ANALYSIS OF ABSENTEEISM TRENDS AMONGST EDUCATORS IN THE NGAKA MODIRI MOLEMA DISTRICT OF THE NORTH WEST PROVINCE

BY

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1.1 Declaration

I, Boikhutso Felicity Keetile hereby declare that the work covered in this research is my own work and I have never submitted it before. All references are properly acknowledged in terms of the required format and statutes of the North West University, Mafikeng campus.

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Signature Date

1.2 Acknowledgments

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Abstract

The aim of this study was to analyse teacher absenteeism in the Ngaka Modiri Molema District of the North West Department of Education between 2013 and 2015. The research investigated the factors that influence teacher absenteeism, how absenteeism affect learner performance and measures that can be put in place to reduce teacher absenteeism. The research approach used in this study was quantitative. The primary data were Persal leave reports of all the educators in the Ngaka Modiri Molema District from 2013 to 2015. The researcher did a content analysis focused on the number of educators who took leave, the type of leave taken, financial implications of leave taken, age analysis of educators who took leave, and number of leave days taken. The data were presented in graphs, and a comparison was done for the three years as indicated in the previous sentence.

The study revealed that illness, depression, working conditions, lack of motivation, low morale, poor infrastructure, long distance to work, overload and overcrowding as some of the major factors that influence teacher absenteeism. It is evident from the study that teacher absenteeism negatively affects learner performance as learners are sometimes left alone in the absence of the teacher. Substitute teachers on the other hand do not fully replace the absent teacher. They are mostly not experienced, knowledgeable and do not have the teaching strategies to maintain learner performance and the regular teacher would do. Proposed recommendations include improved working conditions, payment of unused leave at the end of the school year, rewarding excellent attendance with additional leave or compensation, restricting leave on specific dates, and including teacher absence as a measure in teacher evaluations.

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1. CHAPTER 1: ORIENTATION

1.1. INTRODUCTION

The study investigated absenteeism trends amongst educators in the Ngaka Modiri Molema District of the North West province from 2012 to 2014. The district is vast and rural with 397 schools. The study investigated the reasons educators absent themselves from work, the factors that influenced educators' absenteeism, the impact of educator absenteeism to learner performance, ways to reduce educator absenteeism, the working conditions of educators and how more they affect their work attendance. Educator absenteeism was a topic attractive to the researcher because of the current status of learner performance in the District.

There are many reasons that could lead educators to absent themselves from work, which may include poor working conditions, stress related illness, alcohol abuse, truancy, lack of resources, burn out due to overload, lack of support from management, overcrowded classes and work related challenges. Absenteeism of educators affect learner performance as learners will not be taught on the day educators are not at work.

In terms of the Public Service Coordinating Bargaining Council (PSCBC) Collective Agreement No 7 of 2000 educators do not qualify for annual leave because they are deemed to be on leave when schools close. The collective agreement on leave measures provides for other different types of leave, for example maternity leave, paternity leave and family responsibility leave. An employee is entitled to an amount of paid sick leave equal to the number of days worked during a six–week period for every thirty-six months of continuous employment. However, during the first six months of employment an employee is entitled to only one day paid sick leave for every twenty –six days worked. Before paying the employee for sick leave, an employer may require a medical certificate from an employee who is regularly away from work for more than two days (Venter and Levy, 2014:254).

According to Globler and Warnich (2006:123) absenteeism is not unique to any industry or geographical area, it is a major problem for every organization, particularly since downsizing and other lean' and mean changes have left employers with a smaller workforce.

Decision makers should periodically compute the cost of absenteeism to their organization. Such data will indicate the severity of the problem and the impact of absenteeism on profits, a historical study will indicate whether the total absence-related costs are increasing or decreasing (Globler and Warnich 2006:123). This study will also investigate the financial implication of educator absenteeism in the Ngaka Modiri Molema to the North West Department of Education.

1.2. BACKGROUND OF THE STUDY

The study was conducted in the Ngaka Modiri Molema Education District of the North West Department of Education and Sport Development, one of the four Districts in the North West Province of South Africa. The four Districts are Bojanala, Dr Kenneth Kaunda, Ngaka Modiri Molema , and Dr Ruth Mompati. The population of the study will cover all the 397 schools of the Ngaka Modiri Molema District. Ngaka Modiri Molema is demarcated into five area offices namely Lictenburg, Kgetleng, Mafikeng, Rekopantswe, and Zeerust. Area Offices are further divided into 19 clusters, which are groups of 25 to 30 schools in an area, and each cluster, is managed by a circuit manager. Most of the schools are in poor socio – economic communities.

Educators are away from schools when they take leave according to the categories of leave measures set out in the policy and when they are undertaking official business. An Analysis from South African school visits estimated that around 20 to 25% of the time when educators are away from school they are on official duties. An estimate that leaves on official business is 2% and PERSAL recorded leave is 8% (Reddy et al, 2010). The

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extent of educator leave on official duties is higher for principals who have to attend a number of meetings called by officials from the National department of education. In small schools where there are fewer teachers who have to attend a number of workshops or meetings the negative impact of absenteeism is higher (Reddy et al, 2010).On average, public school teachers in the United States are absent five to six percent of the days schools are in session (Ballou, 1996: Podgursky,2003), a rate of absence which is low relative to those in the developing world, where teacher absence rates of 20 percent are common (Chaudlury, Hammer, Kremer, and Rogers:2006). However, US teacher's absence rates are nearly three times those of managerial and professional employees (Ballou, 1996; Podgursky, 2003). One contributing factor may be teachers' daily exposure to large numbers of children, some of whom are carriers for infectious diseases.

1.3. SIGNIFICANCE OF THE STUDY

The purpose of this study was to establish the causes of educator absenteeism in the Ngaka Modiri Molema and suggest ways in which educator absenteeism could be reduced. The study is important because it was meant to identify the factors that influence educator absenteeism with the view to expose them to senior management to ensure that educators could be supported and assisted to reduce absenteeism. The study also makes recommendations on the measures that can be implemented to reduce absenteeism amongst educators in order to improve learner performance and educator morale.

1.4. PROBLEM STATEMENT

The rate of absenteeism of educators in the Ngaka Modiri Molema district has been a matter of serious concern for the North West Department of Education and Sport Development for the last five years. There are certain schools which have high absenteeism of educators. Leave reports reveal that in some schools a pattern have been observed of some educators who are always absent on Mondays, month end periods, and during examination periods. This phenomenon has negatively affected the performance of learners and the morale of other dedicated educators.

1.5. RESEARCH QUESTIONS

1. What are the factors that influence educator absenteeism?
2. Does educator absenteeism affect learner performance?
3. What measures can be put in place to reduce educator absenteeism?

1.6. RESEARCH AIM AND OBJECTIVES OF THE STUDY

1.6.1. AIM OF THE STUDY

The aim of this study was to analyse absenteeism trends amongst educators in the Ngaka Modiri Molema District of the North West Province during the period January 2013to December 2015, and to identify factors that influenced educator absenteeism in order to make specific proposal for reducing the rate of absenteeism amongst educators.

1.6.2. OBJECTIVES OF THE STUDY

Objectives of this study are to:

- investigate the causes of educator absenteeism
- establish whether educator absenteeism affect learner performance
- Identify the measures to reduce educator absenteeism and make recommendations to senior management.

1.7. RESEARCH METHOD AND DESIGN

1.7.1. RESEARCH DESIGN

A content analysis research was used in this study and the design was both quantitative and qualitative and the format was used through data analysed to determine the factors that influenced educators absenteeism and develop measures and strategies that could be implemented to reduce absenteeism. Quantitative research was used to analyse and present data, for statistical techniques to be used in data analysis and to specify how data

will be presented. White (2003:82) states that the statistical test for each research question and/or hypothesis, and if necessary, the rationale for the choice of the test. The rationale may be in terms of the purpose of the study, sample size, and type of scales used in the instrument. A statistical technique is selected on the basis of appropriateness for investigating the research question and/or hypothesis (White, 2003:82). Quantitative research was used through the analysis of statistical data of the type of leave taken by most educators in the Ngaka Modiri Molema District. This gave the researcher an insight into the nature and /or causes of educator absenteeism.

1.7.2. DATA COLLECTION

Archival data and records were used in the study as data collection method. Persal reports of leave taken by educators in the Ngaka Modiri Molema District from 2013 to 2015 were examined. The researcher did a content analysis of the leave taken, in order to provide recommendations for the reduction of teacher absenteeism.

1.7.3. TARGET POPULATION AND SAMPLING

The target population was all teachers in the Ngaka Modiri Molema District of the North West Department of Education and Sport Development.

1.7.4. SAMPLING

No method of sampling was used. The research analysed the whole data of Persal leave reports of leave taken by educators in Ngaka Modiri Molema district from 2013 to 2015.

1.7.5. METHODS OF DATA ANALYSIS AND INTERPRETATION

1.7.5.1. QUALITATIVE DATA ANALYSIS

According to White (2003:82), qualitative data analysis is primarily an inductive process of organising the data into categories and identifying patterns

(relationships) among the categories. Qualitative analysis is a systematic process of selecting, categories, comparing, synthesising and interpreting to provide explanations of a single phenomenon of interest. The Chi-square test of independence was used; it is concerned with the relationship between two different factors (or categories) in a population under study. There is a significant relationship between the two categories if the probability value (p-value) is less than 0.05 level of significance.

1.7.5.2. QUANTITATIVE DATA ANALYSIS

White (ibid) states that in quantitative research the data analysis presentation states the statistical techniques to be used in data analysis and specifies how the data will be presented. The researcher states the statistical test for each research question and/or hypothesis and if necessary, the rationale for the choice of the test. The rationale may be in terms of the purpose of the study, sample size and type of scales used in the instrument. A statistical technique is selected on the basis of appropriateness for investigating the research question and/or hypothesis (White, 2003: 82). The Minitab software package was used in this study to perform a chi-square test of independence for the data.

1.8. DELIMITATION OF THE STUDY

There could be educators who are on long sick leave in rural areas but have not applied for incapacity leave after they have exhausted their 36 days leave credits, this might affect the credibility of data.

1.9. ETHICAL CONSIDERATIONS

The type and nature of illness were not disclosed due to ethical and confidential reasons and names of educators were hidden from the data provided for 2013 and 2015 leave taken.

1.10. TERMINOLOGY

The following concepts as used in this study are explained:

Absenteeism is the failure of an employee to report to work/duty irrespective of the reason (Globler and Warnich, 2006:553)

Absenteeism is the failure of an employee to report to the workplace as scheduled (Lussier, and Hendon: 2016: 11).

Job burnout refers to the state in which individuals experience physical and mental fatigue after working under heavy pressure (Maslach et al. 2001; Peng et al. 2014)

Job burnout as a symptom of emotional exhaustion that was commonly observed among individuals working in helping professions (Freudenberger1974; Shih et al. 2013)

Incapacity means an illness or injury (PILIR, 2009)

'Educator': means any person who teaches, educates, or trains other persons or who provides professional educational services, including professional therapy and educational psychological services at any public school, further education and training institution, departmental office or adult basic education centre and who is appointed in a post on any educator establishment (Employment of Educator Act, 76 of 1998).

1.11. OUTLINE OF CHAPTERS

The report is organized in five chapters:

Chapter 1: Orientation

Chapter: 2 Literature Review

Chapter: 3 Research Design

Chapter: 4 Results and Interpretation

Chapter: 5 Summary, Findings and Recommendations

Bibliography

Annexures

The following Chapter focuses on the literature reviewed for this study.

2. CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

The present chapter reflects the literature which was reviewed for this study. In this chapter a thorough literature study on absenteeism in general is discussed. A detailed exposition of the legislation, definitions, causes of absenteeism, effects of absenteeism on learners, measuring absenteeism, types of leave taken by teachers, number of days, financial implications and literature on teacher absenteeism is reflected in the following discussion. The concepts are central to the study for contextualization.

There is a concern about quality education provision in South Africa this attracted the researcher's attention and prompted the present study. There are many reasons postulated for the low quality – one of which relates to time spent on teaching and learning activities and in particular, to time on task and educator and learner attendance in school. Both President Zuma's State of the Nation Address (Zuma:2009) and the Development Bank of Southern Africa Education Road Map refer to the concerns relating to educators and learners being in school and in class. Concerns about education quality are also inextricably linked to broader accountability issues in terms of education management (Reddy et al 2010: 1). Absenteeism is therefore a matter of major concern in the provision of quality teaching and learning and by implication the success of the enterprise education.

Bezuidenhout (2009: 152) defines absenteeism as follows:

- Desertion/absence without leave or advising the company for more than five (5) working days
- Absence without authorization for less than five (5) working days
- Recurring absence without authorization for short periods

2.2. LEAVE

Bezuienhout (2009:68) states that the employment contract must address, in respect of all the different types of leave, i.e. vacation,/ordinary leave, sick leave, maternity leave, paternity leave or family responsibility leave:

- How much leave is granted in respect of each leave category?
- When the leave may be taken.
- How the leave accrues during the given cycle.
- Whether leave may be accumulated.
- Whether the employee will be entitled to payment in lieu of leave.

The Basic Conditions of Employment Act, 75 of 1997 contains a number of provisions relating to leave. The basic principles are as follows:

An employee is entitled to a minimum of 21 consecutive days' annual leave on full pay for every 12 months' employment with the same employer. The leave must be granted within six months after the end of the leave cycle and an employer may not expect an employee to take annual leave during other leave or during the notice period preceding termination of employment. An employer may also not pay an employee instead of granting leave (except where employment is terminated). If there is a public holiday during the leave period, the employer must give the employee an extra day's paid leave. During each period of 36 months' employment (the sick leave cycle), the employee is entitled to six weeks paid sick leave. The Act also provides that if an employee is absent for more than two consecutive days, or on more than two occasions during an eight – week period and fails to furnish a medical certificate at the request of the employer, the employer does not have to pay the employee.

An employee is entitled to at least four consecutive months paid maternity leave. The employee is obliged to inform the employer in writing of the relevant dates of her intended maternity leave. Employees who have been in employment for longer than four months and who work for at least four days a week are entitled, in a four month cycle, to three days family responsibility leave. This is linked to the birth and illness

of a child or to a death in the family. Payment for such leave is made subject to the right of the employer to require reasonable proof of the event. (Reddy et al states that (2010: ix) there are times when an educator cannot perform his or her duties and Chapter B of the Personnel Administration Measures(PAM) makes provision for the appointment of a substitute educator when the regular teacher is not present for more than a month. The state pays for the substitute educator. Bezuidenhout (2009: 150) provides an example of a disciplinary code extracted from Barker (1996: 5 – 11) in relation to the abuse or misuse of leave. The document contains the rules and regulations which will assist each employee to behave according to the code of conduct as set out by management. An extract from code of conduct in relation to absence is provided below:

Absence

- No person shall be absent from work without prior arrangement
- All applications for leave or absence must be submitted in written format to the immediate supervisor, prior to the absence
- After a person has been absent due to illness, a medical certificate must be submitted as from the third day of absence. Management may, however, request a medical certificate for just one or two days alleged illness.

Policy and Procedure on Incapacity Leave and Ill-health Retirement (PILIR) (Department of Public Service and Administration, 2009)

The objectives of PILIR are articulated in a policy as well as procedures on incapacity and ill-health retirement known as PILIR are to set up structures and processes, which will ensure:

i) Intervention and management of incapacity leave in the workplace to accommodate temporary and permanent incapacitated employees, and

ii) That rehabilitation, re-skilling, re-alignment, and retirement, where applicable, of temporary or permanently incapacitated employees are facilitated, where appropriate.

The provisions further includes:

The PILIR mission is to:

i) Adopt a holistic approach to health risk management, by seeking synergies with wellness and disease management programmes provided by employees medical schemes and by implementing sick leave management as well as rehabilitation and re-skilling structures in conjunction with health risk management;

ii) Prevent abuse of sick leave by managing incapacity and ill-health as far as possible

iii) Adopt a scientific approach to health risk management based on sound medical, actuarial and legal principles;

iv) Involve the various stakeholders in the health risk management process and structures

v) Implement health risk that is consistent, fair and objective; and

vi) Support health risk management that is cost effective and financially sound.

The Management of temporary and permanent incapacity leave are articulated thus:

i) Incapacity leave is not an unlimited amount of additional sick leave days at an employee's disposal. It is additional sick leave granted conditionally at the Employer's discretion, as provided for in the Leave Determination and PILIR

ii) An employee who has exhausted his/her normal sick leave, referred to in the Leave Determination, during the prescribed leave cycle and who according to the treating medical practitioner requires to be absent from work due to a temporary incapacity, may apply for temporary incapacity leave with full pay on the applicable application forms prescribed in terms of PILIR in respect of each occasion.

For purposes of managing temporary incapacity leave and the application of PILIR, temporary incapacity leave is regarded to be:

i) a short period of incapacity leave, if the employee is absent for not longer than 29 working days per occasion, after the normal sick leave credit have been exhausted, in a sick leave cycle; and

ii) a long period of incapacity sick leave, if the employee is absent for 30 working days or more per occasion, after the normal sick leave credit have been exhausted, in a sick leave cycle.

Permanent Incapacity Leave applies when:

i) An employee, whose degree of incapacity has been certified as permanent but who can still render a service, may be redeployed horizontally with retention of his or her benefits.

ii) If both the employer and the employee are convinced that the employee will never be able to render an effective service at his or her level or rank, the employer may proceed with the process of termination of service on grounds of ill-health, which will be dealt with in terms of section 17(2)(a) of the Public Service Act,1994

2.3. Causes of Teacher Absenteeism

According to Chapman (ibid) the root causes, which directly lead to teacher attrition include:

(i) Economic incentives that encourage turnover.
(ii) Lack of incentives that could offset turnover.
(iii) Government policies that inadvertently encourage turnover.
(iv) Poor working conditions.
(v) Limited alternative access to higher education.
(vi) National efforts to improve quality of instruction may make teaching less attractive.
(vii) The quality and relevance of teacher training.
(viii) Community apathy.

Chapman (1994: 30 -32) mention the following factors as causes of absenteeism: weak economic incentives, such as low pay, government policies that encourage absenteeism, lack of community influence over teacher behaviour and lack of appropriate sanctions.

Lee and Goodman (2015:3) indicate that factors related to pay structure, management, working conditions community conditions and social and cultural responsibilities should be examined to further understand teacher absenteeism: The following table depicts the authors' factors:

Category	**Factor identified in research**
Pay structure	• Salary and compensation • Contractual status • Working relationship with the school • Seniority and professional standing
Management	• School type (private or public) • School governance (locally or centrally controlled) • Enforcement of sanctions • Community accountability
Working conditions	• School culture • Exhaustion, stress, and burnout • School facilities and infrastructure • Classroom structure (multigrade or single grade • Professional development or other duties
Community conditions	• School location (urban or rural, proximity to paved roads, remoteness) • Proximity to school • Environmental and health conditions • Socio-economic conditions
Social and cultural responsibilities	• Illness, funeral attendance, and care

	of family members • Social and cultural norms, including expectations for female teachers

Source: Authors 'analysis based on data from literature review Lee and Goodman (2015)

A further explanation of the factors cited by Lee and Goodman (2015:4) are provided in the following discussion:

Salary and compensation: Research on teacher absenteeism has identified a relationship between days away from school and salary or compensation. In Tanzania teachers identified low salary as the greatest barrier to meeting their priorities: the ability to care and provide for their children, to be able to live in a satisfactory home that offers security and emotional stability, and the money necessary to attain these goals.

Contractual status:In Indonesia contract teachers are absent at significantly higher rates than noncontract teachers (Usman and Suryadarma,2007). Generally contract teachers are non-civil service employees who are hired by local schools on fixed term contracts and who often have less professional training than civil servant teachers and are paid less.

Working relationship with the school: In Papua and West Papua, Indonesia, the nature of teacher working relationships with the school was found to potentially influence teacher absenteeism. In private institutions teachers with indirect working relationships with the school (that is, when the school contracts teachers through the government) had higher absence rates than teachers with direct working relationships (that is, when the school contracts teachers directly, UNICEF 2012). Private and foundation schools with high proportion of civil servant teachers (who have direct working relationship with the school) had high absenteeism rates (36-37 percent), while teachers recruited directly by the school had the lowest absence rate of all teachers categories, possibly because they felt greater accountability to or investment in their institutions (UNICEF, 2012).

Seniority and professional standing: In emergent nations teacher professional levels (related to level of education and credentialing) and age-related seniority contribute to high absence rates (Abadzi, 2009). In Indonesia highly educated teachers and headmasters exhibited higher absence rates than grade teachers (for example, teachers who teach subjects other than physical education and religion). Headmasters were absent

at higher rates than grade level teachers because of lack of daily oversight by the District Office.

School type (public or private): In some emergent nations private schools have lower teacher absenteeism rates than public schools. In Lagos State, Nigeria, private schools had higher rates of teaching activity and lower rates teacher absenteeism than public schools. Tooley et al as cited by Lee and Goodman (2005) describe government school conditions-such as overpopulated classrooms, high student poverty, and poor school planning that likely contribute to higher absence rates among public school teachers.

School Governance (locally or centrally controlled): In primary schools in India, 'locally controlled schools had marginally higher absence rates than schools run by the state government'.

Enforcement of sanctions: The enforcement of sanctions may vary within schools and lead to further absenteeism by teachers who do not experience the same consequences as other teachers (Kremer et al, 2005). The reasons for poor attendance in India can be related to the power or influence teachers carry at their schools, based on factors such as professional background, position, and personal characteristics.

Community accountability: Involving a community in setting teacher expectations may impact teacher absenteeism. Absence rates decreased when local community members were involved in setting teacher salaries. According to a 2008 World Bank project, 'community managed schools' were open more days per year than other schools. Community managed schools are run by committees that comprise family and community members who decide on matters of enrollment, curriculum, finances, and other aspects of running a school.

The nature of working conditions at a school, such as the culture of the school, its physical condition, and responsibilities or expectations assigned to teachers, can influence absence rates. Five factors involving working conditions that relate to teacher absenteeism are:

- **School Culture:** Poor attendance by some teachers may have a ripple effect on others at their school. At one Ghana school district absenteeism affected the

motivation of fellow teachers, who were left to take on additional planning and instruction.

- **Exhaustion, stress, and burnout:** Teacher stress and the number of days spent away from school have also been found to be correlated. Teachers who attributed their absenteeism to stress (measured according to self-reported perceptions of low personal accomplishment, emotional exhaustion, and depersonalisation or detachment from student) were more likely to depart the teaching profession altogether. In Cyprus teacher's personality traits and job stressors were found to lead to burnout (a combination of emotional exhaustion, depersonalization, and lack of sense of accomplishment), which may influence absence rates. One of the most prevalent factors related to job burnout was dealing with student's behavioral problems and time management issues.
- **School facilities and infrastructure:** In six countries, Bangladesh, Ecuador, India, Indonesia, Peru, and Uganda primary schools and health facilities with poorer infrastructure (based on an index that included 'the availability of a toilet.., covered classrooms, non-dirt floors, electricity, and a school library) had higher absenteeism rates. In India teachers were less likely to be absent at schools that were inspected regularly. This was also the case in Indonesia, where teachers at schools with inadequate facilities (such as lack of electricity or working toilets) were more likely to be absent than teachers at schools with adequate conditions.
- **Classroom structure (multi-grade or single grade):** Structuring a school to include multigrade classroom can result in higher teacher absence rates. Across several Indian states and in Indonesia teachers were more likely to be absent in schools where multigrade teaching took place. Teachers may experience more stress in a multigrade setting, though no clear reasons for this finding have been identified.
- **Professional Development and other duties:** The need to attend workshops or meetings was a frequent reason for teacher absence in the Pacific region, which may suggest difficulty in planning for professional development opportunities or for teachers to fulfill other professional duties.

- **School location (urban or rural, proximity to paved roads, remoteness):** In Papua and West Papua, Indonesia, school location is a significant factor in absence rates among administrators and teachers. Geographically, principals from urban schools had the highest attendance rates (67 percent), followed by principals from the easy-to-access lowland district schools (59 percent), principals from the highland district schools had the lowest (33percent; UNICEF). A school proximity to paved roads can also impact absenteeism. Teachers in India were less likely to be absent when their school was located closer to a paved road. In Nigeria teachers in urban schools had slightly lower absence rates than teachers in rural schools, which were attributed to more regular school supervision and higher visibility of inspectors in urban locations. In India teacher absenteeism was higher in the rural, less developed regions than in the most developed areas. Schools were sometimes staffed by the single teacher and they closed completely when the teacher did not come to work, which may have discouraged students and families and thereby increased student absenteeism.
- **Proximity to school:** A teacher's commuting distance to school may have positive or negative effects on absenteeism rates. In Bangladesh, Ecuador, India, Indonesia, Peru, and Uganda teachers local to the school community tended to be absent less often than those who commuted from outside the community. Similarly teachers in Papua and West Papua, Indonesia, who lived in the same district as their schools had an average absence rate of 19 percent, compared with 25 percent for teachers who lived farther out in a sub-district.
- **Environmental and health conditions:** Environmental factors such as hurricanes and other aggressive weather patterns, which can lead to flooding and infrastructure damage in low-lying islands and atolls, contribute to teacher absenteeism in the Pacific region. A lack of basic means to be healthy and safe can also impact teacher absenteeism. In Tanzania lack of access to food, clean water, sanitation, and access to a hospital has been a reason for teacher absence. Teachers agreed that hunger constrained their capacity to teach, as did poor water resulting from inadequate infrastructure (substandard water tanks, and latrines) which leads to sickness and disease.

- **Socioeconomic conditions:** In India's relative teacher salaries are higher in poorer states, yet poorer states have higher absence rates. In Bangladesh, Ecuador, India, Indonesia, Peru and Uganda, teachers in low per capita income areas were absent more often on average than teachers in other areas.
- **Illness, funeral attendance, and care of family members:** In Malawi illness was cited as one of the reasons for frequent absence. This finding was supported by previous research in an HIV/AIDS study, which found that teachers most often cited 'personal sickness, funeral attendance, and attending to sick family members' as reasons for absence.
- **Social and Cultural norms, including expectations for female teachers:** Specific social and cultural expectations and traditions in the Pacific Region mat also relate to high absenteeism. For example, traditional feasts, and funerals, can feature as an important part of village life, and attendance obligations can override professional ones. Gender patterns of absenteeism can also be understood as an indication of broader societal expectations of women.

Obeng-Denteh et al, (2011) identified two types of absenteeism, namely:
Culpable absenteeism and non-culpable (innocent) absenteeism. The former refers absenteeism refers to lateness or absence problems for which the employee should be held responsible because the problems are within the employee's power to address and correct (Anonymous, 2004 as cited by Obeng-Denteh et al, 2011). For instance an employee who is on sick leave even though he/she is not sick, and can be proven that the employee was not sick is guilty of culpable absenteeism. The four key types of culpable absenteeism are;

- Lateness/ leave early
- Failure to notify employer
- Absence without leave; and
- Abuse of leave

The authors define a non-culpable (innocent) as absenteeism the absence of employees due to illness or injury for reasons beyond the employee's control and therefore not culpable which means that it is blameless. Innocent absenteeism is not

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subject to disciplinary action but is approached on the basis of identifying and understanding the medical needs of the employee and any restrictions as identified by the employee's healing practitioner. Obeng-Denteh et al, (ibid) further state that the causes of absenteeism are many and include:

- Stress
- Lack of job satisfaction
- Boredom on the job
- Serious accidents and illness
- Low morale
- Poor working conditions
- Excessive workload
- Transportation problems
- Inadequate leadership and poor supervision
- Poor physical fitness

According to Bowers (2001: Vol 2*)* the Institute of Personnel and Development (2000) survey of the United Kingdom (UK) managers' opinions on causes of absence included 'stress' as a category alongside such elements as 'colds and 'flu', 'stomach upsets' and 'back pain'. However, it is not safe to assume that managers can tell the difference between absences due to stress and those attributable to a minor ailment; by now it is well established (Cohen & Herbert, 1996, for an extensive review) that psychological factors can influence immunity to disease. A genuinely sick teacher with a clearly identifiable physical illness can still be a teacher under stress. In their sample of 126 schools, Bowers &McIver (2000) found that colds, influenza and respiratory conditions were highly indicated by managers as sources of illness from which absence arose, followed by stomach complaints and headaches. These could be related to stress, although a subsequent survey with which the author was involved in, so far unpublished, indicates that many head teachers assign the causal features of such illnesses to close contact with children who are sent to school with transmissible diseases. Seen from that perspective, catching a cold is not symptom of stress, it is an occupational hazard.

Research by the World Bank finds generally high levels of teacher absence in developing Countries, especially in Africa and South Asia. However, most teacher absenteeism is for legitimate reasons, namely personal illness, official duty, and leave. Other studies have not found unauthorised (opportunistic) absenteeism to be a major problem in a number of countries in SSA (Bennell et al, 2002, Bennell, 2004, cited in Bennell 2007).

Absenteeism is widely reported to be lower in private-for-profit schools. Although there is little or no hard evidence to back this up, it is likely that non-state providers, and especially for-profit schools, do impose sanctions on teachers who are absent for legitimate reasons. One of the most important findings of the World Bank research is that absenteeism rates among contractual teachers are much higher than for teachers with permanent status (Bennell and Kyeayampong, 2007:20).

According to Yu, Wang, Zhai, and Yang (2014: 706) efficacy refers to the subjective perceptions and beliefs of teachers with regard to their capability to complete their teaching task and to teach their students well. This concept also pertains to the general perception and judgment of teachers toward the teaching and learning relationship, their role in the development of their students, and other issues. A highly negative self-evaluation causes teachers to develop a highly negative perception toward their work ability, to perceive their schools as an unhappy place to work, to assume a negative coping style, and to feel greater degrees of powerlessness and job burnout, this leads to high rate of teacher absenteeism.

Yu et al (ibid), further state that the long-term effects of stress will lead to the development of chronic stress symptoms and eventually lead to job burnout. According to the authors a cognitive motivation mechanism, self-efficacy represents the faith of teachers toward their teaching ability. This factor directly affects how teachers choose their teaching activities, how they attribute their success or failure to teach and how they regulate their moods. Therefore, the pressure mostly affects job burnout through the

intermediary of self-efficacy. Struggling to cope with a considerable amount of pressure may affect the self evaluation of individuals, which will eventually make them feel tired of working. Therefore, teachers with low self-efficacy tend to adopt evasive tactics when facing setbacks attribute their teaching success or failure to the influence of external environmental factors and neglect the factors of their inner ability and effort. Moreover, teachers feel a greater degree of anxiety and fear because of the poor discipline of their students, they frequently exhibit an open dislike toward teaching and disgust their students. These teachers begin to show symptoms of emotional exhaustion and depersonalization. Thus, the mediating role of self-efficacy in the effects of pressure on job burnout is evident

Medeiros, Villa and Barreto (2012: 85) state that in Sweden, a population-based study of a sample of19,826 subjects showed that long-term disease-related absenteeism was associated with a poorer self-assessment of one's health . The results of studies whose converge on the positive relationship between psycho social factors of work- and illness-related absenteeism, finding relationships with low control at work, lack of support from colleagues and the school hierarchy, interpersonal violence, high emotional demands, and low quality of management. Taken together, this evidence justifies recent approaches that view illness related absenteeism as a health indicator relevant to public health. It is worth mentioning, however, that the relationship between absenteeism and illness is not straightforward, as a sick worker does not necessarily have to miss work (Rice: 2010 as cited by Mederios et al). A leave of absence is indicated when the medical condition is incompatible with carrying out one's work or when there is need for rest or to undergo a diagnostic test or medical procedure during work hours. In addition, illness related absenteeism also is influenced by the motivation to not miss work and by the pressure to come to work.

Bower (2001: Vol 31*)* argues that teachers who take time away from work through sickness present problems for school principals in covering their work. In addition the author states that their absence will have an impact on students and other teachers, as well as on the money available to schools. Further when teachers become too ill to teach

again, their absence before retirement may affect the organisation of the school, while their premature retirement due to disability can have adverse consequences both for the individual and the education system as a whole.

Bowers (ibid) further argues that the key features which connect teachers' absence in general and the need for some to retire due to incapacity relate to availability and cost. A teacher who is absent through illness or any other cause or who leaves teaching because of persistent illness is lost to the children whom she/he would otherwise have taught. The author further states it be intuitively expect a teacher's absence to lower the quality of the school experience for the students whom she/he would otherwise have taught. The teacher also has to be replaced and replacement costs money.

In the case of a prematurely retiring teacher there is also the cost of servicing a pension for longer than would otherwise have been expected. The monetary consequence of teacher absence is usually calculated by computing the cost of paying substitute or 'supply' teachers to replace those who do not report for work. For example, the cost of teacher absenteeism in the USA was arrived at by aggregating the salaries of absent teachers with those of the teachers used to replace them. The outcome figure was based on the assumption that every absent teacher has been replaced by a paid substitute. Notional costings such as this have only limited utility, since they assume both that teachers *can* be replaced in this way and that they always *need* to be replaced Bowers (ibid).The 'cost' of teacher absenteeism is still harder to quantify when it is seen in terms of disruption to a school's routine. It is clearly naive to believe that using a substitute or 'supply' teacher to cover classes means that all of an absent teacher's work will be done. Marking, planning and record keeping all form part of most teachers' jobs and these are not easily covered by a temporary teacher unfamiliar with the school and its pupils. Imants and van Zoelen (1995:Vol 1) indicated that in Dutch education more than 50% of sickness absence is caused by combinations of psychological factors and work place conditions affecting stress. Examples of stress-provoking factors at the school level are a disproportionate division of tasks and uncertainty about rules concerning the handling of pupils and decision-making.

Gender Differences in absenteeism

(Scott and McClellan, 2001) states that employee characteristics and attitudes of secondary school teachers were examined to determine if men and women has different reasons for being absent. Although women were found to perceive some work related factors different than men and to take substantially more days off than men, their absence occurrences were not significantly different. In addition an employee's age and attitude towards pay were the only factors found to exhibit a gender-related impact on absenteeism. Perceived role conflict, and job involvement were found to be significantly related to absenteeism for both men and women.

Demographic characteristics and attitudes that relate to work attendance and might exhibit gender related differences are examined hereunder (Scott and McClellan, 2001):

i) **Age**: Reports from the Bureau of Labour Statistics show that when aggregate absenteeism data was broken down by gender, men and women tend to exhibit different rates of absenteeism for different age groups. Men from 16 to 19 years of age have the highest incidence of absenteeism. The incidence of absenteeism decreases as men age, reaching a low for those in the 25 – 34 age group. Absenteeism rates for men fluctuate through middle age but increase in the oldest age group, those reaching 55 and up. Although women teachers in the 16 – 19 age group also exhibit the highest incidence of absenteeism, the rates in the other group are very dissimilar from those of men. Women have their highest rates in the 25 – 34 age group and their lowest rates between the 35 – 44 and over 55.

ii) **Number of dependents**: While is it acknowledged that child rearing is becoming more of a shared responsibility for couples, it is believed that women are still more likely to stay home to care for sick children. Two studies indicated that a positive relationship existed between absenteeism and family size for women.

iii) **Distance to work:** Transportation problems can affect an employee's ability to get to work. Isambert- Jamati (1962, as cited by Scott and McClellan, 2001) found that there was a positive relationship between distance to work and absenteeism rates for women but not for men. Isambert-Jamati theorized that women who drive long distances to work were more likely to be absent because of the fatigue associated with full work day, child care, and home responsibilities and the long

commute. Furthermore, when car problems do occur women may be more likely to sacrifice work attendance than their husbands. Finally women who are single households are likely to have less disposable income than men and may not be able to afford the same quality of transportation. This research indicates that there may be an interaction between distance to work and gender, such that a positive relationship to absenteeism will be found for women but not for men.

Attitudes thought to have a gender – related impact on absenteeism include role conflict, job satisfaction, central life interest, and job involvement (Scott and McClellan, 2001). These attitudes are examined hereunder:

i) **Role conflict**: When employees face conflict between work demand and the demands of a family or a community member, they must make decisions concerning the importance of each role. Those who believe family or community roles are more important may be absent more frequently than employees who places less value on such roles.

ii) **Job satisfaction**: Pain-avoidance and motivational models of absenteeism imply that if work is painful or painful or unstimulating, employees tend to avoid work. The possibility exist that men and women respond to a dissatisfying work environment in different ways. Scott and Mabes as cited by Scott and McClellan (2001) found significant correlations between absenteeism and all dimensions of satisfaction for men. For women, they only found one significant relationships which was between absenteeism and satisfaction with pay. For women, no relationships were identified, however, formen, absenteeism was negatively related to attitudes towards satisfaction with supervision, the work group, wages, and promotions, and overall satisfaction.

iii) **Centrality of work to life**: Absenteeism rates may differ between men and women to the extent that there are differences in the degree to which work in central to their life. The concept of work centrality was developed by Dubin (1973) who asserted that people tend to have central life interests of people into three groups: work centred, non-work centred, and

non-centred. Those who are work centred choose work as a preferred locale for behavior when there is an equal likelihood that the behavior could take place elsewhere. For example, they prefer to spend a day off with co-workers than with in-laws. Non-work centred people are those whose families or other organizations represent the focal point of their actions. Non-centred people show no particular preference for places or people with whom they would rather spend their time. It would follow that work-centred employees have high job commitment and therefore low absenteeism rates. However, for non work–centred or non-centred employees who have low job commitment, one would predict that their rates of absenteeism would be higher than for work centred employees.

iv) **Job involvement**: Job involvement is a similar construct to central life interests. While work centrality deals with where an individual prefers to carry out their activities, job involvement refers to the belief an individual has in the value of a specific job's goals and activities.

2.4. Effects of Absenteeism

According to Lussier and Hendon (2016: 11) the following are the effects of absenteeism;

- Absenteeism is costly.
- Absenteeism leads to lower productivity.
- It cause lower job satisfaction as other employees take up the slack of doing the work of their absent coworkers.
- It leads to high turnover rate, people tend to leave their jobs when they don't have job satisfaction.

Lussier and Hendon (2016: 11) provide the table hereunder to measure absenteeism:

Absenteeism	
No of employees absent Total employees	Percentage or ratio of employees not at work for a specified period of time. Other workers, or temps, are often needed to do their work
3 100 = 3% or 3: 100 ratio	So 1out of every 33.3 employees is absent

In high income countries, with good administrative systems the extent of teacher absence can be easily calculated. The teacher absence rates were calculated at between 3 to 6%: in the USA the absence rate is around 5%; in Canada 6%; in Israel 5.8%; in Ireland around 5.5% in England sickness absence is 2.6% and in Australia discretionary leave4 is 3.1%. There are systems of substitute teachers to compensate for teacher absence and in the lower grades families would generally compensate for lost time (Reddy et al: 2010: viii)

Reddy et al (2010; viii) state that in high income countries where the living and school conditions are generally good, individual characteristics such as gender and age are factors influencing the extent of teacher absence, and in these countries incentives may be provided to encourage individuals to attend more regularly. In low income countries the school and socio-environmental conditions influence the extent of teacher absence, and strategies to reduce leave taking are dependent on improved school conditions like infrastructure, instilling a leadership ethos and school climate of non-tolerance of educator absence and the long term goal is improved conditions in the community, so that the educational level and economic status of parents are increased.

Analysis of the 2008 Khulisa Consortium audit of ordinary schools datasets and proxy calculations from other studies estimate that between 10% and 12% of educators are not at school on any day. Therefore the conservative, optimistic estimate is that, on average between20 and 24 days a year of regular instructional

time being lost by each educator. The conservatively estimated leave rate of 10% to 12% in South Africa is higher than the rate in high income countries, but lower than the rate in many low income countries(Reddy et al: 2010:ix).

In Canada, in 2008, elementary and secondary teachers were absent on average for 10.1 days at 5%. A report on Sickness Absence in the Civil Service by Auditor General (2009) in Ireland, found absence rate of 6.3% for post primary school Teachers and 4.6% for primary school teachers (Reddy et al, 2010). Israel reported an absenteeism rate of 5.8% in 2002 – 2003. The country has a system of incentives to reduce discretionary leave taking, and 71% of teacher absence were reportedly due to certified sick leave and 11% to uncertified sick (Rosenblatt et al,2009) (Reddy et al, 2010).

Bowers (2001: Vol 2*)* states that in measuring absenteeism must be counted by a calculation of the number of teachers employed in a given year, followed by the number of days they were expected to work that year, the number of days each took off because of reported sickness and the 'lost' days as a percentage of the overall 'available' days. The author further state that this is a process familiar to most schools, since it closely replicates the way they keep track of pupil attendance. The number of 'teacher working days' may vary from country to country (and from state to state in the USA), but this method remains the favoured means of determining overall rates of sickness absence. Ehrenberg et al as cited by Bowers(1991) assumed 180 available working days in New York State;200 days formed the basis for the Canadian statistics reported by Schaefer as cited by Bowers(2000); in both England and Wales 195 days of expected attendance forms the basis for calculating teacher absenteeism.

Like in many other developing countries, teacher absenteeism is a growing challenge in Nigerian education particularly in government or public schools. Studies of government teacher absence in six countries (Bangladesh, Ecuador, India, Indonesia, Peru and Uganda) found teacher absence rates to be between 11% and 27% (Chaudhuryet al, 2005). Another report found that 20% of teachers in rural western

Keyan primary schools could not be found during school hours, while in Uganda, two surveys found teacher absentee rates of 27% in2002 and 20% in 2007. In Nigeria, it is currently estimated that about 20% of the teaching workforce in government primary schools are absent on a given work day (World Bank, 2010; Champion, 2010.

Arie and Rosenblatt (2006:79) argue that for several reasons, the negative consequences of absenteeism are exacerbated in the educational sector, where the present study was carried out. First, because an absent teacher teaches different classes during a typical work-day, replacing absent teachers with substitutes tends to be difficult relative to other types of absentee employees. Second, the cancellation of absent teachers' classes tends to disturb their colleagues 'work. Third, when an absent teacher's classes are taught by a substitute, usually two teachers are paid for the same teaching job, and this increases substantially the financial cost involved. Finally, teachers' absenteeism has been linked to a decrease in their students' achievements (Woods & Montagno, 1997 as cited by Arie and Rosenblatt (2006: 79), and to student absenteeism.

2.5. Effects of teacher absenteeism on learners

According to Reddy et al (2010: 24) High Income Countries (HICs) teacher absence is accommodated by a system of substitute teachers. The system of substitute teachers, however, still raises a number of concerns for the educational system. Firstly, there is the financial implication linking to hiring of substitute teachers and one of the concerns about the extent of leave is the financial burden on the system. The second concern relates to finding suitably qualified teachers and ensuring minimum disruption to the teaching and learning processes (Miller *et al*, 2007; Miller, 2008). Countries have different standards for who could qualify to be a substitute teacher; in the majority of the states in the USA an individual does not need a bachelor's degree to be registered as a substitute teacher as a high school diploma insufficient. However, the standards are higher in Canada and Australia where individuals must have a license to be a substitute teacher. Thirdly, although substitute teachers may be used as a means of coping with teacher absences, it is naive to

believe that using a substitute or 'supply' teacher to cover classes means that all of an absent teacher's work will be done. Marking, planning and record keeping all form part of most teachers' job and these are not easily covered by a temporary teacher unfamiliar with the school and its pupils. Fourthly, learners may struggle to form meaningful relationships with substitute teachers due to the brevity of contact time and teachers 'inability to develop understandings of learners and their capabilities.

The research conducted by Mkwanazi B (1997) revealed that teacher absenteeism had the following major effects on learners:

- ignorance of pupils' names and achievements
- demotivation among pupils
- fighting and other forms of violence such as intimidation, defiance and vandalism
- truancy
- incomplete work programmes and poor performance
- drunkenness and other forms of substance abuse by pupils
- failure to do homework and assignments
- an increase in the drop-out rate
- cheating in the examination

When a teacher is away (whether taking leave or undertaking official duties away from school) the inevitable consequence is a loss of teaching and learning time. In addition, when teachers are away from school, learner absence also increases although it is not clear which is the cause and which is the effect(Kremer *et al*, as cited by Reddy et al 2010:24),

Teacher absenteeism contributes to falling education standards and academic underachievement (Adeleye, 2008 cited by Khalabai, 2012:68). The output of the education industry, student skills and knowledge that are critical to both the equality of opportunity norm and the economic growth aspiration of most countries are not realized (Miller et al,2007 cited by Khalabai, 2012:68). Absenteeism also causes economic

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damage through direct and indirect costs in terms of impact on school's budgets and increased workload for colleagues. In addition to the salary cost for the absent employee, there is cost of substitute staff, lost productivity, reduced quality of services, as well as management time spend dealing with absence that could be used for other purpose (Abeles, 2009: 44 cited by Khalabai, 2012:68). Therefore teacher absenteeism is costly for the Department of Education and government.

The 'climate and leadership' ethos in a school has an impact on the levels of teacher absence. Where teachers are happy and appreciated there is less likely to be high levels of staff absence (Norton, 1998). This suggest that when job satisfaction is high, staff tend to be motivated toward serving the organization and the goal of improved student achievement; which may lead to improved attendance. Reducing absence is also dependent on the set of beliefs and practices among school staff concerning what frequency and duration of absence is individually and organisationally acceptable. If a workplace tolerates high levels of absence, teachers are likely to maintain high levels of absence. The school principal is important in maintaining these norms, and the style of a supportive leader with little tolerance for those who cause extra work for colleagues is better to reduce absence (Dworkin *et al*, 1990).

Miller, Murname and Willet (2007:5 - 6) state that there are several mechanisms through which teacher absences may reduce student achievement. First, instructional intensity may be radically reduced when a regularly assigned teacher is absent .A substitute teacher showing movies is a time-honored illustration, but low skill levels of substitute teachers may contribute to the reduction in instructional focus. A second mechanism through which teacher absences may affect student achievement is through the creation of discontinuities of instruction, the disruption of the regular routines and procedures of the classroom. Students may have difficulty forming meaningful relationships with multiple, mobile substitutes, and even if substitutes deliver brilliant isolated lessons, they may not be able to implement a regular teacher's long-term instructional strategies. Furthermore, substitutes' lack of detailed knowledge of students' skill levels makes it difficult for them to provide differentiated instruction that addresses the needs of individual students.

Teacher absences may also negatively impact student achievement in less direct ways. For example, teacher absences may inhibit attempts by school faculties to implement consistent instructional practices across classrooms and grades. Common planning time, during which teachers may collaborate on improving instruction, is often so scarce that even low rates of teacher absence could almost completely undermine its purpose. This mechanism implies that a teacher's absence not only impacts negatively on the students he or she directly works with, but also on the students taught by the teacher's colleagues. Therefore teacher absence affects the management and planning of the entire school because the already planned schedules would have to change.

Imants and van Zoelen(1995: Vol 1) state that a high rate of sickness absence is associated with high costs for the organisation and a negative impact on work place conditions. A high rate of teachers' sickness absence is supposed to affect the quality of education within schools in a negative way. For example, the continuity of various elements in the instructional process is threatened by teacher absenteeism, such as the systematic monitoring of student learning processes, and consistency in the guidance of pupils. Besides, the development within the faculty of shared high expectancies of student learning potentials will be frustrated when members of the faculty are absent very frequently. Another negative effect of teacher absenteeism is that much time of school managers has to be spent on recruitment of stand-in teachers. Under present circumstances it is not uncommon that in regions where stand-in teachers are scarce primary school principal shave to replace the absent teacher themselves. These time-consuming tasks lead the principals away from their educational leadership tasks. All in all, teacher absenteeism is assumed to be a negative condition for the quality of education in schools.

Impact of substitutes teachers on student achievement

The substitute teachers are charged with creating the best approximation of the teaching that would have taken place had the regular teacher been present (Glatfelter 2006 as cited by Damle 2009). Thus in the optimum circumstances, substitute teachers help mitigate the disruptive impact on student learning caused by the absence of their regular teacher.

However, substitute teachers have to work through many challenges and uncertainties such as inadequate, unclear, or no lesson plans left by the regular teacher, not enough time to know the student's learning styles; and limited training in classroom management. According to the sparse research and other documented evidence, while substitute teachers are able to keep students busy with work, they accomplish very little by way serious instruction and student learning (Damle, 2009)

Teacher absenteeism and the resulting employment of substitute teachers entail financial costs and an increase in educational expenditure. However, the more enduring and expensive consequence are the possible negative impact on student learning and achievement. Damle (2009) has identified three types of studies to asses substitute teacher's impact on student achievement or effectiveness in the classroom:

i) **Impact of teacher absenteeism on student achievement**: Two recent published studies have demonstrated that teacher absenteeism has a negative impact on student achievement. A Harvard study by Miller et al (2007) as cited by Damle (2009) analysed the absences of 2,500 teachers in an urban school district over three year period. The study found that over half the sick days were 'discretionary' and occurred on Mondays and Fridays. The research found a small but significant impact of teacher absences on student math scores after taking away the effects of school, student, and teachers including teacher skill and motivation. Clotfelter et al (2007) as cited by Damle (2009), in a study that examined the frequency and consequences of teacher absenteeism in North Carolina based on seven-year data, found that teacher absentee rates are greater in schools serving low-income students. Most importantly, the study showed that teacher absences negatively impacted student scores in elementary schools. The researchers estimates suggested that increasing teachers' base salary along with raising the financial penalty for absences may help reduce absenteeism as well as lower the districts' costs.

ii) **Impact of substitute teachers on student achievement**

Damle (2009) state that there is evidence suggesting that substitutes may negatively impact student learning. In one study, Orlando Sentinel examined the

relationship between student performance on standardized tests and substitute teaching. The study, conducted in 62 Orange County, Florida, schools compared schools who spent varying degrees of classroom time with the substitute in terms of their English, language arts, and reading scores. The study found that, students 'who spent four or more weeks with a substitute teachers scored 11 points lower on the rading portion of the Florida Comprehensive Assessment Test than their peers in the same school.

iii) **Opinion studies about the effectiveness of Substitute teachers**

Damle (2009) further state that studies investigating the opinions of teachers, students, substitute teachers, and administrators have reported that the regular teachers and administrators have limited confidence in the ability of substitute teachers to accomplish teaching and learning in the classroom. Many studies strongly recommended substantive training for the substitutes to achieve better student outcomes.

2.4 Strategies for Reducing Absenteeism

Brown and Arnell , (2012) suggest that once the problem of teacher absenteeism has been assessed in a particular school or school district, a comprehensive plan of action should be developed. To implement a comprehensive and systematic attendance improvement program consider the following;

- Review board policy
- Appoint an attendance improvement coordinator
- Construct attendance guidelines
- Buyback of unused sick leave should be considered
- Develop an attendance recognition plan
- Discuss sick leave use and abuse with employees
- Improve work conditions
- Provide an incentive for experienced teachers who volunteer for assignments in failing schools, and
- Hold administrators accountable for administering policies and administrators for any abuse of the policies

When absenteeism is related to burnout consider the following:

- Helping individual teachers identify short term signposts of progress in meeting their own and the school's improvement goals
- Rotating teachers classroom assignments so as to ensure that the same teachers do not always have, year after year, difficult students, and
- Provide adequate financial and material resources

Increasing teacher morale is a substantial factor in increasing teacher attendance. There are several factors that contribute to high morale in a work environment. Teachers must feel they are:

- Treated fairly and equally
- Valued and appreciated for their work
- Recognized for their work
- Paid a fair wage for their work and
- Doing work that is important

To increase teachers' attendance in Nigerian public primary schools, the following strategies are suggested.

2.5.1. Application of extant rules and regulations

To check or stem the high rate of absenteeism among teachers, there should be stringent procedural measures to raise the absenteeism barrier and make it less simple to report oneself sick or obtain permission to stay away from work. In this regard, an obligation or requirement to produce a medical certificate from a government hospital after one day of absence should be imposed.

2.5.2. Cultivating a Culture which does not tolerate excessive absences

In this respect, attendance records should be religiously maintained for the purpose of teacher attendance tracking. The attendance record should be reviewed

with each teacher every school term or more frequently with those developing absence trends with a view to arresting the undesirable tendency.

2.5.3. Deliberately improving the economic and social status of teachers

Teachers' salaries and other material rewards should reflect the value to society of the teaching function; and should compare favourably with salaries paid in other professional occupations requiring similar or equivalent qualifications. Therefore, teachers' salaries and other material incentives should be reviewed upwards significantly to keep it at par with what is obtainable in comparable professions.

2.5.4. Provision of conducive working environment

Teachers need a better working atmosphere in the classroom. Primary schools should be rehabilitated and repositioned in order to make them conducive for effective teaching and learning. Adequate infrastructure, facilities and equipments need to be provided in schools if we expect the attendance of teachers to improve. Moreover, the teacher-pupil ratio should be reduced to a maximum of 1:30 to prevent over-crowdinessin classrooms and subsequently, stress on teachers.

2.5.5. Rewarding attendance

Recognizing and rewarding attendance will send a clear and strong message to the teaching staff that attendance is important and noticed. Teachers with good attendance record should be rewarded in some way such as through commendation letters or even awards.

2.5.6. Teachers' empowerment

Teachers should be empowered by the adoption of the participatory approach to school administration and management. In this regard, school policies and programmes should be reviewed to identify how teachers can participate in decisions about their jobs.

2.5.7. Empowering Head Teachers and School Based Management Committees (SBMC)

Head teachers as well as school based management committees should be empowered in terms of being allowed more control with regard to the discipline of their erring teaching staff as this will improve accountability and possibly reduce teacher absenteeism. In fact, teachers must be made aware that they risk termination of appointment for excessive or habitual absenteeism

2.5.8. Developing wellness programmes

Healthy teachers are less likely to fall ill or report sick, and workplace wellness programmes can encourage good health. Preventive work- oriented health measures such as regular medical screening, fitness assessment, exercise and nutrition prescriptions are associated with better employee health. Wellness programmes can also incorporate measures to reduce stress; as any measure put in place to reduce stress will in turn invariably reduce teacher absenteeism.

2.5.9. Increased professionalisation of teaching

The trend towards the professionalization of teaching in Nigeria should be accelerated. To this end, the National policy to make the Nigeria Certificate of Education (NCE) the minimum teaching qualification should be vigorously pursued and enforced until one hundred percent compliance is achieved.

Professionalization of teaching will not only enhance the esteem of professionally qualified teachers but also make them more accountable, as they now have to also abide by the ethics of their profession. It is therefore imperative for professional teachers to be recognized as professionals in their field of work and accorded the recognition and prestige enjoyed by other mainstream professionals in the Nigerian society.

(Chapman, 1994: 39) believes that providing of rewards and incentives for good attendance reduces absenteeism, similarly Norton (1998)found in one school district that incentives produced a significant improvement from an average of 7.2 days of absence in one year dropping to an average of 5.3 days the following year (Reddy et al, 2010:26). The Meritorious Attendance Recognition Programme in the USA, led to average staff absence drop from 7.6 days per employees to 6.4 days in one year, thus reducing teacher's substitute costs. (Reddy et al, 2010: 26). These findings confirm that incentives or rewards are effective in reducing teacher absenteeism

Research indicates that schools with the best infrastructure had teacher absence rates that were approximately half that of schools with the worst infrastructure (Reddy et al, 2010: 27). Thus all attempts should be made to improve conditions for teachers.

Recommendation from the study conducted by (Chapman, 1994: 41) state that attendance policies need to be published and school-record keeping systems strengthened. Teachers need to know the policies and procedures by which they are to abide and authorities must be able to identify offending teachers in a timely manner. Policies only work if people perceive that they are enforced, fairly and soon after the offence.

Bowers (2001: Vol 1*)* details six elements which distinguish between 'successful' and 'unsuccessful' policies. 'Successful' policies are said to: demonstrate

management's commitment to staff health, safety and welfare; encourage 'ownership' of the policy through staff consultation; be applied to everybody in the organisation; make each person's role and responsibilities clear; involve training which ensures consistent but flexible implementation of procedures; remove 'incentives' for absence.

2.6. Conclusion

Normally, acceptable reasons for absenteeism include ill-health, pregnancy and family problems. Since it is impossible to totally eliminate absenteeism in the workplace; then the only viable option is to manage it effectively in such a way as to keep it low and make it less disruptive to organizational life. The conclusion to draw from this study is that absenteeism is significantly related to job satisfaction, meaningfulness of work, and job stress respectively. Job satisfactions, meaningfulness of work and job stress are therefore major determinants of absenteeism. As such, to reduce the rate of teacher absenteeism in government schools, measures must be put in place to ensure increased job satisfaction, high status and low stress for teachers. In any organization people are needed to accomplish work, some degree of absenteeism is inevitable. Even the most productive and reliable of employees may sometimes take time off work or miss work entirely.

3. CHAPTER 3: RESEARCH DESIGN

3.1. Introduction

This chapter reflects the methodology used in the study and a detailed explanation of the population and instrument used to collect data, it explains how data were organised and analysed.

3.2. Research Design

Mouton and Marais (1998: 124) defines a research design as an exposition or blue print of a research project. This implies that the research project is structured beforehand to give clear planning regarding how to gather data organize and analyse data for investigation in such a way that validity is maximized.

Qualitative research employs an inductive research strategy, i.e .researchers develop concepts, insights and understanding from patterns in data, rather than (deductively) collecting data to assess preconceived models, hypothesis, or theories. Often qualitative studies are undertaken because there is lack of theory or existing theory fails to adequately explain a phenomenon. There are thus no hypothesis to be deduced from theory to guide the investigation. In contrast to deductive researchers who hope to find data to match a theory, inductive researchers hope to find a theory that explains their data, (White, 2003: 15).

Content analysis was used for this study. Archival data from Persal System of leave taken by educators from Ngaka Modiri Molema District in the North West province from 2013 to 2015 were analysed. Data of Ngaka Modiri Molema educators of sick leave exceeding 36 days from the SOMA Health Risk Manager for 2013 to 2015 were also analysed. The content analysis led to solutions of how to reduce teachers absenteeism and it's effect on learners.

3.3. Identifying and Developing Appropriate Measuring Instruments

According to Mouton and Marias (1992:76-69) content analysis requires the systematical grouping of the content or information in communicated messages. The messages are then arranged in pre-identified categories to enable their quantitative analysis. Chadwick et al (1984: 248) proposed that the following steps be followed in a content analysis procedure:

i) A specific proposal of the problem in the form of a systematic statement needs to be made,

ii) Sources of communication relevant to the research question need to be identified and located. The perimeter of the population or limits of a sample needs to be clearly defined, before selecting those sources

iii) Selection of a unit, or units of analysis that are to be identified from the sources. A unit is a specified component of a message, that will be coded in the respective categories (e.g. any reference to unions)

iv) Selection of the specific categories into which the units of analysis need to be coded (e.g. input, output, transformation).

- Categories may take the form of single word, sentences, paragraphs, scenes, ideas, concepts, themes, or entire messages.
- Preliminary examinations will suggest appropriates units
- Categories must be described in sufficient detail to ensure consistency
- To avoid ambiguity categories must not have the same meaning,
- Categories must be exhaustive so that all units can be clustered into a category
- A miscellaneous category may be added for units that occur rarely, or fall outside the defined categories.

v) Train coders

vi) Evaluate reliability, where needed

vii) Analysis of data and writing of report.

3.4. Definition of sample group, application of measuring instruments

The detailed records of Ngaka Modiri Molema teachers' leave taken between 2013 to 2015 were analysed in terms of their type of leave, number of leave days taken, trends of which days of the week leave was taken, and the total average number of absent days in year. The analysis was done per Area Office that is Litchtenburg, Kgetleng, Zeerust, Rekopantswe, and Mahikeng. An Area Office is a sub-District which is constituted by a number of circuits. A circuit is constituted by a group of 25 to 30 schools clustered together. The area office data will then be collated to provide a District analysis.

3.5. Data Capturing and Statistical Analysis

Data was captured on a personal computer during the process of analysis. Content analysis was applied as it required the systematical grouping of the content or information. This information was then arranged in identified categories, to enable their qualitative analysis. Descriptive quantitative research involves either identifying the characteristics of an observed phenomenon or exploring possible correlation among two or more phenomenon. According to Leedy et al (2001: 191) the descriptive research examines the situation as it is and it does not involve changing or modifying the situation under investigation, nor is it intended to detect cause-and-effect relationship.

3.6. Detailed analysis of findings

According to Leedy and Ormrod, (2005:134-136) the following steps are required to analyse data:

- Categorisation of data: Data categorized into clusters for meaningful interpretation
- Detailed organization of each case: Each case is studied specifically in its own context in order to arrange the specific details and occurrence of activities

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- Interpretation of each case: In each case, the relevant documents were interpreted to ascertain the occurrence of certain activities in relation to certain meanings and perceptions.
- Pattern identification: Themes were established through identification of certain patterns that occur within the school system. The interpretation of data leads to the characterisation of each case, thus enabling the building up of the information required to accomplish, through data analysis, the relevant information needed.
- Generalisation through each case synthesis: The construction of each case under investigation was given an overall picture, thus providing a clear conclusion that lacks doubt.

3.7. Conclusion

The highest type of leave taken by educators were identified and critically analysed through content analysis method. The analysis was compared to the available literature to develop recommendation to reduce high absenteeism rate.

The next chapter presents the data and analysis of the data.

4. CHAPTER 4: DATA PRESENTATION AND ANALYSIS

4.1. Introduction

The purpose of this chapter is to present the data from the study. The chapter also reflects the analyses of the archival Persal data of leave taken by educators from Ngaka Modiri Molema from 2013 to 2015. The analysis will provide a picture of the extent of leave taken by the number of educators, number of days, per leave type, and cost implications. The data are presented in graphs.

Section A

4.2. Number of educators who took leave per leave type 2013

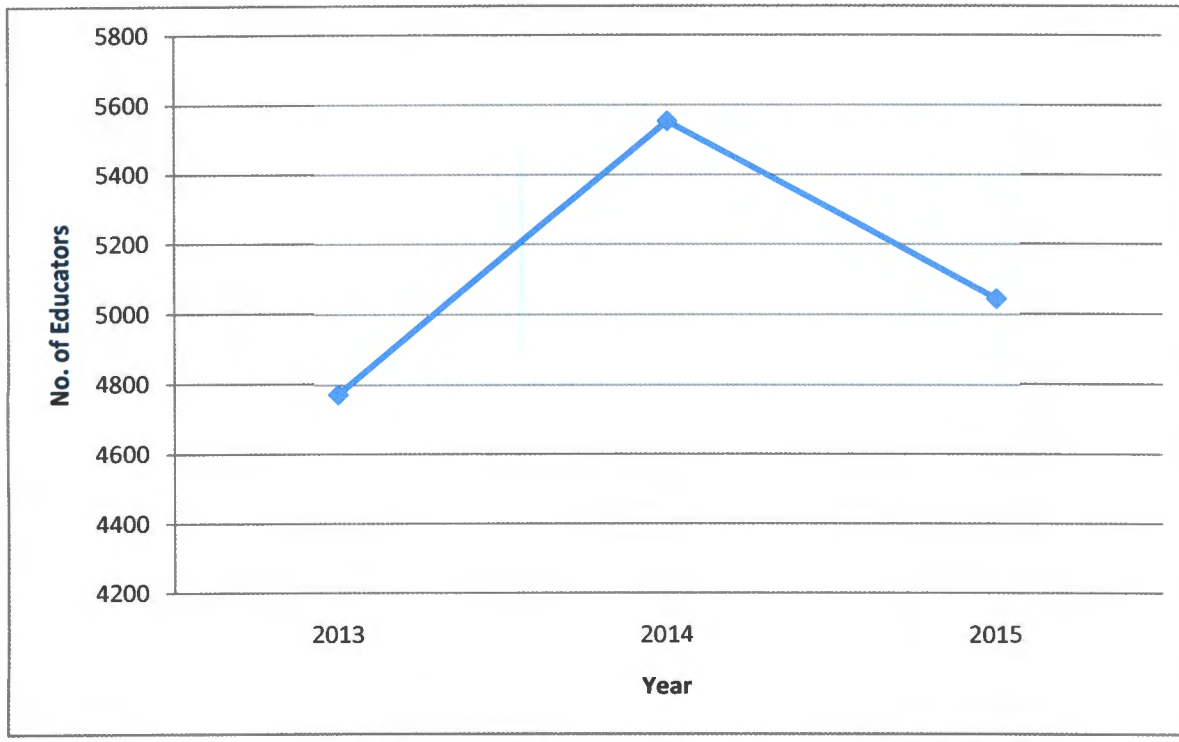

Figure 4.1 illustrates the total number of educators who took leave in the years 2013, 2014, and 2015 in the Ngaka Modiri Molema district. The total number of educator who took leave in 2013 are 4772. The year with the highest number of educators who took leave was in 2014 with 5552 educators, although the number declined in 2015, with 5044 educators, but it was still higher than the number of educators who took leave in 2013.

4.3. Number of leave days taken between 2013 and 2015

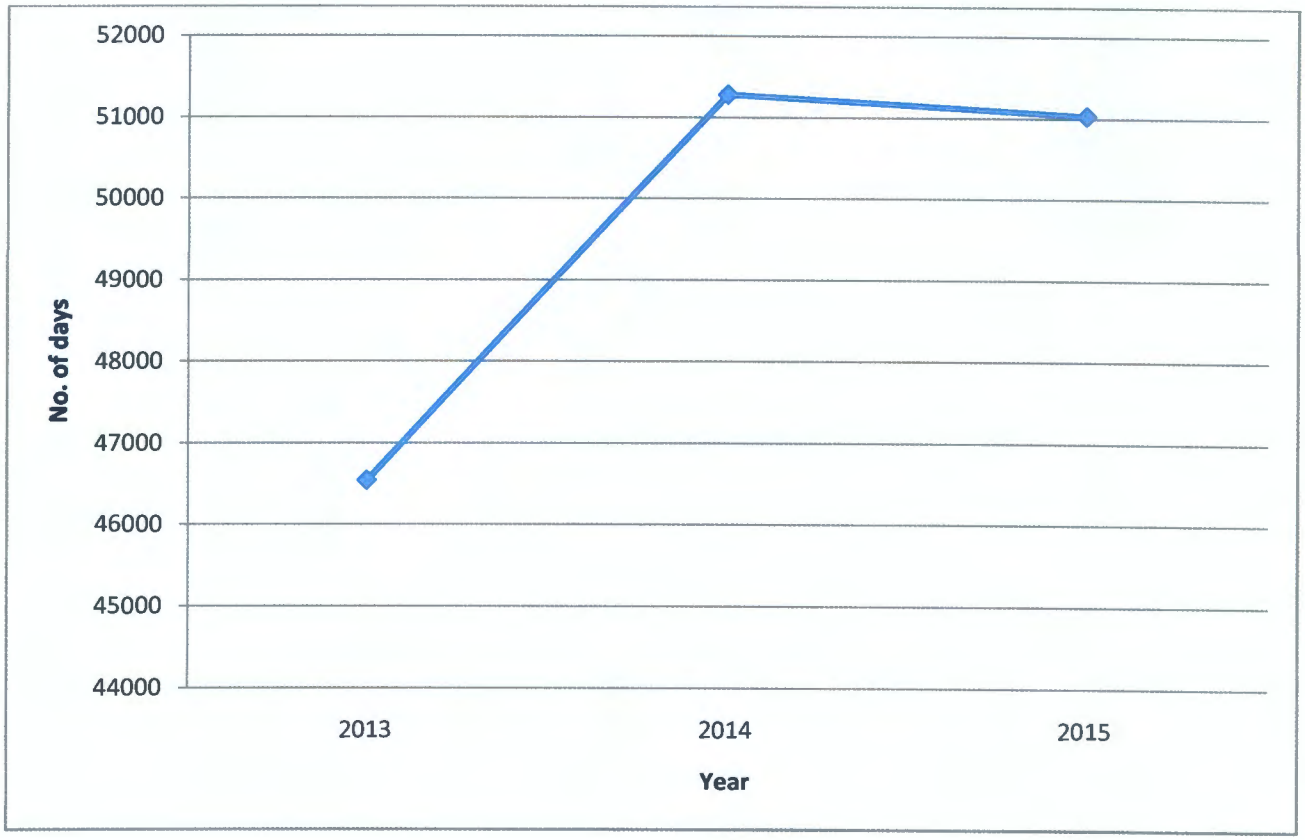

Figure 4.2 illustrates the number of leave days taken by the Ngaka Modiri Molema educators from 2013 to 2015. There were 46,538 leave days taken in 2013. The number of leave days taken rose to 51,275 in 2014.The figure shows that there was a drastic increase in the number of leave days taken from 2013 to 2014, more leave days were taken in 2014, and a slight decline of the number of leave days taken in 2015 with 51,026 days.

4.4. Cost incurred (Rm) for leave days during 2013 to 2015

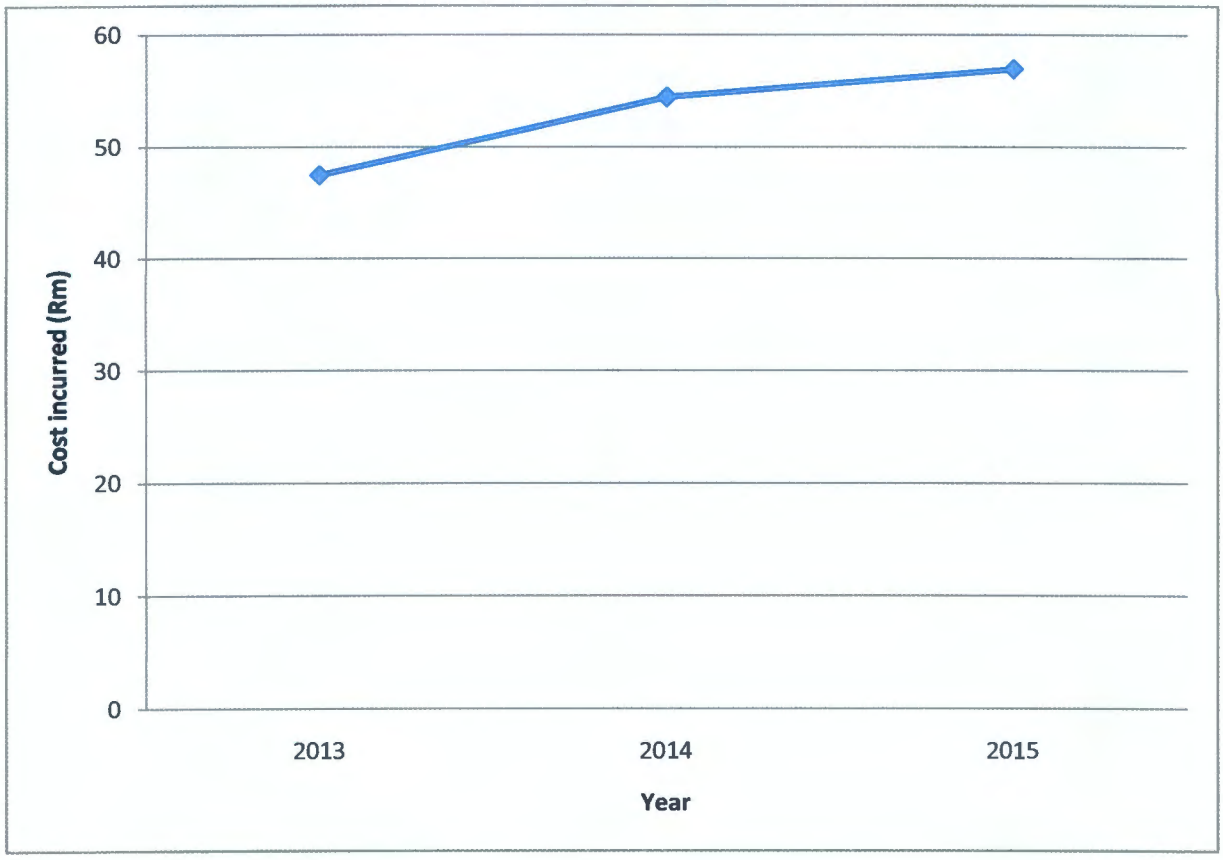

Figure 4.3 illustrates the cost implications for leave days taken from 2013 to 2015. The cost implications of leave days taken in 2013 was R47,4 million. The cost implications rose to R51,2 million in 2014, and further increased to R56,8 million in 2015.The figure shows an increase in the financial implications from 2013 to 2014 and a further increase from 2014 to 2015.

4.5. Individual leave types:

(a) Family responsibility leave

Figure 4.4. No of educators who took family responsibility leave during 2013 to 2015

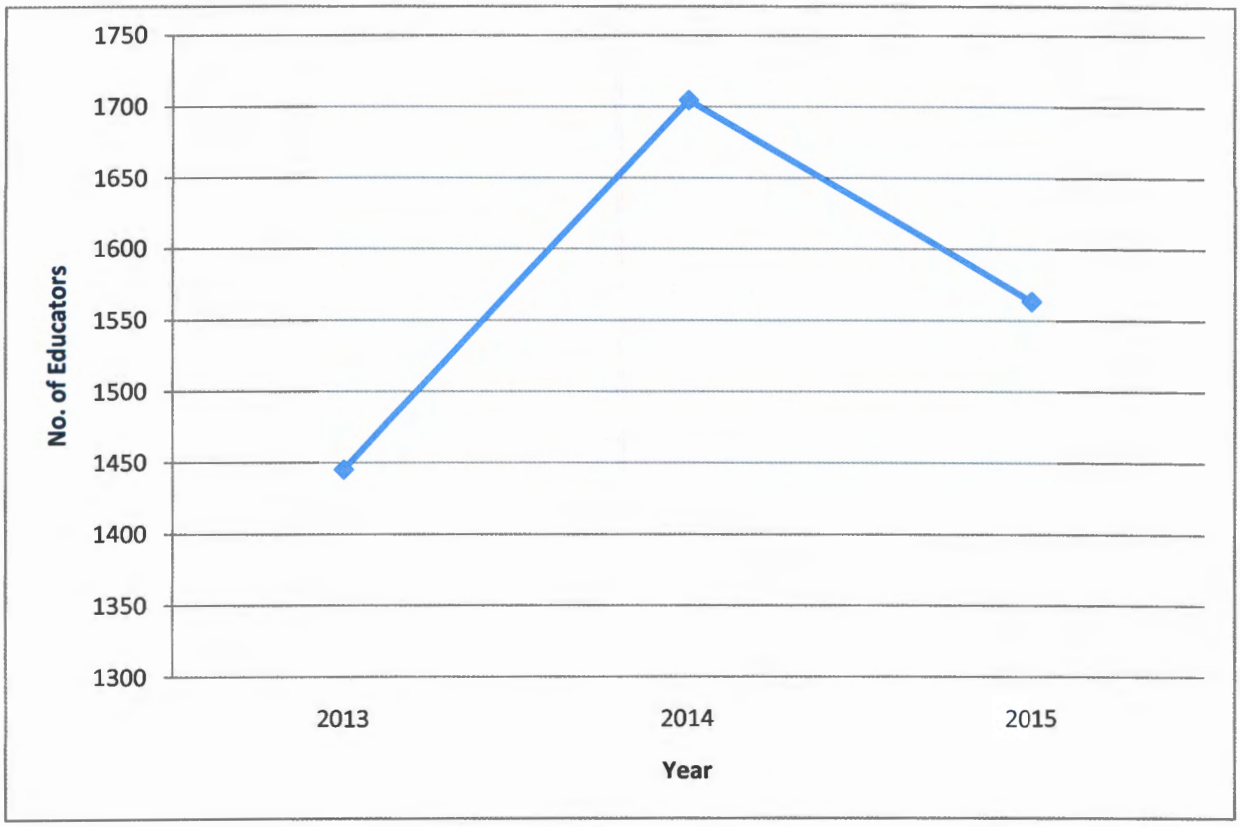

Figure 4.4. illustrates the number of educators who took family responsibility leave from 2013 to 2015. The figure shows that 1445 educators took family responsibility leave in 2013; the number rose to 1704 in 2014, and slightly declined to 1563 in 2015. More teachers took family responsibility leave in 2014 compared to the years 2013 and 2015.

Figure 4.5 Family responsibility leave days taken during 2013 to 2015

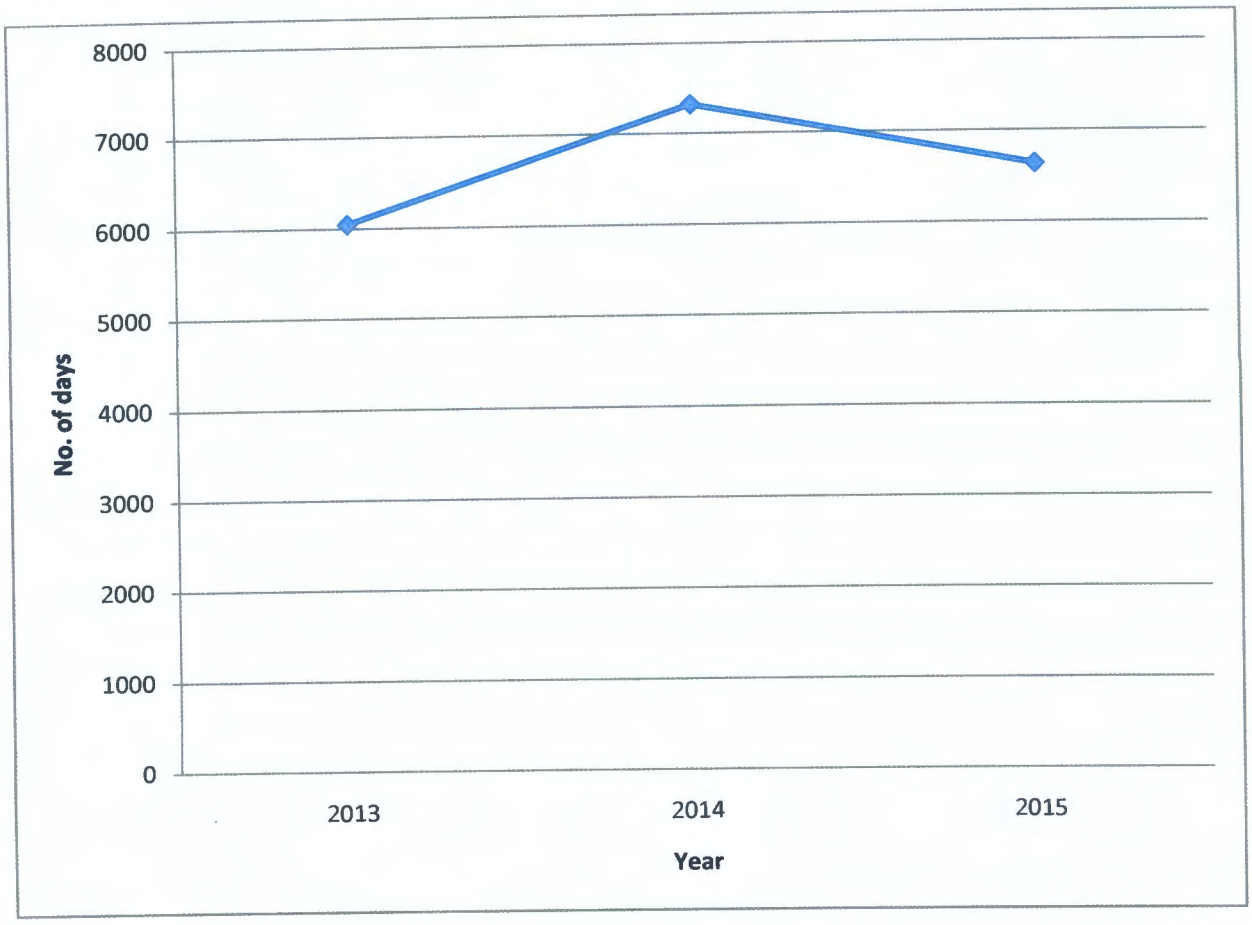

Figure 4.5 illustrates the number of family responsibility leave days taken from 2013 to 2015. In 2013 the number of family responsibility leave days taken were 6041. The number of family responsibility leave days taken rose to 7313 in 2014. There was a slight decline of the number of family responsibility leave days taken in 2015 to 6630. The year 2014 has the highest number of family responsibility leave days taken.

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4.6. Cost incurred (Rm) for family responsibility leave during 2013 to 2015

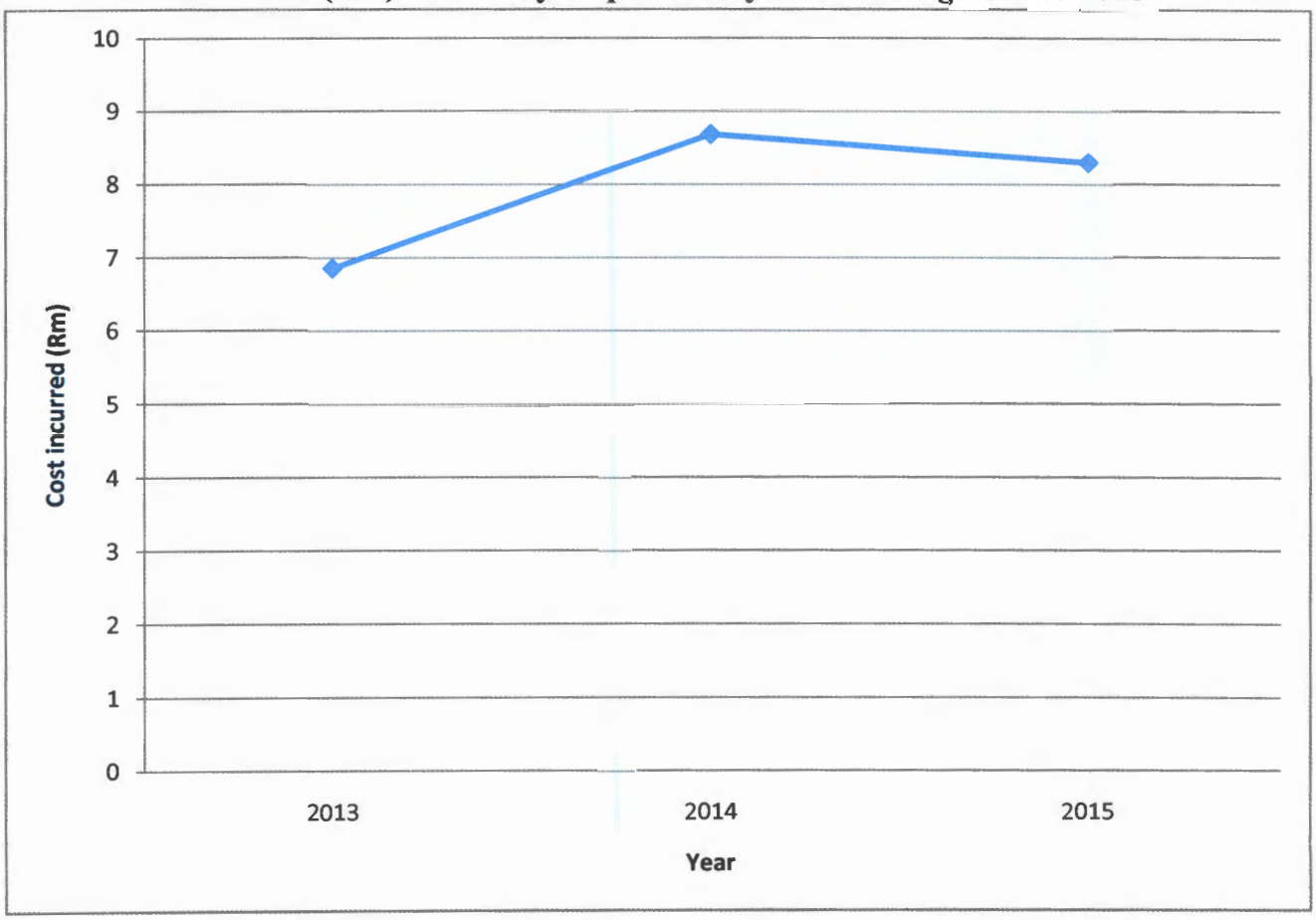

Figure 4.6 illustrates the cost implications of family responsibility leave days taken from 2013 to 2015. The cost implications of family responsibility leave taken in 2013 is R6,8 million. The cost increased to R8,6 million in 2014. There is a slight decrease of the cost implications of family responsibility leave taken in 2015 to R8,2 million. The decrease is very insignificant, because it shows very little decrease in the cost implications.

(b) Sick-full pay leave

Figure 4.7 No of educators who took sick-full pay leave during 2013 to 2015

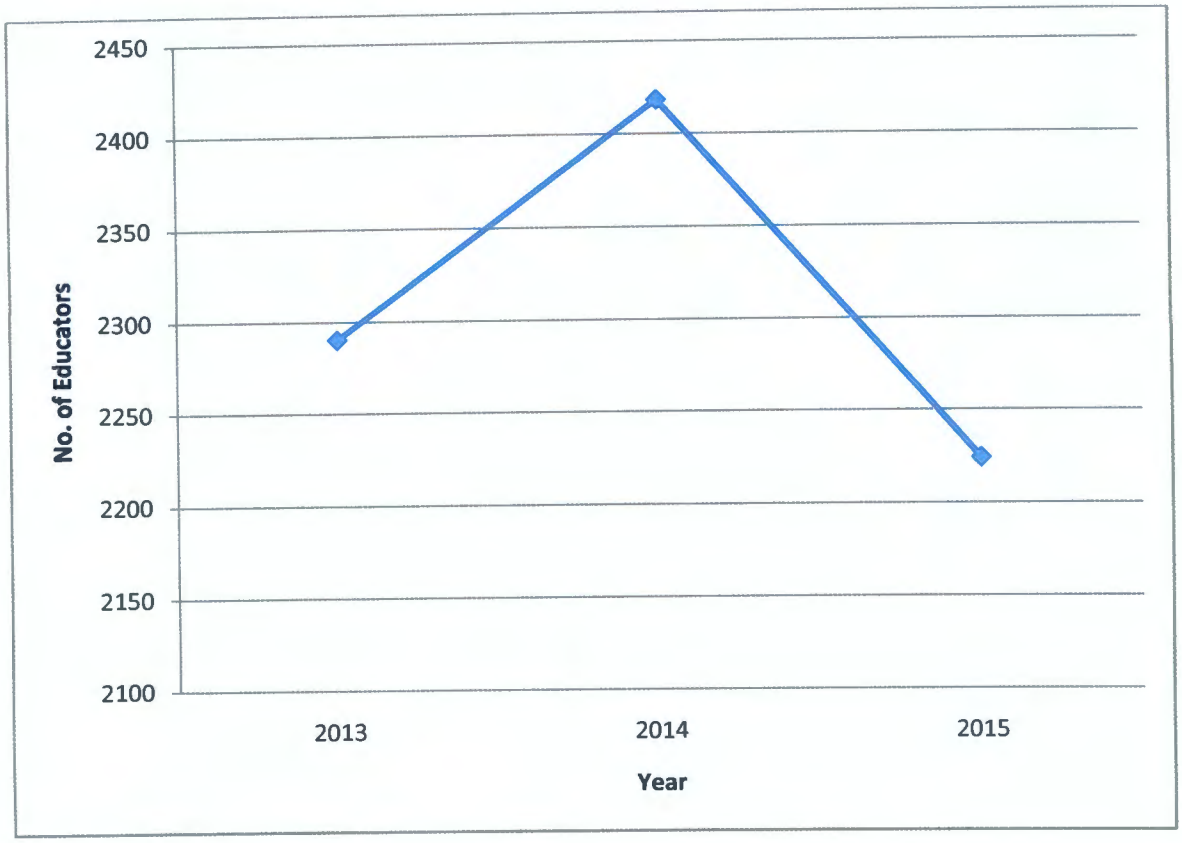

Figure 4.7 illustrates the number of educators who took sick leave with full pay from 2013 to 2015. A total of 2290 educators took sick leave with full pay in 2013. The number of educator who took sick leave with full pay increased to 2418 in 2014. The number of educator who took sick leave with full pay decreased to 2224 in 2015. There highest number of educators who took sick leave with full pay is in 2014. There is a slight decrease of the number of educators who took sick leave with full pay for 2015 compared to 2013.

4.8 No of sick-full pay leave days taken during 2013 and 2015

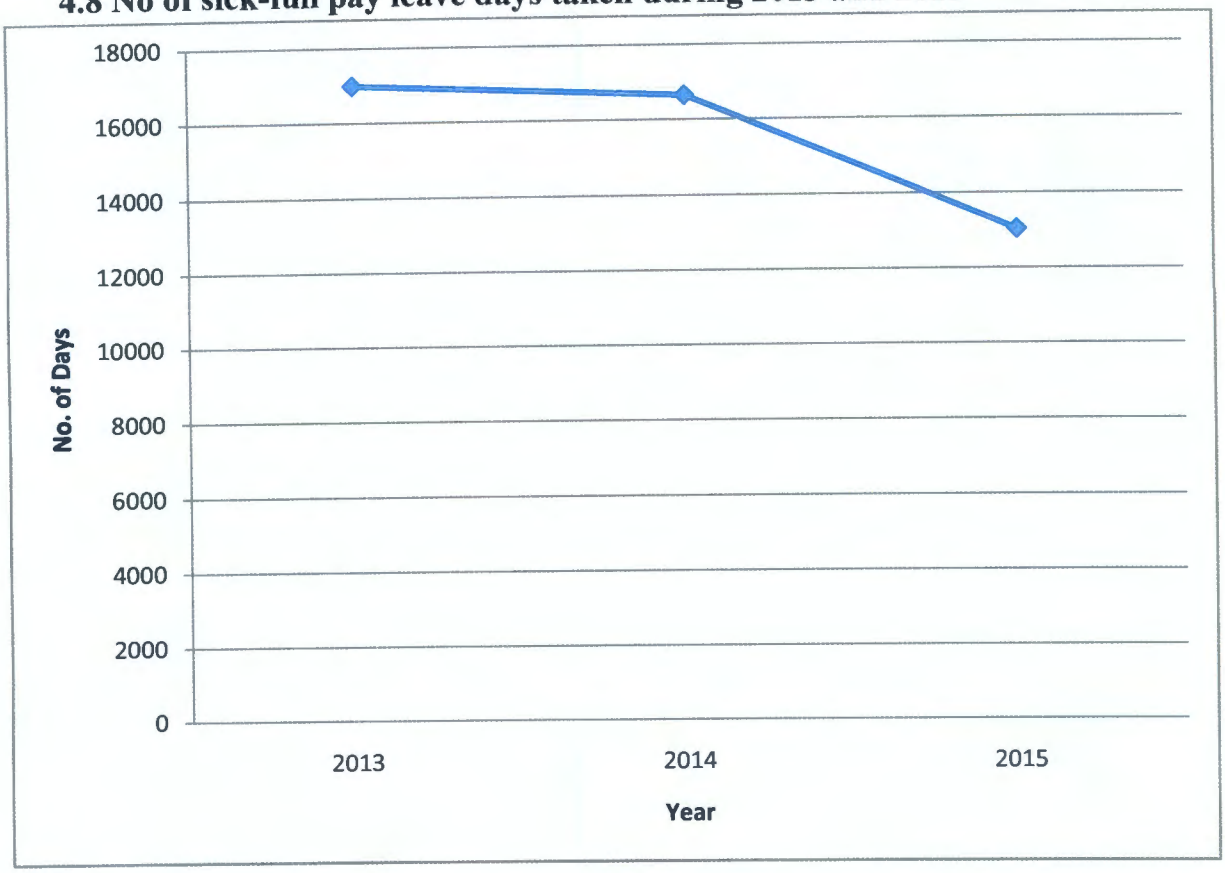

Figure 4.8 illustrates the number of sick leave days with full pay from 2013 to 2015. In 2013 there were 169, 73 sick leave days with full pay that were taken by educators in the Ngaka Modiri Molema district. There is a slight decline of the number of sick leave days with full pay that were taken in 2014 to 166,35 days, a very insignificant decline. However in 2015 the number of sick leave days with full pay further declined to 130,24 days.

4.9 Cost incurred (Rm) for sick-full pay leave during 2013 to 2015

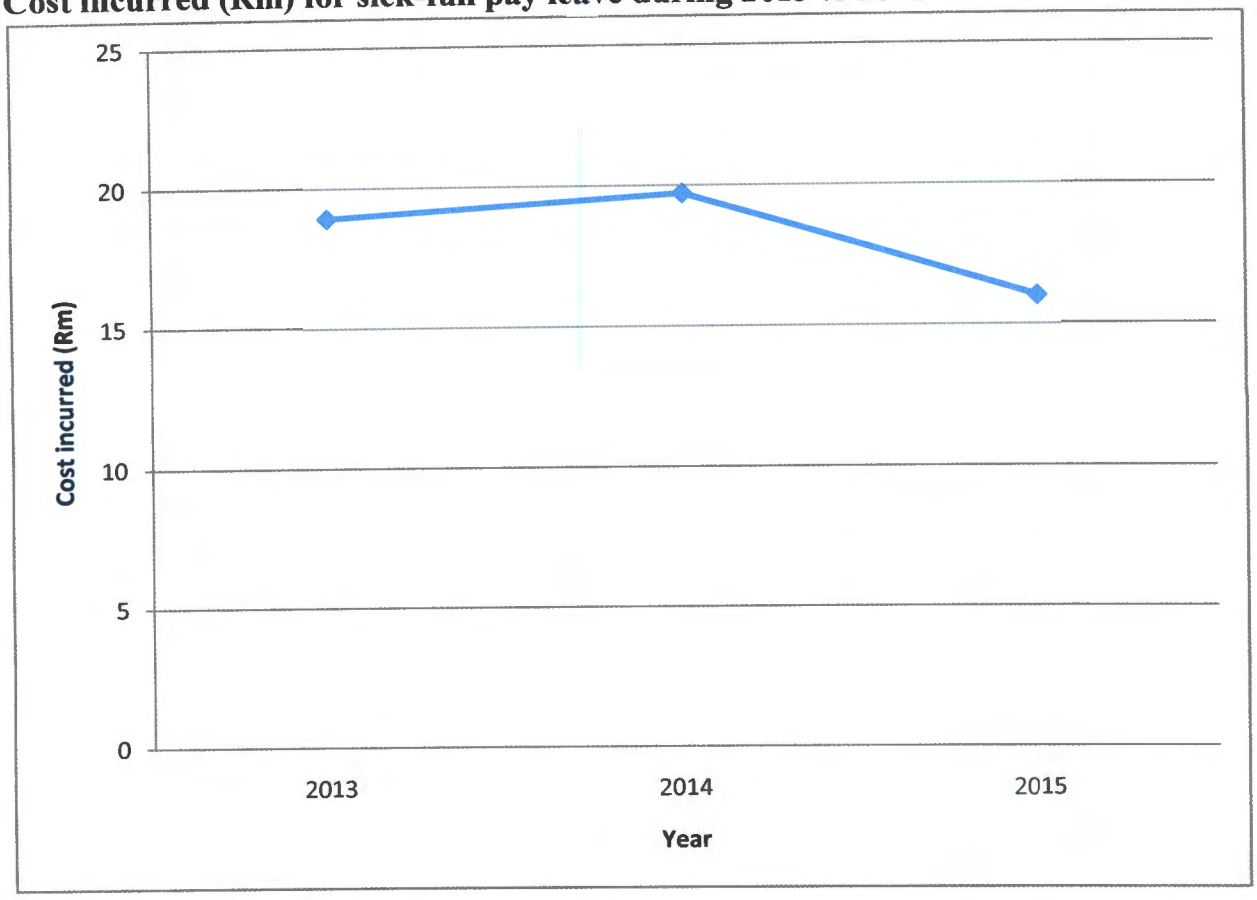

Figure 4.9 illustrates the cost implications of sick leave with full pay taken from 2013 to 2015.The cost implications of sick leave with full pay for educators in the Ngaka Modiri Molema District in 2013 is R18, 9 million. The cost increased in 2014 to R19, 9 million. There is a slight decrease to R16 million in 2015.

(c) Vacation-full pay leave

4.10 Number of educators who took vacation full pay leave during 2013 to 2015

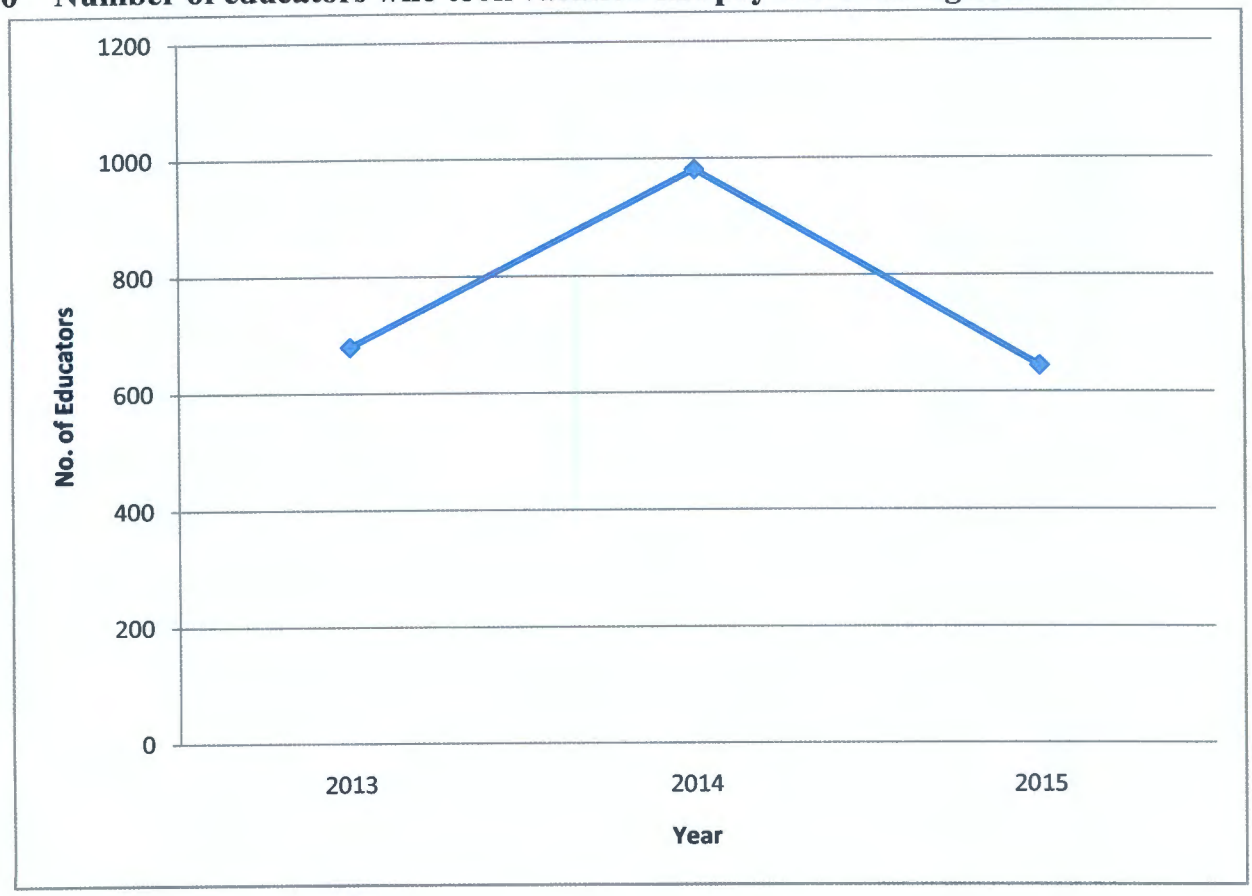

Figure 4.10 illustrates the number of educator who took vacation leave with full pay from 2013 to 2015.The number of educators who took vacation leave with full pay in 2013 is 679. The number increased to 980 educators who took vacation leave with full pay in 2014. In 2015 the number of educators who took vacation leave with full pay decreased to 644.

4.11 Number of vacation – full pay leave days taken during 2013 to 2015

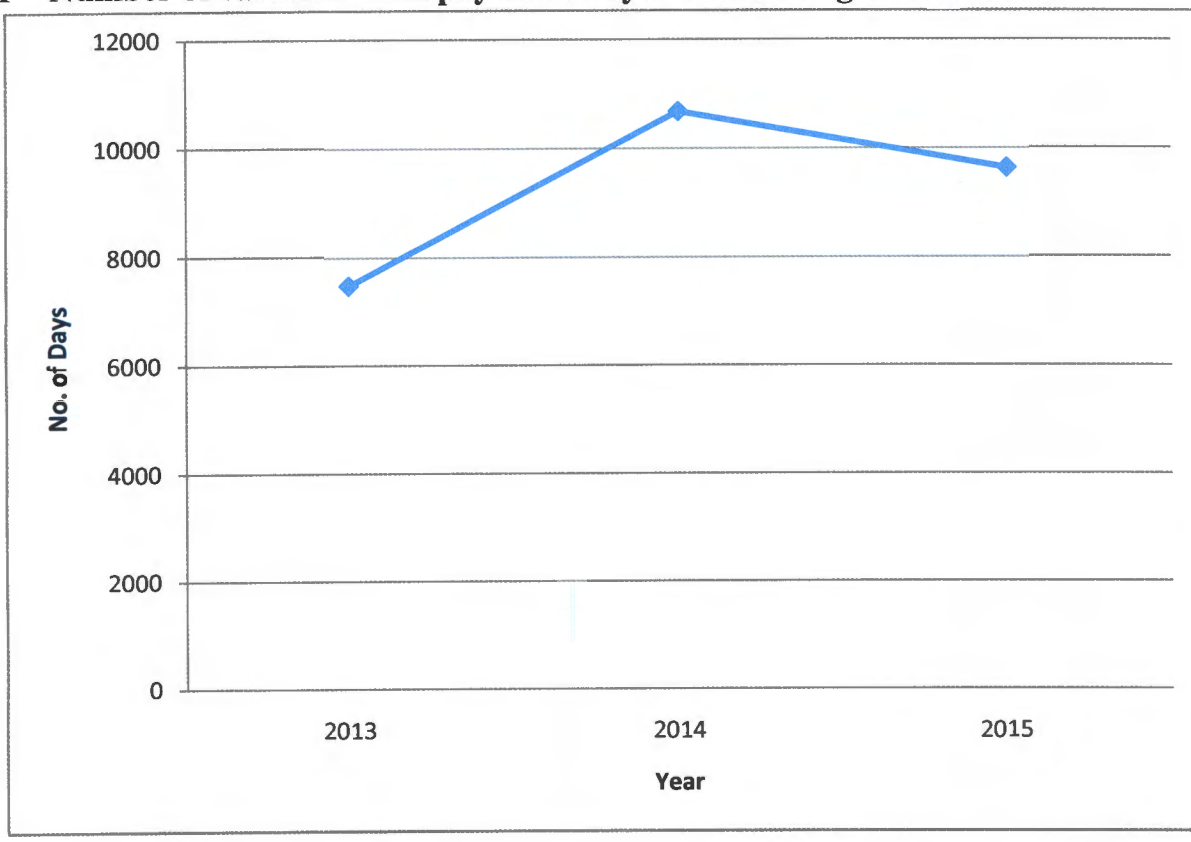

Figure 4.11 illustrates the number of vacation with full pay days taken from 2013 to 2015. The number of vacation with full pay days taken for 2013 is 7479. The number of vacation leave with full pay increased to 10,675 days in 2014. There was a slight decrease of the number of vacation leave days with full pay in 2015 to 9631 days.

4.12 Cost (Rm) incurred for vacation – full pay leave during 2013 to 2015

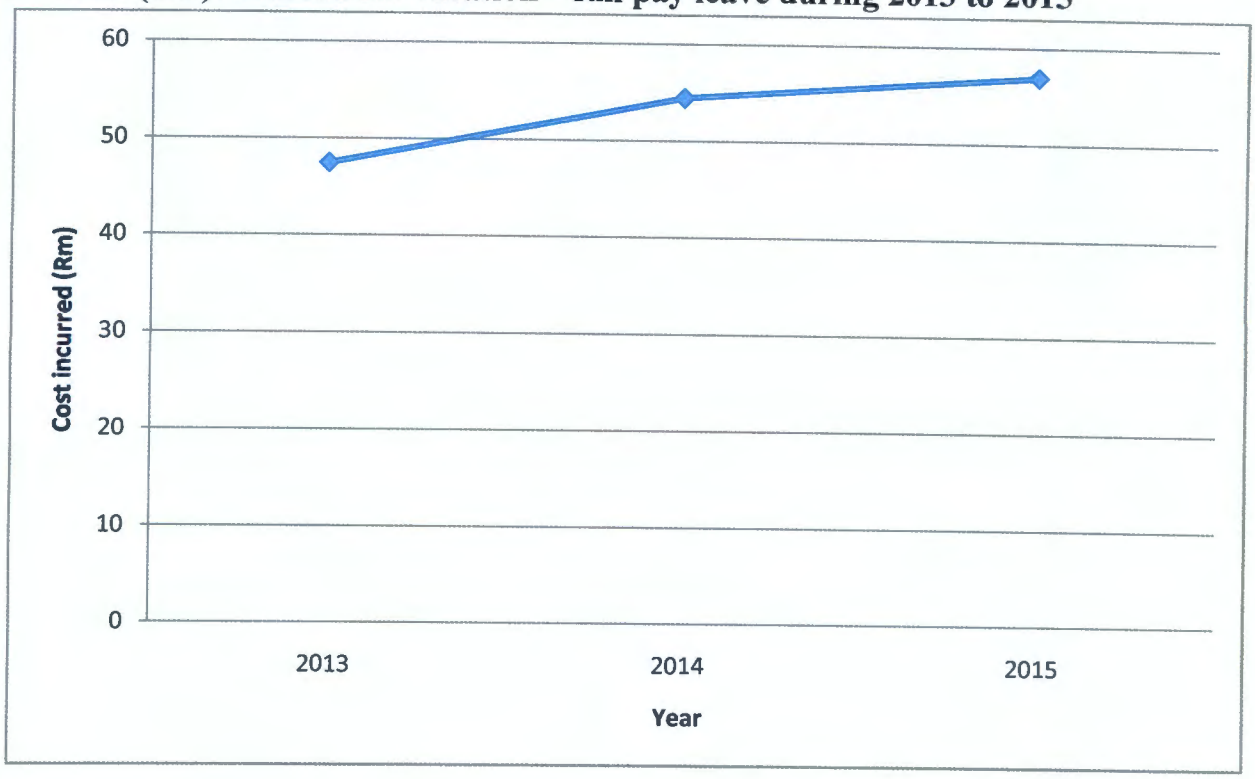

Figure 4.12 illustrates the cost implications of vacation leave with full pay taken from 2013 to 2015.The cost implications of vacation leave with full pay for educators in the Ngaka Modiri Molema District in 2013 was R7,1 million. The cost of vacation leave with full pay increased to R10, 3 million in 2014. There was a very insignificant increase of the cost of vacation leave with full pay in 2015 at R10,6 million.

4.13 ANALYSIS OF SHORT TERM AND LONG TERM INCAPACITY LEAVE 2013 TO 2015 FINANCIAL YEARS IN THE NGAKA MODIRI MOLEMA DISTRICT

The following analysis is for employees who have applied for incapacity leave granted conditionally at the employer's discretion, as provided for in the Leave Determination and Policy and Procedure on Incapacity Leave and Ill-health Retirement (PILIR). An employee who has exhausted his/her normal sick leave, referred to in the Leave Determination, during the prescribed leave cycle and who according to the treating medical practitioner requires to be absent from work due to a temporary incapacity, may apply for temporary incapacity with full pay on the applicable forms prescribed in terms of PILIR in respect of each occasion.

4.14 Analysis of information on graphs and tables

Leave cycle (Days absent from work): 2013 - 2015

Type of leave: Short Incapacity Leave

A short incapacity leave refers to, employee absence for not longer than 29 working days per occasion, after the normal sick leave credit has been exhausted in a sick leave cycle.

Sample size: N = 161 (All teachers who took such leave).

Table 1: Day on which leave starts

Start day	Frequency	%
Monday	52	32.3
Tuesday	38	23.6
Wednesday	17	10.56
Thursday	30	18.63
Friday	24	14.91
Total	**N = 161**	**100**

Figure 4.13: Day on which leave starts

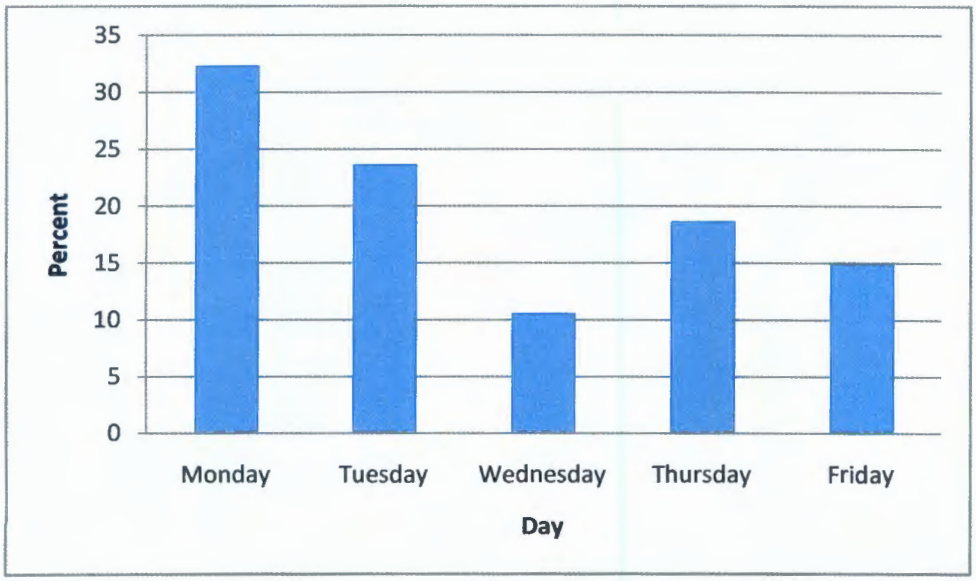

Figure 4.13 illustrates that 32% of the educators who took leave, started their leave on Mondays and Tuesdays.

Table 2: Days absent from work

Duration	**Frequency**	**%**
5 days or less	120	74.53
6 - 10 days	15	9.32
11 - 15 days	7	4.35
16 - 20 days	9	5.59
21 - 25 days	4	2.48
26 - 29 days	6	3.73
Total	**N = 161**	**100**

Figure 4.14: Days absent from work

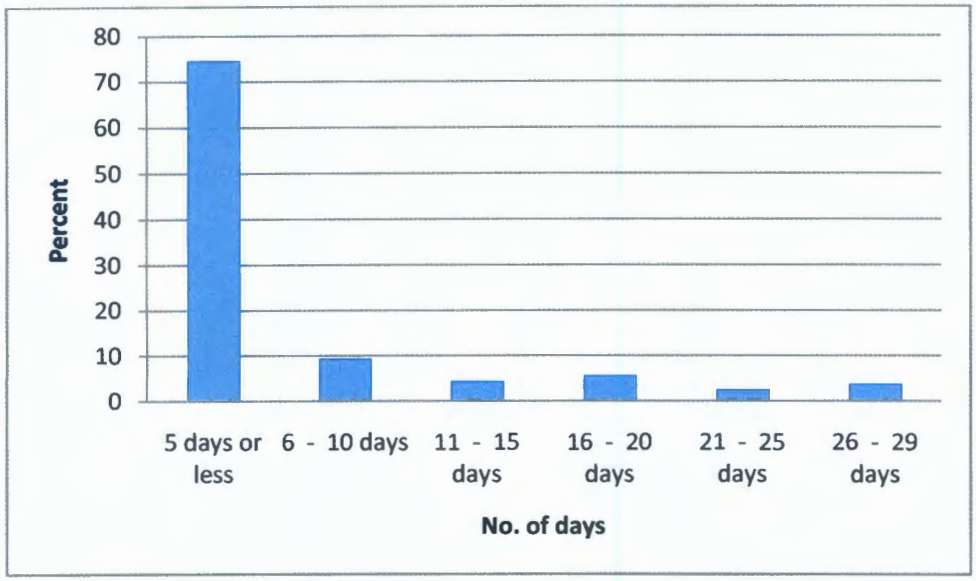

Figure 4.13 illustrates the number of days absent from work in which short incapacity leave was applied for after exhausting the 36 normal sick leave days in a three year cycle. The figure shows that at least 120 (74%) educators applied for short incapacity leave for five days or less, nine educators applied for between 16 and 20 days, four educators applied for between 21 and 25 days, and only six applied for between 26 and 29 days.

Table 3: Age category

Age category	**Frequency**	**%**
35yrs and below	3	1.86
36 - 40yrs	5	3.11
41 - 45yrs	47	29.19
46 - 50yrs	36	22.36
51 - 55yrs	41	25.47
56yrs and above	29	18.01
Total	**N = 161**	**100**

Figure 3: Age category

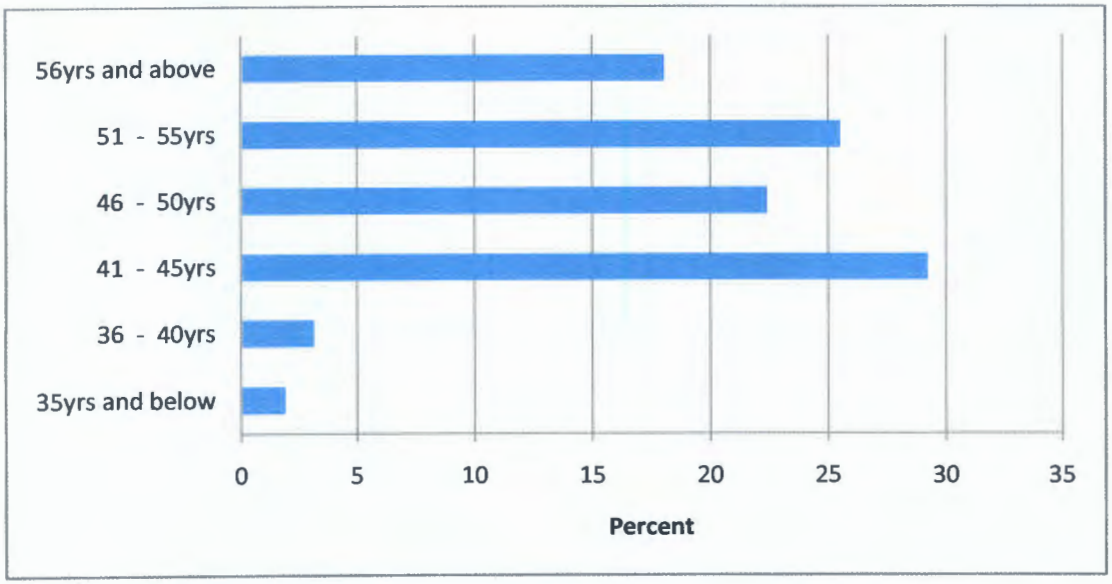

Figure 4.14 illustrates the age category of educators who applied for short incapacity leave from 2013 to 2015. The figure the highest number of educators who applied for short incapacity leave are between the ages of 41 to 45 years at 29%, followed by the age category of between 51 and 55 years at 25%.

Section B: Chi - square Test of Independence

This test of independence is concerned with the relationship between two different factors (or categories) in a population under study. There is a significant relationship between the two categories if the probability value (p-value) is less than 0.05 level of significance.

Table 4: Cross-tabulation of leave days by weekly days on which leave starts.

	Day on which leave starts					
Number of days	Monday	Tuesday	Wednesday	Thursday	Friday	Total
Up to 2 days	18	18	11	20	13	80
More than 2 days	34	20	6	10	11	81
Total	52	38	17	30	24	N = 161

p-value = 0.041 chi-square statistic = 9.993df = 4

Minitab software package was used to perform a chi-square test of independence for the data in Table 4. The chi-square statistic and the p-value with 4 degrees of freedom in Table 4 are 9.993 and 0.041, respectively. Since the p-value is less than 0.05 level of significance, then the number of days employees being absent from work is significantly dependent on the days on which they take leave. It means that the majority of employees start taking leave of more than two days in the beginning of the week, whereas the majority of the employees who start taking leave of two days or less do so towards the end of the week. See Figure 4.15 below to justify this research finding).

Figure 4.15:Days on which employees took leave.

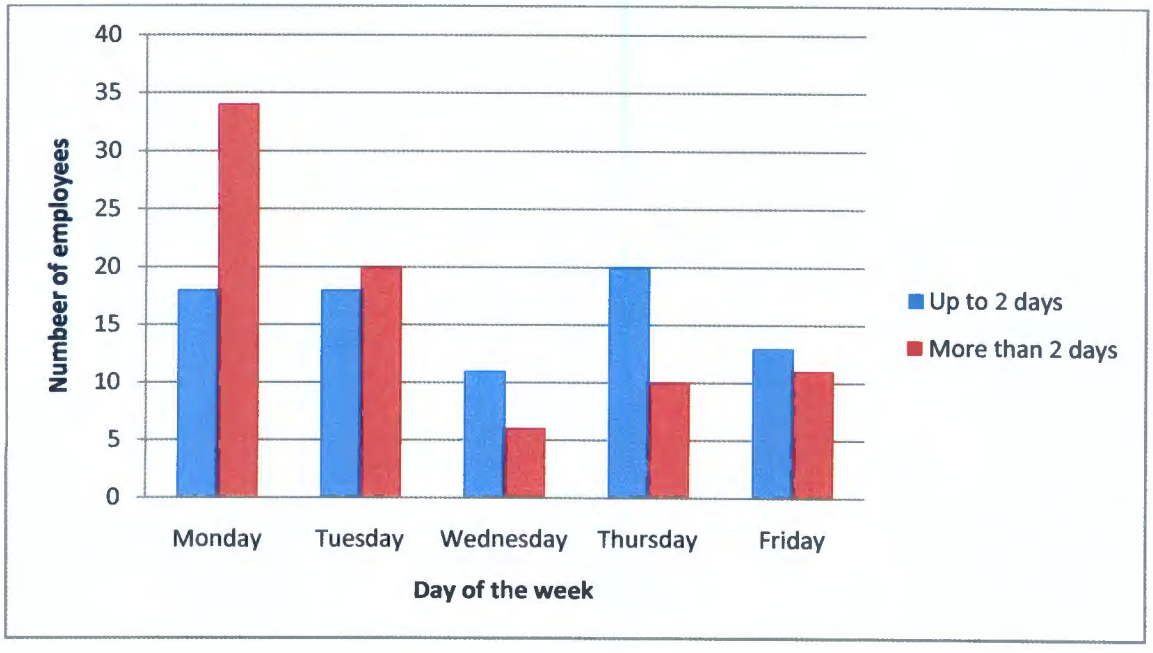

Table 5: Cross-tabulation of weekly days on which leave starts by age of employee.

	Day on which leave starts					
Age category	Monday	Tuesday	Wednesday	Thursday	Friday	Total
50yrs and below	24	23	14	16	14	91
Above 50yrs	28	15	3	14	10	70
Total	52	38	17	30	24	N = 161

p-value = 0.121 chi-square statistic = 7.295df = 4

Since the p-value in Table 5 is greater than 0.05 level of significance, then the day on which employees start taking leave is not significantly dependent on their ages.

Figure 4.16Leave days by age of employees

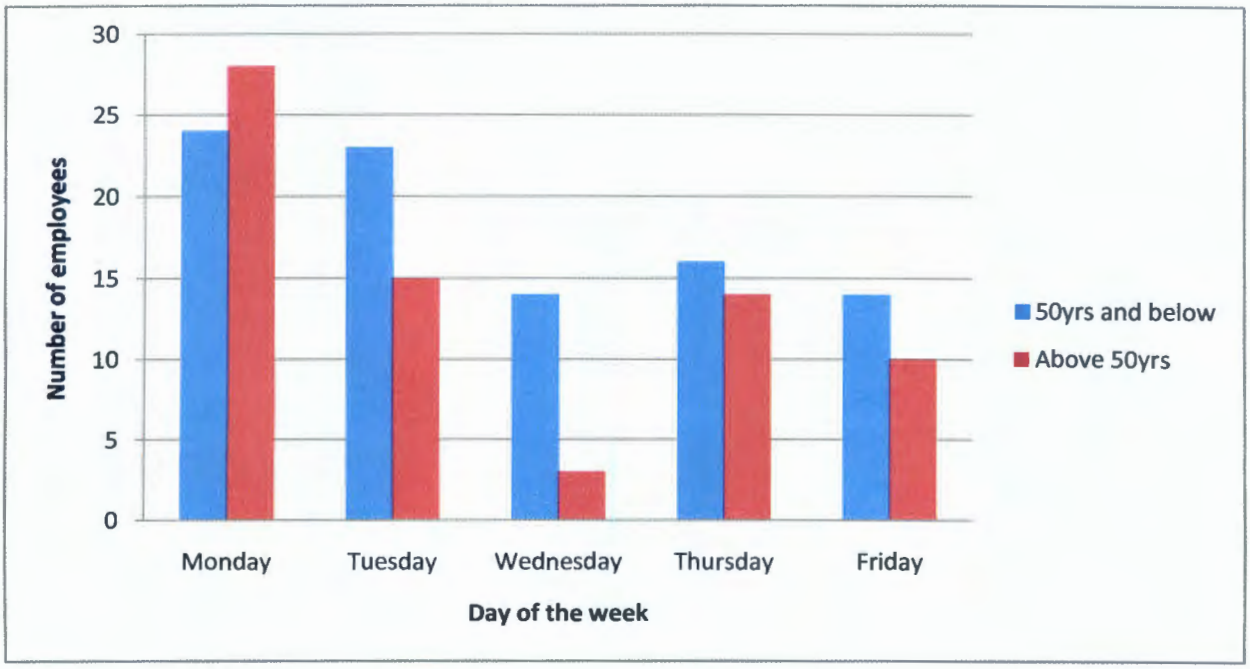

Table 6: Cross-tabulation of leave days by age of employee.

	Age category		
Leave duration	45yrs and below	Above 45yrs	Total
Up to 5 days	36	84	120
More than 5 days	19	22	41
Total	55	106	N = 161

p-value = 0.057 chi-square statistic = 3.628df = 1

Since the p-value in Table 6 is greater than 0.05 level of significance, then the number of leave days is not significantly dependent on their ages.

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Figure 4.17: Classification of employee leave days by their age

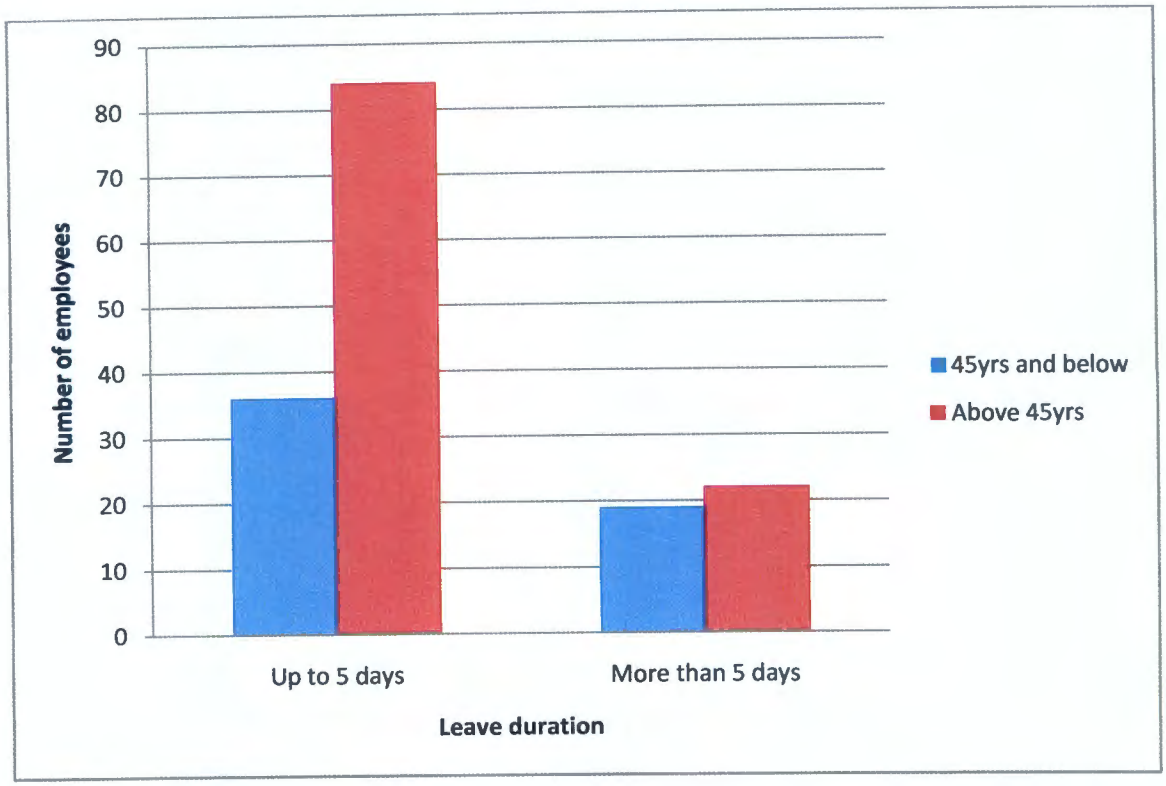

Figure 4.17 illustrates the classification of employee leave days by their age. The figure shows that the number of leave days is not significantly dependent on their ages.

4.15 Analysis of Long Incapacity Leave

Leave cycle (Days absent from work): 2013 - 2015

Type of leave: Long incapacity leave

Long incapacity leave refers to if the employee is absent for 30 working days or more per occasion, after the normal 36 sick leave days credit has been exhausted, in a leave cycle.

Sample size:N = 45

Table 6: Day on which long leave started

Start day	Frequency	%
Monday	18	40
Tuesday	7	15.56
Wednesday	4	8.89
Thursday	9	20
Friday	7	15.56
Total	**N = 45**	**100**

Figure 4.18: Day on which long leave started

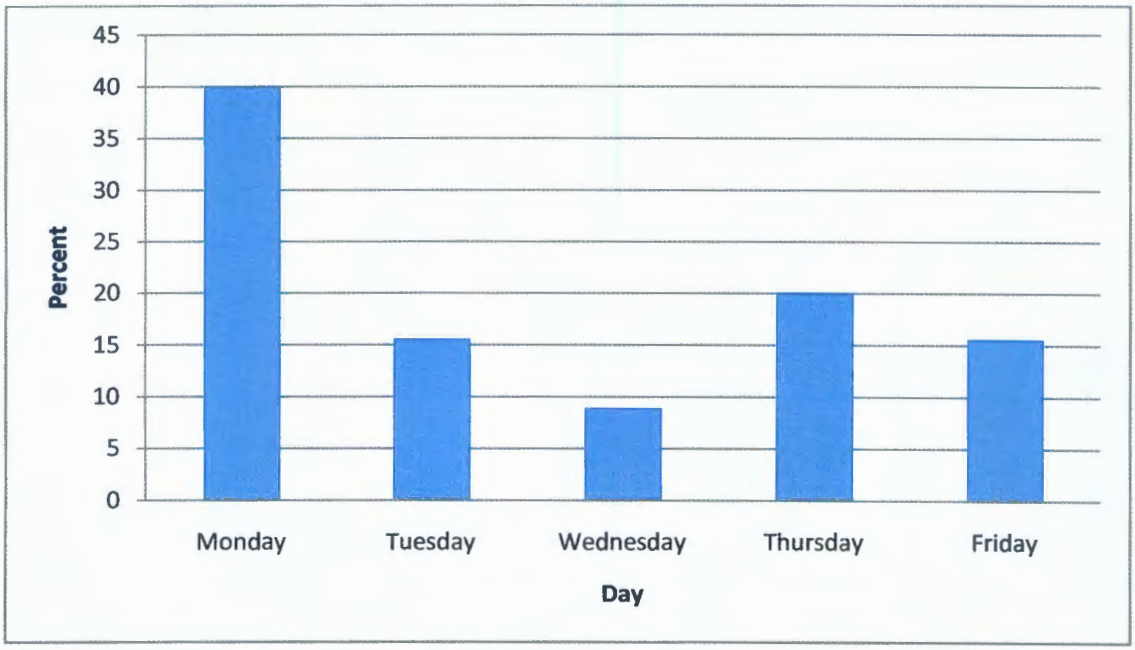

Figure 4.18 illustrates the day of the week which long leave started. The figure shows that 40% of the long leave taken from 2013 to 2015 started on a Monday, followed by Thursday with 20%. Tuesday and Friday have 15% of the long sick leave that started on these days.

Table 7: Days absent from work

Duration	Frequency	%
30 - 60 days	19	42.22
61 - 90 days	12	26.67
91 - 120 days	4	8.89
121 - 150 days	7	15.56
More than 150 days	3	6.67
Total	**N = 45**	**100**

Figure 4.19: Number days absent from work

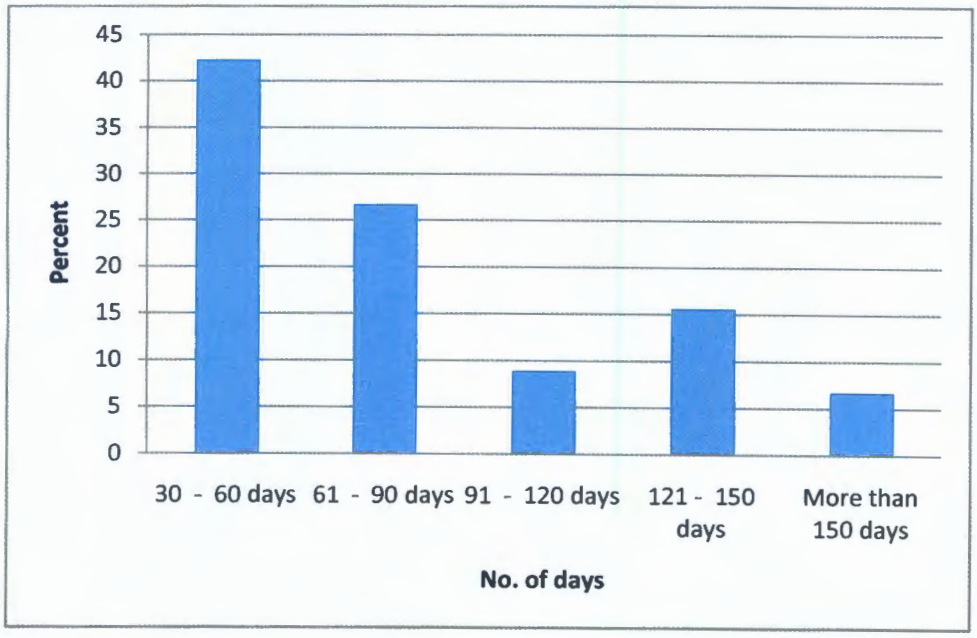

Figure 4.19 illustrates the number of days employees who had applied for long incapacity leave were absent from work. The figure shows that three employees were absent from work for more than 150 days of long incapacity leave, seven employees were absent for between 121 and 150 days of long incapacity leave, 4 employees were absent for between 91 and 120 days of long incapacity, 12 employees were absent for between 61 and 90 days of long incapacity leave, and 19 employees were absent for between 30 and 90 days of long incapacity leave.

Table8: Age category of employees who took long incapacity leave

Age category	Frequency	%
40yrs and below	4	8.89
41 - 45yrs	3	6.67
46 - 50yrs	14	31.11
51 - 55yrs	16	35.56
56yrs and above	8	17.78
Total	**N = 45**	**100**

Figure 4.20: Age category

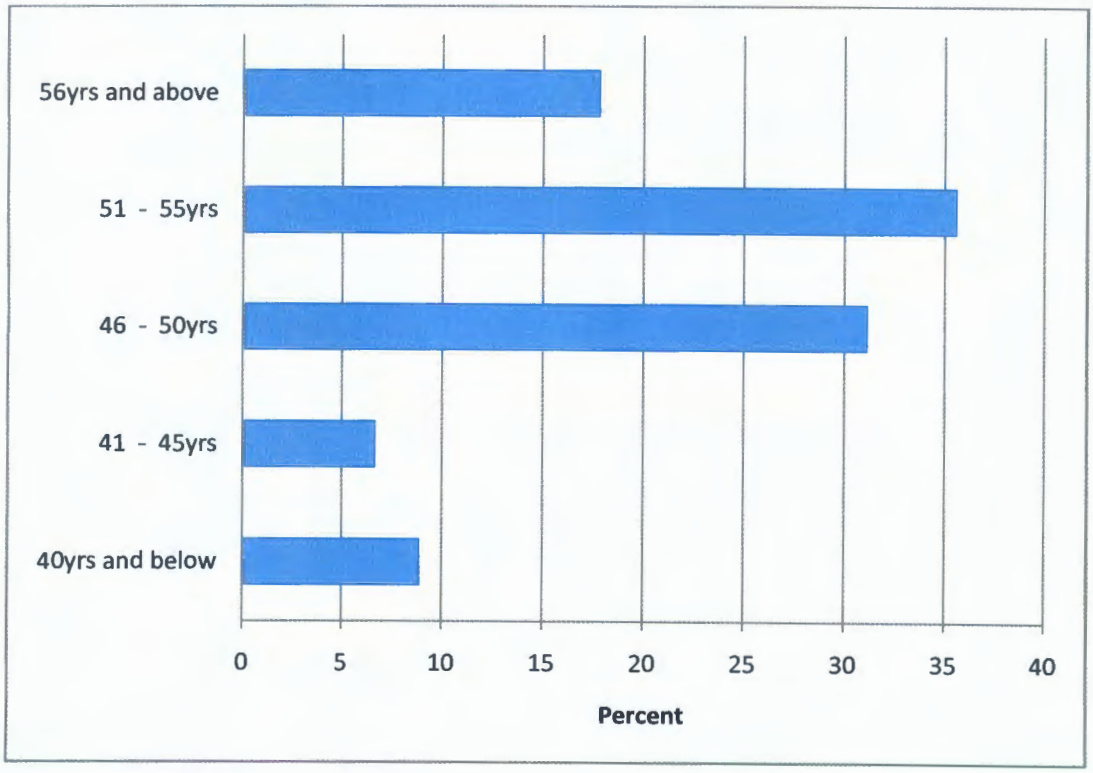

Figure 4.20 illustrates the age category of employees who took for long incapacity leave. The figure shows that 35% of employees between the ages of 51 and 55 years applied for long incapacity between 2013 and 2015, followed by 31% of employees between the ages of 46 and 50 years. Employees who were 56 years and above made 17% of employees who took long incapacity leave.

Section C: Chi - square Test of Independence

This test of independence is concerned with the relationship between two different factors (or categories) in a population under study. There is a significant relationship between the two categories if the probability value (p-value) is less than 0.05 level of significance.

Table 9: Cross-tabulation of leave days by weekly days on which leave started.

	Day on which long leave started					
Number of days	Monday	Tuesday	Wednesday	Thursday	Friday	Total
Up to 60 days	8	3	0	4	3	18
More than 60 days	10	4	4	5	4	27
Total	18	7	4	9	7	N = 45

p-value = 0.569 chi-square statistic = 2.937df = 4

The Minitab software package was used to perform a chi-square test of independence for the data in Table 8. The chi-square statistic and the p-value with 4 degrees of freedom in Table 8 are 2.937 and 0.569, respectively. Since the p-value is greater than 0.05 level of significance, then the number of days employees being absent from work is **not** significantly dependent on the days on which they take long leave (see Figure 4.21 below).

Figure 4.21: Days on which employees took long incapacity leave

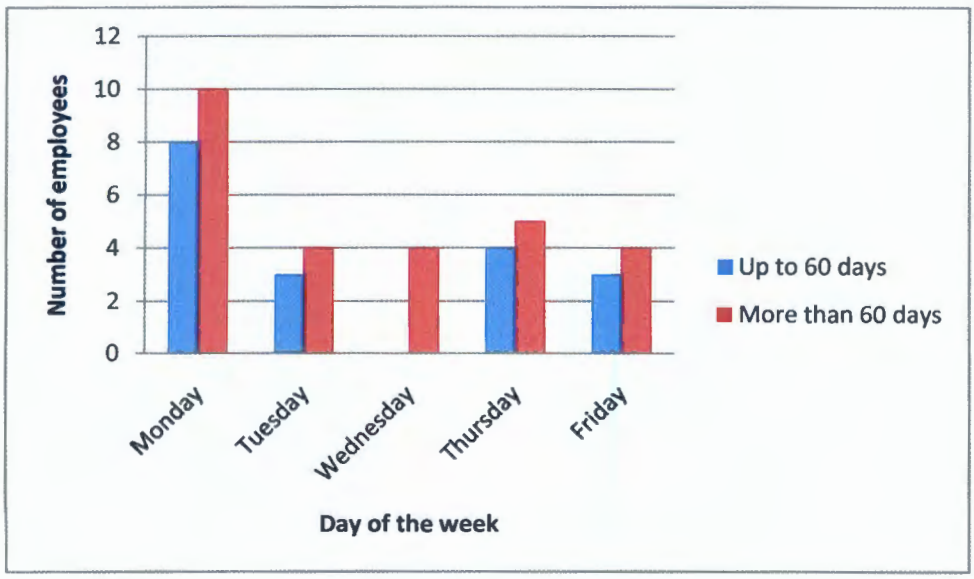

Table 9: Cross-tabulation of weekly days on which leave starts by age of employee.

	Day on which leave started					
Age category	Monday	Tuesday	Wednesday	Thursday	Friday	Total
50yrs and below	11	3	1	5	1	21
Above 50yrs	7	4	3	4	6	24
Total	18	7	4	9	7	N = 45

p-value = 0.236 chi-square statistic = 5.539df = 4

Since the p-value in Table 9 is greater than 0.05 level of significance, then the day on which employees start taking long leave is **not** significantly dependent on their ages (see Figure 4.22 below).

Figure 4.22: Days on which employees took long incapacity leave

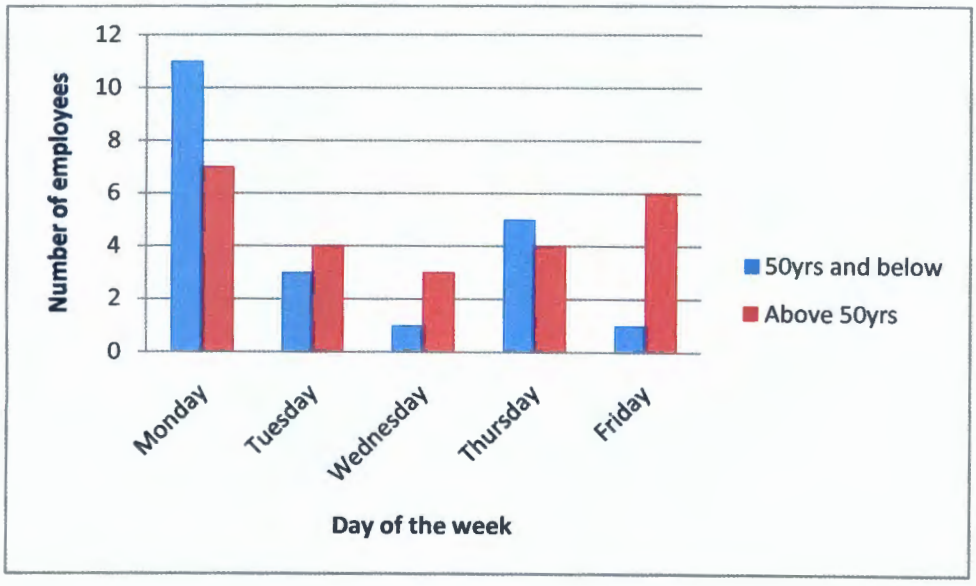

Table 10: Cross-tabulation of leave days by age of employee.

	Age category		
Leave duration	50yrs and below	Above 50yrs	Total
30 - 50 days	9	8	17
More than 50 days	12	16	28
Total	21	24	N = 45

p-value = 0.511 chi-square statistic = 0.432df = 1

Since the p-value in Table 6 is greater than 0.05 level of significance, then the number of leave days is **not** significantly dependent on their ages (see Figure 4.23 below).

Figure 4.23: Classification of employees who took long sick leave by their ages

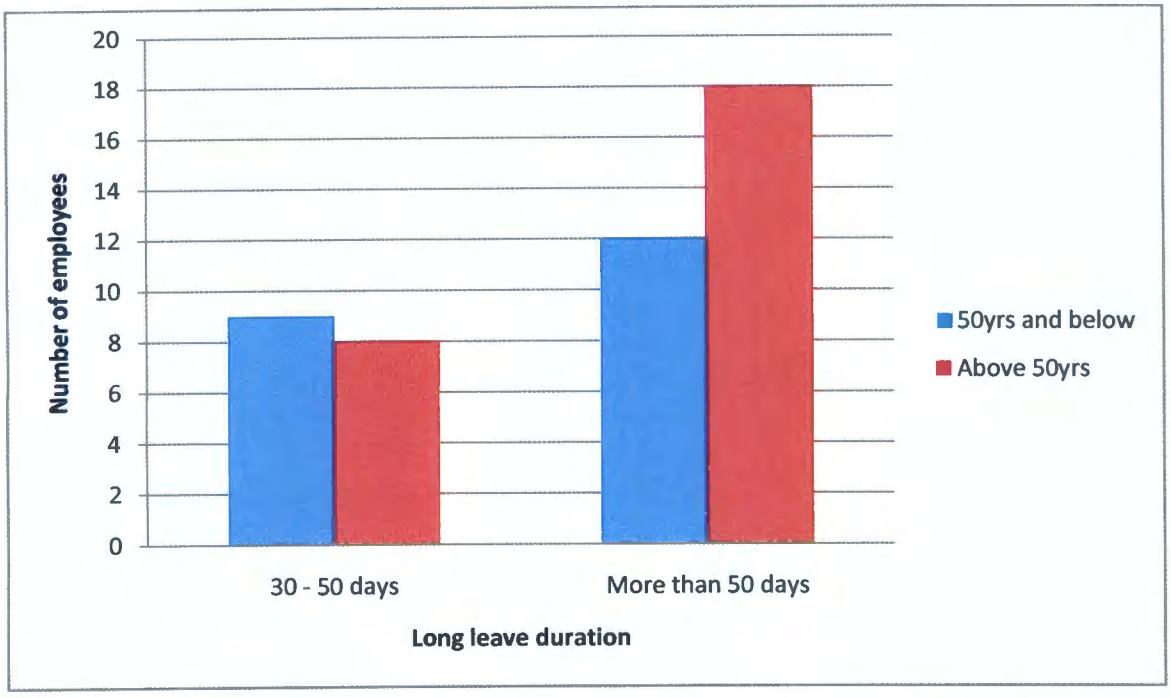

Figure 4.23 illustrates the classification of employee who took long sick leave by their ages. The figure shows that the number of leave days is **not** significantly dependent on their ages.

5 CHAPTER 5: FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.9 INTRODUCTION

In this chapter an in depth analysis of the findings from the data provided is done. The chapter also reflects the recommendations based on the findings of the study and the conclusions drawn from the findings. Recommendations are developed based on the findings and the causes and factors that lead to teacher absenteeism. The recommendations are intended to provide solutions to reduce absenteeism of educators.

5.10 FINDINGS

The analysis of data of leave taken by the Ngaka Modiri Molema educators from 2013 to 2015 in the previous chapter provide the findings as discussed in this chapter.
The findings indicates that the year with the highest number of educators who took leave was in 2014 compared to 2013 and 2015.The lowest number of days in a year in which leave was taken was 2013. More leave days were taken in 2014, with a drastic increase of 4,737 days from 2013. Although there was a decrease on the number of leave days taken in 2015, the leave days taken were still more than the leave days taken in 2013.

The financial implications of leave days taken increased from 2013 to 2014, with a further slight increase in 2015.Family responsibility leave days taken and the number of educators who took leave increased drastically in 2014 from 2013 but declined in 2015.The number of educators who took sick leave with full pay increased from 2013 to 2014, however there was a drastic decrease from 2014 to 2015.The number of sick leave with full pay days decreased from 2013 to 2015 respectively and the financial cost implications of sick leave with full pay were high in 2014.The lowest number of educators who took leave and the number of days in which leave was taken is the vacation leave with full pay. Contrary to the fact that educators do not have vacation leave days. They are deemed to be on vacation during school holidays. Educators do not accrue leave days. The analysis of the day of the week in which leave started, indicates

that 32% of educators who took leave, started their leave days on Mondays and 23% of them started their leave on Tuesdays. The data on the number of days absent from work, shows that 19 educators were absent from work from between 16 to 29 days who applied for short incapacity leave. The age analysis shows that from the data of educators who took short incapacity leave 29% of educators of them were between the ages of 41 to 45 years, 25% of them were between the ages of 51 to 55 years and 22% of them were between the ages 46 to 50 years. The majority of employees took leave of more than 2 days in the beginning of the week, whereas the majority of the employees who start taking leave of two days or less do so towards the end of the week. The day on which employees start taking leave is not significantly dependent on their ages. The number of leave days taken is not significantly dependent on the ages of educators. It was found that that 40% of the long leave taken from 2013 to 2015 started on a Mondays, followed by Thursdays with 20%. Tuesdays and Fridays reflected 15% of the long sick leave that started on these days.

Three (3) employees were absent from work for more than 150 days of long incapacity leave, seven employees were absent for between 121 and 150 days of long incapacity leave, four employees were absent for between 91 and 120 days of long incapacity, 12 employees were absent for between 61 and 90 days of long incapacity leave, and 19 employees were absent for between 30 and 90 days of long incapacity leave. Thirty five percent (35%) of employees between the ages of 51 and 55 years applied for long incapacity between 2013 and 2015, followed by 31% of employees between the ages of 46 and 50 years. Employees of 56 years and above makes 17% of employees who took long incapacity leave. The number of days employees were absent from work was not significantly dependent on the days on which they take long leave. The day on which employees start taking long leave was not significantly dependent on their ages, and the number of leave days was not significantly dependent on their ages.

The challenge with educators who are on long sick leave is that the cost of sick leave with full pay for educators includes the cost of paying substitute educators when the regular teacher is away on sick leave with full pay because the Department pays two

educators for one post. Teacher absence negatively affects learner performance as the substitute teacher cannot fully represent the regular teacher with the teaching style, knowledge and content of the subject being taught and experience of learners learn.

5.11 CONCLUSIONS

The findings above indicate that teacher absenteeism is a serious challenge that the Department of Basic Education must make all efforts to address. The findings show that there is an ageing workforce in the teaching profession in the Ngaka Modiri Molema district. Thirty five percent (35%) of the employees who were on long sick leave were between the ages of fifty one (51) years to fifty five (55) years. The health status of teachers is bad in the sense that 40% of the teachers took long sick and started their leave from the beginning of the week. Absenteeism is increased by teachers who are on long sick leave. The effects of teacher absenteeism are dire in the sense that they affect learner performance which might lead to dooming their future. It is on this basis that strategies proposed under recommendations and in the literature review must be considered to reduce teacher absenteeism.

5.12 RECOMMENDATIONS

Teacher attendance can be increased by implementing the following strategies:

1. Provide employees health and wellness programmes for teachers with high absenteeism rates.
2. Encourage teachers to participate in sport, extra mural activities, and ensure they exercise regularly to keep healthy. There is a positive correlation between employees in good health and high attendance rate.
3. Implement electronic leave management system, to enable you to quickly identify teachers with high absenteeism rate and immediately intervene.

4. Develop and implement an incentive policy for teacher attendance. Teachers with high attendance rates must receive a benefit.
5. Pay teachers unused sick leave
6. Curb the abuse of sick leave by teachers. Any suspicion of sick leave abuse must be investigated and corrected immediately.
7. Provide good working conditions for teachers, which must include teaching resources, accommodation, transport, reasonable sizes of classes to teach, e.t.c.
8. Recognise outstanding and good performance by paying performance bonus.

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APPENDIX A: Short Leave (Absenteeism) Data

Case Subtype	Incident Start Date	Incident End Date	Incident Start Day	Incident Length (days)	Age (yrs)
Short	2/13/2015	3/9/2015	Friday	17	40
Short	5/25/2015	5/28/2015	Monday	4	40
Short	11/13/2015	11/13/2015	Friday	1	42
Short	10/24/2014	10/28/2014	Friday	3	56
Short	11/3/2014	11/5/2014	Monday	3	56
Short	1/26/2015	1/27/2015	Monday	2	56
Short	11/29/2013	12/6/2013	Friday	6	53
Short	8/19/2014	8/21/2014	Tuesday	3	54
Short	5/8/2015	5/8/2015	Friday	1	54
Short	6/5/2015	6/26/2015	Friday	15	56
Short	8/31/2015	9/11/2015	Monday	10	56
Short	8/14/2015	8/29/2015	Friday	11	35
Short	1/14/2015	1/14/2015	Wednesday	1	48
Short	8/17/2015	8/19/2015	Monday	3	46
Short	5/28/2015	6/26/2015	Thursday	21	58
Short	10/20/2015	10/30/2015	Tuesday	9	42
Short	1/19/2015	1/21/2015	Monday	3	41
Short	2/4/2015	2/6/2015	Wednesday	3	41
Short	8/17/2015	8/18/2015	Monday	2	42
Short	9/29/2015	9/29/2015	Tuesday	1	42
Short	10/20/2015	10/30/2015	Tuesday	9	42
Short	11/2/2015	11/6/2015	Monday	5	42
Short	11/9/2015	12/4/2015	Monday	20	42
Short	11/20/2014	12/12/2014	Thursday	17	54
Short	4/7/2015	5/8/2015	Tuesday	22	45
Short	2/3/2015	2/3/2015	Tuesday	1	42
Short	9/8/2015	9/11/2015	Tuesday	4	42
Short	3/9/2015	3/13/2015	Monday	5	53
Short	10/13/2014	10/24/2014	Monday	10	45
Short	6/3/2015	6/15/2015	Wednesday	3	45
Short	12/1/2015	12/2/2015	Tuesday	2	46
Short	1/13/2015	1/13/2015	Tuesday	1	55
Short	5/18/2015	5/22/2015	Monday	5	55
Short	7/28/2015	7/28/2015	Tuesday	1	55
Short	8/31/2015	9/2/2015	Monday	3	55
Short	9/15/2015	9/18/2015	Tuesday	4	55
Short	10/19/2015	10/19/2015	Monday	1	56
Short	1/29/2015	1/30/2015	Thursday	2	42

Short	5/21/2015	6/15/2015	Thursday	18	43
Short	2/4/2015	2/4/2015	Wednesday	1	41
Short	5/29/2014	7/9/2014	Thursday	29	51
Short	9/1/2014	10/1/2014	Monday	22	51
Short	10/13/2014	11/7/2014	Monday	20	51
Short	11/11/2014	12/12/2014	Tuesday	24	52
Short	4/13/2015	5/20/2015	Monday	26	43
Short	5/21/2015	6/26/2015	Thursday	26	43
Short	7/20/2015	8/28/2015	Monday	29	43
Short	7/21/2014	7/25/2014	Monday	5	41
Short	6/4/2015	7/3/2015	Thursday	4	42
Short	4/28/2015	4/28/2015	Tuesday	1	53
Short	6/12/2015	6/26/2015	Friday	10	48
Short	4/21/2015	4/21/2015	Tuesday	1	48
Short	7/21/2014	8/15/2014	Monday	20	44
Short	4/20/2015	8/15/2015	Monday	5	45
Short	5/26/2014	5/27/2014	Monday	2	58
Short	8/4/2014	8/8/2014	Monday	5	58
Short	8/12/2014	8/15/2014	Tuesday	4	58
Short	9/8/2014	9/10/2014	Monday	3	58
Short	5/19/2015	5/22/2015	Tuesday	4	59
Short	11/20/2015	12/11/2015	Friday	16	45
Short	3/5/2015	3/5/2015	Thursday	1	52
Short	4/30/2015	4/30/2015	Thursday	1	53
Short	5/4/2015	5/8/2015	Monday	5	53
Short	5/25/2015	5/25/2015	Monday	1	53
Short	6/2/2015	6/2/2015	Tuesday	1	53
Short	4/20/2016	4/20/2016	Wednesday	1	48
Short	9/4/2015	10/2/2015	Friday	20	48
Short	5/20/2014	5/23/2014	Tuesday	4	52
Short	1/27/2015	1/30/2015	Tuesday	4	52
Short	3/20/2015	3/20/2015	Friday	1	52
Short	8/12/2016	8/12/2016	Friday	1	54
Short	8/31/2015	8/31/2015	Monday	1	56
Short	4/7/2014	4/7/2014	Monday	1	52
Short	9/12/2014	9/12/2014	Friday	1	52
Short	2/10/2015	2/13/2015	Tuesday	4	58
Short	3/3/2014	3/3/2014	Monday	1	32
Short	1/19/2015	1/20/2015	Monday	2	33
Short	2/2/2015	2/3/2015	Monday	2	57
Short	11/3/2014	12/11/2014	Monday	29	45

Short	2/17/2015	2/17/2015	Tuesday	1	49
Short	7/22/2015	7/24/2015	Wednesday	3	49
Short	7/27/2015	7/28/2015	Monday	2	49
Short	8/4/2015	8/7/2015	Tuesday	4	50
Short	8/11/2015	8/12/2015	Tuesday	2	50
Short	11/27/2015	12/11/2015	Friday	11	50
Short	2/5/2015	2/6/2015	Thursday	2	56
Short	3/5/2015	3/6/2015	Thursday	2	56
Short	3/18/2015	3/18/2015	Wednesday	1	56
Short	4/13/2015	4/17/2015	Monday	5	57
Short	9/28/2015	9/29/2015	Monday	2	57
Short	8/5/2015	8/5/2015	Wednesday	1	41
Short	10/25/2013	12/4/2013	Friday	29	53
Short	2/19/2015	2/19/2015	Thursday	1	54
Short	2/26/2015	2/26/2015	Thursday	1	54
Short	5/23/2014	5/23/2014	Friday	1	54
Short	5/26/2014	6/6/2014	Monday	10	54
Short	7/21/2014	8/1/2014	Monday	10	54
Short	4/13/2015	4/22/2015	Monday	8	55
Short	4/28/2015	4/30/2015	Tuesday	3	55
Short	12/7/2015	12/11/2015	Monday	5	56
Short	2/10/2014	2/14/2014	Monday	5	51
Short	9/24/2015	10/4/2015	Thursday	6	40
Short	1/29/2015	1/29/2015	Thursday	1	52
Short	2/5/2015	2/5/2015	Thursday	1	53
Short	2/11/2015	2/11/2015	Wednesday	1	53
Short	3/26/2015	3/26/2015	Thursday	1	53
Short	5/21/2015	5/22/2015	Thursday	2	49
Short	2/24/2015	3/13/2015	Tuesday	14	52
Short	3/19/2015	3/20/2015	Thursday	2	47
Short	4/23/2015	4/24/2015	Thursday	2	47
Short	6/12/2015	6/12/2015	Friday	1	47
Short	10/20/2015	10/21/2015	Tuesday	2	47
Short	5/5/2015	5/8/2015	Tuesday	4	44
Short	5/15/2015	5/22/2015	Friday	6	44
Short	5/25/2015	6/15/2015	Monday	16	44
Short	8/3/2015	8/3/2015	Monday	1	44
Short	6/18/2015	6/19/2015	Thursday	2	38
Short	9/3/2015	9/4/2015	Thursday	2	39
Short	2/25/2015	3/6/2015	Wednesday	8	48
Short	5/21/2015	5/22/2015	Thursday	2	48

Short	8/31/2015	9/14/2015	Monday	11	44
Short	12/2/2014	12/2/2014	Tuesday	1	44
Short	2/19/2015	2/19/2015	Thursday	1	44
Short	2/26/2015	2/26/2015	Thursday	1	44
Short	7/20/2015	7/20/2015	Monday	1	44
Short	7/21/2015	7/21/2015	Tuesday	1	44
Short	7/22/2015	7/22/2015	Wednesday	1	44
Short	7/24/2015	7/24/2015	Friday	1	44
Short	8/27/2015	8/28/2015	Thursday	2	44
Short	8/31/2015	8/31/2015	Monday	1	44
Short	9/1/2015	9/4/2015	Tuesday	4	44
Short	6/4/2015	6/19/2015	Thursday	11	57
Short	9/1/2015	9/4/2015	Tuesday	4	45
Short	9/17/2014	9/17/2014	Wednesday	1	48
Short	10/23/2014	10/24/2014	Thursday	2	48
Short	10/27/2014	10/28/2014	Monday	2	48
Short	11/7/2014	11/7/2014	Friday	1	48
Short	1/26/2015	2/4/2015	Monday	8	48
Short	6/10/2015	6/10/2015	Wednesday	1	49
Short	9/18/2015	9/18/2015	Friday	1	49
Short	11/3/2015	11/6/2015	Tuesday	4	49
Short	11/3/2015	11/6/2015	Tuesday	2	49
Short	4/5/2016	4/5/2016	Tuesday	1	50
Short	4/8/2016	4/8/2016	Friday	1	50
Short	6/10/2016	6/10/2016	Friday	1	50
Short	9/3/2014	9/20/2014	Wednesday	13	49
Short	3/19/2015	3/27/2015	Thursday	7	44
Short	4/14/2015	4/16/2015	Tuesday	3	45
Short	5/20/2015	5/26/2015	Wednesday	5	45
Short	6/2/2015	6/3/2015	Tuesday	2	45
Short	2/10/2015	2/10/2015	Tuesday	1	48
Short	5/6/2015	5/6/2015	Wednesday	1	48
Short	4/10/2014	4/16/2014	Thursday	5	57
Short	2/2/2015	2/6/2015	Monday	5	56
Short	4/28/2015	4/28/2015	Tuesday	1	56
Short	11/2/2015	11/2/2015	Monday	1	57
Short	11/27/2015	11/27/2015	Friday	1	57
Short	12/8/2014	12/15/2014	Monday	6	46
Short	3/9/2015	3/9/2015	Monday	1	56
Short	5/20/2015	5/20/2015	Wednesday	1	56
Short	5/4/2015	5/6/2015	Monday	3	55

APPENDIX B: Long Leave Data

Case Sub Type	Incident Start Date	Incident End Date	Incident Start Day	Incident Length (days)	Age (yrs)
Long	5/6/2015	7/31/2015	Wednesday	62	48
Long	7/20/2015	8/28/2015	Monday	30	56
Long	7/8/2014	12/31/2014	Tuesday	123	45
Long	5/15/2014	6/27/2014	Thursday	31	48
Long	5/15/2014	6/27/2014	Thursday	31	48
Long	6/25/2016	12/9/2016	Monday	119	50
Long	1/12/2015	3/16/2015	Monday	46	52
Long	9/4/2014	12/2/2014	Thursday	63	53
Long	8/31/2015	12/31/2015	Monday	86	44
Long	5/4/2015	6/26/2015	Monday	39	49
Long	1/12/2015	4/10/2015	Monday	63	47
Long	3/30/2015	6/30/2015	Monday	62	52
Long	7/20/2015	9/1/2015	Monday	31	52
Long	10/1/2015	12/31/2015	Thursday	64	57
Long	1/23/2015	4/24/2015	Friday	30	53
Long	4/28/2015	7/28/2015	Tuesday	64	54
Long	7/29/2015	10/29/2015	Wednesday	66	54
Long	10/30/2015	12/31/2015	Friday	43	54
Long	5/3/2016	11/4/2016	Tuesday	132	55
Long	6/5/2014	7/31/2014	Thursday	40	47
Long	10/30/2015	12/31/2015	Friday	43	55
Long	3/13/2014	9/2/2014	Thursday	117	47
Long	2/23/2015	6/6/2015	Monday	71	48
Long	4/1/2015	9/30/2015	Wednesday	124	55
Long	7/20/2015	12/30/2015	Monday	114	48
Long	2/16/2015	10/14/2015	Monday	166	58
Long	5/11/2015	6/26/2015	Monday	34	49
Long	5/15/2014	6/30/2014	Thursday	32	48
Long	11/2/2015	12/11/2015	Monday	30	42
Long	3/4/2016	10/16/2016	Friday	156	48
Long	9/8/2013	12/4/2013	Monday	62	52
Long	4/1/2015	6/30/2015	Wednesday	60	57
Long	8/7/2014	12/31/2014	Thursday	101	54
Long	1/6/2015	6/30/2015	Tuesday	121	39
Long	7/20/2015	9/18/2015	Monday	44	40
Long	10/13/2015	12/31/2015	Tuesday	56	40
Long	10/12/2015	12/11/2015	Monday	45	39

Long	1/12/2015	4/30/2015	Monday	78	53
Long	9/22/2015	11/13/2015	Tuesday	38	56
Long	11/1/2013	12/31/2014	Friday	289	55
Long	3/12/2015	9/11/2015	Thursday	126	56
Long	7/15/2013	10/15/2013	Monday	65	47
Long	4/8/2016	10/24/2016	Friday	137	55
Long	4/17/2015	10/12/2015	Friday	122	57
Long	10/13/2015	12/9/2015	Tuesday	42	58