Table 4.1 above shows that the majority of respondents scored an average above 4.49 indicating that they concur with all the statements that ICT support personnel are responsive, reliable, competent and empathetic.

4.3.2. Analysis of system use by customers

The Table 4.1 above also shows that the majority of respondents scored an average above 4.49 indicating that they concur with all the statements that they are frequent users of the system; they use the system to meet their requirements; they make appropriate use of the system; they make adequate use of the system; and they use the system for the intended purposes.

4.3.3. Analysis of user satisfaction by beneficiaries

Table 4.1 above further shows that the majority of respondents scored an average above 4.49 indicating that they concur with all the statements that the system generates satisfactory reports; they are satisfied with web services; and lastly they are satisfied with user support services.

4.4. Personal information of GEPF employees

This section presents the results on personal information of the GEPF employees.

4.4.1. Gender distribution of GEPF employees

The figure below shows the gender distribution of the sampled GEPF employees.

Figure 4. 7 Gender

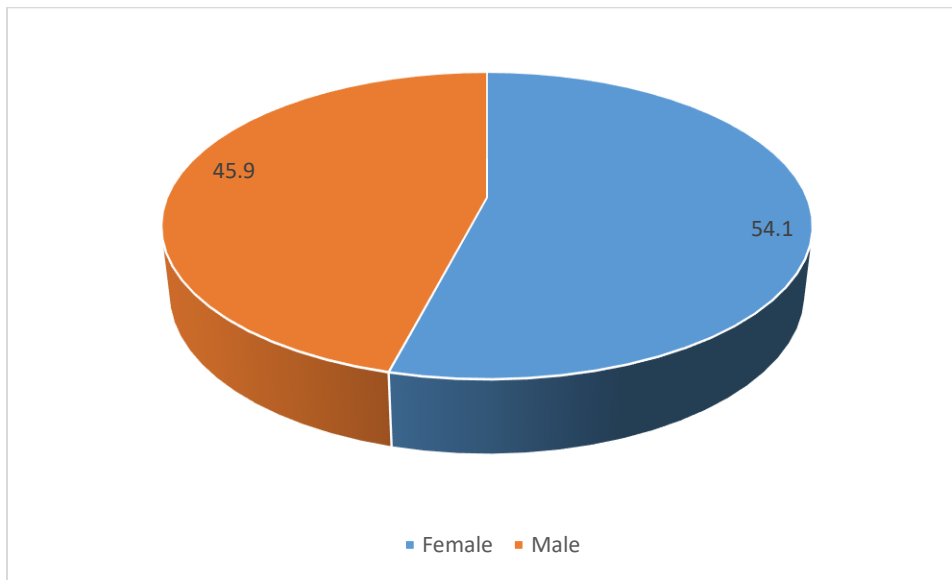


Figure 4.7 above shows that the majority (54.1%) of respondents were females and the balance (45.9%) males. This clearly demonstrates that female employees dominated the male employees. The Public Service Commission (PSC) report (2016) on the assessment of the service termination and pension pay-out in the public service also reported that the majority of the respondents who participated in their report were females.

4.4.2. Age distribution by groups of GEPF employees

The figure below shows the age distribution of GEPF employees. The employees' age were grouped and the findings are presented in a bar-graph as depicted in Figure 4.8.

Figure 4. 8 Age group

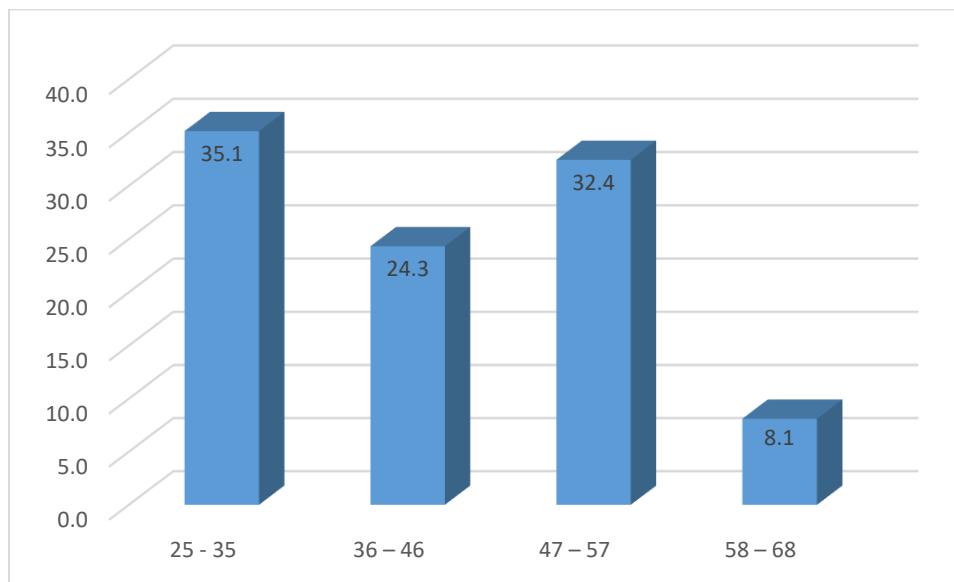


Figure 4.8 depicts that the majority (59.4%) of the respondents falls in age category below 47 years and the least being the age group 58 to 68 year with 8.1%.

4.4.3. Level of education of GEPF employees

The figure below presents the level of education of the GEPF employees. Different levels of education were provided for from Matric to Honours degree and presented in bar-graph as depicted in Figure 4.9.

Figure 4. 9 Level of education of employees

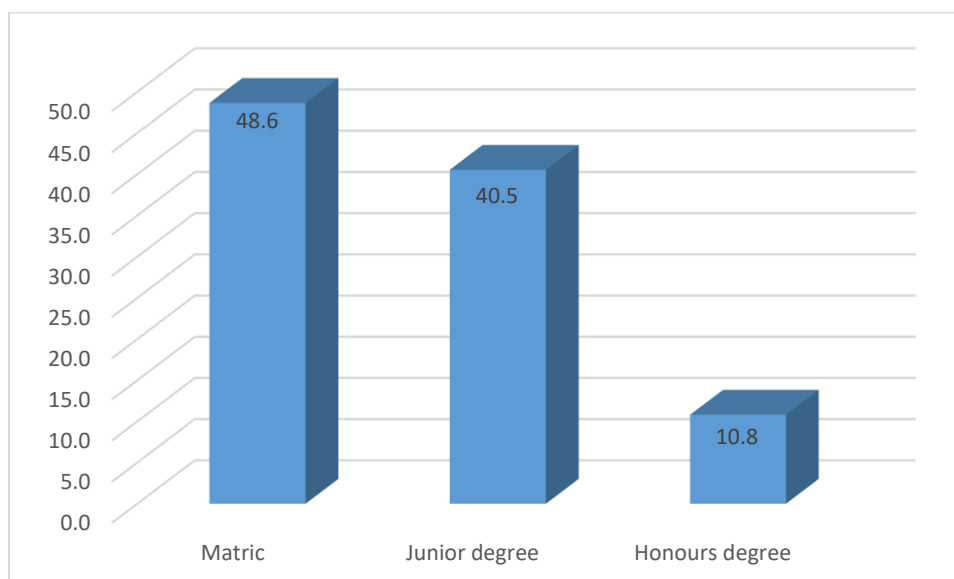
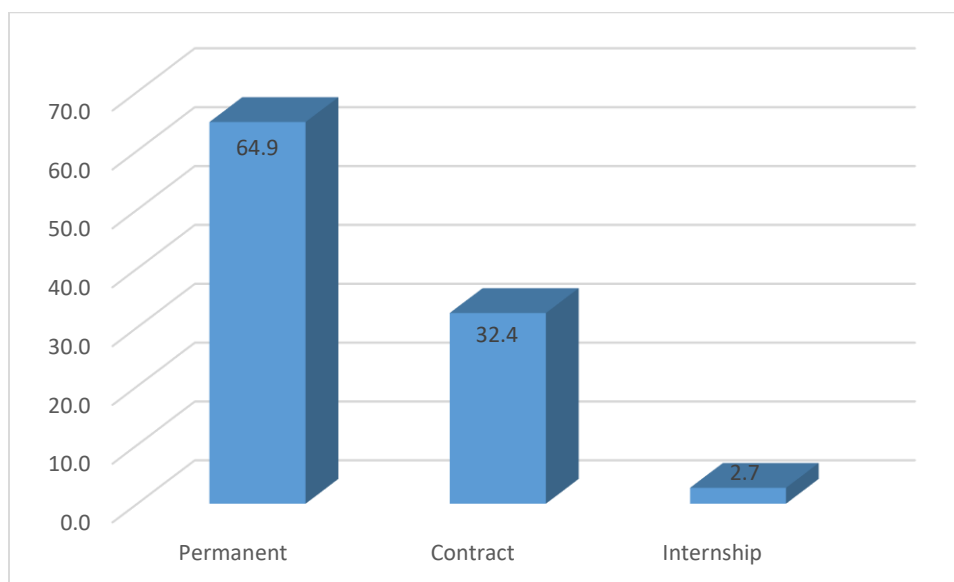


Figure 4.9 above depicts that majority (51.3%) of the respondents have some formal tertiary qualification and the balance (48.7%) of the respondents have matric. The PSC report (2016) also reported that the majority of the HR practitioners managing the termination process have a Grade 12 matric as their highest qualification.

4.4.4. Nature of employment of GEPF employees

The figure below presents the nature of employment of the employees. Types of employment contracts were provided for and presented in bar-graph as depicted in Figure 4.10.

Figure 4. 10 Nature of employment



The above Figure 4.10 shows that the majority (64.9%) of the respondents are employed on a permanent basis, 32.4% are on contract basis and the balance 2.7% were serving as interns.

4.4.5. Designated employees to customers

The figure below presents the designated employees to customers. Different levels of designated employees were provided for ranging from client service agent to middle manager and presented in bar-graph Figure 4.11.

Figure 4. 11 Designation

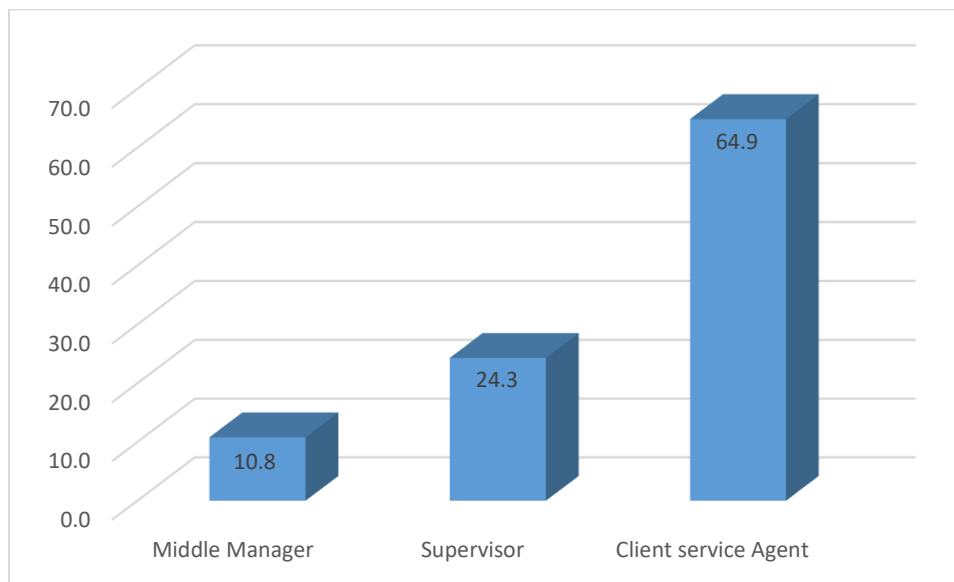
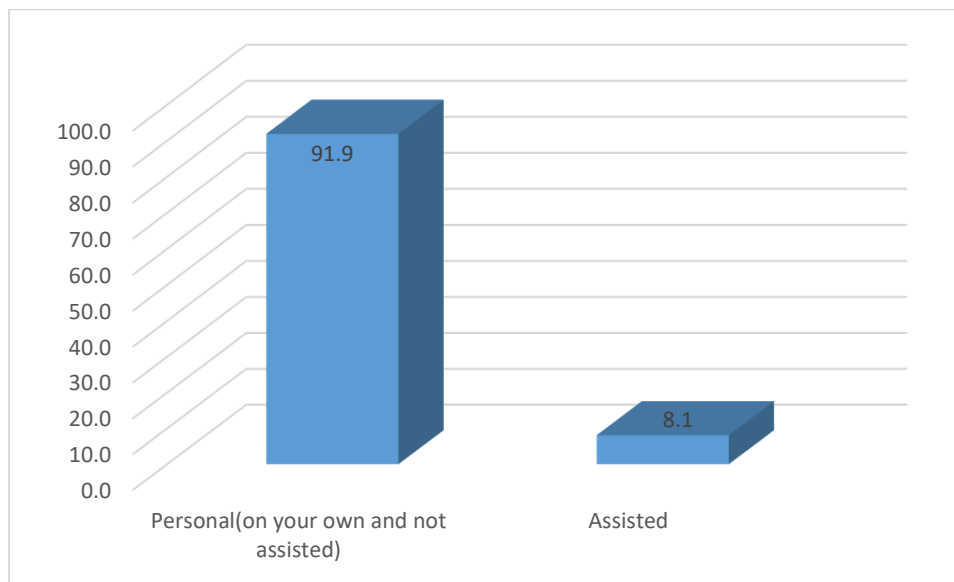


Figure 4.11 above shows that the majority (64.9%) of the respondents were designated client service agents, followed by supervisors (24.3%), and lastly middle managers (10.8%). In contrast, the study by Njuguna and Arnolds (2010) on the financial efficiency of pension funds in Kenya found that the majority of the respondents were found to be middle managers.

4.4.6. Employees access to GEPF

The figure below presents the access to GEPF systems by the employees. The results obtained are presented in bar-graph Figure 4.12.

Figure 4. 12 Access to the system



The above Figure 4.12 illustrates that majority (91.9%) of the respondents access the system on their own with no assistance and the remaining 8.1% were accessing the system with assistance.

4.5. Statistical analysis of GEPF employees based on six constructs

This section of the study presents the results related to the general questions. The questions are divided into six sections, namely, System quality, Information quality, Service quality, System use, User satisfaction and Net benefits. According to DeLone and Mclean (2016: 78). These constructs need to be considered when analysing the efficiency of the pension fund management system. Suffice to say that this study used the model to investigate factors affecting the efficiency of the pension fund system in the North West province.

The respondents were asked to choose from the following description ranges: 1 = strongly disagree; 2 = disagree; 3 = somewhat disagree; 4 = neutral, 5 = somewhat agree, 6 = agree and 7 = strongly agree. To assist in the interpretation of the results, the researcher used the following interpretive scale for the results: at most 1.50 = strongly disagree; 1.51 – 2.50 = disagree; 2.51 – 3.49 = somewhat disagree; 3.50 – 4.49 = neutral; 4.5 – 5.49 = somewhat agree, 5.50 – 6.49 = agree and at least 6.50 = strongly agree.

The results are summarised in the following Table 4.2 below. The focus therefore dictates that any value less than 3.50 will be considered as not agreeing and the value greater than 4.49 will be considered as concurring.

Table 4. 2 Analysis of perception by GEPF employees based on six constructs

Analysis of system quality by employees			
Questions	Mean	Standard deviation	N
Do you consider the system easy to use?	5,95	1,353	67
Does the system offer flexibility?	5,73	1,367	67
Is the system easy to learn?	5,92	1,256	67
Do you consider the system reliable?	5,30	1,431	67
Does the system offers sophistication in your task performance?	5,18	1,507	64
Is the system response time good?	5,88	1,130	55
Analysis of information quality by employees			
Statements	Mean	Standard deviation	N
Does the system produce relevant information	5,57	1,324	67
Does the system produce understandable information	5,78	1,109	67
Does the system produce accurate information	5,05	1,649	67
Does the system produce concise(brief but comprehensive) information	5,14	1,456	67
Does the system produce complete information	5,30	1,469	67

Does the system produce current information	5,68	1,415	67
Does the system produce timely information	5,58	1,228	66
Does the system produce usable information	6,11	0,966	67
Analysis of service quality by employees			
Statements	Mean	Standard deviation	N
Is ICT support personnel responsive (respond quick)	5,51	1,304	67
Is ICT support personnel reliable (can depend on)	5,24	1,480	67
Is ICT support personnel competent (knowledgeable)	5,62	1,320	67
Is ICT support personnel empathic (Understand one's feeling)	5,05	1,632	67
Analysis of system use by employees			
Statements	Mean	Standard deviation	N
I'm a frequent user of the system	6,22	0,787	67
I use the system to meet my job requirements	6,14	1,058	67
I use the system for private use	3,95	2,285	67
I sometimes use the system after hours	4,29	2,236	64
I use the system during office hours only	5,36	1,570	66
Analysis of user satisfaction by employees			
Statements	Mean	Standard deviation	N

The system generates satisfactory reports	5,24	1,690	67
I'm satisfied with web services	5,30	1,469	67
I'm satisfied with user support services	5,54	1,282	67
Analysis of net benefits of system use by employees			
Statements	Mean	Standard deviation	N
The system has improved decision making	5,92	1,090	67
The system has improved cost reductions	5,68	1,396	67
The system has increased production	5,84	1,167	67
The system has improved the turnaround time	6,14	1,159	67
The system has improved efficiency	6,00	1,291	67
The system has improved customer welfare	5,95	1,201	67

4.5.1. Analysis of system quality by GEPF employees

The Table 4.2 above shows that the majority of respondents scored an average above 4.49 indicating that they concur with all the statements that they consider the system easy to use; the system offers flexibility; the system is easy to learn; they consider the system to be reliable; the system offers sophistication in their task performance; and the system response time is good. The finding is explained by the objective which alludes to the investigation of the quality of the GEPF system used in the North West Province. DeLone and Mclean (2003:75) model describes the system quality as desirable characteristics of information system that encompass variables such ease of use, system reliability and response time. According to the findings the majority of the respondents concur with this model in relation to the system quality.

4.5.2. Analysis of information quality by GEPF employees

The Table 4.2 above shows that the majority of respondents scored an average above 4.49 indicating that they concur with all the statements that the system produces relevant, understandable, accurate, concise, complete, current, timely, and usable information. Information quality according to DeLone and Mclean (2003:75) is described as characteristics of system outputs which relate to relevance, concise, completeness and time lines. The findings pertaining to information quality are explained by the research objective that alludes to determining if poor quality service is caused by administration inefficiencies or operational failure in the system. The majority of the respondents share the same view with DeLone and Mclean model.

4.5.3. Analysis of service quality by GEPF employees

The Table 4.2 above shows that the majority of respondents scored an average above 4.49 indicating that they concur with all the statements that ICT support personnel are responsive, reliable, competent (knowledgeable) and empathetic (understand one's feelings). The finding relates to the research objective about determining the cause of poor quality service. According to Delone and Mclean (2003:75) service quality refers to the support received by users from the information systems department. The findings attest to the notion that IT personnel are responsive and reliable which shows that their performance conforms to the model.

4.5.4. Analysis of system use by employees

The Table 4.2 above shows that the majority of respondents scored an average above 4.49 indicating that they concur with three statements that they are frequent users of the system; they use the system to meet their job requirements; and that they make use of the system during office hours only. The two statements which obtained an average score of between 3.50 and 4.49 reveal that the respondents were indecisive on the constructs that they use the system for private use, and that they sometimes use the system after hours. This finding concurs with what DeLone and Mclean (2003:75) describe with regard to system use. The model indicates that system use focuses more on the capabilities of the information system concentrating on the appropriateness of use, frequency of use and the purpose of use. The finding explains the objective on the quality of the GEPF

system. In terms of this aspect, the majority of users confirm the model of DeLone and Mclean that they use the system to meet their job requirements.

4.5.5. Analysis of user satisfaction by GEPF employees

The Table 4.2 above shows that the majority of respondents scored an average above 4.49 indicating that they concur with all the statements that the system generates satisfactory reports; they are satisfied with web services; and that they are satisfied with user support services. The finding is explained by the objective that sought to determine the overall satisfaction in using the GEPF system in the North West province. According to DeLone and Mclean (2003:75) model user satisfaction focuses on users' level of satisfaction with reports and support services. As per the findings the majority of the respondents expressed their satisfaction with regard to satisfactory reports produced by the system. This is indicative that they agree with the explanation of the model.

4.5.6. Analysis of net benefits by GEPF employees

The Table 4.2 above shows that the majority of respondents scored an average above 4.49 indicating that they concur with all the statements that the system has improved decision making, cost reductions, production, the turnaround time, efficiency, and customer welfare. This finding is explained by the objective which talks to the impact of the system on the lives of the beneficiaries and the overall satisfaction in using the GEPF system. DeLone and Mclean (2003:75) explain that net benefits focus on the actual benefits derived by individuals, groups, and organisations from the use of the system. According to the findings the respondents attest to the explanation as per the model. The findings indicate that they concur that the system contributes positively to improved turnaround time, efficiency, informed decision making which are benefits that the GEPF gain from using the system.

4.6. Means score test on customer perception using personal characteristics

In order to determine the difference in pension fund management system of South Africa mean scores and demographic variables, the t-test and analysis of variance test (ANOVA) were computed. The t-test was computed in the gender category only. ANOVA was not appropriate for gender since gender has only two variables (female and male).

Table 4.3. Means scores tests on customer perception using personal characteristics

Means score test by gender on customers/beneficiaries perception		
Factors	t-value	P-value
Service quality	-1.521	0.137
System use	-0.539	0.593
User satisfaction	-0.239	0.813
Overall	-0.566	0.575
Means score test by age group on customers/beneficiaries perception		
Factors	F-value	P-value
Service quality	0.288	0.834
System use	1.438	0.249
User satisfaction	2.534	0.074
Overall	1.467	0.241
Means score test by level of education on customers/beneficiaries perception		
Factors	F-value	P-value
Service quality	1.018	0.397
System use	0.775	0.517
User satisfaction	0.990	0.410
Overall	0.837	0.483
Means score test by nature of customer/beneficiaries employment		
Factors	F-value	P-value
Service quality	0.915	0.410
System use	0.603	0.553
User satisfaction	4.265	0.022
Overall	2.349	0.111
Means score test by designation to customers/beneficiaries		
Factors	F-value	P-value

Service quality	0.319	0.812
System use	1.647	0.197
User satisfaction	1.963	0.139
Overall	1.295	0.292

4.6.1. Means score test on gender of customers

The results presented in the above Table 4.3 revealed that there is no statistically significant difference between the gender of the respondents and their perception on pension fund management system. Therefore, the gender of the respondents does not have a bearing on how they responded to the questions on pension fund management system.

4.6.2. Means score test by age group of customers

According to the results in Table 4.3, there were no statistically significant differences found in the mean scores of the age group of the customers and their perception on pension fund management system.

4.6.3. Means score test by level of education of customers

Table 4.3 revealed that the respondents' perception on pension fund management system with the highest qualification has no significant difference recorded between the highest qualification of the respondents and their perception on pension fund management system.

4.6.4. Means score tests by nature of employment of customers

Table 4.3 shows that, with nature of employment, there is a significant difference recorded in customers' user satisfaction, since the p-values of 0.022 is less than 5% level of significance. This means that nature of employment has a bearing on how the customers responded on the questions on their user satisfaction. The results further revealed that there is a statistically insignificant difference between service quality, system use and the overall scale of pension fund management system with the nature of employment.

4.6.5. Means score test by designation to customers

Using the 5% level of significance, the results in Table 4.3 reveal statistically insignificant differences in the mean scores of the designation and the perception of respondents on pension fund management system.

4.7. Mean scores of employees perception using personal characteristics

In order to determine the difference in pension fund management system of South Africa mean scores and demographic variables, the t-test and analysis of variance test (ANOVA) were computed. The t-test was computed in the gender category only. ANOVA was not appropriate for gender since gender has only two variables (female and male).

Table 4. 4 Mean scores of employee's perception using personal characteristics

Means score test on perception by gender of GEPF employees		
Factors	t-value	P-value
System quality	-0.119	0.906
Information quality	1.196	0.240
Service quality	0.292	0.772
System use	0.071	0.944
User satisfaction	0.481	0.634
Net benefits	-0.686	0.497
Overall	-0.099	0.922
Means score test on perception by age group of employees		
Factors	F-value	P-value
System quality	0,251	0,860
Information quality	0,666	0,579
Service quality	0,562	0,644
System use	1,762	0,174
User satisfaction	1,065	0,377
Net benefits	0,941	0,432
Overall	0,839	0,482
Means score test on perception of level of education by GEPF employees		
Factors	F-value	P-value
System quality	0.255	0.776
Information quality	0.401	0.673
Service quality	0.612	0.548

System use	0.261	0.772
User satisfaction	0.094	0.911
Net benefits	0.033	0.967
Overall	0.300	0.743
Means score test on perception of the nature of employment by GEPF employees		
Factors	F-value	P-value
System quality	2.378	0.108
Information quality	6.393	0.004
Service quality	3.921	0.029
System use	1.582	0.220
User satisfaction	3.482	0.042
Net benefits	2.762	0.077
Overall	8.120	0.001
Means scores test on perception of designation of GEPF employees		
Factors	F-value	P-value
System quality	0.339	0.715
Information quality	1.970	0.155
Service quality	1.549	0.227
System use	0.306	0.738
User satisfaction	1.461	0.246
Net benefits	2.422	0.104
Overall	0.918	0.409

4.7.1. Means score test by gender of GEPF employees

The results presented in the above table reveal that there a statistically insignificant difference between gender of the respondents and their perception on pension fund management system. Therefore, the gender of the respondents does not have a bearing on how they responded to the questions on their perception on pension fund management system.

4.7.2. Means score test by age group of employees

There were no statistically significant differences found in the mean scores of the age group of the respondents and their perception on pension fund management system.

4.7.3. Means score test by level of education of employees

Table 4.4 displays that there is a statistically insignificant difference found between the highest qualification of the respondents and their perception on pension fund management system.

4.7.4. Means score test by nature of employment of employees

Using 5% level of significant, the results in Table 4.4 revealed that there is a statistically significant difference recorded between information quality, service quality and user satisfaction with the nature of employment. There is also a statistically significant difference recorded between the overall scale of pension fund management system with the nature of employment. The results further show that there is a statistically insignificant difference between system quality, system use and net benefits with the nature of employment.

4.7.5. Means score test by designation of employees

The results in Table 4.4 revealed a statistically insignificant difference in the mean scores of the designation of the respondents and their perception on pension fund management system.

4.8. Chapter summary

The chapter presented empirical data analysis results of the study. The data was analysed in order to answer the research questions presented earlier in Chapter 1. The research instrument was tested for reliability using Cronbach's alpha and it was concluded that the data is consistent. The next section discussed the personal characteristics of the respondents. The data was then analysed using the SPSS (Statistical Packaging for Social Science) system and the SPSS output was converted into the graphs and tables. The next chapter discusses the results, offers some conclusion and suggests the recommendations.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

Chapter five presents and discusses findings of the study. The discussion is based on the results obtained on each of the research objectives presented in Chapter 1. Based on the discussions, conclusions and recommendations are derived and submitted. Finally, areas that need further research are proposed.

5.2. Discussion of findings

This section discusses the findings of the study. The findings are discussed per objective.

5.2.1 Objective one: To investigate the quality of the Government Pensions Administration (GPAA) system used in the North West province.

From the results presented in Chapter four, the quality of the GPAA system was investigated and found to be preferred by staff. The findings based on analysis of employee's perceptions revealed that the majority of employees are able to use the system without any assistance. Employees implementing the GEPF system found the system easy to use, offered flexibility, was easy to learn, reliable but sophistication in the performance of task and a quick response time. However, it has been indicated in the study that there are contract workers, employees who have matric only, employee interns and those who use the system for private use. Using the system for private use defeats the purpose of why the pension case management system was acquired. In 2017, there was an acknowledgment by the Public Service Commission and the Public Service and Administration Performance Monitoring and Evaluation Committee in the South African National Assembly that there were delays in the pay-out of pension benefits to retirees in South Africa (Parliamentary Monitoring Group, 2017:10). Hunter (2017: 5) adds that in South Africa there exist a large number of retirees who are witnessing delays in unpaid pension fund benefits that can be attributed to inefficiencies in the administration of the pension fund system. Using the system for private use and employees who lack skill to

operate the system efficiently are factors that impact on the smooth operation of the system resulting in the delays in the payouts.

The end users of the system or customers indicated that they are frequent users of the system and they use the system to meet their requirements. They also highlighted that they make appropriate use of the system, that they make adequate (enough) use of the system, and they use the system for the intended purpose.

5.2.2 Objective two: To determine factors responsible for the poor service quality provision to beneficiaries.

From the results presented in Chapter four, the service quality provision to beneficiaries of the GPAA system was investigated and found to be good. The findings based on analysis of beneficiary's perceptions revealed that the service quality provision to beneficiaries by the staff is of good quality. The above notion was supported by the data that revealed that the ICT support personnel are responsive, reliable, competent and empathic. The staff also confirmed that the system produce relevant, understandable, accurate, concise, complete, current, timely, and usable information.

According to Wang (1995:1-5), there are administrative variables that if not handled properly can lead to poor quality service. These variables include Contribution collection, Benefit determination, Benefit payments and other clientele services among others. The survey conducted shows that these administrative variables were taken care of in the Government Pensions Administration Agency hence the results confirm that the service provided by staff to beneficiaries is of good quality.

5.2.3 Objective three: To determine if the poor quality service is caused by administration inefficiencies or operational system failure.

Based on the results presented in Chapter four, the quality service caused by administration inefficiencies or operational system failure of the GPAA was investigated. The findings based on analysis of employees' perceptions revealed that the users of the system emphasised that the support for the ICT division of the GEPF is of good standard. The notion was supported by the data which clarified that the ICT support personnel are

responsive (respond quick), reliable (can depend on), competent (knowledgeable) and empathic (understand one's feeling). The results are in line with the views by DeLone and McLean (2016) who indicated that the use of technology lead to good quality service.

5.2.4 Objective four: To determine the impact of the system inefficiencies on the lives of beneficiaries.

Based on the results presented in Chapter four, the impact of the system inefficiencies on the lives of beneficiaries of the GPAA was investigated. The findings based on analysis of employees' perceptions revealed that the staff members of GEPP are of the view that the system has more benefits than the negatives. The notion is supported by the data revealing that the system has improved decision making, cost reductions, production, the turnaround time, efficiency, and customer welfare. In contrary, the study by Hunter (2017: 5) reported that in South Africa there is an existence of large number of retirees who are witnessing delays in unpaid pension fund benefits that can be attributed to inefficiencies in the administration of the pension fund system.

5.2.5 Objective five: To determine the overall satisfaction on the use of the Government Pension Administration Agency (GPAA) system in the North West province.

Derivative from the results presented in Chapter four, the overall satisfaction on the use of the Government Pension Administration Agency (GPAA) system in the North West province was investigated. The findings based on analysis of both beneficiaries and employees' perceptions revealed that the overall satisfaction on the use of the Government Pensions Administration Agency (GPAA) system in the North West province appears to be good. The notion is supported by the data which revealed that the system generates satisfactory reports, that they are satisfied with web services, and lastly they are satisfied with user support services. The literature reveals that the core function of Government Pension Administration Agency (GPAA) is to ensure that members and pensioners get quality service, peace of mind about their financial security after retirement (Zwetsloot, 2003:205). This statement supports the finding which shows that the customers and staff are satisfied with user support a service which ensures the efficient functioning of the system.

5.3. Conclusion

The study investigated the factors affecting efficiency of Pension Fund Administration System in the North West Province: a case of Government Pension Administration Agency, South Africa. The study made an attempt to answer five key objectives as presented in the first chapter. Each objective was assigned questions in the questionnaire which directly or indirectly had to answer. The study addresses all the five objectives.

The quality of the GPAA system was found to be preferred by the majority staff. Both the employees and beneficiaries of the GEPA found the system easy to use and without any assistance. The majority also highlighted that the system offer flexibility, easy to learn, reliable but sophistication in the performance of task and provides for a quick response time. The service quality provision to beneficiaries of the GPAA system was found to be good. The staff also confirmed that the system produce relevant, understandable, accurate, concise, complete, current, timely, and usable information. The users of the system emphasised that the support for the ICT division of the GEPA is of good standard and are responsive (respond quick), reliable (can depend on), competent (knowledgeable) and empathic (Understand one's feeling). The overall satisfaction of both beneficiaries and employees on the use of the GPAA system in the North West province appeared to be good.

In general even though the organisation experienced quiet a number of disgruntled members citing the inefficiency of the system which they alleged cause the delay in the payment of benefits, it appears from the findings of the study that the majority of the users being the employees and the customer or beneficiaries of the GPAA and GEPA concur that the system is not the problem as indicated by their ratings. A study by Purce (2014:11) highlights that the delay in the pension pay outs is caused by employees who lack skills to operate the system however in terms of quality as reflected on table 4.2, the majority of users are in agreement that the system gives accurate, concise, complete, understandable and timely information. This attests to the notion that the factors impacting on the efficiency of the pension fund system is not related to the system.

5.4. Managerial implications

According to DeLone and Mclean (2016:78) there are six dimensions that needs to be considered when analysing the efficiency of the pension fund system. In order to conclude that the system is efficient it has to satisfy the following dimensions: system quality, information quality, service quality, system use, user satisfaction and net benefits. The findings according to the system quality shows that the majority of the respondents concur that the system is flexible and reliable. This in itself would assist management in producing quality data that can be relied upon. The users also concur that the service quality which describe the support from information system is good. This is one aspect that could help management and the organisation to perform well with the system that produces accurate, concise and reliable information within time lines.

5.5. Recommendations

The problem statement indicates that pensioners are dissatisfied with prolonged delays of pension pay-outs attributed to the inefficiencies in the administration of the pension fund system however the findings from the survey conducted from all users; employees and customers GPAA and GEPF are of the view that the system is efficient, therefore the survey gives justification that the problem is not with the inefficiency of the system.

The following are recommendations of the study:

- A comparative study should be considered and undertaken to look at the similar objectives with other provincial GEPF offices. Other provincial offices might be performing well and it would assist to do the comparison and benchmarking in an effort to emulate their style of working.
- One could consider a study to investigate the general satisfaction of the employees of GEPF and factor in the ICT aspect as reflected on the current study. In an organization where employees are dissatisfied, the morale normally goes down and this has a negative impact on performance. It would do the organization good to conduct a survey to assess the level of employee satisfaction, identify gaps and address those gaps in a manner that can benefit the organization and its customers

- A study to investigate the turnaround time of claims made to GEPF and the satisfaction level of the pension recipients should also be considered. The issue of the turnaround time, if properly addressed, could significantly reduce the number of disgruntled members.
- A study to investigate and develop effective strategy to minimise complaints from claimants should also be undertaken in future. This could be addressed by improving the turnaround time, continuous training of employees on product knowledge.

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APPENDICES

Dear Participant

My name is Brenda Moreeng-Mogotsi, an MBA11 student at the North-West University.

You have been selected to participate in this survey which aims at exploring the factors affecting the efficiency of Pension Fund Administration system in North West Province: A case of Government Pensions Administration Agency, South Africa. The completion of the attached questionnaire will require twenty minutes of your time.

There are no anticipated risks or discomforts related to this research. Individuals will remain anonymous and results will not be used to identify individuals. The result of the study will be used for academic purpose only. If you have question you can contact Brenda Moreeng-Mogotsi at 018 388 9402 or 072 213 6825

Instruction for completion of the questionnaire

Kindly read all the questions carefully and select one that best represent your answer. Please use a cross to mark the answer you feel is correct.

Section A – Personal Information

This section seeks to understand information about you and your personal background. The information is needed to actually enable myself as the researcher to compare the group of the respondents.

Gender	Female
	Male

Age category	25 – 35
	36 – 46
	47 – 57
	58 – 68
	69+

Highest qualification	Matric
	Junior degree
	Honours degree
	Master's degree
	Doctoral degree

Nature of employment	Permanent
	Contract
	Internship

Designation or your position	Senior Manager
	Middle Manager
	Supervisor

	Client service Agent
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Access to the system	Personal(on your own and not assisted
	Assisted
	No access

SECTION B

APPENDIX I: RESEARCH INSTRUMENTS

Staff Survey Questionnaire

The study is aimed at analysing factors that affect efficiency of pension fund administration system in the North West Province of South Africa.

Please circle the appropriate number to indicate the level of your agreement or disagreement with the following statements on a scale of 1 to 7, where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral (neither disagree nor agree), 5 = somewhat agree, 6 = agree, and 7 = strongly agree.

	Strongly disagree	Disagree	Somewhat disagree	neutral	somewhat agree	Agree	Strongly agree
System Quality (SQ)	1	2	3	4	5	6	
SQ1. Do you consider the system easy to use?							
SQ2. Does the system offer flexibility?							
SQ3. Is the system easy to learn?							
SQ4. Do you consider the system reliable?							
SQ5. Does the system offers sophistication in your task performance?							

SQ6. Is the system response time good?							
	Strongly disagree	Disagree	Somewhat disagree	neutral	somewhat agree	Agree	Strongly agree
Information Quality (IQ).	1	2	3	4	5	6	
IQ1. Does the system produce relevant information							
IQ2. Does the system produce understandable information							
IQ3. Does the system produce accurate information							
IQ4. Does the system produce concise(brief but comprehensive) information							
IQ5. Does the system produce complete information							
IQ6. Does the system produce current information							
IQ7. Does the system produce timely information							
IQ8. Does the system produce usable information							

Service Quality (SQ)	Strongly disagree	Disagree	Somewhat disagree	neutral	somewhat agree	Agree	Strongly agree
	1	2	3	4	5	6	
SQ1. Is ICT support personnel responsive(respond quick)							
SQ2. Is ICT support personnel reliable(can depend on)							
SQ3. Is ICT support personnel competent(knowledgeable)							
SQ4. Is ICT support personnel empathic(Understand one's feeling)							
System Use (SU)	Strongly disagree	Disagree	Somewhat disagree	neutral	somewhat agree	Agree	Strongly agree
	1	2	3	4	5	6	
SU1. I'm a frequent user of the system							
SU2. I use the system to meet my job requirements							
SU3: I use the system for private use							
SU4. I sometimes use the system after hours							
SU5. I use the system during office hours only							

	Strongly disagree	Disagree	Somewhat disagree	neutral	somewhat agree	Agree	Strongly agree
User Satisfaction (US)	1	2	3	4	5	6	
US1. The system generates satisfactory reports							
US2. I'm satisfied with web services							
US3. I'm satisfied with user support services							
	Strongly disagree	Disagree	Somewhat disagree	neutral	somewhat agree	Agree	Strongly agree
Net Benefits (NB)	1	2	3	4	5	6	
NB1. The system has improved decision making							
NB2. The system has improved cost reductions							
NB3. The system has increased production							
NB4. The system has improved the turnaround time							
NB5. The system has improved efficiency							
NB6. The system has improved customer welfare							

Customer Survey Questionnaire

The study is aimed at analysing factors that affect efficiency of pension fund administration system in the North West province of South Africa.

The intent of this section is to obtain some information about individuals who respond to this survey. Information gathered about participants will be treated confidentially, and only group data will be reported as an outcome of this research.

Please circle the appropriate number to indicate the level of your agreement or disagreement with the following statements on a scale of 1 to 7, where 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral (neither disagree nor agree), 5 = somewhat agree, 6 = agree, and 7 = strongly agree.

Service Quality (SQ)	Strongly disagree	Disagree	Somewhat disagree	neutral	somewhat agree	Agree	Strongly agree
	1	2	3	4	5	6	7
SQ1. Is ICT support personnel responsive							
SQ2. Is ICT support personnel reliable							
SQ3. Is ICT support personnel competent							
SQ4. Is ICT support personnel empathic							

System Use (SU)	Strongly disagree	Disagree	Somewhat disagree	neutral	somewhat agree	Agree	Strongly agree
	1	2	3	4	5	6	7
SU1. I'm a frequent user of the system							
SU2. I use the system to meet my requirements							
SU3: I make appropriate use of the system							
SU4. I make adequate(enough) use of the system							
SU5. I use the system for the intended purpose							
User Satisfaction (US)	Strongly disagree	Disagree	Somewhat disagree	neutral	somewhat agree	Agree	Strongly agree
	1	2	3	4	5	6	7
US1. The system generates satisfactory reports							
US2. I'm satisfied with web services							
US3. I'm satisfied with user support services							

