

**TEACHER ATTRITION IN ZAMBIAN SCHOOLS: AN EDUCATIONAL
MANAGEMENT ANALYSIS**

by

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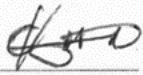
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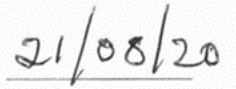
AUGUST, 2020

DECLARATION

I, **Kukano Crispin**, declare that **Teacher Attrition in Zambian Schools: An Educational Management Analysis** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.



Signature



Date

DEDICATION

This thesis is dedicated to my wife Euslin, the children Darren, Gabriel and Michael and to the memory of my beloved late parents Muhambi Israel Kukano (1938-1992) and Mary Muchimba (1948-1995). May their spirit live on....

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ABSTRACT

The purpose of this empirical study was to establish how school managers address the problem of teacher attrition in public secondary schools in Zambia with a view of developing strategies that may be used to reduce teacher attrition in schools. The objectives of the study were to examine how teacher attrition affects the functioning of public secondary schools; find out which factors influence teacher attrition in public secondary schools; and determine and describe which measures are used to sustain teacher retention in public secondary schools. The study adopted a case study design employing mainly the qualitative approach of data collection and analysis. However, quantitative methods of data collection and analysis were also employed to a lesser extent to complement the qualitative aspect. The data were collected through interviews and questionnaires. The sample consisted of 33 participants comprising 30 school managers and three (3) district education board Secretaries from Chongwe, Lusaka and Kafue Districts of Lusaka province. The qualitative data were analysed using thematic analysis while the quantitative data were analysed using the Statistical Package for Social Sciences (SPSS) Version 20 to generate descriptive statistics. The findings revealed that teacher attrition positively correlates to poor staffing levels and poor student achievement ($r=0.812$). The study further established factors influencing teacher attrition in public secondary schools as being poor working conditions, lack of administrative support, low salaries, low social status accorded to teachers and lack of continuous professional development were among the major causes of teacher attrition. In terms of measures used by school managers in addressing the issue of teacher attrition, these include: high salaries, reduced workload, adequate administrative support, fair promotion and fair treatment, participatory decision making, and creating a positive school climate. Basing on the study findings, the following recommendations are made; that school managers should coordinate organisation climate, that is, they should start with transformation of their individual school's organisational climate in order to create an enabling atmosphere which reduces teacher attrition. School managers should effect strategies for teacher retention through continuous professional development; they should ensure that all programmes and activities aim at addressing the actual continuous professional development needs of the teachers. School managers should apply sufficient school management support. The MoE provide explicit preparation for school managers by providing and showing them the significance of managing teacher attrition.

Key Words: Attrition, retention, teacher, public secondary school, school managers

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LIST OF ACRONYMS

CEDU	College of Education
CPD	Continuous Professional Development
DEBS	District Education Board Secretary
GDP	Gross Domestic Product
GRZ	Government of Republic of Zambia
LPEO	Lusaka Province Education Office
MOE	Ministry of Education
OECD	Organisation for Economic Co-operation and Development
UNESCO	United Nations Education Scientific and Cultural Organisation
UNISA	University of South Africa
UPE	Universal Primary Education
SNDP	Sixth National Development Plan
SPSS	Statistical Package for Social Sciences
TSC	Teaching Service Commission

CHAPTER ONE

ORIENTATION TO THE STUDY

1.1 Introducing the Argument

Globalisation is becoming the main characteristic of the world economy. The modern multinational corporation seems to drive and lead this globalisation process where new and fresh markets are always needed to sustain its rapid growth and profitability (Arav & Narsing, 2015:27). People in the globalised world have posed questions about individuality, residency, and ethnic grouping. The increased migration of teachers, nurses, doctors, and engineers reflects a growing trend in the migration of skilled workers. Many developing countries are concerned with the effect of their experienced brain drain and the loss of skilled workers in developed nations. In the context of this thesis, teacher attrition refers to the decrease in the number of teachers when they leave the profession due to various reasons such as illness, retirement, death or for other unknown reasons (MoE, 2011:53). Attrition not only deprives the developing world of important services, but it also represents a lost investment; the time and money spent on educating skilled workers are lost when those workers take their acquired skills elsewhere (Hong, 2010:530).

The Organisation for Economic Co-operation and Development (OECD, 2015:11) reports that there has been a marked increase in the international migration of highly skilled professionals in three sectors: health, education and new technologies. This is partly explained by the mix of motives for which migrants come to live and work in their respective host countries (Arslan, 2015). Increased globalisation, which has been characterised by advanced transport and information and communication systems, has brought with it renewed concern about the effects of emigration of skilled labour from developing countries to developed ones. Zambia like many third world countries suffers from the same loss of human capital to industrialised nations.

A study conducted by UNESCO (2012:5), states that 50% to 80% of all highly educated citizens from several developing countries in Africa and the Caribbean live and work abroad. Indeed, like Kaiser and Cross (2011:3) have observed, developed countries have pro-actively sought to address their critical needs such as the shortage of teachers by developing innovative strategies to attract, recruit and retain teachers from abroad, especially teachers of science and mathematics.

While it is possible to ignore the undesirable effect of teacher exodus in less developed nations, teachers who leave for greener pastures to developed countries inevitably do a disservice to their country's progeny. Manik (2010:109) points out that, the responsibility falls on schools and national education systems in developing countries to create an attractive, healthy and supportive environment for local teachers or run the risk of losing them to international recruitment agencies offering rewarding work and travel packages overseas.

Chovwen, Balogun, and Olowokere (2014:114) reported that many schools in both developed and developing countries find teacher attrition as one of the greatest challenges they face. Teacher attrition affects both the organisation and the employee with costs relating to the selection, personnel success, induction, recruitment, and training of new personnel. Out of the 3,252 qualified teachers who were engaged by the district of New York from 2010-2011, about 7.8% left the teaching profession within two years (Mcadoo, 2013: 1). This scenario is replicated in the UK where 14.1% of qualified teachers left the teaching profession within four years of service (Alan & Pamela, 2013:3). Developed countries in this sense, continue to experience teacher shortages which are addressed by attracting educators from other regions, teachers in less developed countries are much easier to hire. It is from this viewpoint that teacher exit from the profession should be evaluated.

A similar scenario seems to replicate itself in the sub-region where, an increasing number of teachers from other African countries such as Lesotho, Zimbabwe, and Zambia, are migrating into South Africa due to that country's economic prosperity, political stability and promise of better working conditions and income (Education International, 2015:8) . Further, OECD (2015: 124) reports that many teachers are reportedly leaving the profession for greener financial pastures in countries in the sub-region like South Africa, Namibia, and Botswana as well as other developed countries.

1.2 Background to the study

Zambia faced crucial setbacks as a result of the economic crisis that started in the mid-1970s followed up by structural adjustment policies in the 1980s and 1990s. The expenditure on education declined as a percentage of GDP from 5% to 2% from the 1970s to 1990s respectively (World Bank, 2014). The reduced budgetary allocation to the Ministry of Education made teaching a less attractive profession and many teachers left the profession or migrated to other countries. This affected pupil-teacher ratio which increased from 40 to 80 in the 1970s to 2015 respectively (Government of the Republic of Zambia, 2018). With an increase in copper

prices and sound macroeconomic policies, Zambia's economy started rising in the late 1990s and has averaged five to six percent of Gross Domestic Product (G.D.P) growth over the last two decades. These impressive macro-level performances, however, are a far cry from the reality facing most of the general population. Zambia's Seventh National Development Plan (2017: 4) points out that the economic growth experienced during the last decade has not translated into a significant reduction in poverty and improved general living standards of the majority of Zambians. This argument is supported by (USAID, 2011: 3) who postulate that this is essentially true for the rural Zambians where 80 % of the population live in poverty, of which 63% live below the poverty datum line of \$1.25 per day. Constraints in education and health imply that the majority of Zambians cannot participate actively in economic development.

Zambia's long-term development strategy is articulated in its own *Vision 2030: A prosperous middle-income nation by 2030* (MoE, 2011: 4). To attain this objective, the Government of the Republic of Zambia (GRZ) has put in place several National Development Plans and one of them is Human Capital Theory which relates to education. The government places importance on human capital and its role as a prerequisite for Zambia's development under the Seventh National Development Plan (SNDP). Human capital is a cross-cutting issue in Zambia, especially where teacher attrition is concerned and should be addressed in a complete manner rather than through piecemeal obligations. Human capital espouses an educated populace that can make sound decisions that eventually affect the health and welfare of families which may enable people to remain active participants in education and economic development of Zambia (USAID, 2011).

According to MoE (2016:51), a large number of qualified teachers are leaving the teaching profession seemingly faster than they can be replaced. This invariably affects recruitment, training, and deployment processes. Ensuring that teacher retention is enhanced in schools stretches the managerial capacity of most education systems and it is even more difficult for Zambia. It is against this background that this study investigates how school managers address the problem of teacher attrition in public secondary schools in Zambia. The researcher examines attrition and how it has affected the functioning of public secondary schools, the factors influencing teacher attrition, and how school managers identify and determine measures used to retain teachers in public secondary schools.

1.3 Statement of the problem

Zambia, like all other developing countries, faces the problem of retaining its workforce, especially those in the teaching fraternity. Teachers, whether they leave the system or remain in it, are dissatisfied with some aspect of their conditions of service. As a result of these conditions of service, teachers opt to either resign or go for greener pastures in countries like Botswana, Namibia, or South Africa. Against this background, this research aimed at exploring how school managers address the problem of teacher attrition in public secondary schools in Zambia. This study, therefore, sought to answer the following main research question: How do school managers address the problem of teacher attrition in public secondary schools in Zambia?

To facilitate answering the main research question, the following sub-questions were explored:

- How has teacher attrition affected the functioning of public secondary schools?
- Which factors influence teacher attrition in public secondary schools?
- What measures should school managers adopt to sustain teacher retention in public secondary schools?

1.4 Research aim and objectives

The overall aim of this study was to examine how school managers address the problem of teacher attrition in public secondary schools in Zambia. Related to the main study objective, the following were specific objectives:

- to examine how teacher attrition affects the functioning of public secondary schools;
- to find out factors influencing teacher attrition in public secondary schools; and,
- to determine and describe the measures used by school managers to sustain teacher retention in public secondary schools.

Before describing the significance, research design, and methodology employed, it is necessary to first discuss the rationale and motivation behind this study.

1.5 The Rationale and motivation for the study

There has been a growing realisation that each year qualified teachers in the Ministry of Education are leaving the profession in their thousands. It is hoped that this study will add value to the already existing knowledge base on issues relating to teacher attrition.

There are very few studies in the *Zambian* context that address the issue of teacher attrition; published data is fragmented. It appears either as commentaries or just as a record on the extent of teacher attrition that gives little detail on the causes or patterns. Focus is more on statistical data rather than explaining why teachers are leaving the profession. For instance, MoE. (2009: 57) points out that 11,500 teachers left the profession in 2008 and out of these 5,600 are listed as leaving for other reasons. Furthermore, in 2015, the Ministry of Education reported that 8,893 teachers in *Zambia's* primary and secondary schools left the profession (MoE, 2015: 43). Further, statistics for the year 2016 indicated that out of the 6,475 teachers who left the teaching profession, most of these teachers leave for other non-teaching duties in other Ministries within the government and others for unknown reasons. MoE (2016: 51) reports that out of the 6,475 teachers who left in 2016, those who left through resignations were 1,902. Retirement, illness, and death accounted for 1,148 teacher losses. These statistics showed the prevailing challenge of teacher attrition suggesting the need for additional investigation; thus the need for a study of this kind. Finally, it is expected that the conclusions and recommendations of this research may furnish better ways of addressing the problem of teacher attrition in public secondary schools.

1.6 Significance of the study

The findings of this study might contribute towards greater interest in and creating awareness and developing an understanding of how school managers may address the problem of teacher attrition in public secondary schools in *Zambia*. Further, it is hoped that the findings of this study may contribute to the already existing body of knowledge on the effects of teacher attrition. Additionally, the study findings may help fill in some gaps in the literature as regards how teacher attrition is being addressed in *Zambia*.

Symeonidis (2015: 46) argues that teacher attrition is a problem in the profession because it causes increased workload, overcrowded classroom and hiring of unqualified teachers. Educational leaders should be cognisant of reasons which could influence qualified teachers' intentions to either stay or leave the profession. From the findings of this study, it is hoped that when education managers know reasons why teachers leave the classroom, they could make efforts to improve the system better which in turn would imply educational management. It is further hoped that the conclusions, recommendations, and suggestions made in this study may help education practitioners in *Zambia* and other countries, in general, to realise their shortcomings and improve on strategies that may be implemented to retain teachers in the profession.

1.7 Research methodology and design

A mixed-methods design which is a combination of the qualitative and quantitative approaches was used in this study. Creswell (2015: 2) defines mixed-method design as an approach in the social, behavioural and health sciences in which the investigator gathers close-ended and open-ended data (quantitative and qualitative), mixes the two and then draws explanations based on the collective strengths of both sets of data to understand research problems.

The first segment of this section discusses the qualitative inquiry methodology. This decision originates from several reflections which include among others the following:

- Qualitative research emphasises on seeking to understand how human beings make sense of their experiences, design the process of meaning and explain how human beings interpret their lived experiences (McMillan & Schumacher, 2010: 323). This study described the participants' thoughts, feelings, assumptions, beliefs, and values on *how school managers address the problem of teacher attrition in public secondary schools in Zambia*;
- Empirical data of this current study consisted of rich descriptive data about the participants understanding of human behaviour contextually on *how school managers address the problem of teacher attrition in public secondary schools in Zambia* consistent with (Creswell, 2014:14);
- The researcher discovered new ways of understanding the prevailing situation being examined without having recourse to the study findings. However, the usage of prearranged expectations limited the richness of the data that was gathered and leads to bias in the study (McMillan & Schumacher, 2010: 323);
- The researcher was the primary instrument for data collection and analysis (Patton, 2015:12). According to Yin (2011), the idea of having the researcher as the primary instrument for data collection and analysis is ideal in that it allowed him to mingle freely with the participants' whose lived life experiences he sought to understand, in a face to face situation in their natural habitats and find out the realities that exist there. Creswell (2012) states that interactions between the researcher and the participants make it possible for the researcher to explore how human beings behaved, their perception of life, feelings, and experiences of other people and what goes on in their personal life; and,
- Finally, significant consideration of qualitative research is that the research design emerges, evolves, and develops as the research progressed (Braun & Clarke, 2013:3). In the current study, the following steps were predetermined: the methods used and the pattern of data picked, the preference of the inquiry, respondents, and tools used for data gathering.

A case study research design was followed whose focus was on the appreciation of the uniqueness, complexity, and contextualise individual events and experience (Massaro, Dumay & Guthrie, 2016: 768). A case study design allowed original ideas to emerge from the study where the researcher was privileged to pay attention to what was seen to be significant. According to Yin (2014: 178), one of the significant factors in the case study approach is that it uses an inquiry-based strategy where a complex holistic picture, analysis of words, detailed reports, and views of participants are conducted in a natural setting. The main goal of the current study was to provide deeper insight and understanding of the dynamics of a case under investigation through the lens of participants (Cohen, Manion & Morrison, 2011: 250). However, case study findings can still be relevant and transferable in other settings and contexts with the similar environment (Marsha & Rossman, 2011:252).

The last segment in this section briefly deals with quantitative research. Quantitative research varies from elementary counts like frequency distributions to more sophisticated data such as test scores, variances, chi-squares, to mention but a few. Furthermore, quantitative methods usually deal with documenting participants' attributes expressed in the quantity that encompasses objectivity, accuracy, reliability and validity (Babbie, 2010: 5). Quantitative data, therefore, deals with information about the world using numbers whose research techniques are used to get numerical data (Braun & Clarke, 2013: 3-4; Vogt *et al.*, 2014: 241). Thus the purpose of quantitative methods is to measure variables and produce figures which allow processing, comparisons, and replicability of the findings.

1.7.1 Sampling and sample size

The technique that this investigation used was purposive sampling. Provost and Fawcett (2013: 52) point out that a sample offers a set of fundamental principles that support the extraction of information and knowledge from a given population. The main reason for using purposive, according to Patton (2015: 268) is to get the richest possible sources of information to address research questions. The crucial thing in sampling is to identify a suitable sample for data acquisition. As Silverman (2010:141) avers, sampling most likely leads to the specific display of characteristics of the population under investigation. This view is in agreement with Nieuwenhuis (2011: 79) who argues that the explicit purpose is to obtain the richest possible sources of information to answer the research question. Therefore, in conformity with Check and Schutt (2012: 104)

purposive sampling procedure was used to hand-pick conditions that were considered well-positioned to provide data for this research.

This method helped the researcher to fully understand how school managers address the problem of teacher attrition in public secondary schools. The purposive sampling strategy was supported by Patton (2015:53) who point out that the power and logic of using sampling strategies are that a few cases studied in depth yield many insights about the topic. Brinkman and Kivale (2015:5) further assert that qualitative research is based on non-probability or purposive sampling because it seeks to get insights into particular practices that prevail within a specific location, context and time. However, Creswell (2012:205) contends that even though there is usually no sampling method involved in a case study, a selection of cases has to be done to maximise what can be learned as the research progresses. After having described the sampling and sample size a brief discussion in identifying the sites and individual participants, as well as the reasons for their choice, are discussed in subsequent.

1.7.1.1 Site selection

Site selection, according to McMillan and Schumacher (2010:326), implies identification and justification of a site picked to locate participants involved in the study. The current research was conducted in three (3) out of seven (7) districts that form part of Lusaka province, namely; Chongwe, Lusaka, and Kafue districts based on the number of schools with excessive teacher exodus.

1.7.1.2 Selection of individual participants

Three (3) District Education Board Secretaries (DEBS) by their positions were targeted and purposively selected, as they represented the MoE at the district level in the districts where this study was conducted. These are accountable for the supervision of educators involved in continuous development as well as managing education provision in a district. Besides, thirty (30) school managers from the three (3) districts, ten (10) per district were also purposively selected. The criteria for their selection was based on a list of schools with high teacher attrition. Their inclusion in the study was on the premise that they were custodians of managing teachers in a school. As such, they are, therefore, expected to manage both the external and internal school-based development and training programmes. Having outlined the sampling and sample size, site selection,

and selection of individual participants, this investigation at this instant describes tools that were used in data gathering.

1.7.2 Data collection instruments

The study employed three instruments to collect the necessary data. These were; interviews, focus group discussions, and questionnaires. This researcher opted to use these instruments considering the nature of the study. McGuire, Manyika, and Chui (2012: 2) state that the use of a variety of data collection instruments usually results in authentic analysis and conclusions as opposed to relying on only one source of information. The interviews and questionnaires are discussed briefly in the following subsections.

1.7.2.1 Interviews

Interviews and focus group discussions were used as significant qualitative data collection tools for this empirical investigation. Interviews involved a purposeful interaction between the researcher and each of the three District Education Board Secretaries in which he asked questions to collect the needed information, and also learn about the opinions, beliefs, and perceptions on teacher attrition in Zambian secondary schools. According to McMillan and Schumacher (2010: 355), interviews are ideal as data collection tools as it allows the researcher to analyse the participants' perceptions, experiences, assumptions, beliefs, and values of the study participants. Thus, Nieuwenhuis (2011: 87) concludes that the objective of the qualitative interview in a study is to visualise the world through the eyes of participants.

The interview, as an instrument for data collection provides the researcher with an added advantage of getting a huge amount of in-depth data much faster and efficiently than the use of the method of questionnaires and observations (Greeff, 2011:305). Check and Schutt (2012: 174) are in agreement with Greeff (2011), by stating that the response rate of interview compared with other methods such as the questionnaires is generally higher. The interview was convenient in probing and getting clarifications from the investigator as well as reactions from the respondents. Discussions were done individually as well as in groups. A tape recorder and a notebook plus a pen were used as tools to record the conversations during the discussions. The following types of interviews were used in this study; individual interviews and focus group discussions and are briefly explained below.

1.7.2.2 Focus group discussions

Thirty (30) school managers participated in three (3) focus group discussions that are, ten (10) school managers per district. However, Nieuwenhuis (2011) discourages researchers from using only one focus group discussion as this leads to inhibition of acquiring the much needed alternative views concerning the subject under investigation. Further, Lincoln, Lynham, and Guba (2011: 120) note that the administration of different focus groups as part of a single focus group is quite popular because it would be unwise to rely on the information provided by a single focus group. The three groups helped the participants' express their views without intimidation which could have generated biasness towards the required data for this investigation. A maximum number of ten (10) respondents were picked from the selected secondary schools per district to take part in the discussion. According to Tracy (2013: 167), a focus group consists between 3 and 12 participants. The researcher was vigilant neither to pick the largest figure which may impede complete involvement by respondents nor select the smallest figure that may flop to offer additional data than that of an individual.

Participants were able to shape each other's concepts by providing in-depth perceptions related to the topic that emerged from interviews with individuals. Greeff (2011: 307) argues that interactions among and between participants augment the data quality, checks, and balances on each other and assess differences in opinion, beliefs, and feelings about the subject of study among participants. Moreover, Heck and Hallinger (2011: 157) posit that focus group discussions are economical since data collection from multiple viewpoints and in-depth information about the topic under study is done in one sitting within a short time frame.

The sessions for the focus group were deliberated and informed by ground rules which every respondent had to respect. According to Check and Schutt (2012: 203), interview guides are used to make sure that all appropriate issues received attention during the session. Besides, individual interviews as such are appropriate because they allowed depth to be achieved which provides the researcher with an opportunity to probe and build on the participant's responses.

1.7.2.3 Questionnaires

This study used questionnaires for triangulation purposes. Questionnaires are widely used in the collection of significant information about the population; each item in the instrument (questionnaire) addresses specific research questions or objectives of the research (Plano Clark et al., 2013:223).

In this study, a questionnaire was constructed by the investigator which was used to gather data from the respondents. Vogt *et al.*, (2014:78) describe semi-structured or close-ended questions as types of items which refer to questions accompanied by a list of possible alternatives from which participants select the answer that best describes their situation. The motives for using surveys in this research, apart from discussions, were that these two devices had diverse and perhaps harmonising merits and demerits. Surveys are seen as more unbiased and they yield generalisable outcomes due to large samples; these outcomes are endangered by several additional reasons comprising defective survey design; subjective survey; respondent untrustworthiness; inaccuracies in coding and numerical analysis; and defective explanation of outcomes.

On the other hand, discussions offer settings where respondents can ask for amplification of concepts and describe standpoints in their arguments. Both approaches are significant means of attaining straight reactions from participants about their understandings, conceptions, beliefs, and attitudes about the area under investigation (Yin, 2014:21). Besides, the use of these two instruments permitted the triangulation of data. Triangulation refers to data which is cross-checked from multiple sources to establish corroborative and convergence data from different points of view from the same participants (Patton, 2015:654). In underscoring this position, Merriam and Tisdell (2016:250) state that triangulation denotes the usage of interviews and the questionnaires which the researcher used to validate interpret and corroborate data.

1.7.4 Data Analysis

Vogt *et al.* (2014:368) contend that organising, assessing, evaluating, computation and making sense of data according to participants' definition of the status quo, noting emerging patterns, regularities and categories constitute what is known as data analysis. Delport *et al.* (2016:170) agree with this view that data analysis involves dividing data into groups and determining the meaning of each group of sentences.

Analysis of data qualitatively was thematically done. This methodology used the inductive procedures of exploratory, sorting, and associating, combining, and deducing records for trustworthy descriptions in addressing the main purpose of this investigation. In qualitative research, data analysis involves data collection, processing and analysis which are not done separately but it is an intertwined process (Cohen *et al.*, 2012:501). By implication, the process of data collection, analysing, and writing the report was not done distinctly but overlapped and was carried out concurrently. The researcher did not wait for all the data before starting the analysis. Data analysis began with the first interview and the process continued throughout this research.

In quantitative research, data analysis takes the form of scales of data, parametric and non- parametric data, descriptive and inferential statistics, dependent and independent variables (Cohen *et al.*, 2012:501). In this investigation, the Likert scores on the surveys were quantitatively scrutinised descriptively using Statistical Package for Social Sciences (SPSS Version 20.0). This allowed uncovering some reasons bearing on teacher attrition which in turn informed the findings from qualitative analysis.

1.8 Delimitation of the study

According to Marshall and Rossman (2011:99), researchers should narrow their investigations; otherwise, they end up with information that can be difficult to manipulate or be unrelated to the research problem. The present study restricted its lens to the analysis of how school managers address the problem of teacher attrition in public secondary schools in Zambia. The present study's area of interest and activity were conveniently and purposively selected schools in Lusaka Province.

This research confined itself to the appropriately designated thirty (30) school managers drawn from schools in Lusaka, Kafue, and Chongwe districts including their respective education board secretaries in Lusaka Province. It is understood that generalisation of findings did not arise because this research was carried out in a specific context. However, its findings are priceless in research. Yin (2014:178) points out that case study results are generalised in other cases and contexts with homogeneous background. The investigator, consequently, has confidence in the findings of this inquiry which can be widely convertible to other identical locations in other areas of Zambia or comparable settings elsewhere.

1.9 Limitations of the study

School managers and district education board secretaries from thirty (30) schools within the selected three (3) districts of Lusaka Province were the only respondents. These limitations were acknowledged and considered during data analysis and recommendations:

- The responses collected were the views of the participants and may not reflect the views of all school managers within the district, region or province;
- Participants may or may not have provided full disclosure of information while participating in this study;
- The data collected consisted of thirty (30) school managers and three (3) district education board secretaries and may not provide distinct data of perception on individual schools or districts; and,
- Only ten (10) school managers and one (1) district education board secretary were interviewed per district, which limits the inferences of the study.

1.10 Assumptions of the study

While leading this research, some guidelines were constituted:

- The school managers and district education board secretaries who participated in this study were to serve as representatives of the opinions of staff within the selected district;
- The questions used in the survey instrument properly addressed factors that could affect teacher attrition; and,
- Participants responded without persuasion and with honesty.

1.11 Ethical considerations

All data which were obtained and information presented by the participants were subjected to uncompromising ethical considerations (cf. 3.9). An ethical clearance certificate was acquired by the investigator to carry out this research from the College of Education (CEDU) at UNISA. The researcher also obtained consent to carry out this study from Lusaka Province Education Office (LPEO). Once authorisation was approved, the school managers of the designated schools were phoned, which was trailed by a legitimately written request to clarify to them the kind of the research. This procedure is emphasised by Cohen *et al.* (2011:81) who show that before data collection, the researcher should abide by correct procedures to gain authorisation to investigate a specific community.

Given the above assertion, written consent to contact the respondents in public secondary schools and to carry out the current research was acquired from the Lusaka Provincial Education Office. Consultations with the respondents were held before the commencement of the research. The respondents were provided with model questions that were reproduced in the discussion guide. The respondents were told again that their involvement was morally on a charitable basis. The consensus was reached on the place and timing of the discussion. The principle of anonymity was also well-thought-out through the usage of aliases or encryption terms in place of the respondents' actual titles in this present study. Marshall and Rossman (2011:118) emphasise that ethical challenges are likely to arise during data collection and publication of findings. This view underscores the researcher-participant relationship which according to Vogt *et al.* (2014:9), is built around the interpersonal peculiarities of the researcher, often understood in terms of how the researcher keeps good relations, builds trust, respects norms of reciprocity and considers ethical issues. With this approach, respondents continued to be mindful that their immersion in this research was appreciated and their contribution was deliberate. Besides, they had the choice to pull out should they sense being uncomfortable in the manner this research was conducted.

1.12 Definition of key concepts

The main ideas that were used in this inquiry were primarily concerning the reviewed literature; as a result, it was important to spell out their intention in the setting of this research. This was advanced from dual standpoints specifically ideas critical to the subject matter and notions associated with the theme.

1.12.1 Concepts essential to the topic

Teacher attrition: In this investigation, it denotes a decrease in the number of educators when they exit their occupation due to ailment, retirement, demise or leave for unknown reasons (MoE, 2011:53).

Teacher: This is a person who is mainly concerned with pupil learning in the classroom and involves many activities which facilitate or aim at improving the teaching-learning process (Oyewole & Ehinola, 2014:88).

Management: This refers to designing and executing plans effectively using people. In this study, it means effecting competencies that managers need to provide quality leadership (Botha, *et al.*, 2015:2).

1.12.2 Concepts related to the topic

Teacher retention: This is the keeping of teachers at a particular school invariably meaning to reduce teacher attrition and provide a more stable learning environment in schools (Boyd *et al.*, 2009: 416).

Teacher shortages: This concept is explained as a situation where schools lack sufficient personnel to fully carry out its core business of educative teaching (Ingersoll, Merrill & Stuckey, 2014: 22). In this study it also refers to individuals who are qualified to teach decide not to enter the teaching profession. This eventually results in high attrition rates (Ingersoll *et al.*, 2014:22). This is also the inability to fill staff vacancies using existing salaries with teachers qualified to teach in the fields needed (Sutcher *et al.*, 2016: 1).

Zambian Ministry of Education: The management of the education system in Zambia is controlled at three levels; namely the district education board secretary (DEBS), provincial education office (P.E.O), and Ministry of Education Headquarters. Each of these levels wields original powers though mutually exclusive (MoE, 2015: 56).

1.13. Interpretive Paradigm

All research investigations are grounded on a certain logical hypothesis about which procedures binding research investigation and approaches are appropriate for the expansion of knowledge in a given investigation. To administer and determine the value of any research, it is important to know what these assumptions are. The research process has three important dimensions namely ontology, epistemology, and methodology (Donna, 2019). This study attempted to explain how these three metaphysical features relate to the topic under investigation in terms of approach.

Additionally, Harford (2014: 14) points out that a research paradigm reflects our beliefs about the world in which we live because reality is defined by people's subjective experiences of the outside world as a result, they adopt an inter-subjective epistemology and ontological belief that reality was socially constructed". Fejes and Nylander (2019: 3) define a paradigm as that pattern of beliefs and practices that regulate inquiry within a discipline by providing lenses, frames, and processes through which an investigation is accomplished. This investigation was directed through an interpretivist worldview. Dede *et al.* (2016: 8) point out that a person's worldview influences his or her choice of methods". With this view, the researcher accepted the ontological assumption associated with interpretivist paradigm that various realities exist which could be time and context-dependent. Put differently, a person can interpret the same event, phenomena, or experience differently

(Harford, 2014: 16). It means the way people make sense of how things really are. The researcher chose to carry out the investigation to gain insights and understanding of the beliefs held by people in that context by using qualitative methods as a preference for researchers using the interpretive paradigm (Dede *et al.*, 2016: 8).

Another reason for choosing qualitative methods in interpretive paradigm was to add value to the meanings and interpretations of the participants. Participants were required to indicate their responses by ticking a number on a Likert-type 5 point scale on a questionnaire which was quantitatively analysed. In this research, “individual and group interviews were used to verify meanings ascribed to their numerical ratings in the questionnaire (Fan, Han & Liu, 2014:294).

In his view, Daniel (2015:904) warns that researchers’ intending to conduct clear and precise research should understand the philosophical underpinnings that inform the choice of research questions, methodology, methods, and purpose of the study. The interpretivist paradigm is based on two theoretical assumptions namely the epistemological and ontological traditions. These conventions are delineated, followed by suggestions on how they were infused in the study:

Ontological assumptions

- Realism is ultimately created based on individual understanding and is personal;
- Individuals infer and make their sense of proceedings;
- Proceedings are discrete and cannot be universal;
- There are several standpoints on one event; and,
- Interconnection in social disciplines is resolute by inferred connotation and signs.

Epistemological assumptions

- Understanding is increased through a stratagem that signifies the dissimilarities amongst people and the substances of natural sciences and therefore requires the social scientist to group the subjective meaning of social action (Kitchin, 2014:1);
- Information is expanded inductively to create a philosophy;
- Awareness arises from solitary conditions and is not reducible to simplistic interpretation; and,

- Understanding is grown through personal knowledge.

An interpretivist approach, therefore, includes the researcher's beliefs and behaviours as part of the testimony that must be presented and considered in a research activity (Harford, 2014: 14). The exposure of this information decreases what Harding calls impartiality or non-influence of opinions or feelings about the findings. In this sense, there is no impartiality on the part of the investigator because of the impact the inquiry has on the researcher as an ethnographer. Donna (2019: 271) stipulates that people can be well understood within the realm of their cultural milieu. This, according to Fejes and Nylander (2019: 3), is the basis on which interpretivist paradigm was established.

An interpretivist approach to research has the intention of understanding the world of human experience (Cohen Manion & Morrison 2011: 17). In addition to that, an interpretivist recognises the challenge of making a research objective. In terms of this position, a single objective reality does not exist (Harford, 2014:14). The researchers' involvement as well as the use of ontological and epistemological assumptions was of utmost importance in this study whose focus was on the centrality of meaning and understanding (Donna, 2019: 271). Additionally, the interpretivist paradigm worked well with this research study because some of the research methods included engaging with people within their social realm besides talking about their ideas, beliefs, and perceptions. Through this approach, this study endeavoured to explore socially meaningful action through direct detailed, interviews of participants in their natural setting to arrive at understandings and interpretations of how people create and maintain their social worlds (Harford, 2014:15).

Furthermore, Dede *et al.* (2016: 9) point out that both ontological and epistemological assumption make up a paradigm. This research investigated how school managers address the problem of teacher attrition in public secondary schools in Zambia. Therefore, understanding the teachers' social realities through interpreting their environment was important in this investigation as Kitchin (2014:1) points out that the perspectives and experiences of those who are affected by specific jobs must be grasped, interpreted and understood if solid effective specific jobs are to be retained. Moreover, Dede *et al.* (2016: 9) explain that the interpretivist researcher tends to rely upon the participants views of the situation being studied and recognises the impact on the research of their background and experiences. This study briefly discusses the assumptions and methodologies of this paradigm and how these relate to the area under investigation. This is in agreement with

the view of Kitchin (2014:1) who suggests that the reality is socially constructed. In this study, understanding of social reality through a varying human experience from the participants was enhanced by the rich contextual description of the topic under investigation. The inference that was derived by the investigator was a role of the situations of the individuals involved and the variety of interactions in the site under investigation, also individuals are deeply prejudiced by their personal experiences, values, understanding, and impartialities and incline to have a particular worldview.

Thus, in this study, recognition of subjectivity by participants was taken seriously because social realities exist due to different human experiences such as how school managers address the problem of teacher attrition in public secondary schools in Zambia. As a result, multiple realities were considered. These included the external reality, which was what happens in the physical world and internal realities which are subjective and unique to each person (Cohen *et al.* 2011: 17). Since each situation is different, the researcher had to comprehend the authenticity of teacher attrition in the region under investigation. Lodge and Corrin (2017:5) maintain that analysis in an investigation is aided by the researchers' insights and those of participants. The researcher relied on information-rich participants (DEBS and school managers) who were in a position to share their experiences.

Interpretivist main position is that research in this paradigm can never be objectively observed from the outside rather it must be observed from the inside through participants' direct experience. The role of the scientist in the interpretivist paradigm is to comprehend, explain, and demystify social constructs through the lenses of different participants' worldviews (Cohen *et al.*, 2011:17). Interpretivist approach is associated with humanistic research employing qualitative methodologies that are used to obtain an understanding of the world from an individual participant's perspective. These authors further point out that the interpretivist approach deals with people's perceptions, attitudes, and belief systems, feelings as well as emotions. Dede *et al.* (2016:9) aptly conclude that the major elements of interpretivist approach are its focus on providing an in-depth, detailed and true-to-life descriptions of research participants' views. Cohen *et al.*, (2011:17) further explain that the use of interpretivist approach help researchers to code data and to cluster it into themes, resulting in an in-depth description of the phenomenon, encapsulating the views and experiences of the various stakeholders. The next segment discusses the theoretical framework underpinning this study.

1.14 Theoretical Framework

Theory is meaningful in the provision of augmented reasons to make decisions. Challenges in education are augmented by a candid awareness of the theoretical framework sustained in educational situations (Cohen *et al.*, 2011: 10). The theoretical framework underpinning this study was drafted from the Human Capital Theory of Occupational Choice (Ben- Poratha, 1967: 352).

1.14.1 Human Capital Theory Approach to Teacher Attrition

The essential position of the human capital theory of occupational choice suggests that individuals make informed decisions regarding their net monetary and non-monetary benefits from a wide range of occupations and make deliberate decisions either to enter, stay or exit an occupation (Ben- Poratha, 1967: 352).

According to Piketty (2014: 241), the primary commitment between a qualified teacher and an education institution is predicated on existing data and situation regarding teacher attrition. The key component in understanding teacher attrition lies in recognising that change has taken place in an individual teacher that causes a reversal of the earlier decision to remain in teaching. There are two ways in which occupation-specific capital operates to prevent job mobility (Piketty, 2014: 241). In the first instance, individuals are rewarded with higher pay as long as their services are needed while in other cases, pay remained constant until longevity in the profession was guaranteed. This aspect of human capital theory explains why job switching was more common in the early days of teaching as opposed to years towards retirement. There are two kinds of capital: generic which can be transmitted to other professions fairly easily and precisely, that applies to that profession only. The greater the amount of precise capital, the more likely an employee stays in the profession. For example, homeownership, seniority in the profession, investing in the retirement scheme. This was one of the major reasons why movements were more likely to occur because the greater amounts of specific capital that one accrues with age or experience become barriers to leaving the profession.

The human capital theory of occupational choice stipulates that any given job can be ascribed to two characteristics namely inspection or searching which are observed without actually encountering the job and precise characteristics that are seen only after experiencing the job. A major constraint of the human capital theory lies in its hypothesis which states that an individual's precise knowledge about salary, benefits, and the

non-monetary aspects of the work. The process of finding and acquiring a job is done in an environment of uncertainty. The employee and employer both have insufficient understanding of each other and other employment alternatives (Lawson, 2012: 62).

The theory of teacher attrition discussed in this study embeds a pattern in a teaching career where the timing of marriage, the birth of children, geographical migration, and retirement are factors influencing teacher exodus. Normal career progressions within the education sector are also important and these include seeking higher wages, better working conditions, returning to college for further continuous professional development; and promotion or lateral transfer out of teaching to other education related jobs (Piketty, 2014: 385). Other variables that influence teacher attrition include monetary factors such as salary, promotion chances, and retirement packages. Non-monetary benefits include working conditions, collegiality within the workplace, schedules for family and leisure needs, positive attitudes among students, and parental support (Piketty, 2014: 365). It is assumed that people are more likely to choose jobs that maximise their income. In this study, teacher attrition can be explained as emanating from new information concerning the costs and benefits of the existing jobs against alternate jobs (Piketty, 2014: 384). According to Ben-Poratha (1967: 352), other things being equal, the greater the amount of occupation-specific, location-specific and firm-specific human capital that increases, the lower the probability of attrition. An alternative position of this assumption was that the higher the alternative salaries that are required to entice teachers to leave the profession the higher the accumulation of these types of human capital. In general, people accumulate these types of human capital with years of experience within a profession or at a specific school or particular setting. It, therefore, follows that leaving a profession, location or school is more likely earlier in the career. Therefore, individuals usually change occupations early in their careers when salaries are lower and more years of future employment are assured elsewhere.

The theory further posits that the longer an individual stays in an occupation the more he accumulates specific human capital which translates into wage benefits as long as that individual remains in that profession. This occupation-specific capital arises from specialisation which forms as a barrier to attrition. Searching characteristics include salary, type of neighbourhood, type of school, and benefits while examples of specific characteristics include types of students, workload, and time spent on extramural activities and collegiality (Piketty, 2014: 386). The approbation of any work is conditional: if the person finds the usefulness of the

specific characteristics is below some critical level, the person quits the profession. This condition extends to the employer as well. The school can be imperfectly appraised about the teacher's peculiarity at the time of hiring. If the teacher's actions or disposition turn out to be unacceptable, the school fires the teacher.

Another aspect of human capital theory worth consideration is location-specific human capital which includes homeownership, the proximity of friends, and family. Acquiring this location-specific capital in a new setting has an implication on time and costs apart from managing costs of relocation. These costs help explain why people move only if higher remunerations are offered. It also helps to justify why change is more likely early in a career rather than in mid-career since people become stable as they grow older. A final view of human capital is called firm-specific and in teaching, this can be associated with particular schools, school districts, or state systems. Thus human capital points out factors that are not transferrable to other schools or school districts and its presence discourages movement from a school or school district. For instance, seniority on the job demands respect from colleagues and administrators while at the same-time enjoying certain forms of autonomy and privileges, these are easily transferable to other schools. One single factor described as a school-system-specific capital is retirement. Teacher retirement provisions are either local or state-based. Movement out of the local school system or out of the State means that retirement benefits are transferred to the new job.

1.15 Summary

Chapter 1 included a discussion on the synopsis of the problem under investigation, the significance of this investigation, questions of the investigation, limitations, and demarcations of the investigation and description of keywords. This chapter concluded with a research paradigm underpinning this study and theoretical framework and a summary of key points that were identified.

1.16 Chapter Division

The structure of this investigation comprises five chapters as designated in the subsequent sub-sections:

Chapter 1 provides the overview as well as the orientation to the investigation. The purposes and the questions of the investigation trailed by the justification for the investigation are easily outlined in this chapter. The research methodology, delimitations of this study, ethical considerations, and clarification of major concepts, research paradigm, and theoretical frameworks are succinctly presented in this chapter.

Chapter 2 provides a comprehensive analysis of interrelated writings to generate hypothetical data on how school managers address the problem of teacher attrition in public secondary schools in Zambia. The review focuses on teacher attrition including its effect on the school and student achievement. Regions affected by teacher attrition are identified both regionally and internationally. This chapter also discusses factors influencing teacher attrition. Finally, the chapter reviews literature that determines and describes measures used to retain teachers.

Chapter 3 outlines a thorough description of the methodology and design used in this research. It includes the instruments that were used for data collection which data scrutiny process, reliability, and dependability of this investigation.

Chapter 4 summarises the results of this investigation to convey additional comprehension of the tasks and matters underscored in this research.

Chapter 5 provides a summary of this investigation and its key conclusions, recommendations in addressing the challenges of teacher attrition in public secondary schools in Zambia. The chapter closes with suggestions for further empirical studies.

1.17 Conclusion

This study explored how school managers address the challenges of teacher attrition in public secondary schools. This episode has conveyed a wide-ranging direction to the justification of the investigation. A theoretical framework as well as a synopsis of the current literature was outlined. Furthermore, the justification of the investigation and construction of the problem statement, questions of the investigation, aims besides objectives have been explained; this included the plan and approach of this investigation. The ensuing division offers a hypothetical argument on how school managers address the problem of teacher attrition in public secondary schools.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The previous episode dealt with the overview and experience of this investigation, declaration of the problem of this investigation, study questions, goals, and purposes of the present investigation. The discreet nature of this research, the study approach, and restrictions of this investigation, moral contemplations, and explanation of important ideas. In the preceding episode, the outline of the current investigation was concisely presented. The current section examines regional besides universal literature to the existing question of investigation. The purpose of this literature review is to scrutinise other studies that are related to the topic under investigation (Vogts *et al.*, 2014:112). In this study, the literature was deliberately searched and selected based on relevance to teacher attrition in Zambia. According to Kaiser and Cross (2011: 3), there are many reasons why teachers leave the profession and reasons are as many as those who are leaving.

This chapter delved into various views and research findings regarding teacher attrition. Some issues the chapter dealt with were dealt with included the definition of teacher attrition, its causes and effects on the functioning of schools, teacher attrition as a global challenge as well as a local problem in the Sub-Saharan Region and Zambia in particular, teacher attrition trends, factors influencing teacher attrition and retention.. The main thrust of chapter 2 was the discussion of salient features on teacher attrition in public secondary schools in Zambia. The literature study enabled the researcher to ask relevant key questions during the interviews and to put participants' answers into context. The strategy of literature analysis in this investigation was to acquire extra data on how school managers addressed the problem of teacher attrition in public secondary schools in Zambia. For this review, attrition was taken to suggest all perpetual losses of educators from the teaching profession for any kind of motive. The subsequent sub-section describes the notion of teacher attrition.

2.2 Teacher attrition

Teacher attrition is the steady decrease in membership in the teaching profession by way of retirement, resignation or death, it is the number of teachers quitting their jobs which includes both voluntary and

involuntary separation (Goswani & Jha, 2012:2). According to Ingersoll, May, and Merrill (2014: 7), the problem of attrition is insurmountable whether, in the education sector or any other profession, some attrition is inevitable; some educators will retire, others will quit for reasons that are personal and some will be dismissed from their jobs whilst others are encouraged to leave the profession. Sorensen and McKim (2014: 118) argue that teacher attrition is a significant challenge that cannot be underestimated because it results in personnel reduction in schools. This is more evident in the fact that almost half of all new teachers quit their jobs in less than five years of starting (Ingersoll, May & Merrill, 2014: 5).

According to Egu, Wuju, and Chionye (2011: 109), teachers could be classified into three categories (a) stayers (b) uncertain, and (c) leavers. In that regard, Simon and Johnson (2015: 17) define teacher attrition as qualified teachers exiting the classroom to assume other responsibilities, inside or outside education. Furthermore, Ronfelt *et al.* (2013: 4) in their study of teacher attrition adds another category, drifters, for those who leave the urban education but who stay in the field of education. The definition provided by Egu *et al.* (2011: 109) states that teacher attrition can either be expected or unexpected departure of qualified teachers from the profession and this can be permanent or temporary.

The above literature provides mixed definitions by different scholars and this makes it difficult to describe teacher attrition. For instance, it is not always clear in the literature what is meant by ‘leaving teaching’ (Lindqvist & Nordanger, 2016:88). Sometimes teachers are said to have left classroom teaching but remain within education-oriented works. In this study, attrition was considered to embrace all teachers who leave the classroom for whatever reasons (MoE, 2011:54). Consistent with this opinion, Egu *et al.* (2011:109) point out that teacher attrition is portrayed over time as a process which starts long before leaving because choices to exit the profession are made within personal frames of reference and the opportunity strides of the labour market. The apparent inconsistencies in articulating teacher attrition add a further dimension to understanding the precise extent of attrition across different jurisdictions. Many reasons have been attributed to teachers leaving the profession some of which reasons are the following:

- Personal- health, returning to school;
- Family reasons-raising one’s children;
- Job dissatisfaction-low salary, lack of administrative support, school facilities, experience with students and colleagues; and,

- Profession –promotion, career choice, opportunities for professional development (Johnson *et al.*, 2012:11).

By means of a review of research on teacher attrition, Simon and Johnson (2015:17) agree with the aforementioned causes for teacher attrition and amplified that the dominant factor predicting both intended and actual teacher attrition was the teachers' perceptions of the teaching profession. Research continues to focus on studying the effects and reasons for teacher attrition, unfortunately the challenge and current reality is that teacher attrition is attributed to many factors (Ng & Peter, 2010: 123; Ingersoll & Pedar, 2010:18; Buchanan *et al.*, 2013:112). Compounding the high rate of teachers exiting the teaching profession, are the many teachers referred to as 'movers' who change schools. Most teachers move to other schools for various reasons such as location, administrative support, pay, and professional development (Johnson, 2012:11). The next segment outlines the effects of teacher exodus.

2.3 Effects of teacher attrition

The school manager in every institution serves as the leader who is regularly supported by his /her educators in running the affairs of the organisation. Frequently, experienced and skilled teachers are chosen by school leadership to assist in the management of the school. The exit of these qualified teachers creates problem to the administration of schools (Fooi, Basri & Baki, 2014).

There is less conclusive research on the effects of teacher attrition on education; this is what Ingersoll and Perda (2010:29) contend. Despite this view, one of the significant effects of teacher attrition is poor learner performance which is attributed to the schools' inability to adequately staff classrooms with qualified teachers as a result of teacher attrition (Ingersoll & Merrill, 2010: 18). The disparity on the effects of teacher attrition is conspicuously noticed among the poorest and most disadvantaged schools (EFA, 2010:32). Chances for inter-school migration are created by teacher attrition. These chances give rise to empty classrooms especially in rural and remote schools which to a large extent remain vacant and are easily filled by untrained teachers (EFA, 2010:32). Considering the above perspectives, teacher attrition results in long delays before replacements are made. The delays impact on unfilled teaching vacancies, loss of academic learning time by students, sometimes for many months. Nevertheless, Ingersoll *et al.* (2012:30) argue that some amount of teacher attrition can be helpful to schools and individuals. For example, teacher attrition in a school can result in weak teacher-job matches, and adapting to new ideas in the school can prove to be a challenge to replacement teachers. Additionally, another effect of teacher attrition is that students do not benefit when they

receive teachers who are less effective than those who left school. Consistent with this opinion, Ingersoll *et al.* (2012:35) point out that when a school experiences high teacher attrition rates, there is going to be a disruption in the overall performance of the school. Consequently, a school's efficiency is compromised. Regarding the above discussion is the view that teachers who left the profession carry with them a wealth of experience, knowledge, and skills (Ingersoll, 2014: 4). This becomes a serious concern in education provision. Not only does the high attrition rate not only impacts on the cohesiveness of a school but also has a tremendous financial implication. This idea is navigated and is for the time being explained in the ensuing sub-section.

2.3.1 Financial cost of teacher attrition

Assessment of financial cost of teacher attrition cause educators, researchers, and policymakers to infer that policies focused on monetary reward and why teachers leave can help address the teacher attrition challenge (Daley & Kim, 2010:23; Hudson, 2010:9; Jerald & Van Hook, 2011:14; Barnett & Hudgens, 2014:4; Barnett, Wills & Kirby, 2014:4). The views of the current investigator remain that school managers are uncertain to be operational minus sufficient understanding of fiscal implications associated with teacher attrition.

Barnett and Hudgens (2014:4) point out that the cost of replacing a qualified teacher in terms of financial resources and the void that is left on account of those who leave are insurmountable. Irrespective of how it is perceived, teacher attrition results in a significant financial cost to education. Jerald and Van Hook (2011:14) stress that as qualified teachers exit their schools, a double tragedy occurs: money has been lost in training that will not be applied as a tool for school improvement and more money has to be spent in the recruiting and training of new teachers. In corroborating the above contention, Wushishi *et al.* (2014:14) suggest that school managers need to be well versed and up-to-date on issues related to teacher attrition particularly the financial costs involved when teachers leave the profession because there is need to invest more money into recruiting and training of new teachers which reflects on student achievement. This concept is briefly discussed below.

2.3.2. Effects of teacher attrition on student achievement

To address the challenge of teacher attrition and its effect on learner achievement, there is a need for schools to become centres of excellence for effective teaching and learning (Duley & Kim, 2010:23). As Hanushek and Rivkin (2010:267) reveal that regular staff changes have a direct effect on the implementation of a logical, comprehensive and amalgamated curriculum. A growing body of literature indicates that teachers who produce

higher student achievement gains are at least as likely and sometimes more likely, to stay in schools than their less effective peers (Boyd *et al.*, 2010:303; Hanushek & Rivkin, 2010: 268; Daley & Kim, 2010:23). Similarly, Hanushek and Rivikin (2010:270) found that teachers who left a particular school tended to be less effective than those who remained. However, neither Boyd *et al.* (2010:310) nor Hanushek and Rivkin (2010:274) directly tested whether the teachers who filled vacancies in a particular school were more effective on average than those they replaced, it is difficult to conclude the overall effect of teacher attrition on student achievement. For instance, Boyd, *et al.* (2011:305) point out those teachers who produced higher achievement gains and those with more experience were less likely to apply for transfer to other schools.

According to Darling-Hammond, Newton and Wei (2013:179), recent research confirms that a stable and quality teaching cadre is directly related to student achievement, the fact that student learning is directly linked to teacher effectiveness implies that teacher attrition reflects negatively on student achievement. Quality teaching is a significant in-school factor that defines student achievement. It is crucial that teachers' are provided with the necessary support for them to remain in the profession. Teacher attrition not only affects the progression of curriculum implementation and professional development but also decreases the number of qualified teachers (Ronfelt, 2012:3). Disjointed instruction impacts on the continuity of the curriculum that is delivered to students in the classroom. If schools are going to advance new technologies, innovations, creativity, and develop into professional learning communities, they must address the teacher attrition challenge (DeAngelis *et al.*, 2013:351). The education community is, therefore, better served when it maintains experienced teachers and supports professional development.

To conclude, the preceding discussion tried to demonstrate that when teachers leave their schools the most affected are the learners and this makes schools resort to using untrained teachers who in the end remain ineffective. Having explored and propounded on the effects of teacher attrition on student achievement the current study now turns to focus on trends of teacher attrition. This is dealt with in the next section.

2.4 Trends of teacher attrition

Teacher attrition varies substantially across provinces, regions and countries, among and within schools and educators of different categories. Below, the variation in teacher attrition as a global challenge and particularly in Sub-Saharan Africa is discussed (Carver-Thomas & Darling-Hammond, 2017).

Over the past three decades, a lot of articles, reports, and commissions have described trends of teacher attrition (Keigher, 2010:3). Teacher attrition does not happen haphazardly, but rather it manifests itself through a conscious decision for qualified teachers to leave the profession; two trends explain which type of teachers are more likely to leave the profession; highly qualified teachers and those with skills and qualifications most needed in the labour market (EFA, 2010:25).

Different scholars have argued that teacher dedication is one of the significant reasons that determine a teacher's decision to stay or exit the teaching profession (Corbell *et al.*, 2010:57; Hanushek & Rivikin, 2010:267; Day & Gu, 2010:11), and this is closely related to quality issues, especially if the more able teachers are the ones most likely to leave the profession. Understanding teacher attrition patterns provides plausible policy solutions in addressing areas for attrition of qualified teachers. It is usually presented either as a challenge for those in the profession in terms of planning and resources or as an indicator of the relatively poor quality of teaching and low teacher morale (Pitsoe, 2013:311). While there is no doubt that a lot of countries struggle with teacher attrition, there are equally serious challenges of teacher deployment (Johnson *et al.*, 2012:11). This view is supported by Pitsoe (2013:311) who notes that in many countries there are more unemployed qualified teachers in urban centres than in rural areas who have unfilled vacancies. This trend of synchronised surplus and shortage is strong evidence that the problem of teachers for rural schools will not be sorted out by simply providing more qualified teachers. Pitsoe (2013:311) elaborates this view by using the example of the 2004 to 2005 school year in the United States, where 17% (621,000) of teachers moved on and slightly less than half of these qualified teachers transferred to a different school that represents a rate of almost 1000 teachers per day who quit teaching and 1000 teachers per day who move to other schools across the US. The perennial question here is on how school managers address the challenge of teacher attrition in public secondary schools.

An array of researchers, including Hanushek and Rivikin (2010:268), Day and Gu, (2010:12) and Ingersoll and Perda (2010:18) is unanimous that teacher attrition varies from one country to other using variables such as demographic characteristics, age, and experience, family considerations, and subject attrition. Ingersoll *et al.* (2012:30) assert that the stable findings that attrition was higher in the first few years, lower in middle years and rises as older teachers approach retirement age. This represents a U-shaped plot of attrition against age and experience. Other studies have equally demonstrated that large numbers of teachers exit the profession in

the first few years (Allen, Burgess & Mayo, 2012:5). For example, Hong (2010; 530) notes that the shocking rate of attrition among newly qualified teachers is a persistent and pervasive challenge in many countries. This assertion is based on Ontario prediction which stipulated that 18% of newly qualified teachers were at the risk of leaving the profession within the first five years (Johnson *et al.*, 2012:2).

In conclusion, the above discussion suggests that teacher attrition is a complex issue and is determined by the different variables depending on the context and the country involved (Ingersoll & Perda, 2010:18). This statement suggests that important strides have to be made in education when teacher attrition is addressed. This section has examined insights on who leaves the profession and at which stage including the variables associated with those most likely to exit the profession. This phenomenon of teacher attrition is experienced in most countries globally (Baki, Basri, Fooi & Wushishi, 2013:462). The next section explores and briefly describes teacher attrition as a global concept.

2.4.1 Teacher attrition as a global challenge

Teacher attrition is a unique task fronting several schools equally in the industrialised and less industrialised nations. When teachers leave and go to other countries, government efforts are undermined in attending to school staffing levels and this allows developed countries to take advantage of investments in training that have been done by less developed countries (Hong, 2010:530).

The absence of qualified teachers' in schools complicate matters of effective teaching and learning (Borman & Dowling, 2008:398). International research findings point out that a significant source of failure in service delivery in education is teacher absence (Bryk *et al.*, 2010:10; Bruns, Filmer & Patrinos, 2011:10; Johnson *et al.*, 2012:11; Kraft & Papay, 2014:489; Skaalvik & Skaalvik, 2015:182).

Teacher attrition is a scholastic contest that is not restricted to one specific nation or area; collected works in this respect indicates that it is a universal challenge. For instance, many studies in the developed world have provided empirical evidence of teacher attrition issues in schools, for example, in the US the annual attrition rates increased by 41% from 1987 to 2008, (Ingersoll *et al.*, 2012:30; Kraft & Papay, 2014:485; Skaalvik & Skaalvik, 2015:180). The same pattern can be found in Sweden, where an increased attrition rate can be discerned over the last 30 years. The average frequency of teacher attrition among Swedish teachers doubled

during the 1980s and 1990s (Nordanger & Lindqvist, 2016:89). Other countries such as The Netherlands (Brok *et al.*, 2017:883), Hong Kong (McInerney *et al.*, 2015:11), and South Africa (Pitsoe, 2013:310) have had a serious challenge with teacher attrition. Many researchers of other countries such as Australia have equally highlighted this issue in schools (Milburn, 2015:2) and the United Kingdom (Allen, Burgess & Mayo, 2012:3). Across the US, Boyd *et al.* (2011:3) point out that between 40% and 50% of newly qualified teachers usually exit the teaching profession after five years of teaching. This view is complemented by Ingersoll *et al.* (2014:5) who posit that nearly half a million qualified teachers exit their schools each year. This position is supported by some empirical studies that teacher attrition has become a worldwide challenge (Hong, 2010:530; EFA, 2014:10).

The literature identifies teacher attrition in both developed and developing countries as a crisis that needs to be addressed (Kaiser & Cross, 2011:3; Schleicher, 2011:5; OECD, 2012:11). For instance, Wushishi *et al.* (2013:462) contend that a high rate of teacher attrition is one of the most detrimental situations prevailing in educational institutions and has attracted policymakers and education administrators to a series of research on teacher attrition. To deal with the magnitude of teacher attrition challenge globally there is a need for assessment. EFA (2014:10) points out that teacher attrition has reached critical levels in most parts of the world and there was a need to recruit 27 million teachers by 2030. This assertion is complimented by UIS (2015:2) projection that by the same year 22.6 million teachers will compensate for attrition. It is worth noting that in a bid to fill this gap; many countries are lowering standards, often engaging new teachers with little or no training.

Empirical studies conducted in the United States of America (Ingersoll & Perda, 2010:28; Ingersoll & Merrill, 2010: 17) also indicate that there were more teachers trained each year in that country but most leave within the first three years. Furthermore, challenges of teacher attrition are still being reported in other publications (Schleicher, 2011:5; OECD, 2012:11). These views underscore the urgent need for school managers, education practitioners, and education systems around the globe to give attention to challenges affecting teacher attrition and how to address this problem. According to Mason (2010:117), cited in OECD (2012) points out that 62% and 77% of primary and secondary school teachers respectively voluntarily resign from the teaching profession in Australia annually. The above view suggests explicit obligation from the school managers to strategise in reducing teacher attrition.

Ingersoll and Perdaor (2010:14) report that 15% of qualified teachers leave the profession within three years. In elaborating this view, Ingersoll and Perdar, (2010:14) point out that 15% leave the profession within the first five years in the US. In supporting these findings, Kaiser and Cross (2011:3) point out that teacher attrition has worsened such that between 2008-2009 and 2009-2010 school years, 31% and 35% of qualified teachers left the teaching profession respectively. This situation is the same in the UK where 14 % of qualified teachers left the profession within four years of entrance into the profession (Allen *et al.*, 2012:5). Out of the 3,252 qualified teachers hired by the district of New York in 2010-2011, about 8 % left the profession within a year, while 16% left after two years (Mcadoo, 2013:1). Understanding of teacher attrition as a universal challenge crucial for remodelling and instituting a change in decisiveness that school managers should embrace to address the challenge of teacher attrition. However, it is also important for school managers to not only dwell with known factors that result in teachers leaving their schools but they should find ways of retaining their staff by devising strategies of addressing teacher attrition (Joseph & Jackman, 2014:74). Inferred from the above discussion is a view that teacher attrition besides being a global problem has impacted on the quality of education provision (Ingersoll *et al.*, 2014:5). The next section examines teacher attrition in Sub-Saharan Africa.

2.4.2 Teacher attrition in Sub-Saharan Africa

The need for teachers varies from one country to another, but countries with the greatest needs are reported to be in Sub-Saharan Africa, North Africa, West Asia and the Arab States (World Bank 2014:10). This view is authenticated by Saeki *et al.* (2015:4) who state that teacher attrition in Zambia is hovering around 11% due to poor working conditions including low salaries and most are leaving for unknown reasons. Their destination was South Africa, Namibia, and Botswana.

Although these countries have continued to woo more of these teachers, other qualified teachers' moved to OECD countries, on the contrary, no massive reverse teacher attrition has been reported. Sub-Saharan countries report that attrition rates for qualified teachers oscillate between 3% and 17% (EFA, 2010:5). This high attrition in these countries is attributed to having a young teacher population who are more likely to leave for greener pastures. For instance, Wushushi (2014:11) points out that teacher attrition is less in the South and Western parts of Nigeria which is within the range of 10 to 15%. However, the rate of attrition is significantly

higher in the Northern part of Nigeria owing to the low level of education and job opportunities as opposed to the Southern part of the country. Along with the preceding views, teacher attrition in Nigeria varies according to regions. Attrition is minimal in the South Western part of Nigeria with about 10% of qualified teachers exiting the profession within the first five years of their teaching experience (Ekundayo, 2010).

Zambia has one of the highest teacher attrition rates in the sub-region and the Government of the Republic of Zambia anticipates learner-educator division of 64:1 in the education sector (M.O.E, 2010:3) which is far too high. This calls for an investigation into why competent educators are exiting the occupation. The Ministry of Education statistics have also shown that teacher attrition is very high in public secondary schools in Zambia. The table below depicts teacher attrition rates from 2007 to 2014.

Table 2.1: Public secondary school teacher attrition rate from 2007 to 2014

YEAR	ATTRITION NUMBER	COMULATIVE TOTAL	PERCENTAGE OF TOTAL
2007	1114	1114	7.5
2008	938	2052	6.3
2009	1736	3788	11.7
2010	1460	5248	9.8
2011	1376	6624	9.3
2012	5671	12295	38.4
2013	1150	13445	7.8
2014	1335	14780	9

Source: Education Statistical Bulletin (2013)

The above table indicates that the greatest teacher attrition rate was in 2012 where over 38.4% of public secondary school teachers left the profession. Consistent with the above data, Mulkeen (2010:35) reports that in 2005 Zambia had 1,017 qualified teachers with degrees working in schools, but the University of Zambia's annual graduate teacher output is 400. This points to the fact that either these graduates were not entering the

teaching profession or where not staying in it very long. Consistent with this view on teacher attrition, Commission for Africa (2010:3) points out that:

Africa is undergoing teacher attrition of critical proportions. Zambia has just a third of the teachers it needs, Ghana a quarter, and Lesotho only a fifth.....large sums must be invested in teacher training, staff retention, and professional development. Teacher/pupil ratios should be brought under 1:40 in primary education.

The above quotation suggests that the sum of educators required at the national and international level suggests replication of the educator labour force. According to Pitsoe (2013:310), South Africa needs between 20,000 and 30,000 newly trained teachers annually for the coming decade. This scenario is compounded by the reality coming out of colleges of education which graduate far fewer teachers. Every year, an average of 192,000 teachers has to be hired in Sub-Saharan Africa to fill additional posts for Universal Primary Education (UPE) and also compensate for teachers leaving the teaching profession (EFA, 2012:5). These departures are a result of poor conditions of service that are offered to teachers. Because of the above departures, EFA (2012:4) states that countries in this sub-region need to recruit about 63% of the existing teaching cadre to meet the required primary enrolment.

A good number of qualified teachers have left the profession for greener financial pastures in Sub-Saharan Africa and even gone to OECD countries (Baki *et al.*, 2013:462). Therefore, there is a need in these affected countries to increase the primary teaching workforce, with the exceptions of Botswana, Burundi, Cape Verde, Madagascar, Mauritius, Sao Tome, and Principe, Sierra Leone, Swaziland, and Togo (EFA, 2014:4). Zambia hires 5000 teachers annually to reduce on high pupil-teacher ratios particularly in rural areas but how many of these teachers spend beyond two years after recruitment remains a mystery (Zambia Education for All National Review, 2015:1). Excellence in teaching remains subtle in several nations that are coping with excessive learner-educator quotients. In Zambia for example, the rate of teacher attrition rose from 3% in 2002, 5% in 2004, and 12% in 2008 to 17% in 2012 (Zambia Education for All National Review, 2015:8). Table 2.2 attests to the above data.

**Table 2.2: Annual Teacher Attrition Rates in Selected Countries
in Sub-Saharan Africa**

Nation	% by level	
	Primary	Secondary
Eriteria	2	-
The Gambia	3	-
Lesotho	3	10
Liberia	1.6	-
Malawi	5	10
Uganda	5	6
Zambia	9	8
Zanzibar	5	7

Source: Mulkeen, 2010

According to Mulkeen (2010:35) in Sub-Saharan Africa, teacher attrition will not likely go below 5% because there is an inverse relationship between the average service of a teacher in the profession and attrition rate. The next segment provides a brief description of the factors influencing teacher attrition.

2.5 Factors influencing teacher attrition

This segment focus on outlining the key variables that contribute to teacher attrition. School context variables namely teacher preparation, monetary, working conditions, and social factors are equally addressed. Kaiser and Cross (2011:3) and Schleicher (2011:5) argue that there are several explanations that back teachers' exiting their occupations. Even if several reasons are accredited to teacher exit, the present investigation concentrates on how school managers address the challenge of teacher attrition in public secondary schools in Zambia. The review starts with an analysis of the aspects that cause teacher exit. After explaining these factors, the literature on personal characteristics and school context variables are reviewed. The next segment discusses the causes of teacher attrition.

2.5.1 Causes of teacher attrition

Several reasons cause teachers to exit from the profession. Buchanan *et al.* (2013:112) mention low salaries, weak organisational climate, and lack of opportunities to participate in decision making, difficulties to adjust to teaching demands, burnout, and unhealthy school culture. Ingersoll and Perdar (2010:18) stress that some of the studies reveal that teachers who acquire higher certificates obtained in more lucrative courses and prestigious universities and colleges would most likely leave the teaching profession. Furthermore, Masaiti and Naluyele (2011:410) point out that many factors can contribute to teacher attrition; whether a teacher will remain on the job or exit the profession depends on individual factors such as qualifications that are of low value and are not in high demand on the market, chances of such teachers staying longer are higher. Another group of researchers' show that attrition can be subcategorised into many kinds, each affected variously by human and social capital (Long *et al.*, 2012a:630; Kraft & Papay, 2014:489; Weissberg, 2016:384).

A variety of constructs can be related to the challenges of teacher attrition, nonetheless, these variables vary from country to country. The dimensions in the USA may not be the same as in Sub-Saharan Africa but notwithstanding the differences in these variables, the common factors in most countries point to several factors that cause teacher attrition which include demographic factors (Ingersoll & Perda, 2010:18), low wages (Kaiser & Cross, 2011:3; Schleicher, 2011:5; Masaiti & Naluyele, 2011:410; Salif & Agbenyega, 2013:63), professional development (Johnson, Kraft & Papay, 2012:11), poor working conditions (Bryk *et al.*, 2010:10; Mafora, 2013:229; Kraft & Papay, 2014:489), lack of teacher's interest in pedagogy (Scheopner, 2010:261; Beltman, Mansfield & Price, 2011:186; Skaalvik & Skaalvik, 2015:182). The next segment discusses time and demographic profile as causes of teacher attrition. Each of these factors is briefly discussed below.

2.5.1.1 Time

The time frame in which more teachers exit the profession is one of the distinguishing features that determine teacher attrition. Ingersoll and Perda (2010:14) point out that a third of all new teachers leave after three years and 46% are gone within five years of service. This view is supported by Wang, Berry, and Swearer (2013:296) who reveal that among the novice teachers, those with less than four years of experience, the average attrition rate was 9% annually. Ten years earlier, Ingersoll (2003:13) revealed similar findings that showed between 40 to 50% of teachers left the profession entirely within the first five years of service. Research continues to focus on studying efforts and reasons for high teacher attrition; unfortunately, the challenge and current reality is

that teacher attrition is attributed to many core variables of which time plays a crucial role (Ingersoll & Perda, 2010:18; Masaiti & Naluyele, 2011:410; Mafora, 2013:229; Kraft & Papay, 2014:489). The next subsection looks into the role demographic profile plays in teacher attrition.

2.5.1.2 Demographic characteristics

Research has shown that currently there is a straightforward association among sexual characteristics, time of life, and teacher exit rate. According to Maliki (2013:11), age is a reliable predictor of teacher attrition, with higher attrition rates chronicled for both old qualified teachers and the young ones. According to Ingersoll *et al.* (2012:6), results from studies on US teacher attrition, suggest that those who are more likely to exit the profession are female, married who teach mathematics and science. The schools they are leaving are often urban or suburban with the high enrolment of low achieving and poor students. Yet, this is in sharp contrast with Schleicher's (2011:5) study which emphasises that even if the female teachers outnumber their male counterparts, it has been shown that attrition rates are higher for males who change roles within education and move up the career path.

It has been found that younger women are more likely to exit the profession than younger men while older women are less likely to leave than older men (Salif & Agbenyega, 2013:63). This view is complemented by Ingersoll and Perda (2010) as cited in Riggs (2013:1) assertion that teaching originally evolved around the perception that it was a side-line for women before they got their real job, that of raising families; and for men, it was temporary until they moved out of the classroom and become administrators.

This position is complemented by data from Trinidad and Tobago, MoE (2014:5) which states that out of 13,366 qualified teachers currently serving in primary and secondary schools there are only 3,475 male teachers representing 26% of the entire teaching force. The situation is not different from that of Zambia where more than half of the 115,000 teaching cadre constitute of women teacher population (MoE, 2016:50). The ensuing subsections discuss an analysis of personal characteristics to comprehend the influence of these aspects on educator exodus.

2.5.2 Teacher personal characteristics

According to Thomason (2011:21), teaching is a demanding profession in which teachers must navigate emotionally charged situations daily. In addition to their previous professional development, teachers must rely on their own social and emotional competence and personal characteristics such as personality in these situations to help guide their behaviour. Teachers bring characteristics of their personalities into the interactions they have with learners in the classrooms. Teachers' influence on student's learning is more pronounced than any other school-based factor (Boyd *et al.*, 2011:305). Effective teachers are more likely to leave (Day & Gu, 2010:11) due to personal reasons. However, on average teachers with strong academic qualifications are more likely to leave and enter schools with better learner achievement (Darling- Hammond *et al.*, 2013:179). Although the research base seems inconclusive, there is a general agreement in the field regarding several teacher personal characteristics that are critical to teacher attrition (Johnson *et al.*, 2012:11). These factors include:

- (i) Prior work experience: inexperienced teachers are more prone to leave teaching than those who are more experienced (Buchanan, 2010:201);
- (ii) Initial commitment: The less committed teachers tend to leave teaching than those who exhibit a higher level of commitment to teaching (Beltman, Manfield & Price, 2011:186); and,
- (iii) Professional qualifications: this includes teachers who come from renowned institutions and are more likely to remain in teaching compared to those who emerge from seemingly weaker institutions (Johnson *et al.*, 2012:11). A close examination of the above attributes indicates that both internal and external factors influence teacher attrition. In the next section school, context variables that are related to teacher attrition are discussed.

2.5.3 School context variables

In the literature that has examined teacher attrition, attempts have been made to identify what makes teachers leave the profession (Johnson *et al.*, 2012:11). Factors such as teacher preparation, social, monetary, and work conditions are some of the variables that are critical to teacher attrition. These four variables are deemed to be

some of the most significant reasons that impact educators' choice to exit their careers. Every single component is concisely deliberated in the next session.

2.5.3.1 Teacher preparation

Pre-service training provides a clear sign of how equipped and prepared novice teachers are to handle their classrooms (Ronfelt, 2012:6). To guarantee that learners are inculcated with imaginable schooling, educators must exhibit excellence in their teaching. According to DeAngelis *et al.* (2013:350) the time spent in teacher pre-service studies is very short compared to the length of a teaching career. Darling-Hammond *et al.* (2012:23) identify the benefits of teaching practice within the teacher training programme since fieldwork help students to showcase their skills before actual teaching. Consistent with this opinion, Ronfelt *et al.* (2013:5) found that only half of those teachers who had received prior training in form of teaching practice left the profession as compared to those who received none and completely left the profession. It also helps teacher trainees start viewing themselves as teachers and improves their attitudes towards teaching. For instance, Ingersoll *et al.* (2012:30) found that a teachers' pedagogy is significantly related to teacher attrition especially among mathematics and science teachers. This view is complimented by Ronfeldt (2012:5) who suggests that student teaching experiences are linked to teacher attrition and effectiveness.

The literature identifies teacher preparation as one of the many facets of teacher attrition. According to Ingersoll *et al.* (2012:32), 9.8% felt they had in-depth training in pedagogy. These statistics are worrisome because when teachers are unfamiliar with the content, are unaware of how to teach the content, and are not ready to face the challenges of their first year, feelings of frustration and stress occur, causing novice teachers to reach a breaking point. This breaking point is when they decide to exit the teaching profession. This view is complimented by Brannon and Fiene (2013:192) who point out that 20% of mathematics teachers, 26% of science teachers, and 13% of other teachers felt they had little or no pedagogical preparation to guide them for their first year of teaching. Put differently, educators need to have a complete understanding of the syllabus they are using. They will be less efficacious teachers if they lack in-depth knowledge of their pedagogical skills.

Educator training programmes provide different abilities that inspire long-lasting careers in teaching. DeAngelis *et al.* (2013:351) point out that a pre-service programme predicts a lengthy career. According to

Ingersoll *et al.* (2012:33) that there is a relationship between the kind of pre-service training teachers undergo and their potential prospect of attrition”. Furthermore, Ronfelt *et al.* (2013:6) reveal that teachers who had more hours of teaching practice as part of teacher training had a higher self-assessment of teaching preparedness and were less likely to leave teaching. Inferred from the above discussion was the view that teacher pre-service preparation played a significant role in reducing teacher attrition. What follows in the next fragment is the aspect of financial rewards and how they influence teacher attrition.

2.5.3.2 Monetary factor

Benham and O’Brien’s study as cited in Foster *et al.* (2017:2) provided a yearly report on teacher exodus, the subsequent aspects were rated and numeral 7 was the least significant reason why teachers who had already left the profession specified as the reason why they left:

1. Accountability
2. Increased paper work
3. Student attitudes
4. No parent support
5. Unresponsive
administration
6. Low status of teachers
7. Salary considerations

However, current teachers including potential leavers ranked reasons for leaving as follows:

1. Salary considerations
2. Increased paper work
3. Accountability
4. Low status of teachers

5. Unresponsive administration

6. Student attitudes

7. No parental support

In most probable terms, the above reasons explain, in part, why the differences in important factors between ‘stayers’ and ‘movers’ illustrate that those currently serving in their teaching positions view salary as the most important factor in teacher attrition.

Touchstone (2015:172) postulates that identifying and addressing qualified teachers' needs enhances teacher retention even though low salaries are a major contributing factor that affects teachers' decision to quit the profession. For instance, teachers in Africa live on less than three dollars per day does not help meet teachers' basic needs (Salif & Agbenyega, 2013:4). This view is supported by Joseph and Jackman (2014:74) who reported that teachers who left the teaching profession cited low payment as the significant reason for their leaving. Furthermore, Peptra-Mensah *et al.* (2017:54) point out low salaries as a major contributory factor that influence teachers to leave the profession as a result salary structures appeared to be the influencing factor in teacher attrition.

According to Abdei (2010:2), a teacher is more likely to leave a region where the salary structure is lower than in any other region. This is in agreement with Mertler (2016:34) who notes that giving higher salaries to teachers mitigate teacher attrition in schools especially those that are poor or are of low income. In stark contrast, Smollin as cited in Zhong and Zeller (2016:75) points out that access to higher-quality curriculum, clean and safe building, resources, relevant professional development and supportive administration are more important than higher salaries. This indicates that low salaries are not the only reason for high rates of attrition in schools.

According to Masaiti and Naluyele (2011:410), factors contributing to teacher attrition are poor conditions of service signified by poor salaries. Besides, qualified teachers whose contribution to the provision of quality

education has not been reciprocated with adequate salaries resulting in many leaving the profession. Those who remain are grossly underpaid, poorly accommodated, poorly deployed, and receive very little support in the areas they work. In recognition of the above view, Salif and Agbenyega (2013:4) stipulate that most teachers remain unhappy because of unfavourable working conditions such as low pay. Many people no longer prefer the profession because it is perceived as a low paying profession whose conditions of service are no longer attractive. Furthermore, criteria for awarding salary increments influence who gets attracted into teaching, who stays in teaching and for how long (Joseph & Jackman, 2014:74). Understanding the role of salaries and other monetary incentives play in personnel retention is essential towards remodelling and creating a modification in the approach that school managers should implement so that they can handle teachers effectively. The next segment discusses working conditions as a factor influencing teacher attrition.

2.5.3.3 Working conditions

According to Amin (2015:141), teachers leave their schools for greener pastures owing to poor working conditions. In addition to confirming the significance of working conditions in schools, Iqbal (2016:335) argues that variables of teachers' working conditions are more conspicuous for predicting attrition than was previously noted in related literature. Notwithstanding the growing perception about the significance of working conditions, researchers have only started to comprehend how different variables of the workplace affect teachers' ability to execute their duties well and their willingness to stay in the profession (Bryk, *et al.*, 2010:10; Pitsoe & Machaisa, 2012:7; Marinell & Coca, 2013:25).

On average, when teachers leave schools they are not running away from their students, on the contrary, most teachers enter teaching for service (Achinstein *et al.*, 2010:71). Therefore, the present researcher contends that legislators and consultants who wish to keep capable and educators must implement retention strategies that provide a conducive teaching environment which also depends on the nature of the school. Bryk *et al.* (2010:10) and Buchanan (2010:201) are unanimous that teacher's working conditions are considered central to teacher retention and therefore, appear to be a catalyst for teacher attrition. Furthermore, physical environment such as school infrastructure, classroom conditions, and unkempt grounds are some of the contributory factors to teacher attrition (MoE, 2010:60). This position is in agreement with Johnson *et al.* (2010:2) who point out that working conditions are contributory factors to teacher attrition. Furthermore, Tickle, Chang, and Kim (2011:342) observe that working conditions have emerged as the main source of

teacher job dissatisfaction and teacher attrition. Yoo (2011:106) also observed that qualified and gifted teachers left the teaching profession as a result of poor working conditions prevailing in schools. In a consistent view, Beltman, Mansfield, and Price (2011:186), and Buchanan (2010:201) agree that workplace environment influence teacher attrition. The following aspects have been described as having a major effect on teacher exodus:

- Work environment changeover from being a student teacher to a competent teacher (Buchanan, 2013:112);
- Poor working conditions, such as salary and a heavy workload (Buchanan, 2010:201); and,
- Lack of collegial and administrative support (Plunkett & Dyson, 2011:33).

Pitsoe and Machaisa (2012:7) advance the view that poor working conditions lead to teachers quitting the profession. Some researchers have noted that poor working conditions and school climate in most schools are a more powerful driver of teacher attrition (Marinell & Coca, 2013:25; Kraft & Papay, 2014:489; Weissberg, 2016:384). For that reason, the current investigation contemplates it significant to the purpose of this research, to identify the importance of generating a conducive school environment in addressing teacher exodus. This is discussed in the next section.

2.5.3.4 School climate

Buchanan *et al.* (2013:113) point out that the school climate is anchored on people's expressions of school culture which reflects values, goals, teaching, and learning as well as organisational culture. Implied in this view is an understanding that teacher exodus entails exploring predominant teacher working situations in the organisation. In most cases, these conditions exert a significant impact on newly trained teachers who most leave within the first five years (Ingersoll & Perdor, 2012:15). This point is maintained by Bry *et al.* (2010:10) who state that school environments that are supportive where teachers and students are valued trusted and have time and ability impacts on teaching and learning. Johnson *et al.* (2012:2) describe school climate as the psychological atmosphere prevailing at any given moment in a school. Several aspects impact on school environment some of them include; student and teacher behaviour, teacher expectations, school rules, and work situation. These factors not only influence the climate of the school but also impacts on learner achievement (Cohen *et al.*, 2012:180). The work environment in which learning and teaching take place is quite different from other non-teaching jobs. Goldring *et al.* (2012:330) contend that when schools provide an enabling environment for effective teaching and learning and teachers are given opportunities in decision

making on school activities, they eventually show passion in teaching and are less inclined to leave the teaching profession.

Murphy and Louis (2018:23) also point out that classroom experience is an important ingredient in the school's working conditions such as a lack of collegial support as well as lack of control in which teaching was conducted in the classroom as variables that prejudiced their choice to exit their jobs. Bogler and Nir (2015:541) suggest that classroom climate and administrative support play an important role in a teachers' decision whether to remain in teaching or leave the profession. Similarly, Hughes, Matt, and O'Reilly (2015:130) posit that despite the assertion that the right conditions of work should prevail for effective teaching and learning to take place, a negative classroom climate has an effect on teachers' decisions to remain in the profession.

There are several examples of school climate that can influence teachers to exit the profession. Hirsh *et al.* (2010:7) cite low salaries, class size, student discipline, facilities, school leadership as well as professional development as examples. These factors promote a positive culture of schooling (Ingersoll & Merrill, 2010:18). Therefore, to gain a clearer comprehension of teacher attrition there is need to understand variables that influence school climate. Furthermore, some variables that influence school climate include the relationship between teachers' emotional life and teacher attrition. There was a resilient connection between teacher exodus and emotional fatigue. Strategies to regulate emotions such as expressive suppression, reappraisal, and cognitive questions were administered to the participants. Despite these strategies which accounted for various workplace conditions on emotions, emotionally higher teachers had higher attrition intentions (Tsouloupas, 2010:174). In keeping with the above view, Townley and Schneider-Ramirez (2011:86) concur that school climate is the complete environmental quality exhibited within an organisation which can either be hostile, rigid, and warm or open. In support of the above view, Boyd *et al.* (2011:304) contend that school climate promotes collegiality among and between students, members of staff and administrators create possibilities of everyone having a say in the decision-making process. This is usually done through shared convictions, personal freedoms, and hard-work exhibited by students, teachers, and administrators. Furthermore, Atteberry (2013:16) states that a school climate based on student and teacher affirmation brings out a sense of belonging and connection, which eventually increase academic self-image and success as well as increase teacher

efficacy and reduction in attrition. The next section focuses on lack of administrative support as another important variable that impacts teachers' emotional life and subsequently leads to teacher attrition.

2.5.3.5 Lack of administrative support

One of the utmost regularly mentioned reasons for teacher exodus is the absence of managerial provision. This is reflected in the school manager having competing priorities and inattentive to teachers' needs or being unavailable (Prather-Jones, 2011:2). When educators ask for assistance and trust that those in power have their top interest to assist them, the probability of staff preservation is greater. If this provision is vague then educators' sense being left out and that they have to attend to every new situation on their own.

Administrative support also implies availability of resources, where the lack of resources persists teachers look to their administrators as not performing to their expectations (Bataneh & Alsagheh, 2012:5). Another wedge that teachers feel separates them from their administrator's support is when they have no say in the decision making. As found by Howson (2016:10) teachers have very little time participating in decision making, it shows that this lack of participation in decisions that affect their careers can have negative effects on the teaching profession. The aforementioned suggests a view that conditions under which school administrators operate need to be institutionalised. That is sustainable strategies that can stimulate teachers to see value in what they do as educators. The preceding revelation points to the fact that educators are not completely content with their work. In view of this, the next section examines teacher job dissatisfaction as one variable that affects teacher attrition.

2.5.3.6 Job dissatisfaction

The literature highlights job dissatisfaction as another key aspect that influence teacher attrition (Beltman *et al.*, 2011:186; Ingersoll *et al.*, 2014:25; Skaalvik & Skaalvik, 2015:183) even though the push factors are many. For instance, an array of scholars, including Ingersoll and Perda (2010:18), Masaiti and Naluyele (2011:410), Mafora (2013:229), and Kraft and Papay (2014:489) are unanimous that there are many reasons why qualified teachers are dissatisfied with their jobs, but there is no cure-all solution to the problem. The causes of job dissatisfaction resulting in teacher attrition appear to be varied. Loeb, Ingersoll, and Perdor (2010:18) report that teacher attrition in high poverty-stricken schools was twice that of schools with low

poverty levels. For instance, dissatisfaction with teaching was the reason that contributed to teacher attrition in low poverty schools.

According to Masaiti and Naluyele (2011:410), teacher dissatisfaction ranged from student discipline and motivation to lack of school management support. Kraft and Papay (2014:18) reveal that teaching is viewed as rewarding by some teachers but many teachers report a high degree of job dissatisfaction which leads to teachers leaving the profession. Dissatisfiers erode the effectiveness and the efficiency of teachers and therefore negatively influence the human performance potential of both teachers and students (Ingersoll & Perda, 2010:20). Moreover, unsupportive school environments and negative social relations with stakeholders such as parents, colleagues, and school leadership remain predictive of teachers' job dissatisfaction (Scheopner, 2010:261). To overcome such problems, Klassen and Chiu (2010:741) note that teacher competency is associated with high levels of job satisfaction and lack of teacher efficacy leads to teacher attrition.

Job dissatisfaction ranks as one of the contributory factors that manifest itself in teacher attrition through lack of commitment to how teachers do their work (Klassen & Chiu, 2010:742). When expectations are not met both physically and psychologically the resultant effect is job dissatisfaction which is derived from everyday classroom activities including working with children, progress seen in learners, presence of supportive collegiality, and an enabling positive school climate. In this study, job dissatisfaction was conceptualised as the negative evaluative perceptions that people made about their jobs (Beltman *et al.*, 2011:187). Factors related to teacher dissatisfaction are poor working conditions and low teacher morale which results in ineffective teaching and learning. Other causes of job dissatisfaction arise from the dissimilarity between qualified teachers and other professions like nursing, about time and manner of payment of wages, fringe benefits, continuous professional development, and other conditions of service (Bureau of Labour Statistics, 2011:4).

In this light, Van Maele, Dimitri, and Van Houttee (2012:879) elaborate that job dissatisfaction which results in poor job performance by teachers in the teaching profession eventually reflects on poor performance by learners. Furthermore, teacher attrition research reveals that even if teacher attrition is related to teachers' life situations and personal demographics, attrition is significantly related to working conditions which leads to

job dissatisfaction (Pitsoe & Machaisa, 2012:7; Marinell & Coca, 2013:25; Ronfelt *et al.*, 2013:6). This arises due to the prevailing conditions of a school, inclusive of its management, poor school climate, and low job satisfaction (Ingersoll *et al.*, 2014:25). The above viewpoint underscores the reality that job dissatisfaction eventually leads to teacher attrition and school managers have to implement sustainable motivational strategies that make teachers want to remain in the profession (Skaalvik & Skaalvik, 2015:183). The preceding argument has been strong about the importance of responding to several influences that make educators be discontented with their work.

In summary, the above discussion suggests that various factors influence teacher attrition. These include personal and school context variables. These factors if not addressed cause teachers to leave the profession. The next section examines variables underpinning teacher retention which when enhanced can reduce teacher attrition.

2.6 Factors influencing teacher retention

In the context of this study, retention means keeping of teachers at a particular school invariably meaning to reduce teacher attrition and provide a more stable learning environment in schools (Boyd *et al.*, 2009:416). Teacher retention refers to a method used in maintaining teachers within the school or education system. Johnson *et al.*, (2005) report that school administrators play an important role in adopting forward thinking initiatives, building joint mission or making on-going decisions about curriculum and instructions that foster retention of classroom teachers.

Skaalvik and Skaalvik (2015:180) identify teacher retention as one of the many facets that address the challenge of teacher attrition. Consistent with the above notion, Simon and Johnson (2015: 40) point out that teacher attrition has more to do with the challenge of teacher retention as well as recruiting talent into the profession. Boyd *et al.* (2010:416) point to the relationship between teacher retention and teacher effectiveness. By the above views, Ingersoll and Merrill (2010:18) and Johnson *et al.* (2012:2) argue that those teachers who stay were less effective than those who leave. Although the preceding views suggest teachers who were less effective are the ones staying in the profession, complementary research suggests that these less effective teachers are normally not replaced by teachers who are as good as those who leave (Ingersoll *et al.*, 2014:5).

Schools with low rates of teacher attrition tend to fill teaching vacancies with more experienced teachers, who generally are more effective than less experienced teachers (Hanushak & Rivkin, 2010:23; Johnson *et al.*, 2012:2). To bring out a stronger understanding of the use of unqualified teachers and why school administrators need effective approaches for teacher retention, Swazi and Kukano (2013:4) reveal that there are over 3000 community schools in Zambia which are 90% managed by inexperienced and untrained school teachers. Much of the research on teacher retention focuses on external factors that contribute to a qualified teacher's decision to either stay or leave the profession (Waddell, 2010:71). These factors include administrative support, quality of the school environment, access to physical and human resources and teacher subject replacements (Ingersoll & Perda, 2010:29; Ingersoll & Merrill, 2010:18; Atteberry, Loeb & Wyckoff, 2013:3). Simon and Johnson (2015:40) sum up their argument on teacher retention by pointing out those policymakers and educational practitioners have many options in encouraging school managers to create positive environments which ultimately affect why teachers opt to remain in their schools.

In their application of human capital theory, Kirby and Grissmer (1993:10) posit that people make methodical assessments of the cost benefits of entering and staying in a profession besides, individuals make decisions throughout their career to enter, stay or leave an occupation. For example, the greater the aggregation of specific capital, the lower the prospect of attrition, and this theory espouses that younger teachers are more likely to exit the profession and attrition is more likely to occur in their earlier years (Darling-Hammond, 2010:18). Before delving into further discussion on why teacher retention is a crucial factor in teacher attrition, the researcher considers it significant to first highlight the importance of identifying motives that make some teachers want to remain in their jobs.

The theory of Grissmer and Kirby on teacher exodus and Chapman's model of teacher retention were used to frame the discussion of this section. Chapman (1994:645) proposed that a qualified teacher's choice to continue in their jobs as a consequence of many reasons. These include:

- Present characteristics;
- Educational preparation;
- Initial commitment;
- Integration into teaching;
- Outside effects; and,

- Job contentment.

Grissmer and Kirby (1992:53) suggest a complimentary theory of teacher attrition, proposing that a teacher's departure from the profession is influenced by the natural life and career cycle, where attrition is experienced more regularly among novice teachers, reduces as experience increases and then rises again as teachers approach retirement age. In addition to this natural cycle, Piketty (2014:386) suggests the following factors contributing to teachers' decision to exit the profession:

- The amount of human capital one possesses regarding teaching;
- The amount and type of information possessed when deciding to enter the profession;
- Previous work and teaching experience;
- Changes in family status after being employed;
- Salary and working conditions; and,
- Characteristics and compensation of alternative job opportunities.

The above outline of the factors contributing to teacher retention is not exhaustive and they have their drawbacks. The most pronounced restriction that conforms to this investigation is that at hand there are no distinct strategies for individuals liable for dealing with teacher retention in public secondary schools. Nevertheless, this research intends to minimise the gap. To recap, one of the goals of the present investigation is to determine and designate measures which are used to sustain teacher retention in public secondary schools (cf. 1.4). Regardless of the well-known drawbacks, a critical analysis of the aforementioned reasons advises that school managers have a part to play, in managing all undertakings associated with the retention of teachers. Johnson *et al.* (2012:11) observe that understanding why teachers remain in the profession is equally valuable for understanding attrition.

According to Ingersoll (2012:30), unqualified teachers produce unqualified students, who in turn become unqualified teachers and the cycle becomes unbreakable. In supporting this view, Donaldson, and Johnson (2011:49) point out that teacher attrition leaves schools unstable and a lack of continuity as teachers who are qualified leave and novice teachers replace them. Therefore, retaining qualified and experienced teachers in a particular school has remained a challenge for many years (Johnson *et al.*, 2012:32). Concerns about teacher attrition have focused on why teachers leave the profession, but little attention has been given to those who

opt to stay (Wadell, 2010:70). Efforts to curb attrition should be focused on understanding factors that influence teachers to stay in the profession such as administrative support, reduced workloads, mentoring programmes, high salaries, and a positive school climate (O'Brien & Hamburg, 2014:61; Bickmore & Bickmore, 2010:106). These variables are discussed below.

2.6.1 Administrative support

School managers are the key players in teacher retention. The leadership abilities of the school manager contribute to the retention of teachers (Mason & Matas, 2016:3). Administrative implies influencing, guiding, and leading teachers to achieve the goals of the organization (Chitra, 2013:66). In other words, leadership is how school managers lead and motivate educators in their work. This influence does not mean imposing authority to achieve the goals of the school manager (Voon, Lo, Ngui & Ayob, 2011:24).

One of the distinguishing factors that determine teacher retention is administrative support. Pranter-Jones (2011:2) established that teachers cited administrative support and the extent of being welcomed by their faculty as the greatest influences on the decision whether to leave or remain in the profession. Furthermore, Howson (2016:10) affirms the significance of school administrators in fostering growth and workplace satisfaction among teachers. Bickmore and Bickmore (2010:106) contend that school administrators' leadership style has an impact on a teacher's decision to remain in the teaching profession. Outcomes of their investigation specify that educators who received managerial backing were perceived to have the longing to continue teaching in their institutions. On the other hand, those teachers who perceived their administrators as abusive and unsupportive left their schools for either greener pastures, migrated to another school or completely left the teaching profession (Bickmore & Bickmore, 2010:107). Schools that openly support teachers and allow them to exercise their freedom in the teaching/learning process experience low levels of teacher attrition. The above views are supported by Tickle *et al.* (2011:345) who postulate that the most significant predictor in teachers' intention to either stay or leave the profession hinged on the support of school administrators.

In recognition of the above view, Ingersoll and Merrill (2010:18) stipulate that teacher leadership and performance are intimately connected to the quality of their work. The role of the school manager is crucial in this regard to ensure that teacher retention is sustained. Factors that result in teachers leaving the profession

include a lack of support from the administrators and their colleagues, wrong perception of teaching as a profession, and being overwhelmed with the task of teaching (Ingersoll & Perda, 2010:29). Administrative support implies creating an enabling school climate, parental involvement, and instructional leadership (Atteberry *et al.*, 2013:3). Nonetheless, the literature is bereft of evidence to suggest that these teachers purely leave on account of lack of administrative support. What emerges is the view that the quality of follow up support is indispensable to teacher retention (Simon & Johnson, 2015:40). The implication of administrative support is reflected in reduced staff workload. This is dealt with in the next section.

2.6.2 Reduced workload

Teachers encounter a series of challenges in their working life especially in the early years of teaching. In some cases, they are given challenging tasks such as handling large classes and extracurricular activities which make them focus less on teaching and learning preparations (Bryk, 2010:10). Students' academic learning time is considerably reduced. Duley and Kim (2010:23) report that reducing new teachers' workload in their first few years of teaching encourages teachers to continue in the profession. This view is in agreement with Masaiti and Naluyele (2011:411) who contend that reducing workloads to new teachers compliment with well-meaning support programmes designed by a school such as mentoring and collegiality among administrators and colleagues. The next segment posits the importance of mentoring as a variable that influences teacher retention.

2.6.3 Mentoring programmes

According to Glazerman *et al.* (2010:27) mentoring programme is one of the crucial resources that newly qualified teachers' need most which prepare them to personally work well in the profession. This view suggests that induction and mentoring programmes do assist new teachers in settling in the teaching profession.

Ingersoll (2010:47) notes that psychological and instructional related support is a necessity in mentoring to meticulously support a novice teacher. Likewise, Correa and Wagner (2011:19) contend that mentoring is a specific type of learning where the mentee does not only receive instructions from the mentor but also participates actively in the learning process.

As pointed out by Ingersoll and Smith (2011:205) mentors provide crucial support and advice to novice teachers in areas such as pedagogy, classroom management, lesson planning, and emotional support. However, Ingersoll (2012:51) points out that failure to appropriately match a mentor with a mentee, lack of willing and able mentors as well as mentor training has resulted in failed efforts which have increased the rate of teacher attrition. Lai in Ambrosetti and Dekker (2010:43) report that the relationship between the quality of mentoring and its impact on teaching in the classroom which involves guidance, collaboration in developing interpersonal skills results in higher retention rates. This inference rests on the fact that mentorship plays a significant role in providing teachers opportunities to learn within the context of their work experience (Correa & Wagner, 2011:19). Therefore, mentoring is a specific context and allows teachers to acquire specific knowledge and skills.

Therefore, it is strongly suggested that mentoring be employed to mentees to support their abilities for teaching (Ingersoll, 2012:51). Even though the general mentoring processes evolve around the organisational values and substructure, the emphasis for mentoring should give rise to a culture of teaching and learning in the institution. Whether those mentors are formal or informal, they should provide a type of springboard for novice teachers, a place of understanding, and the renewal to continue teaching (Ingersoll & Strong, 2011:205). In this case, Ingersoll (2012:51) points out that new teachers feel very isolated because in most cases they are left alone in the classroom and do not know who to turn to for help. Additionally, mentoring programmes avail an opportunity for novice teachers to have a confidant who offers guidance and counselling to their daily needs and experiences (Hudson, 2013:365). To underscore this view, O'Brien, and Hamburg (2014:61) state that high quality mentoring programmes have been found to encourage teacher efficiency, generates higher job satisfaction, increases commitment, and improves classroom instruction and student achievement. According to Lai in Ambrosetti and Dekker (2010:43), one deviation of teacher preparatory programme implies providing qualified teachers the chance to interact with experienced colleagues who take their questions without much ado. These seasoned teachers act as supporters in the provision of required information which otherwise cannot be readily available

Psychological support helps teachers in dealing with day to day frustrations and stresses while instruction related programmes assist in strengthening their knowledge of content in relating it to students. Ingersoll and Perda (2010:20) predicted the probability of teacher attrition of the first year was 18%, newly recruited was

28%, inexperienced teachers who did not participate in any induction and mentoring programmes was 40%. The data indicates that mentoring programmes can drastically reduce teacher attrition. The first year of teaching is frustrating and often stressful and overwhelming (Ingersoll & Strong, 2011:205). Mentoring, if well managed helps new teachers settle in their new working environment. It is imperative that school managers create an enabling environment which promotes a culture of learning and teaching in the school (Correa & Wagner, 2011:19). School managers and experienced teachers, in this case, participate in activities that are well designed besides being tailored to the needs of these new teachers. Ingersoll (2012:47) proposes three mentoring dimensions namely:

- relational which refers to the existing relationship between the mentee and the mentor;
- developmental which signifies the personal and professional development of the mentee; and the mentor; and,
- finally contextual which focuses on the situational and cultural setting within which mentoring takes place.

The roles of a mentor have implications for the school manager in fostering teacher retention. These functions act as strategies in determining ethical principles for teachers' continuous professional development. Besides, continued use of mentorship programmes creates a sense of security for new teachers in their current jobs. An auspicious mentor programme can eventually increase teacher retention. In support of this assumption, Ingersoll (2012:48) notes that a mentorship programme which becomes unsuccessful exhibit negative consequences in the retention of new teachers: half-baked measures coupled with high levels of stress for beginner teachers' result in inefficiency in the classroom. Teacher attrition which takes on different facets makes it increasingly difficult to effectively assess the effect of mentoring programmes. Ingersoll (2012:51) further points out that teacher attrition is a challenge in schools and have to be addressed through mentoring programmes with supportive administration. According to Hudson (2013:364), teachers need to find an outlet, which is often in the form of a mentor, to express their negative and positive feelings. Therefore, each school designs a mentoring programme that suits its teachers' requirements (O'Brien & Hamburg, 2014:61).

Additionally, The Carter Review (2015:68) recognises the need for efficacy in mentoring by engaging mentors who can explicitly explain and provide rigorous training that goes beyond theory but focuses on how teachers acquire skills of effective mentoring. Therefore, strong mentoring and induction programmes act as pre-requisites in addressing teacher attrition. Besides, teachers need to create a boost of encouragement so that

they are appraised for their hard work and there is no need to give up (Reams, 2016:33). By receiving this support and encouragement, newly qualified teachers are encouraged to continue teaching. The next episode of this section explores the role high salaries play in teacher retention.

2.6.4 High salaries

Joseph and Jackman (2014:74) point out that salaries are among the factors that could help stem the tide of teacher attrition in schools. The influence that teacher salary has on attrition is significant. It is worth noting that while attrition is attributed to low salaries, teachers with better pay are less likely to leave the profession than those with poor salaries (Masaiti & Naluyele, 2011:410). The implication is that school managers have to find ways of motivating teachers for them not to exit the profession.

A salary is a fixed or regular monthly or annual gross payments made to employees for the work done (Adenji & Osibanjo, 2012:33). Furthermore, Pepra-Mensah *et al.* (2017:53) point out that a salary is a reward a teacher receives in exchange for performing tasks for a school. The role high salaries play in teacher retention cannot be underestimated. Salaries, however, can create either a positive or negative outcome in an organisation. On one end of the spectrum, an employee can be happy and exhibits this through hard work, dedication, and loyalty while on the other end, a salary can create emotional dissatisfaction if workers are poorly rewarded and develop absenteeism, job dissatisfaction which results in a turnover (Khan *et al.*, 2017:62). However, some scholars have discussed the implications of salaries as motivators for teachers, yet there is no agreement that salaries or other financial incentives motivate teachers (Nyakundi, 2012:46). Studies by Gerritsen, Kuijpers and Van de Steeg (2015:316) reveal that teachers' high salaries do not have any effect on their intention to remain in the profession. However, Goldhaber (2017:7) reveals that an improvement in working conditions matters more than receiving high salaries even though other studies show the significance of salary in teachers' decision to remain in the profession. The above views explain partly why most recent literature tends to suggest that high salaries influence teacher retention (Akhtar *et al.*, 2016:653; Chepechumba & Kimuta, 2017:490).

The Bureau of Labour Statistics (2011:4) holds an opinion that there was inconsistency in the relationship between teachers' salary and their prospect of remaining in the teaching profession. For instance, financial incentives are not the only factors that influence teachers to quit teaching, however, providing good salaries to teachers in relation to their qualifications and hard work can go a long way in reducing teacher attrition (Bureau

of Labour Statistics 2011:4). This is in agreement with Masaiti and Naluyele's (2011:412) research summary on salary which reveal that pay incentives can have a positive influence on reducing teacher attrition. Furthermore, Joseph and Jackman (2014:74) hold the opinion that the majority of participants in their study left teaching because of low salaries. Apart from high salaries as a variable in teacher retention other aspects such as a positive school climate have to be taken into consideration. This is conversed in the ensuing subdivision.

2.6.5 Positive school climate

Gupta and Shaw (2014:2) postulate that a positive school climate is exhibited by a continuous improvement of safety, innovation, creativity, and an enabling working environment that fosters effective teaching and learning. An effective school manager provides an opportunity for the existence of a positive school climate. This ensures that an environment is created in the school in which teachers and learners execute their duties in the best possible circumstances (Buchanan, 2010:201).

The school must provide a safe environment for all the stakeholders such as the learners, teachers, ancillary staff as well as administrators. Ravitch (2010:34) argues that a positive school climate creates an environment needed to constitute student learning systems where discipline must be antecedent to the philosophy and ethos of the school. School climate includes both tangible and non-tangible aspects of school life. Johnson, Kraft, and Papay (2012:10) assert that an enabling environment acts as a predictor of learner achievement and academic growth, this undoubtedly influences teachers to want to stay at the school. When educators are given the respect and their contributions are appreciated in the running of the school, the result is a positive school climate which gives rise to a high teacher retention rate. It is important to cogitate that school climate includes several factors and influences that include all kinds of data obtaining within the school environment (Weissbourd, Boufford & Janes, 2013:2). In this regard, establishing a safe work environment for faculty, staff and students which fosters effective teaching and learning is at the very centre of positive school climate (Owens & Valesky, 2014: 86). Therefore, teacher attrition can significantly be reduced if close attention is paid to the work environment. A positive school environment informs this study and highlights the importance of the work context for teachers in public secondary schools in Zambia.

The above-mentioned opinions should, however, not be understood to supersede the importance of the relationship between school climate and teacher morale. Botha (2015:36) asserts that when qualified teachers are motivated, they value their jobs and take self-importance in being recognised by the school manager and when they even have a say in decision making creates a positive school climate. In summary, this section examined factors influencing teacher retention. When these variables are poorly addressed they lead to teacher attrition. Therefore, it is essential to satisfy teachers for their teaching jobs as it leads to a reduction in teacher attrition.

2.7 Summary

This chapter strived to highlight the teacher attrition phenomenon and its impact on schools. An analysis of the tendencies of teacher exodus worldwide and Southern Africa was discussed. Factors influencing teacher attrition and retention were further examined. Personal and school context variables were highlighted among them teacher preparation, working conditions, administrative support, reduced workload, mentoring programmes, salaries, and school climate. These variables were considered to be the most influential factors on both ends of the spectrum. When the attributes of these variables are negative they cause teacher attrition and when positive the result is teacher retention. Evidence deduced from the review of related literature carried out in this episode points to the inadequacies of teacher attrition statistics and insufficient and disjointed teacher exodus strategy reactions from stakeholders both locally and internationally. What has emerged from the discussion arising from the specific aims of the investigation provides reasons for researching teacher attrition in Zambia. The next division deliberates on the methodology used in this investigation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents a description and justification of the research methodology carried out in this study. Yin (2014:192) explains a research methodology as a theoretical framework, assumptions and concepts underpinning the approaches and methods of a study. Another definition by Taylor, Sinha, and Ghoshel (2011:12) and Somekh *et al.* (2011:4) stipulate that research methodology is a systematic investigation into a study of materials and sources to establish facts and reach conclusions. Furthermore, Lichtman (2013:324) describes research methodology as a collection of methods, operation or conduct within a well-defined knowledge base that guides the research.

Following the above views, this chapter is constituted in the following way:

- the research design and approach;
- the sampling frame and sample selection; and,
- data collection procedure including analysis and interpretation, trustworthiness and research ethics.

The above mentioned features are discussed below to explain their suitability for this study. It is important to take notice that the literature study carried out in the preceding chapter stipulated broad theoretical responses to the following objectives emerging from the main aim of the study:

- to examine how teacher attrition affects the functioning of public secondary schools;
- to find out which factors influence teacher attrition in public secondary schools; and,
- to determine and describe measures which are used to sustain teacher retention in public secondary schools. The succeeding section focuses on the research approach that was used in finding answers to the study questions.

3.2 Research approach

A mixed methods research design combining both the qualitative and quantitative approaches to examine teacher attrition in public secondary schools in Zambia was used in this study. According to Cohen *et al.* (2011:24), mixed methods present varied ways of perceiving the world, and they complement each other.

Further, Massaro *et al.* (2016) posit that the use of these approaches in a study enables the researcher to examine the different facets of teacher attrition, including its effects, causes, trends, and enhanced the integrity and validity of the findings. Furthermore, Creswell (2014:24) reveals that the merits and demerits of mixing qualitative and quantitative methods are that biases found in one method are overcome by the use of the other method. The mixed methods are applied by mixing the descriptive survey design (part of the quantitative paradigm) with qualitative interviewing and by using quantitative and qualitative data analysis techniques. Quantitative methods are usually geared towards documenting participants' attributes expressed in quantity, extent or strength as well as ensuring that objectivity, accuracy, validity, and reliability are taken into account (Babbie, 2010:5). The purpose of quantitative research is to measure variables and to produce figures which permitted judgments as to the status of the variables in question, which in turn allowed further processing, comparisons, and allowed replicability.

Creswell (2014:35) describes qualitative research as subjective because it focuses on understanding the meanings that individuals or groups ascribe to social or human phenomena. Creswell (2014:36) further postulates that researchers in this paradigm are interested in participants' worldview rather than relying on the meaning that the researcher brings to the investigation. The next segment discusses the rationale for choosing mixed methods design.

3.2.1 Rationale for a mixed-methods design

This study applied the mixed-methods design, combining both the quantitative and qualitative approaches (cf.1.7). Vogt *et al.* (2014:2) assert that quantitative and qualitative studies each have merits and demerits that make it more or less effective for a specific research problem. Also, Creswell (2014:32) posits that mixed methods research is an approach to empirical investigation that involves collecting data both qualitatively and quantitatively whose major assumption is to provide a more complete understanding of the research problem. As stated in Chapter 1, the main aim of this thesis was to examine how school managers address the problem of teacher attrition in public secondary schools in Zambia, and the mixed-methods design was, therefore, found to be suitable for this purpose. Feilzer (2010:14) concludes that combining methods in one study enables the researcher to find out what is known regardless of whether the data and methodologies are qualitative or quantitative. Using combined approaches was thus considered appropriate for this study.

Further Feilzer (2010:14) contends that the most common way in which data derived from different sources are combined is triangulation, a process defined by Cohen *et al.* (2011:118) as the practice of viewing things from more than one perspective. This can mean the use of diverse methods, different sources of data, or different researchers within a similar study. Findings can thus be complemented, questioned, or corroborated by different methods. In that respect, the use of combined methods as triangulation increases the legitimacy of the research and the dependability of the data and its findings. In this study, triangulation was achieved by combining the quantitative and qualitative research approaches, the use of the survey questionnaire, and in-depth interviewing as data collection instruments, different data sources (district education board secretaries and school managers), and quantitative and qualitative data analysis methods. The researcher believes that the combination of the above approaches and instruments improved the trustworthiness and validity of the data and the credibility of the findings. The next segment discusses the qualitative phase.

3.2.2 Qualitative phase

Qualitative paradigm or mode of inquiry specifies how human beings interpret their lived experiences and raise crucial questions of this investigation. The decisive features that underpin a qualitative investigation include the following:

- Focus on how people interpret their lived experiences;
- Understanding the participants' worldview;
- Exploring people's feelings and perceptions; and,
- Flexibility in the emergence, expansion, and development of the research design.

The above attributes are explained briefly in the literature below. Starting with the first attribute, qualitative research was chosen for this study because of its relevance to the research questions which underpinned this investigation. Empirical data concerning the participants of this study comprises rich descriptive data about the participants' understanding of human activities. This arises from this study's main question which is: How school managers address the problem of teacher attrition in public secondary schools in Zambia? Qualitative research has been recognised by some scholars to have the ability to answer the 'how' research questions (Cohen *et al.*, 2011; Nieuwenhuis, 2011). This is in addition to the position taken by (Marshall & Rossman, 2011:91) who observe that qualitative researchers look for answers that stress on how social perceptions are created and assigned meaning. The second aspect of a qualitative investigation lies in the subjectivity in

understanding the participants' worldview. The point in qualitative research is to ascribe meanings that are determined by its natural inhabitants with a view of gaining an in-depth comprehension of the natural phenomena (McMillan & Schumacher, 2010:323). The preconceived meaning that the researcher brings to the research about the problem does not suffice in a qualitative investigation (Lichtman, 2013).

Qualitative research allows the researcher to mingle freely with the participants' lived life experience through face to face interaction in their natural habitats and find out what goes on there in practical terms (Creswell 2014). Qualitative research often allows the researcher to become the primary instrument for data collection and analysis (Miles & Huberman in Toma, 2011; Yin, 2011). In this study, the researcher went into the field so that interaction with the participants under investigation took place. This was done by exploring how these participants behaved, their perception of life, feelings, and experiences of other people.

The current researcher had to forgo his biasness to understand the lived experience of the participants. The empirical data of this study comprised a dense description of the participants' meanings such as their thought patterns, feelings, assumptions, and beliefs (Harwell, 2011; Creswell, 2013). The empirical data was in the form of words as opposed to the use of numbers. Direct quotations from the participant's own words were included to demonstrate certain issues. Merriam and Tisdell (2016:298) contend that the use of the actual words that the participants use helps to foster the researcher's comprehension of the participant's worldview. Inductive reasoning assisted the researcher to avoid biasness and a possibility of pre-empting the findings. Researchers such as Boeije (2010:5) as well as Marshall and Rossman (2011:91) agree that through the use of inductive reasoning, qualitative research plays a significant role in studies that seek to generate theories or provide guidelines when the existence of such is either partial or insufficient in addressing the sophistication of challenges prevailing in an education setting. The present study was no different. As pointed out in section 1.5 of this study, little empirical data was known about the topic under investigation. The next section discusses the quantitative phase of this study.

3.2.3 Quantitative phase

According to Creswell (2014:220), quantitative research aims to describe the trends or explain the relationship between variables. In this study, the variables were expressed in numerical form analysed with the aid of, analysis of variance, factor analysis, or regression analysis, in line with (Befring, 2015:131-160). Even though

quantitative methods are characterised by stringent requirements for structure, the methods also provided room for flexibility and pragmatic adaptation. Combined designs using mixed methods that include qualitative and quantitative data are therefore increasingly used (Creswell, 2014:227). Questions in the quantitative phase were:

- How has teacher attrition affected the functioning of public secondary schools?
- Which factors influence teacher attrition in public secondary schools?
- Which measures are used to sustain teacher retention in public secondary schools?

A predetermined set of predictor variables included participants' opinions on the current compensation and benefits through improvement on financial incentives and personal characteristics. Selected factors that contributed to teacher attrition were treated as independent or predictor variables as they generally cause, influence, or affect outcomes. These factors were identified through analysis of related literature and the theory on teacher attrition. The following factors were considered:

- Causes of teacher attrition: these included among other predictors; time frame involved when more teachers exit the profession, internal and external factors, retirement and students;
- School context factors: These variables among other predictors included; teacher preparation, monetary factor, working conditions, school climate, administrative support, job dissatisfaction; and,
- Factors influencing teacher attrition: These variables among others included; reduced workload, high salaries, and positive school climate.

These variable items were measured on a continuous 5-point Likert scale in the questionnaire. For the test to have a statistical power each variable was represented by at least two items on the scale in the survey instrument. The next section focuses on the research design that was adopted in finding answers to the research questions of this study.

3.3 Research design

The research design is the researcher's overall strategy for answering the research questions. A research design undertakes various purposes. It facilitates in streamlining data which was pertinent to research questions (Yin,

2011:8). A favourable research design, according to Heck (2011) has an advantage of guarding against and avoids other possible interpretations of the results. Denzin and Lincoln (2011: xi) define a research design as a comprehensive plan for executing the systematic exploration of the study under investigation. Agreeing with the above definition, Creswell (2013:7) perceives the design as the plan a researcher has for the study. This includes the methods to be used, the type of data to be gathered, the choice of the research setting, participants, and data collection tools. Kerrigan (2014:344) also points out that research design involves procedures such as the last three steps in the research process namely data collection, data analysis and report writing. According to Merriam and Tisdell (2016:22), the views expressed above summarise a research design which in this study was a methodical plan to collect, analyse, interpret, and finally present research data to answer the research questions. This was done using the exploratory sequential mixed methods which are discussed next.

3.3.1 Exploratory sequential mixed methods design

In this study, the researcher first collected individual interviews and focus group data, analysed the results, developed an instrument, and then administered to a sample of the population. In essence, the researcher employed a three-phase procedure with the first phase exploratory, the second as instrument development, and the third as administering the instrument to a sample of the population (Delpont *et al.*, 2016:441).

Creswell and Plano Clark (2013:26) stipulate that mixed methods present different views of seeing the world since these standpoints complement each other. Their use in this study helped the researcher examine various facets of teacher attrition which included its scope, causes, and effects and how these enhance the validity and integrity of the findings. Additionally, as Kerrigan (2014:341) points out, the advantage of mixed methods is that biasness found in one method is overcome by the use of the other method. Further. Ponce and Maldonado (2015:128) state that the strategy intends to develop better measurements with specific samples of populations and to see if data from a few individuals in the qualitative phase can be generalised to a large sample of a population.

This study utilised a case study design intending to elicit detailed qualitative and quantitative information to answer questions on how school managers address the problem of teacher attrition in public secondary schools. Creswell (2009:4) posits that a case study research design is followed as a means for exploring and

understanding the meanings that individuals and groups ascribe to the subject under investigation. The choice of a case study was preferable over other qualitative strategies because the researcher needed to gather in-depth information from the participants. Yin (2014:20) defines a case study as a scientific inquiry that explores current phenomenon within its real-life context, especially when the dichotomy between the context and the phenomenon is not palpable. A similar definition by Kerrigan (2014:341) concurs that a case study relates to an in-depth examination, narration, and analysis of interactions of a particular phenomenon in an enclosed system over some time. There is agreement among researchers that what can compose a 'case' for the empirical examination can be a single unit such as one individual, group, activity, event, programme, or sometimes a process (McMillan & Schumacher, 2010:345; Bogdan & Biklen, 2011:63; Robson, 2011:136). According to Ashley (2012:102), the use of case study allows the researcher to go deeper into contextually and naturalised situations.

Yin (2014:20) identifies and illustrates the three main attributes of a case study. These are distinctive, narrative, and heuristic. The distinctive nature of a case study implies a limitation to a particular educational phenomenon that the researcher seeks to understand in-depth despite the number of participants or sites (Welman *et al.*, 2011:25). In this study, the researcher sought to understand deeply the uniqueness and peculiarities involved in how school managers address the problem of teacher attrition in public secondary schools. The narrative aspect indicates that the result of a case study is a compact description of a phenomenon under investigation from the participants in their natural setting (Chadderton & Torrence, 2011:54; Check & Shutt, 2012:190). The third concept, the heuristic feature implies that case studies depict the reader's understanding of the phenomenon under investigation (Yin, 2014:16). This reveals new meaning, prolongs the reader's perception and experience, or support what is known. A dominant understanding from the above definitions is that case study research intends to cultivate a deep understanding of the particularity and complexity of a single case as it portrays itself in a real-life situation (Brockenbrough, 2012:746; Creswell, 2013:97).

Furthermore, a case study design was used because of its specific advantage of allowing the researcher to utilise different sources of data and data collection techniques in agreement with Heck (2011:205) and Robson (2011:135). This study employed interviews and questionnaires as data collection methods which allowed triangulation of data (McMillan & Schumacher, 2010: 331) and ensured validity and trustworthiness of the investigation (Yin, 2011:153; Nieuwenhuis, 2011:80; Flick, 2014:5). Sometimes, case studies are

misunderstood owing to their limitation in advancing a strong basis for scientific generalisation (Chadderton & Torrence, 2011:54; Creswell, 2013:7). The emphasis in this study, however, was on the in-depth understanding of the dynamics of the topic under investigation through the standpoint of participants who were purposively selected. Even if, case studies do not yearn for generalisations, their findings have implications for other settings. Marshall and Rossman (2011:252) point out that case study results reflect trends within a population of interest. Consequently, they can be replicated in other similar cases, contexts, and backgrounds (Saldana, 2013:3). The researcher expected that the findings of this study would highlight the participants' understandings given the role that school managers play in addressing the problem of teacher attrition in public secondary schools. It was envisaged that the findings would resonate in other parts of Zambia or even beyond the borders in situations with a similar background. The questionnaires were used to generate statistics opinions of participants regarding this subject to enable an explanation of the findings (Hennink, 2014:2). The mixed approach was perceived to be significant since it allowed the researcher to examine the unfolding of a strategy on how school managers can address the problem of teacher attrition in public secondary schools based on qualitative and quantitative data. The next section examines who constituted the sample of the current study, why, where, and how they were selected.

3.4 Sampling and sample selection

The ensuing sections discuss sampling and sample selection, including participant and site selection. This study used purposive sampling (cf.1.7.1). According to Silverman (2010:141), the explicit purpose of using purposive sampling procedure is to obtain the richest possible sources of information to answer the research questions. A brief discussion of the identification of the study population, research sample, site selection, and participant selection, including the reasons for their choice, follows in the next subsections.

3.4.1 Study population

The present study sought to understand the meanings that participants ascribed to the roles that school managers play in addressing the problem of teacher attrition in public secondary schools. In this study, and as was explained in section 1.7.1.1, the target population comprised district education board secretaries and school managers in three districts namely Lusaka, Kafue, and Chongwe who were purposively selected. This enabled the researcher to select the typical site for studying the phenomenon under investigation (teacher attrition). A combined sample of participants, comprising thirty (30) public secondary school managers were

picked to respond to the self-administered survey questionnaires as well as participate in the focus group discussion. Three (3) district education board secretaries were selected to participate in the in-depth individual interviews, giving a total of thirty-three (33) interviewees. The number of interviewees was considered sufficient to allocate enough time to each interview and delve deeper into teacher attrition issues under investigation. The next subsection discusses the research sample.

3.4.2 Research sample

According to Vogts *et al.* (2011:143) sampling is a process by which a certain portion of a given population is selected for study. Besides, Provost and Fawcett (2013:52) point out that a well-chosen sample leads to the correct display of the peculiarity of the population under study. In this research, a purposive sampling technique was used so that a wealth of possible sources of information to meet the purpose of this study was provided.

Patton (2015:268) contends that qualitative research is based on purposive sampling because it is concerned with a specific sample of particularly interesting features of each element. Furthermore, Brinkman and Kvale (2015:5) argue that the rationality and influence of qualitative purposeful sampling are derived from the emphasis placed on an in-depth understanding of specific information-rich cases. The current study sought to understand the meanings that participants ascribe to the role school managers play in addressing teacher attrition in public secondary schools. Purposive sampling was used to pick cases that were deemed to be of interest to this study. The next subsection discusses site selection.

3.4.3 Site selection

According to McMillan and Schumacher (2011:330), site selection implies identification and justification of a site picked to locate participants involved in the study. The current research was conducted in three (3) out of seven (7) districts that form part of Lusaka province. These sites were picked based on their representativeness in terms of the study's population of interest which involved teachers leaving the profession.

Out of the three districts, Lusaka has the largest number of public secondary schools, thereby providing the researcher with a variety of site options from which to choose for this study. Lusaka district comprises twelve

(12) zones with thirty (30) public secondary schools from which ten (10) schools were purposively selected for this study. Likewise, ten (10) public secondary schools from Kafue and Chongwe districts were selected through the purposive sampling method (cf.1.7.1.1). The sampled districts had qualities associated and suitable to the research problem and aim. Kafue and Lusaka are in an urban setting. Besides being a conurbation, these two districts are similar in terms of their socio-economic backgrounds. Apart from schools experiencing teacher attrition in Chongwe district, the site was chosen simply because of accessibility and convenience. The researcher is a lecturer at a newly created university in the district and stays within a reasonable distance to most of the secondary schools. Therefore, conducting the current study in Chongwe district was economical in terms of time and money. The next subsection discusses participant selection.

3.4.4 Participant selection

A total of thirty-three (33) participants were purposively selected for data collection. Of these, thirty (30) participants comprising secondary school managers were approached to respond to the self-administered survey questionnaire and focus group discussion. The school managers are considered to be custodians of managing teachers in a school. It is, therefore, a logical expectation that they manage both external and school-based development programmes and personnel training. Furthermore, three (3) district board secretaries were also approached to participate in the one-on-one semi-structured interviews. These are responsible for managing education provision in a district. They are presumed to be responsible for managing programmes involving teachers' continuous professional development in the district. These samples were selected not only because they would meet the purpose of the current study but also because of their expertise they were more likely to be informative and knowledgeable about the phenomenon under investigation (Cohen *et al.*, 2011:157). The next subsection discusses the data collection procedure.

3.5 Data collection procedure

Data collection was done in two phases with the initial qualitative data collection followed by the second quantitative data collection. Put differently, the results from one data collection procedure informed the data collection approach of the other procedure, the latter builds on the former. In this research, items for inclusion in the questionnaire were built upon previously collected qualitative data that identified constructs or language used by research participants (Creswell, Curry & Fetters, 2013:6). Since qualitative data analysis yielded quotes, codes, and themes, Owing to its two-phase structure and the fact that only one set of data was collected

at a time, this design was relatively easy to describe, implement and report. However, this implied that the design requires a considerable amount of time to implement. The next phase discusses data collection instruments used in this study.

3.5.1 Data collection instruments

In this study, the key data gathering instruments used were interviews, focus group discussions and questionnaires. The use of these corresponding data collection instruments improved reliability and validity as it assisted the researcher to cross-check the information obtained and to gain a deeper insight into the issues under examination. According to Nieuwenhuis (2011:80), the use of more than one research instrument in the collection of data authenticate the trustworthiness of the study. Additionally, Patton (2015:14) points out that if a researcher employs various data collection tools, their analysis and conclusion were much clearer than relying on only one source of evidence. The proceeding sections highlight the appropriateness of the use of the interview in this study, with specific attention on their respective efficacies and constraints.

3.5.2.1 The Interview

An interview is a process that involves a dialogue between a researcher and respondent where questions are focused on the research study (McMillan & Schumacher, 2010:355). This view is supported by Cohen, *et al.* (2011:411) who assert that the interview is a basic source of data in case studies. Furthermore, Heck (2011:205) points out that an interview is a kind of discourse that is initiated explicitly for the sole reason of gathering information meant to address the research question.

An array of scholars stipulate that an interview is a leading means of data collection in qualitative research (Cohen *et al.*, 2011:411; Nieuwenhuis, 2011:87; Patton, 2015:426). In conformity the preceding assertion, Brinkmann and Kvale (2015:5) point out that qualitative interviewing allows the researcher to conduct in-depth interviewing which focus on the deep lived meanings that events have for individuals. As is clear from the foregoing views, the main goal of qualitative interviewing was to obtain rich data that was descriptive and evoked a deeper understanding of the subject under investigation from the standpoint of the participants. This approach for data collection was the method employed by the researcher in this study.

3.5.2.1.1 Semi-structured interviews

According to Merriam and Tisdell (2016:110), a semi-structured individual interview is open, allows new ideas to emerge as the interview goes on. These are also known as in-depth interviews which were held on a one-on-one basis with each of the three (3) district education board secretaries. Bryman and Bell (2011:158) define semi-structured interviews as open-ended discussion deliberately designed to collect in-depth data from a participant using probing questions. Semi-structured interviews are very useful in inaugurating an explorative investigation in a study (Welman *et al.*, 2011:201; Merriam & Tisdell, 2016:111).

Given that this research design (cf. 3.3) demanded information regarding participants personal perceptions, beliefs, attitudes, and feelings about the area under investigation, semi-structured interviews were chosen as the most relevant interview technique because they offered great compliance to pursue data in whatever direction that is appropriate (McMillan & Schumacher, 2010:343). In this regard, semi-structured individual interviews were used to get responses to questions and to explore an area of interest with the participants to comprehend the meaning they ascribe to their experience (Creswell, 2014:24). These insights were not obtained through structured interviews which are viewed to be rigid, predetermined and exhibit questioning tactics that did not allow topics or issues as expected when the interview schedule was designed (Patton, 2015:14). Semi-structured interviews were picked to provide a deep insight into the subject under investigation to generate questions for the focus group interviews.

The use of semi-structured individual interviews was not without constraints. By its nature, this technique took a lot of time in collecting consistent and systematic data because of discussing it with the three (3) district education board secretaries. Furthermore, data gathered using this technique was not always easy to analyse and compute. Since different questions evoked dissimilar feedback, the researcher spent a lot of time sifting through responses to come up with patterns that emerged at different points in the interviews with three (3) district education board secretaries.

3.5.2.1.2 Interview process

During the interviews, the researcher became a moderator whose role included recording group deliberations, facilitating, monitoring, and moderating the group discussion so that it went smoothly (Check & Schutt, 2012:174). According to Patton (2015:444), interviews provide consistency since each respondent dealt with

the same question. The interview guide determines the best use of available time in an interview situation. The researcher used an interview guide that comprised general questions or a subset of the topics to facilitate the meaningful progression of the interview. The interview guide consisted of clearly pre-formulated questions matching with research questions with linkages to themes arising from the literature review. The researcher had to outline the aims and objectives of this study as the interview began. The participants were advised on the significance of their involvement and were at liberty to pull out should they see it necessary during the interview (Merriam & Tisdell, 2016:128). The researcher sought permission to take notes and audio-record the interviews from the participants. Consent to use a tape recorder was sought from the participants. Vogt *et al.* (2014:54) emphasise that tape recording gives word for word account of an interview, whereas Merriam and Tisdell (2016:163) point out that during fieldwork qualitative researchers' use notebooks for taking down notes as well as use a tape recorder which can be applied for data analysis later. Audio-recording and taking down notes proved to be advantageous in this investigation.

Additionally, assurance of the participants' confidentiality regarding their input was guaranteed. Simplicity in word formulation of the questions was prepared to generate a free-flowing discussion around a specific theme. On average, the interview took an hour. At the end of the interviews, the researcher acknowledged the participants for their time and contributions and pointed out that interviewing them provided an informative experience. It was envisaged that upon completion of each interview, field notes had to be reviewed, and then tape-recorded information was transcribed so that basic data analysis could begin. The next subsection discusses the focus group discussion as a technique for data collection.

3.5.2.2 Focus group discussion

In total three (3) focus group interviews were conducted in this study. Thirty (30) school managers - ten (10) per district were interviewed in each of the three (3) participating districts. Nieuwenhuis (2011:90) points out that using different focus groups as part of one research investigation is not uncommon since it is deemed risky relying only on one focus group. Therefore, the use of more than one focus group interview provides the much-needed credibility in addition to the different views that are expressed about the study under investigation (Lincoln *et al.*, 2011:120).

The focus group consisted of similar participants who were not familiar with each other. They were picked, therefore, on account of similar characteristics that were relevant to the question of the current study (McMillan & Schumacher, 2010: 363; Marshall & Rossman, 2011:149; Check & Schutt, 2012:205; Hennink, 2014:2). The size of each focus group per interview session was limited to ten (10) participants drawn from the participating schools in each district. Tracy (2013:167) suggests that a focus group interview consists of 3 to 12 participants which are marked by guided group interviews, questions and answers, and other activities.

Focus group interviews with school managers served two purposes in this investigation: (1) to validate initial data which was collected from education board secretaries through semi-structured interviews and (2) to arouse in-depth examination of phenomena of interest of which little is acknowledged openly and to freely express participants' perceptions. The main reason for using focus groups in this study was to use group interaction to release information and perceptions that were less achievable without the interaction found in a group where participants' views are validated, extended, and authenticated by similar others. Focus groups produce effects such as insightful self-disclosure that cannot be easily accessible in one-on-one interviews, activate hidden details of experiences, and releases inhibitions that discourage participants from releasing rich in-depth information (Heck, 2011:206; Tracy, 2013:168; Lichtman, 2013:207; Creswell, 2013:25).

Three focus group interviews were conducted with ten participants from each of the three participating districts which were within the maximum number of twelve (12) participants required in a focus group interview. The method was appropriate in this situation because of the members' common characteristics. For instance, they are all school managers and employees of the Ministry of Education working in the same province. During the interview, the researcher played a moderator's role. The moderator helped the participants' express their views without intimidation which could have led to the suppression of in-depth information required for this investigation (Greeff, 2011:305). The focus group interviews allowed participants to react and build upon the responses of other participants. This resulted in the generation of opinions and information which would have remained undiscovered in the questionnaires.

In this study, the researcher conducted the focus-group interview as an open conversation in which participants had an equal chance to address questions to fellow participants, and to comment on or respond to their comments as well as to the interviewer. The following steps were taken:

Step: 1 preparing for the focus group interviews; three (3) focus group interviews were constituted with representatives coming from each of the three (3) districts. Twelve (12) is the maximum number required for a focused group interview per session, only ten (10) constituted each group in this study. The researcher was the moderator for each interview session;

Step: 2 developing the interview guide; this contained the questions which were asked to the participants during the interview session. In this study, the researcher conducted the focus group interview as an open conversation in which participants had an equal chance to address questions to fellow participants, and to comment on or respond to their comments as well as the interviewer. The following questions were covered during the focus group interviews:

- (i) How has teacher attrition affected the functioning of public secondary schools?
- (ii) Which factors influence teacher attrition in public secondary schools?
- (iii) What measures should school managers adopt to sustain teacher retention in public secondary schools?
- (iv) Are there specific factors that have led to continued teacher outflow in your school?
- (v) Do you think teachers themselves are responsible for attrition in your school?
- (vi) What recommendations can you make to reduce teacher attrition?

Step: 3 reserves a time and place; this was done well in advance. A meeting lounge was reserved for approximately two (2) hours. This time was used to prepare the room before the interview session and cleaning up afterward;

Step: 4 equipment needed; the audio radio cassette was used to record the interview session. This allowed the researcher to review the audiotape quickly, locate comments, and record the exact information. Note-taking was also done as a way of recording the information;

Step: 5 selection of the focus group interview participants; Ten (10) school managers were purposively selected from a list of schools in each district with high teacher attrition for participation in this study;

Step: 6 the interview session; the interview room was ready by the time the participants arrived. The participants and the moderator all sat around a table. The moderator drew out information by encouraging a spirit of group interview and cooperation that brought forth ideas beyond the questions and comments. The moderator kept the conversation on track without inhibiting the flow of ideas from participants; and,

Step: 7 after the session, the facilitator wrote a short report to summarise the group interview.

Focus group interviews provided several valuable advantages to the study for several reasons. Some included the following:

- Focus group interviews are less expensive and time-consuming. They generate huge amounts of data in a relatively short time at less cost compared to individual interviews (Tracy, 2013:168). In this case, focus groups' availed opportunities to collect various standpoints and in-depth information about the study under investigation in one sitting in a short period (Heck, 2011:207);
- They are potentially rich in information. The group synergy enhances the quality of information and results in releasing of data which could have remained concealed in individual interviews (Merriam & Tisdell, 2016:17);
- There is evidence of animation, recall-aiding, additions, and elaboration of information (Van Manen, 2014:26). Contrary to individual interviews, the participants in focus groups made further comments beyond their earlier responses taking into account what other participants had to share (Check & Schutt, 2012:206); and,
- Lastly, Richards (2015:135) points out that coding data of focus groups comes from interpretation and reflection on the meaning which was relatively easy to compile and understand.

The use of focus group interviews also generates some limitations. It is not always easy to gather focus group participants at a specific place and time especially when fieldwork corresponds with national events such as the end of year examinations. Another challenge was the inability to control internal group dynamics where some members were not free and open hence giving way to more outspoken individuals (Nieuwenhuis, 2011:437). To a certain extent, group dynamics choked dissenting views or different perceptions on argumentative topics, regardless of the moderator's efforts to prevent this from happening. The next episode discusses the questionnaire as a data collection instrument.

3.5.2.3 Questionnaire

According to Plano Clark *et al.* (2013:223), a questionnaire is a document containing questions or other types of items intended to solicit data appropriate for analysis. In this study, questionnaires were handed to participants who completed them on their own. The researcher and the participants agreed on the time and date when the questionnaires would be handed back. Cohen *et al.* (2011:404) posit that the absence of the researcher was helpful in that it allowed participants to complete the questionnaire in private, to devote as much time as

they wished to its completion. Cohen *et al.* (2012:160) argues that attention to the order of questions, language used, readability, layout, length, and content of the questionnaire is encouraged so that the quality of data is assured. It is important to note that the number of questions in a questionnaire does not coincide necessarily with the number of variables. Self-completion questionnaire surveys are a cost-effective method of gathering information from a large number of people in a consistent way. These are widely used as a method for data collection in educational and social science research (Maree & Pietersen in Maree, 2013:155; Plano Clark *et al.*, 2013:223). Furthermore, Babbie and Mouton in Delport *et al.* (2016:186) postulate that the use of self-completion questionnaires determine the extent to which participants held a specific attitude or perspective. In some instances, self-completion questionnaires allow participants to express opinions on issues about which they cannot share in a one-on-one interview.

In this study, the questionnaire consisted of two parts. The first part of the instrument contained a statement of purpose and directions and comprised bio-data which included; age, gender, educational background, and work experience at the school. The second part of the questionnaire consisted of Likert-scale items. The ratings had the following designations: 1=strongly disagree; 2=disagree; 3=undecided; 4=agree; 5=strongly agree. The Likert scale was used because it is very appropriate when a researcher wants to measure a concept. This is achieved by asking a series of Likert scale questions and thereafter calculated a total score for each respondent by assigning the values 1 to 5 to the categories and then adding each respondent's five values based on a given response (Maree & Pietersen in Maree, 2013:167). Furthermore, the questionnaire consisted of close-ended questions that addressed various facets of teacher attrition. These questions ranged from factors influencing teacher attrition to teacher retention strategies. Besides, the questionnaires contained unstructured open-ended questions which allowed participants to discuss issues without inhibition. Vogts (2014:78) observes that in the case of an open question, it is asked and space provided for a word, phrase, or even a comment. It is important to note that this type of question is more challenging than is the case with closed questions. Having explained how data was collected, it is appropriate to focus on the mixed data analysis process used in this study.

3.6 Exploratory sequential mixed data analysis methods

Yin (2011:94) points out that data analysis is the extent to which meaning is extracted from data either implicitly or explicitly from the information collected in a study. Vogt *et al.* (2014:368) point out that analysing

data was a three-step process; encode and describe the information, analyse and interpret information, communicate findings, and identify the most effective way to convey the findings.

As already mentioned in Section 1.7.4 and asserted by Cohen *et al.* (2012:501) quantitative research data analysis takes the form of parametric and non-parametric, inferential, and descriptive statistics, whereas, qualitative research tends to be associated with words and images. They further elaborate that in quantitative research, phenomena are measured so that they can be transformed into numbers. On the other hand, qualitative research tends to be associated with the written word and to rely on intricate descriptions of phenomena or people.

The processes of data collection, analysis, and reporting did not happen in clear cut stages-rather they were done concurrently as overlapping cycles. Vogt *et al.* (2014:368) specify data analysis as a rigorous and logical process through which gathered data in an investigation is given direction, structure, and meaning. According to McMillan and Schumacher (2010:367) data analysis involves choosing, categorising, assimilating, synthesising, and unravelling data for plausible interpretation to address the essential aim of the study.

In this study, both quantitative and qualitative methods of data analysis were used considering that some research questions endeared themselves to the use of quantitative methods of analysis, while other questions endeared themselves to the use of qualitative methods of analysis. Qualitative data both from the semi-structured interviews, and focus group discussions with the DEBS and the school managers were analysed using text and thematic analysis, That is, coding and categorisation of themes emerging from the data, and patterns interpretation. Using the Statistical Package for the Social Sciences (SPSS) version 20.0 computer programme for windows, quantitative data were analysed to obtain frequencies and percentages that were presented in the form of tables and charts (cf.4.2.1 & 4.2.2). Besides, the SPSS was further used to analyse quantitative data by way of cross-tabulations and thereby make comparisons between responses given by the different subpopulations.

Also, data analysis includes the use of descriptive statistics for all the variables. Since this research used exploratory sequential mixed design qualitative data was put in themes that were compared. Statistical trends were supported by qualitative themes and vice-versa. Delpont *et al.*, (2016:171) observe that data analysis in

the quantitative paradigm does not in itself provide answers to research questions, answers are found by way of interpreting the data and the results. The research questions in this study are highlighted below.

• ***How has teacher attrition affected the functioning of public secondary schools?***

Part of preparing and presenting statistical data is to offer a broad picture of a sample representing something specific. A biased sample means that inferences can be made only to the particular group represented by the sample. Data for this question was analysed through descriptive statistics. Frequency analysis was conducted to identify valid percent for responses to all the questions in the survey.

• ***Which factors influence teacher attrition in public secondary schools?***

Descriptive statistics were carried out on items related to teacher attrition in public secondary schools in Zambia. Frequency analyses were conducted to identify valid percent for responses to specific questions related to teacher preparation, monetary factors, and working conditions.

• ***Determine and describe which measures are used to sustain teacher retention in public secondary schools?***

To answer this question, a holistic measure of concern on factors influencing teacher retention was examined on items in the survey. Descriptive statistics for the survey items were summarised in the text and reported in tabular form. The next segment discusses how data were integrated using a mixed-methods design.

3.6.1 Data integration in an exploratory sequential mixed approach

Vogt *et al.* (2014:434) stipulate that data analysis in mixed methods research consists of analysing the quantitative data using quantitative methods, and the qualitative data using qualitative methods and procedures. It involves the processes whereby quantitative and qualitative data analysis strategies are combined, connected, or integrated into research studies (Creswell, 2015:2). This study adopted data integration in an exploratory sequential mixed approach as described by Johnson and Onwuegbuzie (in Delport *et al.*, 2016:447). This choice emanated from manifold considerations, including the following:

- Data reduction; this involved reducing the dimensionality of the qualitative data through exploratory factor analysis and quantitative data via descriptive statistics;

- Data display involving qualitative pictorial description through the use of charts, and quantitative data using tables and graphs;
- Data transformation, this is where quantitative data was converted into narrative data that can be analysed qualitatively;
- Data correlation which involved quantitative data being data integration correlated with the qualitised data or the qualitative data being correlated with quantitised data (Vogts *et al.*, 2014:435);
- Data comparison involved comparing data from the qualitative and quantitative data sources; and,
- Data integration, this was the stage where both the qualitative and quantitative data were integrated into a coherent whole.

Accordingly, in the interpretation section, the researcher presented the general qualitative and quantitative findings from individual interviews, focus group discussions, and the questionnaire and explained how they differed or were similar concerning teacher attrition. It is important to note that making inferences (conclusions and interpretations) was based on data collected in this study. As the last stage, Vogt *et al.* (2014:368) point out that inferences are the researcher's construction of the relationship among people, events, and variables. The next section describes measures adopted in the study to maintain reliability and validity.

3.7 Reliability and validity

Every research has every stipulation to produce efficacious and reliable knowledge in an ethical way (Merriam & Tisdell, 2016:237). Currently, it appears that when researchers in the qualitative paradigm reflect on research “validity and reliability” they often refer to research that is credible and trustworthy (Lincoln *et al.*, 2011:121; Nieuwenhuis, 2011:80).

3.7.1 Reliability

The meaning of reliability in both qualitative and quantitative research differs. In quantitative research, it measures replicability, consistency, and dependability in terms of time, instruments, and participants (Creswell, 2014:277) while in qualitative research it implies credibility, neutrality, conformability, dependability, consistency, applicability, trustworthiness, and transferability (Vogts *et al.*, 2014:33). Reliability is, therefore, the consistency that can be found in replicated measurements of the same experiences (Patton, 2015:605). For research to be reliable, it has to show that if it had to be done using similar

group participants in a duplicate context, then resembling findings will be established (Merriam & Tisdell, 2016:250).

As explained above, Cohen *et al.* (2011:199) point out that reliability is a synonym for dependability, consistency, and replicability over time, instruments, and groups of participants. It deals with precision and accuracy. In this study, the test-retest reliability of the survey instrument was obtained through the pilot testing of the instrument. Test-retest reliability showed the same results were obtained with the repeated administering of the same survey to similar study participants (Hosack *et al.*, 2012:373).

In quantitative research, the reliability of the instruments is very important for decreasing errors that can arise from measurement problems in the research study (Merriam & Tisdell, 2016:240). Reliability refers to the accuracy and precision of a measurement procedure; therefore, reliability assessments are measures of measures (Vogt *et al.*, 2014:79). In this study, the researcher compiled detailed data from in-depth interviews. Additionally, all interviews were chronicled and transcribed afterward and notes were collated with those taken during the interview itself. Both the questionnaire and interview schedule were pilot-tested to ensure the instruments' reliability and validity. The reliability of the results was done using the factor analysis in which Cronbach's alpha was used to check the reliability of both internal consistency and the final results. Equally, the internal consistency reliability analysis of the items measured on the Likert-type scale was conducted on the results of the pilot study. This helped in assessing how well the various items in a measure appear to reflect the attribute, the participants' views on teacher attrition in public secondary schools in Zambia. The next subsection discusses validity.

3.7.2 Validity

Creswell (2014:277) and Vogts *et al.* (2014:33) describe validity as to whether a device or indicator that is supposed to gauge a concept measures the concept. Information, therefore, remains valid as long as there is a provision of correct measurement of the concept (Cohen *et al.*, 2011). It is important to note that in qualitative data a certain measure of the standard error is allowed, while in quantitative data the subjectivity of the participants which include their opinions, attitudes, and standpoints contribute to some degree of biasness (Cohen *et al.*, 2011:179). As much as the researcher endeavoured for the highest degree of validity, the research couldn't be 100% valid. Flick (2014:5) points out that in quantitative research validity of data is authenticated

through attentive sampling, suitable measurement, and statistical analysis of information, while in qualitative research validity of data is achieved through reliability, depth, richness, and scope of collected data. Vogts *et al.* (2014:77) underscore this point by stating that the idea of validity is used to conclude whether the researcher correctly describes the experience which it intends to portray.

Consistent with the above opinion, Merriam and Tisdell (2016:238)) state that validity implies the level to which a study truthfully reflects or assesses the precise concept or construct that the researcher is attempting to measure. They further point out three forms of validity; content, criterion-related, and construct validity. Content validity shows the extent to which the survey items and the scores from these questions are representative of all the possible questions about teacher attrition in public secondary schools in Zambia. The wording of the survey items was examined by experts from UNISA. The next segment discusses how credibility and trustworthiness were attained in this study.

3.8 Credibility and trustworthiness

McMillan and Schumacher (2010:102) contend that the findings of any particular study can be trustworthy when they are considered to approximate the truth. In this light, the researcher, therefore, was expected to provide a report that was credible and dependable in terms of the extent to which it rung true to participants in the field and how congruent the findings reflected reality (Fetterman, in Toma, 2011:271). This view is in agreement with Creswell (2013:263) and Maxwell (2013:124) who postulate that trustworthiness can be estimated by how precise the study reflects the participants' meaning of the topic under investigation. Additionally, Patton, (2015:653) contends that though quantitative and qualitative researchers can never arrive at objective truth or reality, various ways can be used to attain the credibility and trustworthiness of the findings. Given this paradox, the researcher used the design rigorously to enhance the plausibility and reliability of the research findings. The following measures of validity are discussed in the next sub-headings; reflexivity, triangulation, respondent validation, low inference descriptor, and thick, rich description.

3.8.1 Reflexibility

Researchers need to explain their biases, dispositions, and assumptions regarding the research. In this study, the researcher ensured that he was not influenced by being subjective and biased but remained objective throughout the entire research process. Maxwell (2013:124) points out that an essential strategy in dealing

with researcher biasness in the study was reflexivity, implying that the researcher needs to be actively self-critical about likely biases throughout the study. Patton (2015:610) argues that such a clarification permits the reader to better comprehend how a particular researcher can arrive at a specific interpretation of data. Besides, related to the integrity of this research is what is referred to as the researcher's position or reflexivity; which is how the researcher affects and is affected by the research process (Probst & Berenson, 2014:813).

3.8.2 Triangulation

This study used interviews and questionnaires as sources of data. Employing triangulation, this study cross-checked data from these two sources to ascertain corroboration and convergence from multiple perspectives with the same people. For instance, Patton (2015:674) explains that triangulation, in whatever form, increases credibility and quality by countering the accusation that a study's findings are simply an artifact of a sole method or a solitary source. To discard familiar threats to trustworthiness, the present study engaged in triangulation which means the process of getting information from different sources, cross-checking, and verifying the collected data (Patton, 2015:654). In underscoring this view, Merriam and Tisdell (2016:249) stipulate that the stratagem of triangulation allows the study to evade some of the disagreements linked to the origin of discrepant experiences.

3.8.3 Respondent validation

In literature, respondent validation is also known as member checks and participants' feedback (Reason & Rowan in Silverman, 2010:278). This measure relates to a process where the investigators authenticate their understanding of what they grasp with the participants' (Nieuwenhuis, 2011:86). It is the single most significant way of ruling out the likelihood of misconstruing the meaning of what participants say and do and the standpoint they have on what is going on as well as identifying one's biasness and misinterpretation of what was observed (Maxwell, 2013:127). In agreement with this strategy, the primary analysis of empirical data as findings emerged, was verified with some participants and were further processed in the light of the participants' reactions. This was the only ingenious way to eliminate potential misinterpretation of the meaning that participants bring to the topic under investigation (Probst & Berenson, 2014:813).

3.8.4 Low inference descriptor

Another effective used was the low inference descriptor method which (McMillan & Schumacher, 2010:331) describe as discreet use of citations or quotes. This study used verbatim or straightforward quotations of the respondent's words and precise citations extracted from the data to authenticate interpretations of gathered data (Nieuwenhuis, 2011a:115). The citations were carefully used to display differences in participants' comments, to give typical samples of feedback relative to specific topics, and to display certain understandings or viewpoints.

3.8.5 Thick, rich description

Concerning the above strategy of low inference descriptors, the present study provided thick rich descriptions of the findings, for instance, data collection and interpretation processes included concise descriptions of activities, interactions, and settings. The descriptions were so detailed that they were able to assist implied readers 'view' the setting and understand the context of the study (McMillan & Schumacher, 2010:326). Therefore, this study provided descriptive analysis to contextualise the study so that readers' could determine the magnitude of their situations with the research context and whether the findings were transferrable (Nieuwenhuis, 2011a:115). Coinciding with this view, Merriam and Tisdell (2016:17) point out that the study should replicate enough information to allow readers to determine what the participant was trying to transmit.

3.9 Ethical considerations

Scholars have observed that ethical issues are likely to come up during the collection of data and the publication of findings (Marshall & Rossman, 2011:118). This position underscores the researcher-respondent relationship which Tracy (2013:243) describes as dependent on creating and cultivating trust with participants who respect norms reciprocity and meditatively considers ethical issues. Babbie in (Delpont *et al.*, 2016:114) defines ethics as preferences that influence behaviour in human relations, conforming to a code of principles, the rules of conduct, the responsibility of the researcher, and the standards of conduct of a given profession. The researcher followed the ethical considerations outlined by Patton (2015:408-409). These attributes are explained below.

- Explaining the purpose of the research and the methods used: This research ensured that the purpose of this study was explained to the participants and used language that will be understood by the participants;
- Promises and reciprocity: The researcher did not make promises that would not be kept;

- Risk assessment; the researcher ensured that by conducting these interviews participants would not be psychologically stressed by ostracising them for sharing their experiences with other people;
- Data access and ownership: The researcher and UNISA would access and own this data respectively;
- Interviewer mental status: The researcher ensured that aspects that merit further explanations are taken care of and these were done without breaching confidentiality;
- Data collection boundaries: The researcher delimited the parameters for this study. When participants showed discomfort in response to some questions, there was no need to pursue the matter any further;
- Ethical versus Legal Issues: This study was informed by the UNISA code of ethics which assured respect and sensitivity. The researcher adhered to this ethical and philosophical framework;
- Research participants were not subjected to any harm;
- Anonymity of the individuals participating in the research was assured;
- The protection of the privacy of research participants was ensured;
- Respect for the dignity of research participants was prioritised;
- Affiliation in any forms, sources of funding as well as any possible conflicts of interest were declared;
- Any deception or exaggeration about the aims and objectives of the research was avoided;
- Any type of communication concerning the research was done with honesty and transparency; and,
- Any type of misleading information as well as representation of primary data findings in a biased way was avoided. In addition to the above principles, this study adhered to the following ethical considerations which are briefly discussed in the succeeding subsections.

3.9.1 Informed consent

Cohen *et al.* (2011:43) explain that autonomy is the ability for self-determination in action according to a personalised plan. They further point out that informed consent seeks to incorporate the rights of autonomous individuals through self-determination. It also seeks to safeguard assaults on the integrity of the participant and protect personal liberty and veracity. It was essential to describe any physical harm or discomfort, any invasion of privacy, and any threat to dignity as well as how the participants would be compensated in that situation. Informed consent was a major ethical issue in conducting this research. The researcher ensured that the participants gave their consent. The researcher informed the participants about the methods which were used to protect anonymity and confidentiality. Furthermore, the researcher provided a non-coercive disclaimer, which stated that participation was voluntary and no penalties were involved in refusal to participate. The

researcher took into account participants with physical, cultural, and emotional barriers which required the use of simple language to effectively communicate. Finally, the freedom to pull out was explained because the interest of the participants always prevailed over the interests of society and science (Cheng-Tek, 2012:218). According to the above views, the will of participants was respected at any cost for this research. The next subsection discusses beneficence as an ethical principle in research.

3.9.2 Beneficence

Creswell (2014:96) points out that the term beneficence in research is understood as an obligation to maximise possible benefits and minimise possible harm and that it must bring no harm to participants. A related view comes from Cohen *et al.* (2011:86) who state that beneficence relates to the benefits of the research, while non-maleficence relates to the potential risks of participation. Non-maleficence require a high level of sensitivity from the researcher about what comprises harm. According to Cheng-Tek (2012:221) discomfort and harm can be physiological, emotional, social, and economic. When a researcher tries to learn intimate details of the participants' lives he has to deal with opening old wounds. Non-maleficence dictates both preventing intentional harm and minimising potential harm. The researcher used pseudonyms and distorted identifying details of the interviews when transcribing data. Having discussed avoidance of harm in this research to how school managers address the problem of teacher attrition in public secondary schools in Zambia what follows in the next fragment was a discussion on how privacy, anonymity, and confidentiality were ethical variables.

3.9.3 Violation of privacy, anonymity, and confidentiality

For this research, violations of privacy and confidentiality are viewed as synonymous. Participants were informed of all possible limits to this principle as well as the steps that were taken to ensure that no breach of this principle took place (Cohen *et al.*, 2011:77). In this study, privacy implied the element of personal privacy, while confidentiality indicated the handling of information in a confidential manner. Vogts *et al.* (2014:456) describe privacy as the freedom an individual has to determine the time, extent, and general circumstances under which private information will be shared with or withheld from others. Furthermore, Cohen *et al.* (2011:299) state that different participants may refuse to avail of personal information as they regard it as an invasion of privacy, the researcher ought to respect that. This may even apply in revealing their age, income, marital status, and other details that the participant may regard as intimate.

Cheng-Tek (2014:220) believes that an invasion of privacy happens when private information such as beliefs, attitudes, opinions, and records is shared with others, without the participants' knowledge or consent. The researcher ensured that the privacy of all participants in this study was maintained by ensuring that information that was shared was kept confidential. Confidentiality was viewed as a continuation of privacy, which was agreements between persons that limited others' access to private information (Delport *et al.*, 2016:119). Cohen *et al.* (2011:86) note that the term anonymous must never be used to mean confidentiality. Information given anonymously ensures the privacy of participants. Anonymity means that no one including the researcher should be able to identify any subject afterward. In this research, the issue of confidentiality and anonymity was closely associated with the rights of beneficence. Anonymity was assured when participants' identities were not linked with personal responses. The researcher privately kept all the information to himself to protect the identity of the participants. Babbie (in Delport *et al.*, 2016:120) differentiates between anonymity and confidentiality and believes that confidentiality implies only the researcher and a few members of the research team should be aware of the identity of the participants and the staff should have committed concerning confidentiality.

3.10 Summary

This chapter furnished a detailed explanation of the research methodology. The study followed the qualitative and quantitative line of inquiry in responding to the central question. The reasons for the selection of qualitative and quantitative research were highlighted. Also, the chapter justified using the two paradigms in the research design. Purposive sampling underscored the use of sampling procedures in the study. It also provided a compendious explanation of the sources of data that included the interview and questionnaire analysis. The former was viewed as the main data collection technique and the questionnaire played the supplementary and verification role. The chapter closes with a discussion on strategies that were used to minimise threats to credibility and trustworthiness. The concluding section discussed the significance of ethical considerations with the view of protecting the privacy and confidentiality of the participants, location, and integrity of the data. In the next chapter, the empirical findings of this study were presented in detail.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

The problem statement indicates that this study sought to establish how school managers address the problem of teacher attrition in public secondary schools in Zambia with a view of developing strategies that may be used to reduce teacher attrition. Analysis of the collected data revealed that addressing teacher attrition in the sampled research sites was beset by not assisting teachers in their instructional programmes such as instructional aides and social support. Despite being aware of the above problems, the study found that the majority of school managers pursued no workable means to tackle them. The investigation was undertaken through the review of related literature and empirical research. The preceding chapter focused on the research methodology and design used to obtain data in this study. The qualitative and quantitative research approach was employed to guide the empirical investigation. The data were collected using the interview and questionnaires from the purposively selected district offices and secondary schools in Chongwe, Lusaka, and Kafue districts of Lusaka province.

This chapter presents a discussion of the empirical findings. The analysis of the empirical data has been done against the background of the literature review in chapter two of this study and presented around the objectives of the study as discussion points. The quantitative information from all the subpopulations has been presented using tables and bar graphs and while the qualitative information has been presented using verbatim transcriptions derived from the interviews with the district education board secretaries and the school managers from the districts under study. For the qualitative data, direct quotations were used to present the findings as they reflect the deep thoughts and feelings of the participants on their experiences and perceptions on how school managers address the problem of teacher attrition in public secondary schools in Zambia. The findings from both the qualitative and quantitative data are discussed jointly to facilitate triangulation of the study findings.

4.2 Demographic characteristics of the participants

To establish how school managers addressed the problem of teacher attrition in public secondary schools, demographic data were collected from the participants who included school managers and the district

education board secretaries in the schools and districts that participated in this study. This aspect was seen to be critical as it helped the researcher in determining the effects that these variables had with regards to teacher attrition in public secondary schools.

4.2.1 Gender and age

In terms of the gender and age of the school managers who participated in this study, Table 4.1 shows the distribution.

Table 4.1: Gender and age of school managers

Age range (in years)	Gender		Total
	Male	Female	
24 and below	-	1 (3.3%)	1 (3.3%)
35 – 44	4 (13.3%)	5 (16.7%)	9 (30.0%)
45 – 54	6 (20.0%)	8 (26.7%)	14 (46.7%)
55 and above	5 (16.7%)	1 (3.3%)	6 (20.0%)
Total	15 (50.0%)	15 (50.0%)	30 (100.0%)

Source: field data

As depicted in table 4.1, the majority of the school managers, $n = 14$ (46.7%) were aged between 45 to 54 years old. Among this category of the school managers, $n = 6$ (20.0%) were male and $n = 8$ (26.7%) were female. This was followed by those who were aged 35 to 44 years old. Of these, $n = 4$ (13.3%) were males, while $n = 5$ (16.7%) were females. However, $n = 6$ (20.0%) of the school managers indicated that they were aged between 55 years old and above. Among these, $n = 5$ (16.7%) were males and $n = 1$ (3.3%) was a female. There was only one female school manager whose age range was between 24 years old and below. The above findings suggest that most of the school managers were old enough and could have experienced teacher exodus in the years that have passed by.

4.2.2 Highest professional qualifications

In terms of the highest professional qualifications of the school managers who participated in this study, these were as illustrated in Figure 4.1.

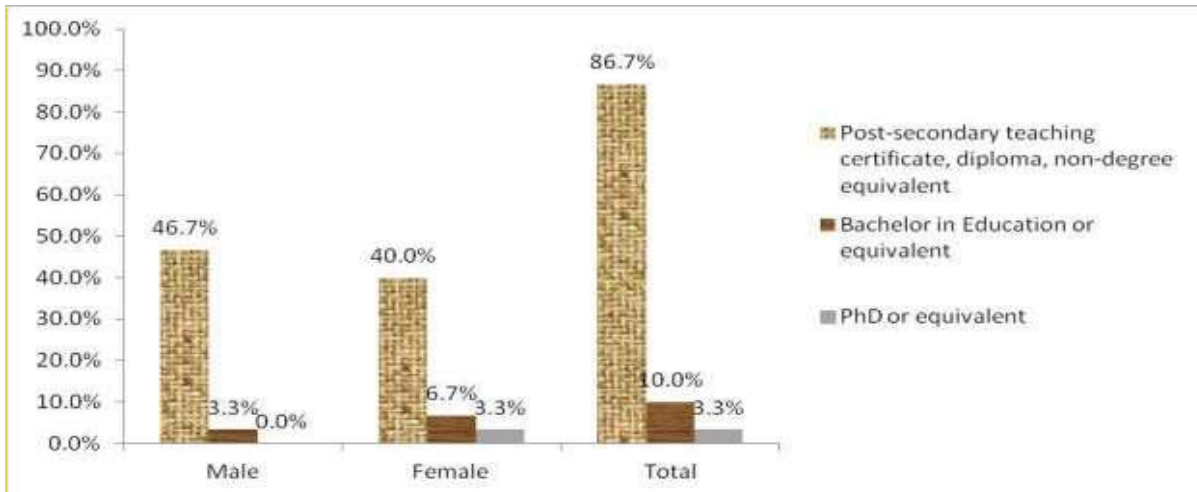


Figure 4.1: Highest professional qualifications of the school managers by gender (n = 30)

Source: Field data

The figure above shows that the majority, n = 26 (86.7%) of the participants had a post-secondary teaching certificate, diploma, or non-degree equivalent. Of these, n = 14 (46.7%) were male whereas n = 12 (40.0%) were female. Further, the figure shows that n = 3 (10.0%) of the school managers had Bachelor in Education or equivalent as their highest professional qualification. Furthermore, the figure shows that there was only one female school manager who had a Ph.D. or equivalent as the highest professional qualification. As can be seen from the above statistics, it appears that most of the school managers, about n = 28 (87.0) were lowly qualified. However, it is worthy to note that the more qualified one is, the more likely he/she has the necessary information about teacher attrition through knowledge acquired through normal formal studies.

4.2.3 Work experience as school manager

School managers who participated in this study were asked to indicate the number of years they have served as school managers. Their responses were as shown in Table 4.2.

Table 4.2: Gender and work experience

Work experience (in years)	Gender		Total
	Male	Female	
0 – 5	1 (3.3%)	8 (26.5%)	9 (30.0%)
6 – 10	2 (6.7%)	5 (16.7%)	7 (23.3%)
11 – 15	5 (16.7%)	2 (6.7%)	7 (23.3%)
16 – 20	3 (10.0%)	-	3 (10.0%)
21 – 25	1 (3.3%)	-	1 (3.3%)
26 and above	3 (10.0%)	-	3 (10.0%)
Total	15 (50.0%)	15 (50.0%)	30 (100.0%)

Source: field data

The table above illustrates the gender and work experience of the school managers that participated in the study. The table depicts that most of the participants, $n = 9$ (30.0%) have been school managers for a period of between 0 - 5 five years. Among these, one was male and $n = 8$ (26.5%) were females. The findings further show that $n = 7$ (23.3%) of the school managers and a further $n = 7$ (23.3%) had working experience of between 6 – 10 and 11 – 15 years, respectively. Among those who had between 6 and 10 years of work experience, $n = 2$ (6.7%) were males whereas, $n = 5$ (16.7%) were females. For the ones with between 11 – 15 years of work experience, $n = 5$ (16.7%) were males and $n = 2$ (6.7%) were females. The least was one male school manager who had between 21 – 25 years of work experience.

Years of experience are one of the critical variables in this study. It is believed that the longer a person stays in the teaching profession, the better insight he/she has on issues related to why most teachers leave the profession.

4.3 Presentation of the research findings

It is almost inconceivable that a researcher can interpret the collected data unless it is organised according to categories (McMillan & Schumacher, 2010:367). The presentation of the findings in this section is structured into categories. The categories are drawn from the collected data and based on the main research question, research aim, and objectives of this study. The layout of these groupings is as follows:

- examine how teacher attrition affects the functioning of public secondary schools;
- find out which factors influence teacher attrition in public secondary schools; and,
- determine and describe measures which are used to sustain teacher retention in public in public secondary schools (cf. 1.4).

The different views of scholars and researchers (DeAngelis *et al.*, 2013:351; Zambia Education for All National Review, 2015:1) explored and explicated in Chapter two of this study partially addressed the aforementioned objective (cf.2.3). In this category, the researcher envisioned to accomplish the above objective through presentation and discussion of the empirical data concerning what the participants viewed as the reasons for teacher attrition and how it affects the running of schools. During the empirical investigation, it was discovered that the majority of participants were aware that teacher attrition affected the functioning of public secondary schools. As ‘DEBS 3’ aptly put it, *my district has experienced high teacher attrition, with many teachers joining other government departments or the corporate sector, this means that staff establishment of schools will be difficult to be met.*

In line with this opinion, one participant mentioned that contextual factors such as low salaries, poor working conditions and lack of continuous professional development were some of the factors which make teachers leave their schools. Teachers are thus attracted elsewhere for greener pastures, and others leave and go and work in other government ministries. The above finding is in line with Borman and Dowling (2008:398) who posit that many factors contribute to teacher attrition. They argue that a variety of constructs can be related to the challenges of teacher attrition and that these differ from country to country. These findings are also in agreement with Kraft and Papay (2014:489) who found a variety of factors such as low salaries, poor working conditions, and lack of continuous professional development as influencing teacher attrition.

4.3.1.1 Teacher attrition leads to poor staffing levels

During the interviews with the school managers, it was discovered that the majority of participants were aware that teacher attrition led to the depletion of the staff establishment in a school. The majority of the school managers’ bemoaned the lack of replacements once teachers left the school. For example, a manager at school ‘1’ described how teacher attrition leads to poor staffing levels as follows:

In our school, five teachers left within a term and there were no replacements. This meant that some teachers having an overload, that is teaching combined classes and some classes have as high as one hundred pupils in one class. This brings about inefficiencies in terms of teaching and learning because the environment is not conducive.

In line with this opinion, one participant mentioned that there was a need to supply schools with more teachers. Implied in the above view is an assumption that addressing the challenge of teacher attrition in schools was a precondition for effective teaching and learning. The participants also intimated that teachers leave due to a perceived lack of security in the places where they live. Some still believe that unnatural causes such as witchcraft had a role to play in teachers leaving their schools. At school '2' the manager encapsulated the above views as follows:

Depending on the reasons why the teachers have left the school, teachers do not stay in those schools as a result of witchcraft. This leads to poor staffing levels in schools because teachers will be afraid to come and work in that community.

At school '3' the manager disclosed that teacher attrition is quite common in rural areas where witchcraft is rampant. He further argued that the government should deploy teachers in areas where they come from so that they serve their local communities.

Most school managers during the focus group discussions argued the attrition of qualified and experienced teachers had resulted in teacher shortages in schools and harms the quality of staffing in schools. Supporting this view, the manager at school '4' narrated the following;

The time our school experienced high teacher attrition was when six teachers left. This led to disruption in the overall performance of the school which resulted in poor learner performance. This gave rise to engaging untrained teachers who had little or no understanding of the context in which the teaching and learning process takes place. As context determines education, this can be a disadvantage in terms of delivering quality education to the learners as a result of poor staffing levels.

Furthermore, most managers' posited that their schools had lost experienced teachers, with the manager at school '5' saying:

We have lost very good teachers to better-paying jobs in other professions. The loss of experienced teachers, particularly in mathematics and science, coupled with low numbers of graduates from universities who mostly do not end up in the classroom. This has forced some schools to become dependent on untrained teachers who in most cases are unavailable.

The majority of the DEBS were in agreement that low salaries and poor conditions of service were the major reasons why teachers left the profession. This has resulted in poor staffing levels in schools, especially in Mathematics and Science. DEBS '1' revealed that:

One of the challenges of teacher attrition in my district is that there is a persistent teacher shortage in schools and this has resulted in fewer teachers which ultimately leads to multi-grade teaching in these institutions. These large class sizes harm the quality of education provision.

Consistent with the above views, Zambia Education for All National Review (2015:1) reports that the rate of teacher attrition for both primary and secondary school teachers rose from 3% in 2002, 5% in 2004, and 12% in 2008 to 17% in 2012. This projection is the highest in the sub-region. The government further projects projected a pupil-teacher ratio of 64:1 within its education sector is unacceptably high (MoE, 2010:53). Furthermore, the literature review in this study revealed fairly consistent interpretations of the effect of teacher attrition in the functioning of secondary schools (cf. 2.3; 2.4.2 & 2.5.1). Ingersoll *et al.* (2012:30) maintain that teacher attrition leads to poor staffing levels which in turn affects teacher performance. Ingersoll and Perda (2010:29) and Ingersoll and Merrill (2010:18) posit that schools' inability to adequately staff classrooms with qualified teachers is as a result of teacher attrition.

4.3.1.2 Teacher attrition results in poor student achievement

Analysis of the qualitative data from the interviews and focus group discussions revealed that the majority of the participants believed that teacher attrition leads to poor student achievement (cf. 2.3.2). The collected data revealed that due to the absence of teachers, schools recorded poor results. The fact that student learning is directly linked to teacher effectiveness implies that teacher attrition reflects negatively on student achievement.

What is also worthy to note is that this study discovered that teachers who leave the profession mostly are those who are talented and gifted. The manager of school ‘6’ attested thus:

The cream of my teachers has left for greener pastures. One way we have identified how teacher attrition affects student achievement was that we had to examine poor academic results whether these accrue only to students who had new teachers in the school or whether this was also the case with students whose teachers had remained. We found that teacher attrition influenced those students of teachers who were coming and going, to somehow negatively impact on student achievement.

Another manager at school ‘7’ remarked that: *teacher attrition has a negative effect on student achievement beyond what can be explained by experience.*

Most of the DEBS pointed out that student learning is linked to teacher effectiveness implying that teacher attrition leads to poor student achievement. DEBS ‘2’ commented:

In my district, there has been the consistently poor performance of learners at composite final examinations in schools that have been hit hard by teacher attrition. In most cases, teachers who have left are high performers compared to those who remain. There is a breakdown in the culture of teaching and learning in the affected schools. This has contributed to poor student achievement.

The views captured through the focus group interviews with the school managers identified poor student achievement as one of the main causes of teacher attrition. Similar results were obtained on this variable from the quantitative data obtained from the school managers through the administration of the questionnaires. The findings were as presented in Figure 4.2

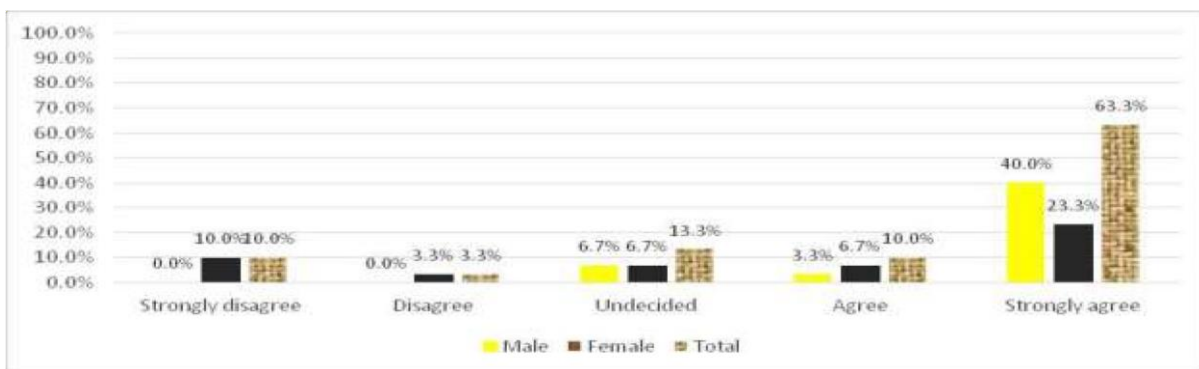


Figure 4.2: Teacher attrition results in poor student achievement (n = 30)

Source: field data

The figure shows that the majority of the school managers “strongly agreed” that teacher attrition results in poor student achievement. Among these school managers, n = 12 (40.0%) were males whereas n = 7 (23.3%) were females. The figure also shows that n = 4 (13.3%) of the participants were undecided while n = 3 (10.0%) and another n = 3 (10.0%) “agreed” and “strongly disagreed” respectively. Among those who “agreed” n = 2 (6.7%) were females while n = 1 (3.3%) were males. Of those who “strongly disagreed”, none was male. The figure further shows that only n = 1 (3.3%) female “disagreed” with the statement. As can be seen from Figure 4.2, the majority of the school managers, n = 22 (73.3%) were of the view that teacher attrition leads to poor staffing levels and poor student achievement. These findings conform to those of the interviews with most of the DEBS.

Notwithstanding the above findings, Boyd *et al.* (2010:310) stress that when qualified teachers exit their schools the result is poor student achievement. However, in support of the above findings, Darling-Hammond *et al.* (2013:179) posit that to address the problem of teacher attrition and its effect on learner achievement, there is a need for schools to become centres of excellence. Also, poor learner performance is attributed to the school's inability to adequately staff classrooms with qualified teachers as a result of teacher attrition (Ingersoll & Merrill, 2010:14). In another way, the present researcher believes that student learning is directly linked to teacher effectiveness which implies that teacher attrition reflects negatively on student achievement. Ronfeldt (2013:3) argues that teacher retention promotes the progression of curriculum implementation and professional development but also increases the number of qualified teachers. However, the present researcher subscribes to such moves only as far as implementation of teacher retention strategies are concerned, but differs vastly from the opinion that teachers who left a particular school tended to be less effective than those who remained.

4.4 Factors influencing teacher attrition in public secondary schools

The second objective of this study sought to find out factors influencing teacher attrition in public secondary schools. From their responses, all the participants displayed an awareness that there are factors that influence teacher attrition in public secondary schools. Focus group discussions with the school managers and interviews with the DEBS revealed five (5) themes and can be clustered as follows, and discussed in detail below:

- Poor working conditions;
- Lack of administrative support;

- Low salaries;
- Low social status; and,
- Lack of continuous professional development.

4.4.1 Poor working conditions

Interviews with school managers indicated that the majority of them pointed out the necessity of having good working conditions to reduce teacher attrition (cf. 2.5.3.3). School manager '16' had this to say:

When I arrived at my current school I found pathetic conditions, the facilities, equipment, and supplies were deficient. Teachers reported feelings of dissatisfaction on top of that they were overwhelmed when they were assigned subjects or grades for which they are unprepared. Under such conditions, the students pay the price, suffering the effects of uninformed instruction, poor lesson planning, and crowded classes. The indirect effects of such problems such as teachers working in inadequate conditions lead to teacher dissatisfaction and eventually leave the profession. I have since introduced the aspect of incentives for teachers and improving the physical conditions in the school.

Kraft and Papay (2014:489) argue that research has revealed that teaching is viewed as rewarding by some teachers but many teachers report a high degree of job dissatisfaction which leads to teachers leaving the profession. Skaalvik and Skaalvik (2015:83) claim that even if teacher attrition is correlated to teachers' life situations and personal demographics, attrition is considerably related to working conditions which leads to job dissatisfaction. Other causes of job dissatisfaction arise from the dissimilarity between qualified teachers and other professions like nursing, about time and manner of payment of wages, fringe benefits, continuous professional development, and other conditions of service (Bureau of Labour Statistics, 2011:4).

The above viewpoint underscores the reality that job dissatisfaction eventually leads to teacher attrition and school managers have to implement sustainable motivational strategies that make teachers want to remain in the profession (cf.2.5.3.6). Other participants, in different focus group discussions, indicated that there was a link between workplace conditions and teachers' commitment to either stay or leave the profession. School manager '17' said:

Poor working conditions such as inappropriate workload, lack of professional development and accommodation, dilapidated infrastructure, and lack of parental and community support are factors which by implication increase teachers' desire to exit the profession.

The above view is supported by Ingersoll *et al.* (2014:25) who assert that student discipline problems, poor administrative support, lack of professional development, and dilapidated infrastructure are all factors that can influence a teacher to leave the profession.

School manager '18' highlighted the dependence on the regulations of the Ministry of Education in terms of procuring additional resources to improve the schools learning environments. He mentioned:

Yah...you know school managers have limited control overuse of funds because there are strict orders not to use money without express permission from the Ministry. The fund that is received from the Ministry is usually monitored, you don't buy what you necessary need but you buy according to the prescription of the Ministry, that is why I indicated that school managers have limited control in the use of funds and this affects the entire running of the school.

The above claim is in line with Benham and O'Brien as cited in Foster *et al.* (2017:2) who in their research on why experienced teachers leave the profession, ranked accountability as one of the most common factors, followed by increased paperwork, student attitudes, no parent support, unresponsive administration, low status of teachers, and salary considerations, in that order. These findings indicate that school managers are working under difficult circumstances and that internal and external factors often militate against their success as instructional leaders.

Similar findings were obtained from the school managers from the quantitative data gathered through questionnaires. The findings on this variable showed that 87% of the school managers viewed poor working conditions as one major contributing factor to teacher attrition in Zambian public secondary schools. Analysis of the quantitative data revealed the following as presented in Figure 4.3

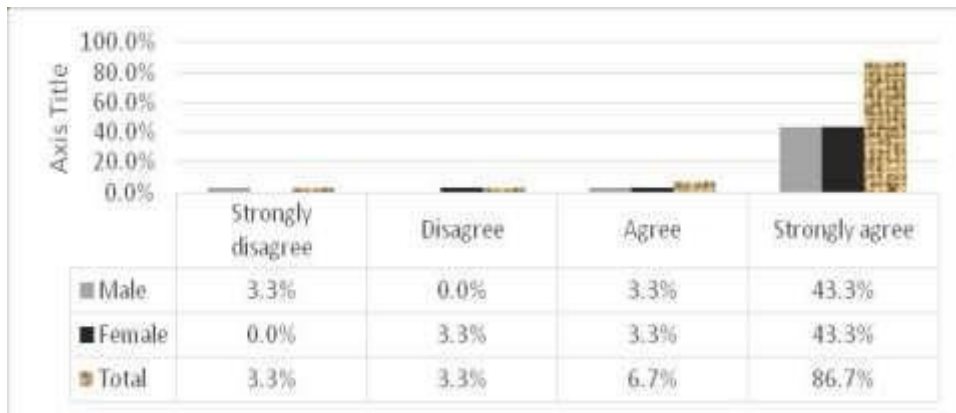


Figure 4.3: Whether poor working conditions influence teacher Attrition (n = 30)

Source: Field data

This study revealed that the majority, n = 24 (86.7%) of the school managers “strongly agreed” that poor working condition was one of the factors influencing teacher attrition in public secondary schools while n = 2 (6.7%) “agreed”. The figure also shows that n = 1 (3.3%) of the school managers “disagreed” with the statement whereas another n = 1 (3.3%) was undecided. Among the school managers who “strongly agreed” n = 13 (43.3%) were males and another n = 13 (43.3%) were females. As for those who “strongly disagreed” all were males, constituting n = 1 (3.3%) of the total participants. For those who “agreed” n = 1 (3.3%) was male and another, n = 1 (3.3%) was female. Finally, only n = 1 (3.3%) male school manager “strongly disagreed” to the statement that poor working conditions influence teacher attrition in public secondary schools.

The implications of the above findings from both the qualitative and quantitative data are that school managers agreed that poor working conditions influence teacher attrition in public secondary schools. These findings are similar to the findings of Ronfelt *et al.* (2013:6) who argue that the departure of qualified and gifted teachers is a result of poor working conditions prevailing in schools. This situation is in line with Ingersoll *et al.* (2014:25) that working conditions are causal factors to teacher attrition. The present researcher believes that the physical environment such as school infrastructure, classroom conditions, and unkempt grounds are some of the contributory factors to teacher attrition. Buchanan (2010:201) and Johnson *et al.* (2010:2) maintain that poor working conditions, such as salary and a heavy workload are contributory factors to teacher attrition.

Further, Masaiti and Naluyele (2011:415) and MoE (2015:60) allude to the fact that factors contributing to teacher attrition are poor conditions of service signified by poor salaries.

4.4.2 Lack of administrative support

The empirical investigation also indicated that the majority of school managers affirmed that a lack of administrative support was a contributing factor in teacher attrition. School manager '19' vented his frustration on failure to provide the needed support to his staff:

In my school, I will speak for myself; I find it a challenge when to advise my teachers. I have given leeway to the Heads of Department (HODs) to assist teachers in their instructional programmes but it seems they are not doing it. In the end, teachers are coming back to me and say that they are not being supported others are saying am not providing opportunities for them to go for further training, with this scenario some teachers have expressed the desire to leave the school and teaching altogether.

In support of the above comment, the school manager '20' had this to say:

Social support was also seen as a major reason for remaining in the profession, especially after staying at the same school for a long time. You are with teachers that you feel may support and help you out both professionally and socially. However, when one of my teachers lost the mother, the expected backing both in terms of financial assistance and material support did not come as anticipated.

The participants, however, felt that school managers should play a significant role in ensuring that teachers are motivated and show a sense of efficacy and exhibit a positive attitude towards the teaching profession. Analysis of the quantitative data revealed the following as presented in Figure 4.4.

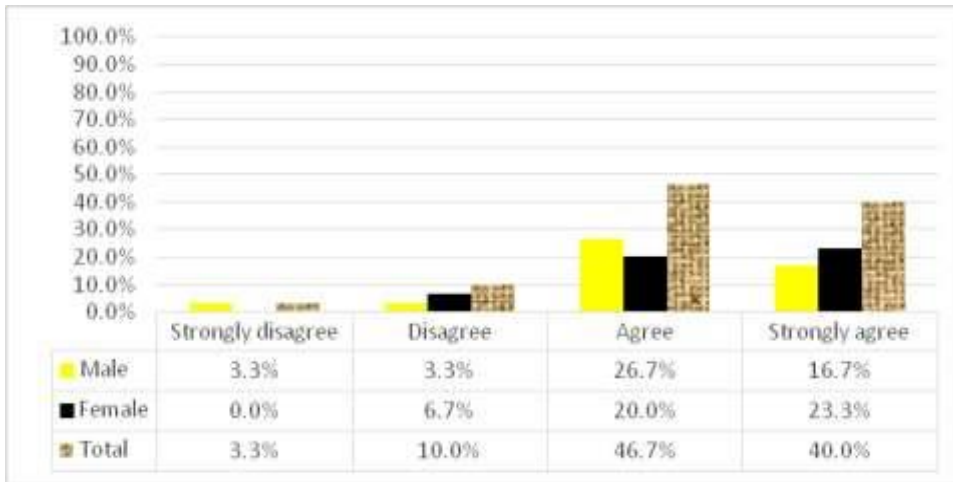


Figure 4.4: Whether poor administrative support influenced teacher attrition (n = 30)

Source: Field data

As can be seen from Figure 4.4 above, the majority of the school managers “agreed” and “strongly agreed” that poor administrative support influenced teacher attrition in public secondary schools accounting for n = 14 (46.7%) and n = 12 (40.0%) of the total participants. Among those who “agreed”, n = 8 (26.7%) were males while n = 6 (20.0%) were females whereas for the ones who “strongly agreed”, n = 7 (23.3%) were females and n = 5 (16.7%) were males. Only n = 3 (10.0%) of the school managers “disagreed” with the statement. Of these, n = 1 (3.3%) was male and n = 2 (6.7%) were females. Further, n = 1 (3.3%) female school administrator “strongly disagreed” with the statement. Considering the frequency distributions for “agree” and “strongly agree”, which corresponds to n = 26 (86.7%) compared to “disagree” and “strongly disagree” which accounts for only n = 4 (13.3%) of the total participants, it is evident that the school managers were of the view that lack of administrative support encourages teacher attrition in public secondary schools.

A school’s effectiveness in supporting teachers concerning student discipline, instructional methods, and curriculum, as well as an enabling school environment, constitute what is known as administrative support (Tickle *et al.*, 2011:345). For instance, school administrators play a significant role in motivating and ensuring that teachers show a sense of efficacy and a positive attitude towards the profession (Bickmore & Bickmore, 2010:106). This observation is further expressed by Wood (2005:39) who points out that school administrators have five significant roles they play in the school such as creating a positive school culture, instructional

leadership, facilitator of mentors, teacher recruiter, and teacher advocacy. School administrators' support for mentoring and induction programmes especially those related to support play an important role in teachers' decisions to quit or remain in their jobs (Simon & Johnson, 2015:40). School leaders need to ensure that mentors have time to train mentees. They also need to take a keen interest in the suggestions and recommendations made by mentors working with newly recruited teachers. Further, Mason and Matas (2016:3) observe that a teachers' decision to either stay or exit the profession hinges on school leadership. School administrators sometimes misjudge the effect of their role and position has on teachers.

A close examination of the above insights suggests that there must be a shared vision and collective responsibility between administrators and staff which in turn can lead to the creation and upholding of quality relationships and sound communication between all those involved. Therefore, school administrators must create an enabling environment that is both nurturing and supportive so that effective teaching and learning can take place (cf. 2.5.3.5).

4.4.3 Low salaries

The data obtained from the school managers and DEBS during focus group discussions and interviews showed that the salary of teachers was considered as a key issue in teachers' motivation and their resolve to remain in the teaching profession (cf. 2.5.3.2). The majority of the school managers explained that teachers are underpaid. They further explained that low pay for teachers has a demoralising effect on the whole process of education by discouraging teachers, undervaluing their work, and losing teachers to better-paying professions. School manager '21' remarked as follows:

The teaching profession is the least paid and most belittled profession in the country. The major reason for this is that teachers get low salaries. When we compare the salary and other benefits teachers gain with other professionals, it is disappointing. We have developed strong hatred toward the profession. These days the teaching profession is considered as abridge occupation. Nobody wants to stay in the teaching profession unless she or he fails to find another job. This is reflected in the type of students who aspire to be teachers. The teaching profession is not only losing well-experienced teachers to other professions but also fails to attract the brightest candidates to the profession.

The comment above by school manager 2, suggests that the school managers and DEBS unanimously felt discomfort and not pleased with the salary paid for the teachers. They explained that the low salary of teachers has changed the attitude of teachers toward the teaching profession and made them lose interest. They further explained that this low salary has caused basic needs to be unmet for teachers and declining prestige. This has resulted in teachers getting involved in other jobs to make ends meet and eventually leave the profession. In agreement with the school manager '21' School manager '22' highlighted that:

The government pays us the lowest salary, which can hardly cope with the current economic situation. Moreover, there is no change in our salary even though the inflation rate is very high. There has been a wage freeze for almost five years, meaning no salary increment but when that came it was only US \$20 per month and for all these years the primary concern was that of meeting basic needs. If the money you earned from your profession does not meet your basic needs, what is the meaning of staying in that profession? For a hungry teacher, the primary concern is addressing the basic needs, looking to fulfil the needs for food and accommodation.

It emerged from the analysis of data that several school managers' observed that low salaries coupled with high inflation rate make the living cost unbearable for teachers forcing them to leave the teaching profession in the quest for greener pastures. Owing to this, the pursuit for basic needs was described as dominating their activities such as conducting tuition after knocking off and getting involved in small businesses.

School manager '23' shared his deep concerns regarding how low salaries teachers get has contributed to the loose of respect that the profession deserves. He mentioned:

Becoming a teacher is economic suicide. We have been trying our best expecting that the situation might change one day. However, the situation is getting worse and worse. Now we lost hope about everything. Our attachment to the teaching profession is eroded. It has turned out that being a teacher is a sign that one should be prepared to lead a mediocre lifestyle. Since today's society values people entirely with their income status, teachers lost the respect they deserve. Because of this, teaching has currently become the most disrespected profession in the country. As a solution teachers are leaving the profession and replacements are not matching with the numbers that are leaving.

The findings above suggest that the participant emphasises that in addition to making the basic needs out of reach, the low salary of teachers contributes to the loss of respect for the teachers and the teaching profession. According to the majority of the participants, these conditions force them to leave the profession. Because on this score the teaching profession is not offering them reasonable pay that bears the current cost of living which in turn compromises teaching and professional development activities. Besides, the fall of teachers' pay below the minimum wage has a damaging effect on the social status or image of teachers.

School manager '24' also indicated that teachers complained that they are paid less in comparison with other civil servants, which is a double demotivating factor for them. According to him:

The situation of teachers and the teaching profession is getting worse and worse. Teachers are demoralized because of low salaries, lack of incentives, poor working conditions, and ineffective leadership. This condition threatens the profession as it drives away passionate and dedicated individuals out of the profession

School manager '25' explained how one teacher expressed his feelings and disappointment about the teaching profession:

If I will be given a new opportunity to select a profession, I would not consider and choose teaching as my profession. The reason is that teaching is the least paid and most disrespected profession. The economic return from the profession is very low and doesn't address your basic needs, let alone other concerns. Now being a teacher is considered as an entrance to financial insecurity and a sign of poverty. When we compare our pay with the other civil servants with the same qualifications and years of experience, they are earning better and reasonable salaries. Therefore, we consider joining the teaching profession as a punishment, which is disgraceful. Our commitment to the profession and educating the children is shifted to dealing with ways of addressing our pressing basic needs. Moreover, inexperienced and relatively unqualified individuals, who lack adequate profile for the leadership position, lead the profession.

These findings indicate that the teaching profession is not enjoying the privileges that other civil servants are enjoying. This amounts to unfair treatment of teachers and is conveying a message that teaching is less important than other professions. This situation undermines their social status and forces them to leave the profession for other well-paying jobs. Data collected from the DEBS who were interviewed also revealed that low salaries and poor conditions of service in public secondary schools in their districts and relatively higher

salaries and better conditions of service in the private sector were given as significant factors influencing teacher attrition in Lusaka province.

DEBS ‘2’ summarised these factors by stating that *teachers leave the profession for better salaries, better working conditions, and better housing.*

DEBS ‘3’ further stipulated that:

Better conditions prospects and conditions of service in the private sector or parastatals attract qualified teachers who eventually leave the teaching profession. These offer better conditions of service such as institutional accommodation, scarce skills allowance, hefty gratuity as well as medical and education schemes for their families.

The generous conditions of service available for teachers outside the profession do not seem to be the norm in public secondary schools. Therefore, the less favourable conditions of service prevailing in these schools are contributing factors towards teacher attrition. Similar findings were revealed from the quantitative data collected through the administration of questionnaires to the school managers. The findings are depicted in Figure 4.5 below.

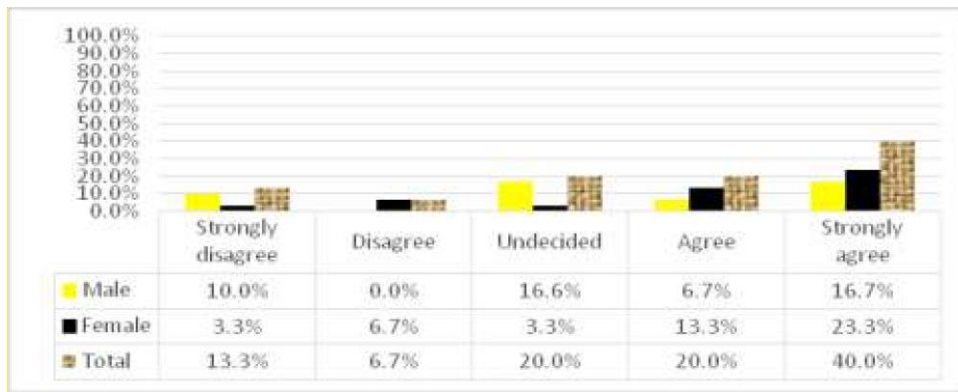


Figure 4.5: Inadequate salary influence teacher attrition (n = 30)

Source: Field data

The figure above shows that n=12 (40.0%) and n=6 (20.0%) of the school managers “strongly agreed” and “agreed” respectively to the statement while n=4 (13.3%) and n=2 (6.7%) “strongly disagreed” and disagreed”.

Among the ones who “strongly agreed”, n=4 (13.3%) were females and n=5 (16.7%) were males while amongst those who “agreed” n=4 (13.3%) were females whereas n=2 (6.7%) were males. As for those who “strongly disagreed” n=3(10.0%) were males and n=1 (3.3%) was a female. Further, the figure shows that n=2 (6.7%) females “disagreed”, and none of the males fell in this category. The study findings from both qualitative and quantitative data, generally point to the fact that school managers unanimously agree that low salaries influenced teacher attrition in public secondary schools in Zambia. This study suggests that salaries that teachers get are one of the determining factors for them to either stay or leave the profession. Masaiti and Naluyele (2011:410) and MoE (2015:60) posit that factors contributing to teacher attrition are poor conditions of service signified by poor salaries.

Teaching remains one of the poorly paid jobs and this has given rise to qualified teachers whose contribution to the provision of quality education has not been reciprocated with adequate salaries leaving the profession. Those who remain are grossly underpaid, poorly accommodated, demotivated, poorly deployed, and receive very little support in the areas they work (Masaiti & Naluyele, 2011:410). Understanding the role of salaries and other monetary incentives play in addressing teacher attrition in schools is essential towards remodelling and establishing a shift in attitude that school managers should adopt so that they can manage teachers effectively. Therefore, a less costly remedy of teacher attrition is to create a conducive school environment that promotes effective teaching and learning.

4.4.4 Low social status accorded to the teaching profession and teachers by society

The study findings through interviews and focus group discussions showed that social status was one of the factors which influenced teachers to either remain or leave the teaching profession. A school manager at school ‘25’ stated the following:

The teaching profession in its current form leaves much to be desired. Firstly, I should mention that our salaries are far from the other profession. The society has lost the value of the teaching profession. In many instances, we remain beggars in our communities, the issue that was not there just after independence. The dependency on ‘hand-outs’ has depleted the image of the teaching profession. How then can we be respected by the community around us?

In agreement with school manager '25' school manager '22' highlighted that:

Long is gone when teachers were accorded decent accommodation. We easily mingle with society in our communities. Not to mention much, some of our colleagues have even ended up participating in vices that are contradictory to the teaching profession. Here I mean drinking irresponsibly and dressing in a manner that gives a negative image of the teacher. Surely, the government should institute measures through the responsible offices to instil a sense of respect among teachers themselves and the community.

The study further revealed that several school managers' observations were that low status accorded to the teaching profession impacted negatively on teacher retention in public secondary schools in Zambia. Further analysis of the quantitative data showed similar trends in responses to the ones that were reported from the qualitative data. The findings were as presented in figure 4.6 below.

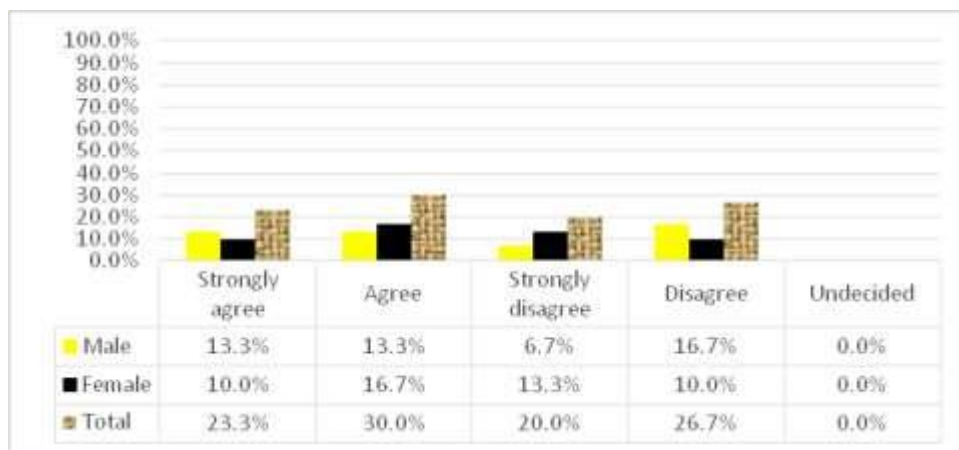


Figure 4.6: Low status accorded to the teaching profession and teachers by society contributes to teacher attrition (n = 30)

Source: Field data

The statistics in Figure 4.6 reveal that most of the school managers “agreed” and “strongly agreed” that the low status accorded to the teaching profession and teachers by society contributed to teacher attrition in public secondary schools representing n = 9 (30.0%) and n = 7 (23.3%) respectively. However, the figure also depicts that n = 8 (26.7%) and n = 6 (20.0%) of the school managers respectively “disagreed” and “strongly disagreed” to the statement.

In terms of gender responses, of the total n = 7 (23%) of the school managers who “strongly agreed” n = 4 (13.3%) were male and n=10.0% were female. Further, the figure displays that, n = 2 (6.7%) of the male and n = 4 (13.3%) of the female school managers “strongly disagreed” whereas n = 5 (16.7%) males and n = 3 (10.0%) females “disagreed to the statement that low status accorded to the teaching profession and teachers by the society contributed to teacher attrition in public secondary schools. Generally, the above findings reveal that more than half of the school managers, n = 16 (53.3%) who participated in the study were of the view that low status accorded to the teaching profession and teachers by the society contributed to teacher attrition in public secondary schools.

These findings are similar with Beltman *et al.* (2011:186), Ingersoll, Merrill and Stuckey (2014:25), and Skaalvik and Skaalvik (2015:182) who argue that the reasons why teachers exit the teaching profession vary and for each teacher the decision to leave is influenced by several factors. Even if teacher attrition is related to teachers’ life situations and personal demographics, attrition is significantly related to working conditions which leads to job dissatisfaction. This viewpoint underscores the reality that job dissatisfaction eventually leads to teacher attrition and school managers have to implement sustainable motivational strategies that make teachers want to remain in the profession. The above discussion suggests that various factors influence teacher attrition. The low status accorded to the teaching profession is as a result of societal personal and school context variables contribute to teachers leaving the profession (2.5.2 & 2.5.3). Another group of researchers’ show that attrition can be sub-classified into many categories, each affected variously by human and social capital (Long *et al.*, 2012a:630; Kraft & Papay, 2014:489; Weissberg, 2016:384).

4.4.5 Teachers lack the opportunity for continuous professional development

Findings from the interviews with the school managers showed that most of them were of the view that the lack of continuous professional development influences teacher attrition in secondary schools. The school manager ‘18’ had this to say:

My understanding of CPD is that it refers to formal and informal activities undertaken by teachers either individually or collectively throughout their careers to enhance their professional knowledge, understanding, and competence. However, in Zambia, little effort is being given to this issue, which may be due to lack of funding. From my point of view, very few teachers from my school have had a chance to attend this training. CPDs act as incentives for teachers. Given such training would bring about a reduction in teacher attrition

because an effective teacher is one who is abreast of the current changes taking place in the education sector. The government should consider giving schools enough funding for this venture.

In support of the school manager '18', the school manager '22' reported the following:

All I know is that CPD is intended to increase teachers' mastery of the curriculum and their teaching areas. It should also help them in facilitating learning and give them insight into understanding the learners and their developmental needs. For some time now, I have seen very little commitment from the MoE in organising these activities. This has resulted in most teachers running away from the teaching profession as they believe that they shall remain stagnant in their profession. Teachers need progress year after year as this increases their chances of getting to higher levels in the teaching profession.

Another school manager stated thus:

CPDs entails professional development which includes in-service education and training, professional growth, human resource development, and staff development which are key to teacher retention in schools. A content teacher, especially in terms of training which upgrades him/her will not otherwise think of leaving the teaching profession. With this in mind, I feel it is high time that the government should take CPD as an integral part of the teaching profession.

A further revelation was from school manager '10' who indicated that:

CPD encompasses formal and informal development activities engaged in by professional teachers continually, following their initial professional qualification and induction, intended mainly or exclusively at improving their professional knowledge, skills, and attitudes so that they can teach children more effectively. However, I have noticed that there has been very little attention being given to this programme. Young teachers would always want to undergo training to upgrade themselves and be at par with the international standards.

From the above exposition, it emerged that despite being aware of the various tasks that school managers should perform, the majority of participants lacked depth and range in the outline of specific activities and aspects involved in the actual execution of the tasks involved in promoting CPDs as school managers. Based on these findings, the researcher concludes that school managers that lack a basic understanding of what they are expected to do cannot be perceived as effective in their role. Such school managers may become used to

overlook certain responsibilities execute them wrongly or even omit them completely. Salif and Agbenyega (2013:63) suggest that school managers that exhibit little knowledge of what should constitute their roles run the risk of damaging the collegiality that exists; losing or missing learning opportunities for teachers and affect the organisational climate.

The empirical evidence also revealed that there was no school-based activities related to teachers’ CPD in the identified public secondary schools. During data collection, no participant mentioned or even implied that any of the sampled schools organised activities sought to capacitate teachers. Instead, reference was made to the CPD interventions provided at Zonal meetings. The lack of continuous professional development was also found in previous studies (cf. 2.5.3.4) to be one of the factors influencing teacher attrition in secondary schools. Hirsch et al. (2010:7) also cite lack of professional development as a variable that can influence teacher attrition. The foregoing exposition has shown lack of training as one of the main challenges to the effective management of teachers’ continuous professional development by school managers. Johnson, Kraft, and Papay (2012:489) observe that many school managers are often not well prepared for the tasks they must perform and are not given enough training to equip them with the necessary skills and knowledge to perform their functions well. The present researcher believes that these barriers arising from lack of training can be minimised by making the Provincial Education Office aware that such impediments exist and should provide school managers with targeted and meaningful training. Similar findings emerged from the quantitative data as presented in the following section. The findings were as portrayed in Figure 4.7 below.



Figure 4.7: Lack of opportunity for continuous professional development contributes to teacher attrition (n = 30)

Source: Field data

As can be seen in Figure 4.7, most of the school managers, $n = 8$ (26.7%) agreed that lack of continuous professional development influence teacher attrition in secondary schools, while $n = 7$ (23.3%) of them “disagreed” and a further $n = 7$ (23.3%) were undecided. As for those who strongly agreed, there was an equal percentage of $n = 4$ (13.3%) for both male and female participants whereas for those who disagreed, $n = 5$ (16.7%) were females and $n = 2$ (6.7%) were males. Further for those that were undecided, $n = 4$ (13.3%) were males and $n = 3$ (10.0%) were females.

Further analysis of the data shows that taking into consideration the percentage of the school managers who “strongly agreed” and “agreed”, $n = 15$ (40.9%) compared to those who “strongly disagreed” and “disagreed”, $n = 11$ (36.6%), the study finding points to the fact that less than half of the school managers were in agreement and another less than half were not in agreement that lack of continuous professional development influence teacher attrition in public secondary schools in Zambia.

To supplement the above findings, the researcher endeavoured to statistically determine whether the variable highest educational/professional qualifications had any effect on the factors influencing teacher attrition using the variables; poor working conditions, poor administrative support, inadequate salary, the low social status accorded to the teaching profession and teachers by society; and teachers’ lack of opportunity for continuous professional development. The findings were as shown in Table 4.4.

Table 4.4: Bivariate correlations on factors influencing teacher attrition in public secondary schools and outcome variables

		1	2	3	4	5	6	7
Highest professional/ academic qualification	Pearson							
	Correlation							
	Sig. (2- tailed)		1					
	N		30					
Poor working conditions	Pearson							
	Correlation		-					
	Sig. (2- tailed)		.321					
	N		30	30				
Poor administrative support	Pearson							
	Correlation		-	.812**	1			
	Sig. (2- tailed)		.027	.000				
	N		30	30	30			
Inadequate salary	Pearson							
	Correlation		-	.092	.202	1		
	Sig. (2- tailed)		.681	.627	.285			
	N		30	30	30	30		
Low social status accorded to the teaching profession and to teachers by society	Pearson							
	Correlation		-	.218	.352	-	.254	
	Sig. (2- tailed)		.242	.248	.056	.105	.175	1
	N		.197	30	30	.582	30	30
			30			30		

Teachers lack of opportunity for continuous professional development	Pearson Correlation	-	-.169	-	-	-	-	1
	Sig. (2-tailed)	.075	.372	.385	.054	.032	.123	30
	N	.695	30	*	.777	.866	.518	
		30		.036	30	30	30	
				30				

*. Correlation is significant at the 0.05 level (2-tailed)

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.4 shows the correlation among factors influencing attrition rates in public secondary schools and outcome variables. Results indicate that poor working conditions correlates significantly with poor administrative support, $p = .000$; $r = .812$. The table further shows that poor administrative support correlated negatively with academic/professional qualifications of the school managers, $p = .027$; $r = -.404$, indicating that administrators with low academic qualifications were more likely to be poor school managers. There was also a negative correlation on poor administrative support and teachers' lack of opportunity for continuous professional development, $p = .036$; $r = -.385$, suggesting that those school managers with poor administrative support were more likely not to send their teachers for further studies, thus promoting teacher exodus. The above findings suggest that poor administrative support from the school managers influenced teacher attrition in public secondary schools in Zambia. The summary of the factors influencing teacher attrition in public secondary schools in Zambia is presented in Table 4.5.

Table 4.5: Summary of factors influencing teacher attrition in public secondary schools

Factors	Gender	Response				
		Strongly agree	Agree	Strongly disagree	Disagree	Undecided
Poor working conditions	Male	13 (43.3%)	1 (3.3%)	1 (3.3%)	-	-
	Female	13 (43.3%)	1 (3.3%)	-	1 (3.3%)	-
	Total	26 (86.7%)	2 (6.7%)	1 (3.3%)	1 (3.3%)	-
Poor administrative support	Male	5 (16.7%)	8 (26.7%)	1 (3.3%)	1 (3.3%)	-
	Female	7 (23.3%)	6 (20.0%)	-	2 (6.7%)	-
	Total	12 (40.0%)	14 (46.7%)	1 (3.3%)	3 (10.0%)	-
Inadequate salary	Male	5 (16.7%)	2 (6.7%)	3 (10.0%)	-	4 (13.3%)
	Female	7 (23.3%)	4 (13.3%)	1 (3.3%)	2 (6.7%)	1 (3.3%)
	Total	12 (40.0%)	6 (20.0%)	4 (13.3%)	2 (6.7%)	5 (16.7%)
Low social status accorded to the teaching profession and teachers by society	Male	4 (13.3%)	4 (13.3%)	2 (6.7%)	5 (16.7%)	-
	Female	3 (10.0%)	5 (16.7%)	4 (13.3%)	3 (10.0%)	-
	Total	7 (23.3%)	9 (30.0%)	6 (20.0%)	8 (26.7%)	-
Teachers lack of opportunity for continuous professional development	Male	4 (13.3%)	2 (6.7%)	3 (10.0%)	2 (6.7%)	4 (13.3%)
	Female	4 (13.3%)	2 (6.7%)	1 (3.3%)	5 (16.7%)	3 (10.0%)
	Total	8 (27.6%)	4 (13.3%)	4 (13.3%)	7 (23.3%)	6 (23.3%)

Source: Field data

Table 4.5 shows that school managers revealed that poor working conditions n = 28 (93.4%); poor administrative support n = 26 (86.7%); inadequate salary n = 18 (60.0%); low status accorded to the teaching profession and teachers by society n = 16 (53.3%); and the last ranked factor was teachers' lack of opportunity for continuous professional development n = 12 (41.9%).

4.5 Determine and describe measures which are used to sustain teacher retention

The third objective of this study was to determine and describe measures which are used to sustain teacher retention in public secondary schools (cf.1.4). During data collection, most school managers displayed an awareness that they had a responsibility to provide support by creating a healthy environment that facilitates, rather than hinders teacher retention. Gupta and Shaw (2014:2) suggest that school managers have a responsibility to generate the conditions and establish a climate for teacher retention. Owens and Valesky (2014:86) describe the school climate as the psychological environment that represents the 'feel of the place' at a given moment in time. In this regard, school managers are expected to adjust the school climate to reflect essential variables that *inter alia*, include high teacher morale, adaptation, decentralised power, effective communication, and goal focus (Botha, 2015:36).

Findings showed that some external factors that contribute to qualified teachers' decision to stay in the profession include: adequate administrative support, positive school climate, reduced workload, and high salaries (cf. 2.6). These variables are explained in the next subsections.

4.5.1 Adequate administrative support

During the focus group interviews, several participants displayed an awareness that school managers provide the necessary support and create a work environment that teachers need in their work. The majority of the participants saw the school manager as a key player in the institution. The manager at school '13' commented on the dominant role of the school manager in teacher retention. She said had this to say:

What one actually observes is that school managers are key in the institutions because they can identify problems. Teachers in the classrooms do experience challenges that need school managers' intervention. According to my observation in most cases, school managers are providing support to teachers by creating

an enabling teaching environment especially when it comes to teaching materials, continuous staff development, and motivation.

Another manager at school '14' shared his feelings, saying that school managers are let down by their subordinates who do not fulfil their duties. According to him, he said:

I am going, to be honest with you; teachers I have worked with in the past have performed. But the current ones am working with there are challenges, I can actually put my head on the chopping board that I have been let down by some of my subordinates, as a school manager am complying, take instructions..... by creating a healthy work environment but am actually complying by motivating them. I feel am providing sufficient school management support though some have chosen to ignore this.

Likewise, the manager at school '15' mentioned that school managers' dependence on the support from the school management team and the teachers to do his task properly. Where this commitment is lacking, the school managers' effectiveness suffers.

I think school managers are managers of institutions. And as managers' we are responsible for professional matters and the day to day operation of the school. Actually, the support we give to our teachers should make them feel wanted and cherished by the school. As school management, we have to put measures that motivate teachers that would not make them want to leave the school. We have to create a conducive climate that can encourage teacher retention.

Analysis of the quantitative data reveals similar findings as those obtained from interviews and focus group discussions with the school managers n=23(77%) agreeing to the statement that sufficient school management support fosters teacher retention in public secondary schools. The findings on this variable were as presented in Figure 4.8

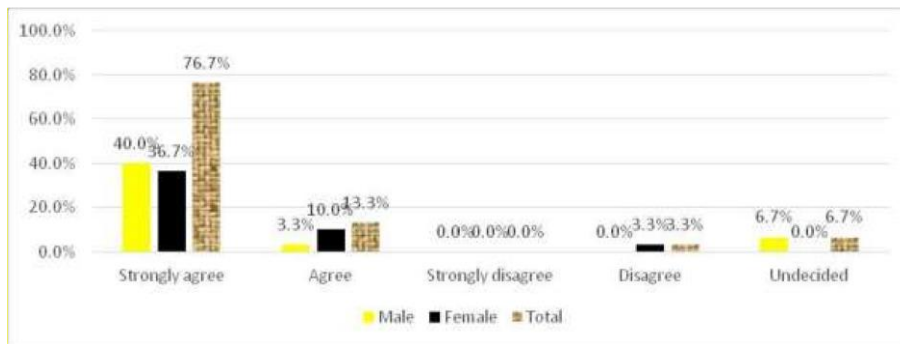


Figure 4.8: Sufficient school management support foster teacher retention in Public secondary schools (n = 30)

Source: Field data

As reflected in Figure 4.8, the majority, n = 23 (76.7%) of the school managers “strongly agreed” that sufficient school management support promoted teacher retention. Among these participants, n = 12 (40.0%) were males and n = 11 (36.7%) were females. Further, n = 3 (10.0%) female and n = 1 (3.3%) male school managers “agreed” to the notion that sufficient school management support fostered teacher retention in public secondary schools in Zambia. However, n = 2 (6.7%) of the male school managers were undecided on this matter. The figure also reveals that one female school manager, accounting for n = 10 (3.3%) disagreed with the statement. The findings confirm the assertion of Chitra (2013:66) who found that teachers cited administrative support and the extent of being welcomed by their faculty as the greatest influences on the decision whether to leave or remain in the profession. Furthermore, Tickle *et al.* (2011:345) point out that administrative support is a necessary strategy in teacher retention. This implies supporting teachers concerning student discipline, instructional methods, and curriculum as well as an enabling school environment.

4.5.2 Positive school climate

Some of the participants revealed that establishing a safe work environment for teachers, staff, and students which fosters effective teaching and learning is the very core of a positive school climate (cf.2.6.5). However, the collected data revealed that most schools exhibited a negative school climate, which did not promote but rather discouraged teacher retention. Most participants expressed a consistent opinion that the prevailing negative school climates must change to reduce teacher attrition and sustain retention.

If teachers have high morale and are committed to teaching, this would create a positive school climate but when the teachers are not committed to the task of teaching and not motivated, this would lead to a negative or a closed-school climate. Similar findings were obtained from the quantitative data as illustrated in Figure 4.9 below.

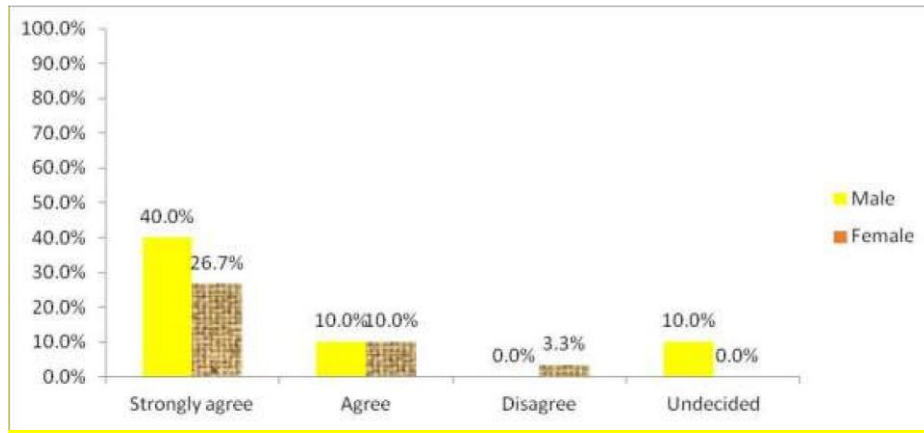


Figure 4.9: Positive school climate contribute to teacher retention
(n = 30)

Source: Field data

As reflected in Figure 4.9, the majority, n = 20 (66.7%) of the school managers “strongly agreed” that positive school climate promoted teacher retention. Among these participants, n = 12 (40.0%) were males and n = 8 (26.7%) were females. Further, n = 3 (10.0%) female and n = 3 (10.0%) male school managers “agreed” to the notion that positive school climate encourage teacher retention in public secondary schools in Zambia. However, n = 3 (10.0%) of the male school managers were undecided on this matter. The figure also reveals that one female school manager, accounting for n = 1 (3.3%) disagreed with the statement.

This study revealed that most participants understood the need for a positive school climate as an aspect of teacher retention. Establishing a safe work environment for faculty, staff, and students which fosters effective teaching and learning is at the very centre of a positive school climate (Weissbourd, Boufford & Janes, 2013:1). Accordingly, participants indicated that the school must provide a safe environment for all the stakeholders such as the learners, teachers, ancillary staff as well as administrators (cf. 2.6.5). The above findings are in agreement with Gupta and Shaw (2014:2) who argue that a positive school climate is crucial for teacher

retention. Teachers would not want to continue to work in schools where students are riotous. Therefore, teacher attrition can significantly be reduced if close attention is paid to the work environment.

4.5.3 Fair promotion opportunities

Fair opportunities are seen as one of the factors contributing to teacher retention in public secondary schools in Zambia. Findings from the focus group discussions with the school managers’ revealed that poor management of promotion opportunities which in some instances were not done according to the qualifications of the teachers and at times took too long was a barrier to teacher retention in schools.

The empirical study showed that unfair and irregular promotion practices in schools have major implications for teacher retention. Needless to say, any teachers’ realistic prospect for promotion should be based on the Annual Confidential Appraisal Forms which are no longer meaningful. To tackle this problem, this study suggest that school managers should take responsibility to correct the processes involved with the view of bringing the purposes of Annual Confidential Appraisal Forms to fruition. Most significantly, this study suggests that school managers should receive specific training on how to manage Annual Confidential Appraisal Forms at their respective levels (cf.5.7.4). Similar findings emerged from the quantitative data as presented in the following section. The findings were as portrayed in Figure 4.10.

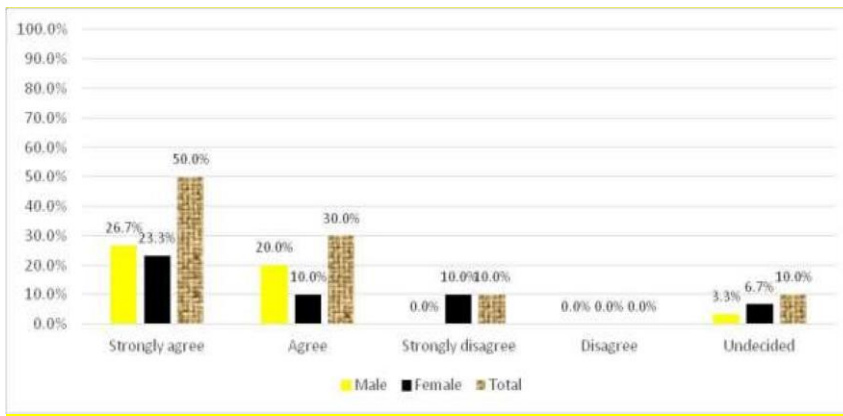


Figure 4.10: Fair promotion opportunities maintain teacher retention in public secondary schools (n = 30)

Source: Field data

Figure 4.10 shows that $n = 15$ (50.0%) and $n = 9$ (30.0%) of the school managers “strongly agreed” and “agreed” to the fact that fair promotion opportunities maintain teacher retention in secondary schools in Zambia. Of the participants who “strongly agreed”, $n = 8$ (26.7%) were males, whereas $n = 7$ (23.3%) were females. As for those who “agreed”, $n = 6$ (20.0%) were males and $n = 3$ (10.0%) were females. Further the figure shows that one male, $n = (3.3\%)$ and two females, $n = (6.7\%)$ were undecided. However, $n = 3$ (10.0%) females “strongly disagreed” with the notion.

Generally, considering the percentages of “strongly agree” and “agree”, $n = 24$ (80.0%) versus “strongly disagree” and “disagree”, $n = 3$ (10.0%), it appears that the school managers agreed that fair promotion opportunities influence teacher retention in public secondary schools.

4.5.4 Participatory decision making in school programmes enhance teacher retention in public secondary schools

From the empirical investigation, it was discovered that most participants were aware that the lack of teacher participation in decision making was a barrier to teacher retention. For instance, school manager ‘12’ remarked:

When I was promoted as a school manager to another school, I found a culture where decision making over key issues in the school was only a preserve of the school management. I observed that there was very little input from the rest of the members of staff. Teachers looked demotivated and seemingly frustrated because they were not active participants in decisions that were done in the school. I changed this approach by involving members of staff in matters relating to school governance and this has created collegiality among members of staff.

Further, the school manager ‘8’ stated thus:

There was a need to be inclusive in the way decisions are made that affect the running of the school so that teachers feel are part of the process and this enhances teacher retention.

School manager '9' also said:

Teachers in school feel part and parcel of the school administration when they are involved in decision making; they don't feel left out and they actively take part in implementing projects and have a sense of ownership. This is one of the reasons that make teachers want to stay in a school.

The review of related literature ties with the views and experiences of the participants regarding teachers' participation in decision making (cf. 2.6.4). Buchanan *et al.* (2013:113) endorse the view that collegiality among and between students, members of staff, and administrators, where possibilities are created for everyone to have a say in the decision-making process. According to Boyd *et al.* (2011:304) teachers display a less positive attitude towards the profession because of inadequate support, little or no say in decision making. Botha (2015:36) supports the above views when he avers that when teachers have a say in decision making a favourable positive school climate is created.

In agreement with the above authors, the study found that schools were not consistently engaging teachers in matters relating to school governance. In some cases, schools only had 'working committees'. This implies the majority of teachers in the school who do not belong to such committees are not privy to major decisions that are made without their input. Most school managers revealed that the rigid and sometimes insensitive manner in which information is handled has led to feelings of job insecurity, uncertainty, low morale, and frustrations among teachers. Related findings emerged from the quantitative data as presented in the following section. The findings are portrayed in Figure 4.11 below.

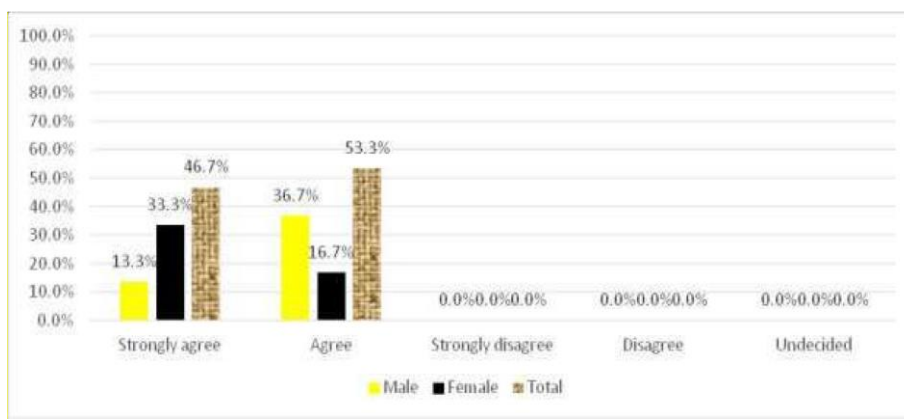


Figure 4.11: Participatory decision making in school programs enhance teacher retention in public secondary schools (n = 30)

Source: Field data

The findings of the study revealed that n = 14 (46.7%) and n = 16 (53.3%) of the school managers “strongly agreed” and “agreed” that participatory decision making in school programs enhance teacher retention in public secondary schools. Of these managers, who “strongly agreed”, n = 10 (33.3%) were females and n = 4 (13.3%) were males. As for the ones who “agreed”, n = 11 (36.7%) were males whereas n = 5 (16.7%) were females. None of the school managers “strongly disagreed” or “disagreed” and none were undecided on this issue.

The findings above clearly suggest that the school managers agreed that participatory decision making in school programs enhance teacher retention. In line with the above findings, the literature study suggests that school managers should engage in participative decision making by carrying out various tasks which include the following: administrative support (cf. 2.6.1) and creating a positive school climate (cf. 2.6.5). Although the majority of the participants’ responses seemed disjointed, inarticulate, and difficult to follow in most cases, the researcher was prudent to put together their views according to the above two functions. The aim was to create a deeper insight into the many meanings that the participants ascribed to their role as school managers in addressing the challenge of teacher attrition. Mertler (2013:40) suggests that participation in decision making is strongly associated with teacher retention. This assertion is complimented by Howson (2016:10) who points out that teachers displayed a less positive attitude towards the teaching profession because of little or no say in decision making.

4.5.5 Fair treatment of teachers by school managers encourage teacher retention in secondary schools

The majority of participants revealed that teachers needed to be fairly treated by school managers. The study found that the majority of the school managers held an opinion that consistently side-lining some teachers in the school did not inspire a sense of ownership in those teachers perceived to be side-lined.

The above views were supported by those school managers who collectively indicated that side-lined teachers were in most cases demoralised, as a result, the affected teachers react with mere compliance to instructions. School manager ‘15’ had this to say:

It seems as school managers we do not take some teachers seriously. I do not consult some teachers because I feel their input may not be valuable since I have those who are close and work with me. But, what I have

realised is that even those teachers I exclude should be allowed to voice out concerns and needs. They need to be consulted as well.

This finding of side-lined teachers is consistent with the reviewed literature. Studies show that bias and lack of fairness by school managers did not inspire a sense of ownership in those teachers perceived to be side-lined (Bataineh & Alsagheer, 2012:5). The tenuous involvement of all teachers in fair and equitable distribution of responsibilities in a school is inexcusable in this era of democracy. School managers, are therefore expected to shift from a rigid authoritarian model of management to embrace the democratic principles in their management practices.

The literature abounds with typical repercussions facing school managers that institutionalise the tenuous involvement of side-lined teachers. According to Smit *et al.* (2011:257), such school managers run risks of facing side-lined teachers' dissatisfaction which may give rise to low morale, poor cooperation, and resistance prone reactions. The current researcher's stance is that, where side-lined teachers expect their input to be valued but feel disregarded and isolated. These side-lined teachers tend to become frustrated and feel disillusioned and unfulfilled. This condition may impact negatively on these teachers and eventually leave the profession.

An effective remedy in dealing with the tenuous involvement of side-lined teachers is to create an invitational organisational climate. To this end, school managers should create opportunities that engender effective consultation with side-lined teachers.

Similar findings emerged from the quantitative data as presented in Figure 4.12 below.

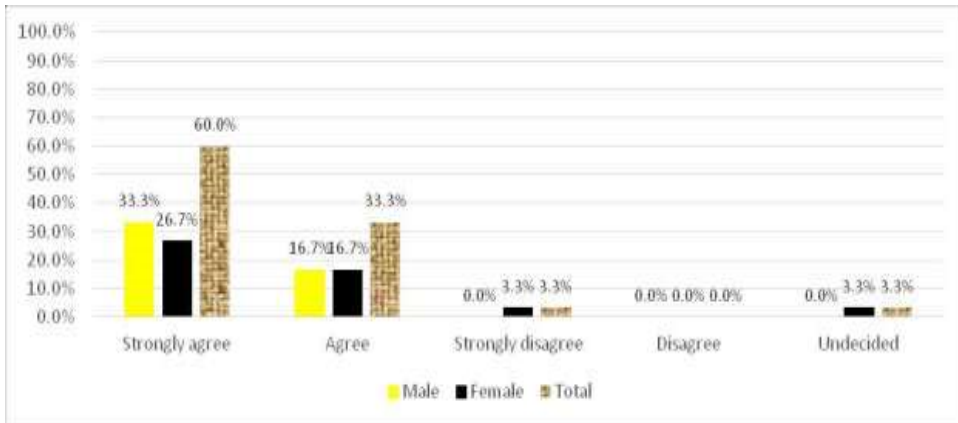


Figure 4.12: Fair treatment of teachers by school managers sustains teacher retention in public secondary schools (n = 30)

Source: Field data

As depicted in Figure 4.12, the majority of the school managers, n = 18 (60.0%) “strongly agreed” that fair treatment of teachers by school managers encourage teacher retention in secondary schools. Among these school managers, n = 10 (33.3%) were males and n = 8 (26.7%) were females. Further, the figure shows that n = 10 (33.3%) of the school managers “agreed”. Of these, n = 5 (16.7%) were males and the others, n = 5 (16.7%) were females. However, one female school manager “strongly disagreed” with the assertion.

The preceding presentation of the findings shows that generally, school managers were of the view that fair treatment of teachers by school managers encourages teacher retention in public secondary schools. The above findings are in line with the views of Simon and Johnson (2015:140) who contend that fair treatment of teachers by school managers can motivate teachers who in turn show a sense of efficacy and a positive attitude towards the profession. This perception is further articulated by Howson (2016:10) who points out that school managers have roles to play in the school by involving teachers fairly participate in school governance issues (cf.2.5.3.5).

4.5.6 Reduced workload

The empirical evidence suggested that work overload on the part of teachers was another major impediment to discharging their duties effectively. The majority of the school managers in their focus group interviews stressed that teachers were experiencing heavy workloads especially in schools where there was teacher shortage. Most participants in this study expressed a similar opinion that teacher attrition leads to a heavy

workload for those teachers who remain since they have to cover up for the classes where teachers have left. The manager at school '10' said:

Our teachers are stressed given that they teach more than one class despite appealing to the Ministry of Education to send teachers but the problem is the deployment of new teachers which often takes as long as two or three years because the government has no money to pay newly recruited teachers. Teaching Service Commission recommends an average teaching load of 18 lessons per week for one teacher, holding all other factors constant. Increased workloads mean that a teacher taught more than 27 lessons per week and they were doing other roles like being games master/mistress, class teacher, housemasters/mistress among other responsibilities other than just teaching. Increased workloads make it difficult for the teachers to cope and eventually this fuels teacher's desire to leave for greener pastures or movement to the private sector or career switch in a bid to look for better-paying jobs that are not cumbersome and rates of returns are higher. If the workload is reduced teachers who leave are likely to stay in the profession.

In support of the above comment, school manager '11' stressed the importance of reducing teachers' workload if teacher attrition was to be reduced in schools. In this regard, she stated that she was made to understand that almost all schools are facing the challenge of an increase in workload as a result of teacher attrition. She further said:

Even though the case is minimal in some subject areas, this is still common in other subjects such as Mathematics, English, and Science. Teachers are few and the rate at which the graduates in the field are entering the profession is low. Therefore, you will realise that those who are leaving the teaching profession are adding to the burden and increasing the workload of those teachers who are remaining. She added that on several occasions has heard other school managers complain about teacher shortage to the Ministry of Education officials for more teachers, but no action has been taken to tackle the situation. The only option according to the Ministry of Education is that school managers should continue using the available human resource to keep the school going.

The findings from the quantitative data reveal similar results that reduced workload fostered teacher retention in public secondary schools in Zambia. Figure 4.13 illustrates the study findings.

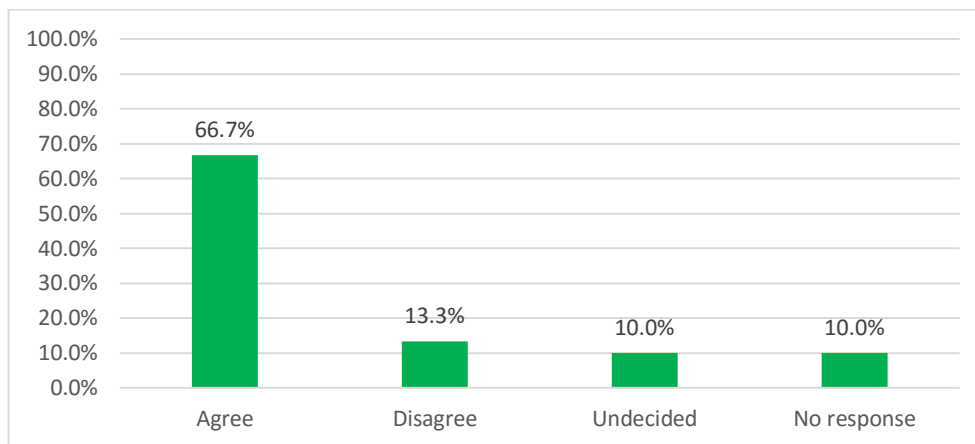


Figure 4.13: Reduced workload fostered teacher retention in public secondary schools

Source: Field data

As can be seen from Figure 4.13, the majority of the school managers, $n = 20$ (66.7%) “strongly agreed” whereas $n = 4$ (13.3%) “disagreed” to the view that reduced workload was one of the measures to sustain teacher retention in public secondary schools. However, $n = 3$ (10.0%) of the school managers were undecided on this matter and $n = 3$ (10.0%) of the school managers did not respond to this issue. Generally, the statistics above show that school managers were of the view that reduced workload was one of the measures to sustain teacher retention.

The findings of the current study relate well with those of Bryk (2010:10) who posits that teachers encounter a series of challenges in their working life especially in the early years of teaching. In some cases, they are given challenging tasks such as handling large classes and extra-curricular activities which make them focus less on teaching and learning preparations. Students’ academic learning time is considerably reduced. Duley and Kim (2010:23) report that reducing new teachers' workload in their first few years of teaching encouraged teachers to continue in the profession. This view is in agreement with Masaiti and Naluyele (2011:411) who contend that assigning challenging tasks to new teachers interferes with well-meaning support programmes designed by a school such as mentoring and collegiality among administrators and colleagues.

4.5.7 High salaries

Participants in this study believed that improving teacher salaries could help with teacher retention. For example, school manager '8' confirmed this in the following:

Practically, all teachers whether they remain in teaching or not, feel that the salaries they receive are not sufficient to enable them to live in a way that befits their status. For instance, delay in paying teacher salaries has resulted in teachers going for moonlighting jobs such as trading and have become makeshift businessmen and women to adapt to the economic situation. You will find that some teachers get permission for seemingly genuine reasons and yet they go and buy goods for sale as far as South Africa, Botswana, Namibia, and Tanzania. Low salaries are a major contributor to teachers leaving the profession.

Data collected from the three (3) DEBS who participated in the qualitative investigation was analysed and coded, resulting in the following major themes, given in order of priority: improving salaries and conditions of service; harmonisation of teacher qualifications and salaries; and professional development. To improve teacher retention, most DEBS argued that the government needed to improve teacher salaries and other conditions of service. In this regard, DEBS '1' said: *there should be an improvement and harmonization of teacher salaries and conditions of service.* This was seen as an essential intervention to reduce teacher attrition and maximise teacher retention. Finally, the DEBS further suggested that teachers should be availed of opportunities to upgrade and update their professional qualifications and so improve their salaries. DEBS '3' argued that:

There is a need to ensure that school managers are encouraged to go for further studies because the trend now is that one cannot be in a school manager's office without having acquired skills and knowledge in educational leadership and management. It is a call for every school manager to upgrade for those who have not done so. I am sponsoring over 30 school managers in my district for that programme.

Findings from the quantitative data showed similar findings like those from the interviews and focus group discussions as reflected in Figure 4.14

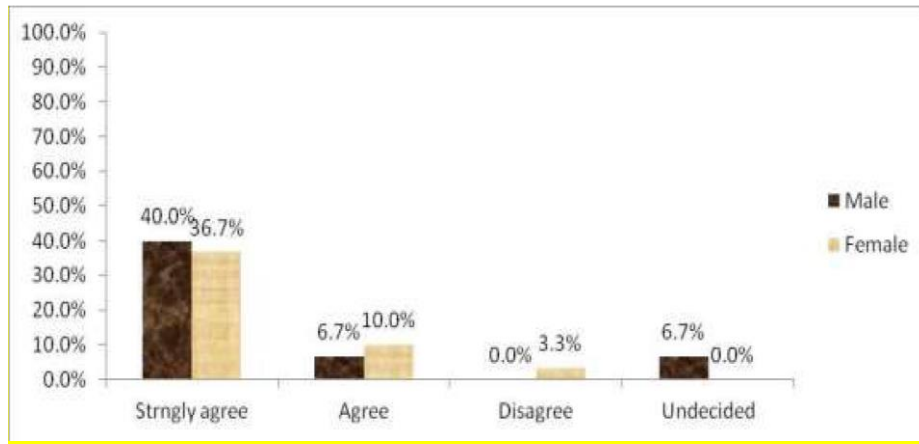


Figure 4.14: High salaries promote teacher retention in public secondary schools in Zambia.

Source: Field data

As shown in Figure 4.14, the majority, $n = 23$ (76.7%) of the school managers “strongly agreed” that high salaries promoted teacher retention. Among these participants, $n = 12$ (40.0%) were males and $n = 11$ (36.7%) were females. Further, $n = 3$ (10.0%) female and $n = 2$ (6.7%) male school managers “agreed” that high salaries promote teacher retention in public secondary schools in Zambia. However, $n = 2$ (6.7%) of the male school managers were undecided on this matter. The figure also reveals that one female school manager, accounting for $n = 1$ (3.3%) disagreed with the statement.

The influence that teacher salary has on attrition is significant. It is an undeniable fact that while attrition is attributed to low salaries, teachers with better pay are less likely to leave the profession than those with poor salaries (Masaiti & Naluyele, 2011:412). The implication is that school managers have to provide effective strategies that can be implemented to ensure that teachers remain in the profession. Furthermore, Joseph and Jackman (2014:74) hold an opinion that the majority of men in their study left teaching because of low salaries. A summary of the determination and description of measures that are used to sustain teacher retention in public secondary schools are presented in Table 4.6.

Table 4.6: Measures used to sustain teacher retention

Measures used to sustain teacher retention	Gender	Response				
		Strongly agree	Agree	Strongly disagree	Disagree	Undecided
Sufficient school management support	Male	12 (40.0%)	1 (3.3%)	0 (0.0%)	0 (0.0%)	2 (6.7%)
	Female	11 (36.7%)	3 (10.0%)	0 (0.0%)	1 (3.3%)	0 (0.0%)
	Total	23 (76.7%)	4 (13.3%)	0 (0.0%)	3 (3.3%)	2 (6.7%)
Fair promotion opportunities	Male	8 (26.7%)	6 (20.0%)	0 (0.0%)	0 (0.0%)	1 (3.3%)
	Female	7 (23.3%)	3 (10.0%)	3 (10.0%)	0 (0.0%)	2 (6.7%)
	Total	15 (50.0%)	9 (30.0%)	3 (10.0%)	0 (0.0%)	3 (10.0%)
Participatory decision making in school programs	Male	4 (13.3%)	11 (36.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Female	10 (33.3%)	5 (16.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Total	14 (46.7%)	16 (53.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Fair treatment of teachers by school head teachers	Male	10 (33.3%)	5 (16.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Female	8 (26.7%)	5 (16.7%)	1 (3.3%)	0 (0.0%)	1 (3.3%)
	Total	18 (60.0%)	10 (33.3%)	1 (3.3%)	0 (0.0%)	1 (3.3%)

Source: Field data

The above table shows that generally, school managers agreed that, sufficient school management support, n = 27 (90.0%); fair promotion opportunities, n = 24 (80.0%); participatory decision making in school programs, n = 30 (93.3%), were some of the measures used to sustain teacher retention in public secondary schools.

4.6 Summary of findings

This study found that the school managers and the district education board secretaries had notable conception of the constituent elements of teacher attrition and functioning of public secondary schools (cf.4.3.1). It was discovered that their conceptions in this regard were supported by extant literature. Another significant finding in this study was that the participants had a limited understanding of the role school managers' play in staff retention. For instance, during data collection, some participants went as far as disclosing that they were not aware that school managers were expected to adhere to a set of formal processes of management to reduce teacher exodus. Based on the findings, the researcher concluded that school managers that lack a basic understanding of what they are expected to do cannot be perceived as effective in addressing teacher attrition. The empirical investigation also underscored a series of practical challenges faced by school managers in Chongwe, Kafue, and Lusaka districts (cf. 4.4). These are summarised below.

4.6.1 Poor working conditions (cf. 4.4.1)

The intensity of this barrier was evidenced by the participants' consistently citing it and pointed out identified problems such as pathetic conditions, deficiency of equipment and supplies, and handling subjects they were not trained.

4.6.2 Lack of administrative support (cf. 4.4.2)

Analysis of the collected data revealed that this problem was dual-faced. The study found that addressing teacher attrition in the sampled research sites was beset by not assisting teachers in their instructional programmes such as instructional aids and social support. Despite being aware of the above problems, the study found that the majority of identified school managers pursued no workable means to tackle them. Instead, the empirical evidence indicated that many of them used adapting strategies such as borrowing from schools and citing lack of funding from the Ministry of Education.

4.6.3 Low salaries (cf. 4.4.3)

The empirical data evinced that school managers and DEBS considered low salaries teachers receive as a key issue in teacher attrition. The study found teachers are involved in moonlighting jobs such as conducting tuition

and doing some small businesses. Collected data indicated that the teaching profession is not enjoying the privileges that other civil servants are enjoying.

4.6.4 Low status accorded to the teaching profession (cf. 4.4.4)

The study found that teaching as a profession has been perceived to be of low status because of poor conditions of service rendered to teachers as well as societal, personal and school context variables contribute to teachers leaving the profession.

4.6.5 Lack of continuous professional development (cf. 4.4.5)

The empirical data evinced that school managers were not encouraging teachers to upgrade and update themselves. School managers found it difficult to decide who should be supported by the school for further studies in the absence of clear guidelines.

4.7 Conclusion

This chapter presented and discussed the results of the empirical study. The Statistical Package for Social Sciences (SPSS Version 20.0) was used to analyse the quantitative data whereas the qualitative data was analysed using the thematic analysis. The presentation of the findings is structured into three main categories: teacher attrition and functioning of public secondary schools; factors influencing teacher attrition in public secondary schools and measures used in teacher retention in public secondary schools.

The next chapter provides a general overview of this study, a summary of the key findings and recommendations drawn from the key findings of this study. The limitations of this study, possible areas for further study, and conclusions are also provided in the ensuing chapter.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

The previous chapter presented and discussed the data that emerged from the empirical study. The reason of this concluding chapter is to summarise the study. To this end, the current chapter presents a general overview of the preceding chapters, a summary of the findings and conclusions emanating from the findings of the study. These are followed by recommendations on how school managers can address the problem of teacher attrition in public secondary schools in Zambia. Areas for further research conclude this chapter. These aspects are discussed in the next sections sequentially.

5.2 Overview of chapters one to four

The purpose of this study was to establish how school managers address the problem of teacher attrition in public secondary schools in Zambia with a view of developing strategies that may be used to reduce teacher attrition in these schools. The data were collected utilising the semi-structured interview schedule and questionnaires from the purposively selected districts and secondary schools in Chongwe, Lusaka, and Kafue districts of Lusaka province. This study was organised into five chapters. This section presents a summary of each chapter.

Chapter one provided the basis for the current study. It succinctly introduced the argument by pointing out the effect of globalisation on the movement of people across the globe. This increased globalisation has brought with it the effects of migration of skilled labour from developing countries to developed ones. The movement of labour across regions and countries have not spared teachers who continue to look for better conditions of service elsewhere. There are many reasons why teachers leave the profession. Some leave for other teaching duties in other ministries within the government, most leave through resignations while others leave for unknown reasons. The problem of teacher attrition continues to be a major challenge for the Ministry of Education in Zambia (cf.1.1).

In the succeeding segment, the researcher explored and presented the background to the study. The section started with the presentation of the economic crisis which started in the mid-1970s. This was followed up by

the structural adjustment policies of the 1980s and 1990s. The economic situation at the time had implications for the education sector which resulted in the reduction of budget allocation to the Ministry of Education. This had an impact on the pupil-teacher ratio because teaching became less attractive and many teachers left the profession. A large number of qualified teachers continue to leave the profession which affects the recruitment, training, and deployment process (cf.1.2).

Having established the background of this study, the subsequent section explored the statement of the problem. This section highlighted the need for this study and why the problem was investigated. This was done by providing a brief description of the background of the problem which pointed out the knowledge gap which eventually showed the problem (cf.1.3). The preceding section helped generate research aims and objectives. This section highlighted the overall aim of the study which gave rise to specific objectives (cf.1.4). The next section described the motivation and rationale that prompted the researcher to undertake this study. There has been a growing realisation that each year qualified teachers leave the profession in their thousands. There are very few empirical studies that have been carried out on teacher attrition. In Zambia, published data on teacher attrition is fragmented. It appears either as commentaries or just as a record on the extent of teacher attrition that gave little or no detail on the causes or patterns. Focus is more on providing statistical data rather than giving an explanation of why teachers are leaving the profession (cf.1.4).

The next section explained how the findings contributed to the already existing body of knowledge in teacher attrition. Additionally, the results indicated how the study led to an improved approach in addressing the challenge of teacher attrition from the perspective of the Ministry of Education officials, provincial education officials, district education board secretaries, school managers, and policymakers. It is hoped that when they know reasons why teachers leave the classroom, they could make efforts to improve the system better which in turn would imply education management (cf.1.5). The ensuing segment explored the research methodology and design used in the study. A mixed-methods approach was applied in this study. Individual interviews and focus group data were collected analysed and then developed a questionnaire that was administered to the sample population. The study utilised a case study design that aimed at eliciting detailed qualitative and quantitative information that answered questions on how school managers addressed the problem of teacher attrition in public secondary schools (cf.1.7). This section further highlighted the type of sampling method and how the sample size was picked (cf.1.7.1) and individual participants (cf.1.7.1.2). Additionally, this section

illuminated the following as instruments used for data collection: the interview (cf.1.7.2.1), semi-structured interview (cf.1.7.2.1.1), focus group interviews (cf.1.7.2.1.2) and questionnaires (cf.1.7.3). This section also highlighted how data was analysed (cf.1.7.4).

The next section provided the basis for selecting the study setting. It described the limits or scope of the setting. This was delimited to purposively select public secondary school managers drawn from Lusaka, Kafue, and Chongwe districts including their respective district education board secretaries (cf.1.8). This study had its limitations. It highlighted the following: the responses were views of the participants and did not reflect views of all school managers in the participating districts; participants did provide full disclosure of information while participating in the study; and, only ten (10) school managers and one (1) district education board secretary were interviewed per district, which limited inferences of the study (cf.1.9).

In this study, data that was obtained and information presented by the participants was subjected to uncompromising ethical considerations. The researcher obtained permission to conduct the study from the College of Education (CEDU) at UNISA. The researcher also obtained permission to conduct the study from Lusaka Province Education Office (LPEO). Once permission was granted, the school managers of the selected schools were contacted by mobile phone, which was followed by an officially written request to explain to them the nature of the study (cf.1.10). The researcher further explored the major concepts that were used in this investigation. It was important to explain what they meant in the context of the study. This was approached from two perspectives namely concepts essential to the topic and concepts related to the topic (cf.1.11).

The researcher explored the philosophical assumptions related to this study. Interpretivist paradigm was chosen in the context of this study based on the following: the researcher chose to investigate to gain insights and understanding of the beliefs held by people in that context by using the qualitative method; the nature of the questions which led this researcher to choose qualitative method. This was achieved through detailed in-depth information that was required from participants; and, to add value to the meanings and interpretations of the participants.

Participants were required to indicate their responses by ticking a number on a Likert-type 5 point scale on a questionnaire which was quantitatively analysed. In this study, structured and semi-structured interviews were

used to verify meanings ascribed to their numerical ratings on the questionnaire (cf.1.12). The next section explained the theoretical framework underpinning this study. The researcher adopted the human capital theory of occupational choice. This theory suggests that individuals make informed decisions regarding their net monetary and non-monetary benefits from a wide range of occupations and make deliberate decisions either to enter, stay or exit the occupation (cf.1.13). Finally, in this section, the researcher presented a chapter division of the entire work. This study was organised in five chapters as described (cf.1.14).

In chapter two, the researcher explored and presented pertinent literature related to the analysis of teacher attrition in public secondary schools. The chapter commenced with the presentation of the overview of teacher attrition (cf.2.2). This section highlighted issues related to teacher attrition and various reasons attributed to attrition. Section 2.3 sought to address the first of the three objectives of this study from a theoretical perspective, namely, to *assess how teacher attrition affected the functioning of public secondary schools*. Section 2.3.1 discussed the financial cost of teacher attrition on student achievement. Pertinent effects included teacher vacancies and poor learner achievement (Hanushek & Rivkin, 2010:274) and teacher transfers (Boyd *et al.*, 2011:305).

Having established the effects of teacher attrition, Chapter two continued to explore existing literature related to teacher attrition (cf.2.4). This section highlighted the trends of teacher attrition as a global challenge (cf. 2.4.1) and more specifically teacher attrition in Sub-Saharan Africa (cf. 2.4.2). In section 2.5, the study highlighted what literature presented as factors influencing teacher attrition and appropriate strategies to overcome them. This was an attempt to address another key research objective of this study namely, to examine factors influencing teacher attrition. Notably, this section illuminated the following as some of the causes of teacher attrition; time (cf.2.5.1.1), demographic profile (cf. 2.5.1.2), teacher personal characteristics (cf. 2.5.2), school context variables (cf. 2.5.3), teacher preparation (cf. 2.5.3.1), monetary factor (cf.2.5.3.2), working conditions (cf. 2.5.3.3), school climate (cf.2.5.3.4), lack of administrative support (cf.2.5.3.5) and job satisfaction (cf. 2.5.3.6). After the illumination of specific factors, the researcher presented possible strategies to overcome that particular factor in pursuance of empowering school managers to address issues of teacher attrition.

Chapter two continued to explore further existing literature related to factors influencing teacher retention (cf. 2.6). The intention was to address the third and final research objective that is, to examine measures used to sustain teacher retention in public secondary schools. Among factors that influence teacher retention; school managers are responsible for providing support to teachers that foster personnel retention (cf. 2.6.1), reduced workload (cf. 2.6.2), and mentoring programmes (cf. 2.6.3), high salaries (cf. 2.6.4) and positive school climate (cf. 2.6.5).

Chapter three indicated how the researcher obtained the empirical data that was required to address the research questions. The qualitative and quantitative research approach was adopted (cf.3.2; 3.3; 3.4 & 3.5). This chapter further explained the procedure for sampling and sample selection (cf. 3.6), data collection procedure (cf. 3.7.1 & cf. 3.12.1), data analysis process (cf. 3.8 & 3.12.2). An account for the study's credibility and trustworthiness was presented (cf. 3.10 & 3.13.1), ethical considerations (cf. 3.11 & 3.14) were also discussed in this chapter.

Chapter four focused on the presentation and discussion of the empirical findings. Section 4.2 provided demographic characteristics of the participants in terms of gender and age (cf.4.2.1), highest professional qualifications (cf. 4.2.2), and work experience as a school manager (cf.4.2.3). The presentation of the findings was structured around research questions (cf. 1.4) and emergent themes. Three themes emerged from the data analysis. The first theme highlighted the participants' conceptions on how teacher attrition affected the functioning of public schools (cf.4.3). The second theme illuminated the participants' understanding of the factors influencing teacher attrition in public secondary schools (cf.4.4). The third and last theme highlighted measures for enhancing teacher retention (cf.4.5). A discussion of each of the identified measures for enhancing teacher retention was followed by specific strategies. This was partly in pursuance of the main research question of this study (cf.1.3). It is worth noting that each chapter included its introductory section as well as its conclusion, and is linked to other chapters of this study. The next section discusses the summary of the significant findings derived from the literature and empirical research in this study.

5.3 Summary

The previous chapter has presented the findings of the study conducted to establish how school managers address the problem of teacher attrition in public secondary schools in Chongwe, Lusaka, and Kafue districts of Lusaka province in Zambia (cf.1.3). This study set out to address the following objectives:

- to examine how teacher attrition affects the functioning of public secondary schools;
- to find out which factors influence teacher attrition in public secondary schools; and,
- to determine and describe measures which are used to sustain teacher retention in public secondary schools.

Before discussing the summary of major findings, it is important to point out that after the outline of the key findings, the researcher aims to present the recommendations based on the literature and empirical findings that may help school managers in addressing the challenge of teacher attrition. This is done in line with the aim of this study (cf.1.3).

5.3.1 Findings from the related literature review

A literature review provided the theoretical basis for this study (cf. Chapter two). Deriving from the literature review, a summary of the main findings is presented following this study's objectives as follows:

5.3.1.1 Objective one: to examine how teacher attrition affects the functioning of public secondary schools

To address the above objective the following conclusions were drawn:

5.3.1.1.1 Teacher attrition leads to poor staffing levels

It was established from the literature review that teacher attrition leads to poor staffing levels and this affects the quality of staffing in schools (cf.2.3).

5.3.1.1.2 Teacher attrition results in poor student achievement

From the literature review, it was found that learning is directly linked to teacher effectiveness implying that teacher attrition impacts negatively on student achievement.

5.3.1.2 Objective two: to find out which factors influence teacher attrition in public secondary schools

The following findings were drawn from the literature review to the above objective.

5.3.1.2.1 Poor working conditions (cf.2.5.3.3)

From the literature review, it was found that poor working conditions were one basic aspect that contributes towards teachers leaving the profession. It was necessary to have good working conditions to reduce teacher attrition. (cf.2.5.3.6).

5.3.1.2.2 Lack of administrative support (cf. 2.5.3.5)

The literature review illuminated various ways in which the school manager contributed to the challenge of teacher attrition. It was revealed from the study findings that lack of administrative support was one of the factors that contribute to teacher attrition in public secondary schools in Zambia. Regardless of the various descriptions, scholars were unanimous that a teachers' decision to leave the profession hinges on school leadership whose roles are fivefold: creating a positive school culture, instructional leadership, facilitator of mentors, teacher recruiter, and teacher advocacy (cf.2.5.3.5).

5.3.1.2.3 Low salaries (cf. 2.5.3.2)

It was established from the literature review that low salaries were considered to be a key issue in teacher motivation and their resolve to remain in the teaching profession (Touchstone, 2015:172). Low salaries are a significant contributing factor that affects teachers' decision to exit the professions (Abdei, 2010:2). The literature revealed that whenever there was an increase in teacher pay, teacher attrition was significantly reduced (Mertler, 2016:34). Understanding the role salaries play in addressing teacher attrition in schools is critical towards remodelling and establishing a shift in attitude that school managers should adopt so that they can manage teachers effectively (Masaiti & Naluyele, 2011:415). Further, the low salary of teachers contributes to the loss of respect for the teachers and the teaching profession. Because of this score, the teaching profession is not offering them reasonable pay that bears the current cost of living which in turn compromises teaching and other professional activities.

Additionally, the literature review revealed that low salaries may not be the only reason why teachers leave the profession. There is a need to address other factors as well such as increasing pay with higher qualifications and students who are low achievers (Joseph & Jackman, 2014:74). Therefore, school managers are required to address school context variables which make teachers leave the profession (cf.2.5.2), teacher personal

characteristics (cf.2.5.3), consider the relationship between gender/age and attrition (cf.2.5.1.2), and to reflect on the timeframe involved when more teachers leave the profession (cf. 2.5.1.1).

5.3.1.2.4 Low social status accorded to the teaching profession (cf. 2.5.3.6)

The literature revealed that teacher dissatisfaction arises as a result of low self-esteem, negative evaluative perceptions that people make about teaching, contribute to teacher attrition (Ronfeldt *et al.*, 2013:6; Skaalvik & Skaalvik, 2015:182). It was also evident from the literature that many people no longer prefer the profession because it is perceived as a low paying profession whose conditions of service are no longer attractive as compared to other professions (Salif & Agbenyega, 2013:63). To tackle this problem, the literature suggests that school managers should provide support to teachers (cf. 2.6.1), and establish a safe work environment for teachers, staff, and students (cf. 2.6.5). Such provisions should not only seek to equip school managers with appropriate knowledge concerning their role but also help them comprehend how different variables of the workplace affect teachers' ability to carry out their duties well and their willingness to stay in the profession (Bryk *et al.*, 2010:10).

5.3.1.2.5 Teachers' lack of opportunity for continuous professional development (cf. 2.5.1) The literature review revealed that many school managers lack sufficient knowledge and skills to provide quality leadership and management to teachers' continuous professional development (John *et al.*, 2012:11). It was also evident from the literature that there was a negative correlation on poor administrative support and teachers' lack of opportunity for continuous professional development, implying that those school managers with poor administrative support were more likely not to send their teachers for further studies, thus promoting teacher exodus (cf. 2.5.3.2).

5.3.1.3 Objective three: to determine and describe which measures are used to sustain teacher retention in public secondary schools

From the literature review, it was found that teacher retention in public secondary schools was influenced by several variables (cf. 2.6). The most significant of these variables, highlighted in the literature review include high salaries (cf.2.6.4), adequate administrative support (cf. 2.6.1) which is characterised by the following; fair promotion opportunities, participatory decision making, and fair treatment of teachers by school managers

as well as a positive school climate (cf.2.6.5) and reduced workload (cf.2.6.2). These variables are outlined, in sequence, in the next sections.

5.3.1.3.1 High salaries (cf. 2.6.4)

The literature review revealed that all teachers whether they remain in teaching or not, feel that the salaries they receive are not sufficient to enable them to live in a way that befits their status (Masaiti & Naluyele, 2011:40). It was evident from the literature that if teachers' salaries are increased retention rates are also increased pointing to the fact that low salaries were a major contributor to high teacher attrition rates (Adenji & Osibaijo, 2012:33). It was also established from the review of literature that teachers left the profession because of low salaries and that pay incentives can have a positive influence on reducing teacher attrition (Joseph & Jackman, 2014:74).

To solve this problem, the literature suggests that school managers should find ways of motivating teachers by providing them with financial incentives that play an active role in addressing teacher attrition in schools. The role that these monetary incentives play in addressing teacher attrition cannot be underestimated because they are essential in establishing a shift in attitude that school managers should adopt so that they can manage teachers effectively (MoE, 2015:60).

5.3.1.3.2 Adequate administrative support (cf. 2.6.1)

Extant literature revealed that school managers must modify organisational climate to foster effective and sustainable teacher retention by providing adequate support to teachers (Bickmore & Bickmore, 2010:106; Tickle *et al.*, 2011:345). The ideal administrative support should reflect many attributes including fair promotion, participatory decision making, fair treatment, and a positive school climate (Simon & Johnson, 2015:40). These attributes are outlined in the next sections.

5.3.1.3.2.1 Fair promotion (cf. 2.5.3.1)

From the literature review, it was found that school managers should identify and suggest promotion for hardworking teachers who should be a reflection of qualified and well-trained teachers (Ingersoll, 2012:31). Besides, fair promotion opportunities and teacher preparedness influence teacher retention in schools (Brannon & Fiene, 2013:192).

5.3.1.3.2.2 Fair treatment (cf. 2.5.3.5)

It was established from the literature study that school managers who were fair-minded were more likely to retain their teachers (Howson, 2016:10). To bring out fair treatment, school managers have to create a positive school climate (cf. 2.5.3.4), be a teacher recruiter and advocacy (cf. 2.5.3.5), and should provide instructional leadership (cf. 2.6.1).

5.3.1.3.2.3 Participatory decision making (cf. 2.6.4)

The literature revealed that school managers recognised that the input by teachers in the running of the school was a major retention factor for effective teacher management. It was established from the review of literature that participatory decision making by all teachers in school programmes was an important aspect of teacher retention (Botha, 2015:36). When qualified teachers are motivated, they value their jobs and contribute positively to the success of the school especially when having a say in decision making which creates a conducive positive school climate (cf. 2.5.3.4).

5.3.1.3.2.4 Creating a positive school climate (cf. 2.6.5)

The literature revealed that school managers have to modify the school climate to create a safe work environment for staff and students which should foster effective teaching and learning (Kraft & Papay, 2011:10; Ravitch, 2010:34; Weissbourd *et al.*, 2013:1). The ideal school climate should reflect some attributes including; a healthy working environment, student discipline, collegiality and respect for one another, teacher participation in decision making, and high teacher morale (Buchanan, 2010:201). The literature review revealed that to modify the school climate to reflect the above attributes, school managers are required to provide adequate administrative support (cf. 2.6.1), reduce the workload (cf. 2.6.2), and to adopt induction and mentoring programmes (cf.2.6.3). Having presented a summary of the important findings derived from the related literature review, the next section outlines the major conclusions drawn from the empirical data.

5.4 Conclusions

The conclusions from the collected data were presented against the backdrop of this study's research question, research aim, and objectives (cf. 1.4). To ensure that this section is presented, the conclusions are given in line with the three groupings that emerged during the data analysis (cf. 4.3). The identified groupings were:

- to examine how teacher attrition affects the functioning of public secondary schools (cf. 4.3);
- to find out which factors influence teacher attrition in public secondary schools (cf.4.4); and,
- to determine and describe measures which are used to sustain teacher retention in public secondary schools (cf. 4.5).

In this section, an outline of the above groupings and pertinent subgroups are synthesised with prior literature review relating to how school managers address the problem of teacher attrition in public secondary schools in Zambia.

5.4.1 Teacher attrition and functioning of public secondary schools (cf. 4.3.1)

The empirical investigation revealed that the participants possessed considerable similarities in their ideas on how teacher attrition affects the functioning of public secondary schools (cf.4.3.1). In the main, the participants' views were consistent with the literature. This conclusion was drawn from the participants' responses concerning:

- Teacher attrition leads to poor staffing levels (cf. 4.3.1.1); and,
- Teacher attrition results in poor student achievement (4.3.1.2). These two segments are discussed next.

5.4.1.1 Teacher attrition leads to poor staffing levels (cf. 4.3.1.1)

The majority of the participants were aware that teacher attrition led to the depletion of the staff establishment in a school (cf.2.3). Likewise, they emphasised that teacher attrition of qualified and experienced teachers resulted in teacher shortages and affects the quality of staffing in a school (Ingersoll *et al.*, 2014:4). Furthermore, the participants expressed the view that regular staff changes and lack of replacements once teachers left the school have a direct effect on the implementation of the curriculum.

5.4.1.2 Teacher attrition results in poor student achievement (cf. 4.3.1.2)

Empirical data indicated that the majority of participants were of the view that teacher attrition leads to poor student achievement (cf.2.3.2). They collectively mentioned that as a result of teacher absence, schools recorded poor results. They disclosed that to their dismay, those who leave mostly were talented and gifted teachers (Darling-Hammond *et al.*, 2013:179).

5.4.2 Factors influencing teacher attrition in public secondary schools (cf. 4.4)

It was concluded from the empirical investigation that the majority of the participants displayed an awareness that there are factors that influence teacher attrition in public secondary schools. In most instances, their responses were articulate and portrayed in-depth information particularly when they outlined teachers' poor working conditions and low salaries. Based on the collected data the following conclusions were drawn:

5.4.2.1 Poor working conditions (cf. 4.4.1)

The empirical investigation revealed that the majority of the school managers view poor working conditions as an important ingredient in teachers' decision to leave the profession. Further, the participants were of the view that the prevalence of poor physical environment militated against teachers' desire to remain in teaching. The evidence from the interview data indicated that there was a need to have good working conditions to reduce teacher attrition (cf. 4.4.1). This finding was consistent with findings in previous studies (Gonzalez, Brown & Slate, 2008:2; Yoo, 2011:106) which agrees that poor working conditions correlate significantly with poor administrative support which in turn influenced teacher exodus from the profession (cf. 4.4).

In general, it was concluded that school managers who lack the basic understanding of what they are expected to do cannot be perceived as effective in their role in addressing the problem of teacher attrition in their schools. Such school managers are prone to overlook specific responsibilities, perform them wrongly, or completely avoid them. The researcher discovered through empirical investigation the perceptible partial understanding and application of their role were further exacerbated by practical impediments encountered when dealing with teacher attrition. An outline of these impediments follows in the next section.

5.4.3 Impediments to managing teacher attrition and possible solutions to these impediments (cf.4.4)

It was concluded from the empirical investigation that the sampled school managers faced several challenges that impaired their effectiveness (cf.4.4). The most significant of these included poor working conditions (cf. 4.4.1), lack of administrative support (cf.4.4.2), low salaries (cf. 4.4.3), low social status (cf. 4.4.4), and teachers' lack of continuous professional development (cf. 4.4.5). These are briefly discussed, in turn, next.

5.4.3.1 Poor working conditions (cf. 4.4.1)

The empirical data evinced that school managers found that poor working conditions prevailing in schools were a demotivator to teachers (cf. 2.5.3.3). Specifically, school managers were puzzled to realise that it was their responsibility to ensure that safe working conditions prevail in their schools.

5.4.3.2 Lack of administrative support (cf. 4.4.2)

The study found that the selected school managers did not provide enough support to teachers (cf. 2.6.1) this implies that schools that openly support teachers and permit them to exercise their autonomy in the manner they work experience low levels of attrition. Improving school climate was presented as the crux of the matter.

5.4.3.3 Low salaries (cf. 4.4.3)

The school managers in the study deduced that the low levels of income of teachers have led the profession to lose its respect. It was observed that teachers were not offered reasonable pay that bears the current cost of living, which in turn compromises teaching. (cf. 2.6.4). The influence that teacher salary has on attrition is significant, school managers have to provide strategies such as financial rewards for teacher retention.

5.4.3.4 Low social status accorded to the teaching profession (cf. 4.4.4)

It was concluded from the collected data that the low status accorded to the teaching profession contributed to teacher attrition. Participants emphasised that the low salary of teachers contributes to the loss of respect for the teachers and the teaching profession. The low status as a result of social, personal, and school context variables (cf. 2.5.2 & 2.5.3). School managers should motivate their teachers by providing incentives that can bring about job satisfaction. Further, extrinsic factors which include poor infrastructure, lack of administrative support, and low salaries need to be addressed to motivate teachers.

5.4.3.5 Teachers' lack of continuous professional development (4.4.5)

The majority of the participants were aware that addressing teacher attrition challenges presupposed adequately trained, skilled and knowledgeable teachers to foster retention of teachers in schools. Likewise, they accentuated that teachers required ongoing professional development to provide them with the necessary skills and knowledge to improve their performance and update their qualifications with a view of promotion.

Additionally, the participants expressed the view that to address teacher exodus from schools, teachers should be accorded an opportunity to upgrade and update their qualifications.

5.5 Determine and describe measures which are used to sustain teacher retention in public secondary schools (cf. 4.5)

It was concluded from the empirical investigation that the majority of the participants were of the view that some external factors contributed to teachers' decision to stay in the profession. These, among others, include adequate administrative support, positive school climate, reduced workload, and high salaries (cf. 2.6). These are discussed below.

5.5.1 Adequate administrative support (cf.4.5.1)

The empirical investigation revealed that to ensure teachers remained committed to their work, school managers should give support to their teachers since they remain key players in the institution. The empirical investigation revealed that school managers should provide support to teachers in terms of teaching materials, continuous professional development, and provide care. This in turn should make teachers feel wanted and cherished by the school. Interview data revealed that school managers were committed to their duties and were keen to improve the welfare and conditions of their teachers so that they can remain serving in their school (cf.4.5.1). Administrative support implies creating an enabling school climate; parental involvement and instructional support among others (cf. 2.6.1).

School managers foster growth and workplace satisfaction among teachers by attending to their personal and professional needs. A school should come up with a committee that looks at teacher welfare. These provide feedback to the school manager concerning particular teacher needs. Teachers should feel appreciated and a sense of ownership must prevail in the school. This support must be extended to professional continuous development. School managers must be supportive of the teachers' quest for further studies by providing financial, moral, and material support. This aspect, however, should be well organised and regulated so that any form of biasness and nepotism eliminated. It means that the committee that looks at teacher welfare should be objective in its operation. Teachers should be encouraged by school managers to further their studies according to the school's need areas which must be a priority. The school should reward teachers according to their performance and long service in the school. This can be part of the school ethos. For instance, those

teachers whose examination classes get very good grades and those who have served the school from five, ten, fifteen, twenty years and so on must be recognised accordingly.

5.5.2 Positive school climate (cf.4.5.2)

It was concluded from the collected data that school managers have to establish a safe work environment for effective teaching and learning to take place. This will in turn enhance teacher retention (cf. 4.5.1). The participants also indicated the view to suggest that creating an enabling school climate that fosters collegiality and motivation are key factors in reducing teacher attrition. Furthermore, interview data revealed that all participants understood the essence of a positive school climate which was a crucial aspect of teacher retention. This strategy implies a school manager giving respect to staff, appreciating their contributions in addition to teachers experiencing a healthy working environment. Establishing a positive school climate for students, staff and faculty promote effective teaching and learning. The school manager must give respect to all the members and appreciate their contributions so that they take ownership of the school. Therefore, the school manager has the task of creating an environment where teachers experience a healthy enabling working environment. The school manager must create an opportunity that brings about the existence of a positive school climate. This must be done consciously, deliberately, and with intent. Strategies such as collegiality among staff, provision of incentives and bonuses, effective teaching and learning as well as professional development are attended to. The Ministry of Education must ensure that school managers who enter leadership positions should have the skills and knowledge needed to nurture a positive school environment.

5.5.3 Reduced workload (cf.4.5.6)

The empirical data evinced that the sampled school managers reported that teachers experienced heavy workloads. This made it difficult for them to cover up for the classes where teachers have left (cf.4.2.4.8). With a lot of time for their duties at their disposal, it is highly probable that teachers may be effective in discharging their function. As a result, they will focus less on teaching and learning preparation. School managers should give balanced workloads to teachers so that they can value being a teacher and in that way reduce teacher attrition. School managers should implement a policy where a school can run classes for one contingent of pupils in the mornings and another in the afternoons. It means that teachers will have longer working hours invariably meaning an increase in allowances. The implication is that a lower level of investment in equipment and fewer teachers will add to the merit of coping with lack of infrastructure, teaching

aids, and lack of teachers. Furthermore, the school manager should ensure that new teachers are given reduced workload and extracurricular activities this will make them focus more on teaching and learning preparations. These strategies coupled with mentoring and collegiality among administrators and colleagues will go a long way in encouraging teachers to stay in the profession.

5.5.4 High salaries (cf.4.5.7)

The research discovered that respondents were mindful that teaching equated with other careers was the least paying job (cf.4.4.3). They, likewise conveyed opinions concerning teachers' pay a very significant factor in retention of teachers. Managers of schools should offer teachers incentives and gratuities to bridge the gap on what they receive as salary and the motivation to carry out the work itself. School leadership should provide guidance to teachers on entrepreneurship and income generating activities. These should not override teaching and learning in the school. This approach will help teachers who have fallen prey to getting soft loans through microfinance firms. Managers of schools should be proactive in ensuring that teachers are retained in their schools by being a good mediator, co-worker, and supervisor within the school situation above all provide teachers with incentives for them to stay.

The main outcomes of the investigation are three: in the first place, poor staffing levels and poor student achievement leads to teacher attrition. The investigation discloses that data scrutiny showed that many respondents demonstrated identical ideas of the rudimentary elements of teacher attrition and how it affects the running of public secondary schools.

In the second place, reasons inducing teacher attrition in public secondary schools comprise; working situations which were poor, insufficient managerial backing, low salaries, and low public standing accorded to the teaching profession, and teachers' absence of continuous professional development

In the third place are the research outcomes which have shown that sufficient managerial support, conducive school environment, reasonable upgrade chances, hands-on decision making in school agendas, impartial handling of teachers by managers of schools, abridged amount of work, and high salaries enhance teacher retention in public secondary schools in Zambia.

5.6 Recommendations

In this segment, the investigator makes some commendations that can be useful to advance the administration of teacher attrition in Zambia. The subsequent endorsements are informed by key outcomes of the research.

- i) Education officers should improve on generating complete information throughout the nation bearing in mind that data is fragmented and insufficient. This data should capture the how many qualified teachers have left the system and at which level. This must include all segments of the education system namely tertiary and universities, secondary, primary as well as early childhood education. Statistics should also avail sex characteristics, period, how long one has worked, movement and the type of school one left. The Zambian Ministry of Education should reflect this data in its annual publication tabloid.
- ii) Data arising from this research indicates that low pay and working situations which are poor are the some of the major push factors of teacher attrition. There is need for government and stakeholders to improve on these conditions as they reflect the prevailing economic situation in the country. Monetary incentives should reflect the type of qualifications, service rendered where; urban or rural area.
- iii) Unpredictable teacher enrolment has made the profession unattractive. Systematic implementation of the re-staffing programme will bring back confidence to all stakeholders. Teacher graduates are not employed immediately after completing their programmes yet there is serious teacher shortage in the country. Ministry of Education and stakeholders must initiate plans to absorb these unemployed graduates.
- iv) Managers of schools must begin transforming their establishments by creating conducive school environments where functional steering committees should be a pre-requisite. This transformation should be enhanced through hands on decision making where teachers and stakeholders take responsibility of running the school.

- v) The importance of upgrading and updating teachers cannot be over emphasised. Schools should prioritise the aspect of continuous professional development at individual and school level. Managers of schools must take the lead and enrol in programmes that will add value to the organisation. In this regard, the Ministry of Education should mandate all managers of schools to enrol in programmes pertaining to school management which could be an annual event short course overtime can result in certification. This can be done in liaison with the Zambia Qualification Authority and the Teaching Council of Zambia. This should be a prerequisite for new and old managers of schools.

It is projected that the implementation these policies will lead to efficiency delivery in schools.

This vision can completely happen as long as the commendations prepared for the Ministry of Education in the subsequent fragment are implemented.

5.7 A STRATEGY FOR MANAGING TEACHER ATTRITION IN ZAMBIA

A number of factors and features designed for controlling teacher attrition in public secondary schools in Zambia can be concluded from the inferences discussed in unit 5.3. The results point to six (6) most important principles which are discussed in the ensuing sub-units.

5.7.1 Comprehensive teacher attrition statistics

Teacher attrition can be managed through proper planning in education. Informed decision can only made if there is a complete data base which will provide tangible information of what actually is happening in this area of education management. In-depth information should be properly segmented according to sex characteristics; it should be known which gender leaves most and why so that appropriate interventions can be made. Period; when do most departures occur and who and how long have they served as teachers? Which type of school are they leaving? Public or private and finally knowing reasons why they left would be very cardinal. These statistics can assist the Ministry of Education planners and all other stakeholders to understand and appreciate what is happening in the country in terms of teacher attrition. These facts will support decisions based on formulation of policy for implementation.

5.7.2 Instruments for implementing teacher attrition policy

Teacher attrition policy in Zambia should be augmented by the following:

- Formulation of teacher attrition policy;
- Designing tools for data collection on teacher attrition;
- Empower education stakeholders at levels to monitor consistently teacher attrition; and, mobility through provincial education offices.

5.7.3 Harmonisation of salaries and teacher qualifications

To significantly reduce on teacher attrition there is need to appreciate qualifications that teachers possess. Currently the Zambia Qualification Authority are authenticating teachers' qualifications country wide. This could be a step in the right direction and place teachers in proper salary scale according to what they have acquired. Salary scale should be segmented according to the type of qualification. At the moment masters and a doctoral degrees have no scale and no value. Highly qualified teachers have left the profession on account of this factor. Therefore, the strategy of recognising teacher qualifications should be prioritised.

5.7.4 Education leadership and management programme

All teachers in school management must be trained in education leadership and management so that schools can effectively be managed. A number of institutions are now offering courses in educational management. The skills, values as well as knowledge acquired will go towards organisational success. The quality of school management defines the direction a particular institution takes. It is evident that some schools need more help than others in this area that is why we have effective schools and non-effective schools. The Ministry of Education should mandate all its managers to acquire skills and knowledge in this area of specialisation. As a strategy for school improvement, the Minister of Education can issue a Statutory Instrument through parliament so that it becomes law. That is, one cannot be head of a school without a qualification in education leadership and management.

5.7.5 Audit of school managers

There is an absolute need for mopping managers of schools throughout the country and find out who has which qualification. The Ministry of Education should give a grace period of a year so that audit of managers of schools is done through a memo to all provincial education officers. It is evident that the way some schools

operate points to what type of management is in that school. There are schools that are managed by people who are under qualified and those who are qualified are confined to teaching in the classroom. This reflects on the promotion policy that is who gets promoted to be a manager of a school and with which qualifications. There is evidence that most promotions have happened through corruption, nepotism and favouritism. Promotions should be accorded to people who show evidence that they have acquired skills and knowledge in school leadership. The strategy for implementation is to ensure that every manager of a school possess the right qualification.

5.7.6 Improve conditions of service

The perception that the teaching profession remains one of the lowly paying jobs will not go away if the conditions of service are not improved. There is need to motivate teachers so that they remain devoted and committed in their work. This aspect of conditions of service is at two levels. The first one is to ensure that the Ministry of Education should harmonise teacher salaries so that they are paid for their value. The second one is to apply strategies that will retain teachers locally through the incentive system. Each school must devise a plan on how to appreciate its teachers. Apart from monetary aspect, this can take the form of accommodation, loans, medical scheme and children education. Production unit should be encouraged both at individual and school level as a way of generating extra income.

5.8 Limitations of the study

The investigator recognised subsequent likely limits that relate to this investigation:

- The inaccessibility of some of the originally suggested respondents for gathering data was a problem specifically in the districts of Kafue and Lusaka. Their reasons for not being accessible oscillated from demanding work timetables to overall lack of curiosity. Notwithstanding that, the investigator held interviews with their colleagues;
- This investigation is to a very great extent centred on an examination of Western literature pertinent to teacher attrition. Thus, the well-known factors in Western literature may not essentially underwrite teacher attrition in Africa and Sub-Saharan Africa specifically; and,
- No numerical indication is provided in this investigation concerning the most protruding reasons that influence on teacher attrition.

5.9 Capacities for additional investigation

Despite the fact that the current investigation has, to a great extent enlightened what was delineated in chapter 1, the investigator is of the opinion that added investigation could be needed on particular unpremeditated omissions of this investigation, in that way making more contributions that can strengthen the mission of managing teacher attrition. Consequently, the ensuing areas can be taken into account for further scrutiny:

- An investigation of factors inducing teacher attrition in public and grant-aided secondary schools ought to be carried out at national level to determine matters regarding teacher attrition.
 - Carry out a longitudinal investigation in dissimilar settings to bring out the effect of teacher attrition in public secondary schools in Zambia.

5.10 Conclusion

The purpose of this investigation was to scrutinise how school managers address the problem of teacher attrition in particular public secondary schools of Lusaka province. This was done with an understanding of developing strategies that may be used to back up the role managers of schools play in addressing the problem of teacher attrition. This goal was adequately realised. This investigation has exposed teacher attrition as being a problem that require attention of legislators and all stakeholders.

After probing the comment from the sampled respondents', the investigator resolved that schools and the Ministry of Education's feedback to the teacher attrition phenomenon have not been reasonable. The investigation discovered that managers of schools were incompetently equipped in carrying out their tasks. They displayed an incomplete comprehension of their role in addressing teacher attrition. They were further motivated in deliberating the reasons and issues of teacher attrition and not on by what method they can address the problem. As a consequence, the investigation developed commendations to address these restrictions as a way to advance the value of addressing the problem of teacher attrition in schools.

In closing, the investigator would like to throw a challenge at the Lusaka province education office management. The lack of suitable management in the light of teachers leaving the profession in several of the sampled public secondary schools which this investigation has exposed proposes that all is not well in the way teacher attrition is handled at school and provincial level. It is essential to make available support to school managers as well as other provincial education offices with comparable situations concerning the management

of teacher attrition. This provision should comprise but not restricted to the delivery of sufficient and pertinent funds and services, and improvement in working conditions. With this provision, it is assumed that managers of schools will meaningfully help address the problem of teacher attrition in schools.

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APPENDIX A

LETTER REQUESTING PERMISSION TO CONDUCT RESEARCH

Teacher Attrition in Zambian Schools: An Educational Management Analysis.

Kukano Crispin (Mr) Soweto Compound
Chalimbana Email: criskukano@yahoo.co.uk
1st September, 2017

The Provincial Education Office
P/B RW 21 E, Lusaka.

Dear Sir,

REQUEST FOR PERMISSION TO CONDUCT RESEARCH: STUDENT NUMBER 34187839

I, Crispin Kukano am doing research under supervision of Professor P. Mafora, Registrar: Academic, Enrolments and Administration towards a Doctor of Education degree at the University of South Africa. We are inviting you to participate in a study entitled Teacher Attrition in Zambian Schools: An Education Management Analysis. The study seeks to make contributions that can help school managers address the problem of teacher attrition in public schools in Zambia.

This study is significant and will provide description and analysis of the current management of teacher attrition in public schools. It will involve an interview and administration of a questionnaire which will last approximately sixty minutes respectively. This will take place in a mutually agreed upon location at a time convenient to you. You may decline to answer any of the interview or questionnaire items if you so wish. Additionally, you may decide to withdraw from this study at any time without any negative consequences. There are anticipated risks to you as a participant because this study will need your time for engaging in an interview and filling in the questionnaire. There will be no reimbursement or any incentive to participate in the research. The benefits of this study is to ensure that generation of new knowledge on teacher attrition will produce benefit for the participants themselves, other individuals or for society as a whole, or for the advancement of knowledge.

I will ensure strict confidentiality and anonymity of all participants at all levels of this research study. If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at 0975485900. For more information regarding the study, kindly contact my supervisor. His contact details are:

Professor P. Mafora University of South Africa
Registrar: Academic, Enrolments and Administration Email: pmafora@unisa.ac.za

Yours faithfully



Kukano Crispin

APPENDIX B

All communications should be addressed to the Provincial Educational Officer and not to any individual by name

Telephone: +260 - 211 - 250655 / 251220
Fax: +260 - 251009



*In Reply please quote:
No:.....*

PEO/LR/101/28/2

REPUBLIC OF ZAMBIA MINISTRY OF GENERAL EDUCATION

OFFICE OF THE PROVINCIAL EDUCATION OFFICER
LUSAKA REGIONAL HEADQUARTERS
PRIVATE BG RW 21E
LUSAKA

4th September, 2017

Kukano Crispin (Mr)
House No. 06
Soweto Compound
LUSAKA

RE: PERMISSION TO CONDUCT RESEARCH IN LUSAKA PROVINCE

Reference is made to the subject matter.

I am in receipt of your minute dated 1st September, 2017 in which you wrote to seek permission to conduct a research project particularly in Lusaka and Kafue and Chongwe Districts - Lusaka Province.

I am pleased to inform you that permission has been granted for you to conduct the said research in the named District.

Kindly note that this activity should not interrupt the academic calendar for the learners.


Paul Ngoma
PROVINCIAL EDUCATION OFFICER
LUSAKA PROVINCE

/smk

APPENDIX C

All communications should be addressed to the Provincial Educational Officer and not to any individual by name

Telephone: +260 - 211 - 250655 / 251220
Fax: +260 - 251009



*In Reply please quote:
No:.....*

PEO/LR/101/28/2

REPUBLIC OF ZAMBIA MINISTRY OF GENERAL EDUCATION

OFFICE OF THE PROVINCIAL EDUCATION OFFICER
LUSAKA REGIONAL HEADQUARTERS
PRIVATE BG RW 21E
LUSAKA

4th September, 2017

To: The District Education Board Secretaries
Lusaka, Kafue and Chongwe District
LUSAKA PROVINCE

INTRODUCTORY LETTER: KUKANO CRISPIN (MR)

Reference is made to the above subject matter.

This serves to introduce to you the above named student from University of South Africa (UNISA) who wishes to carry out a research on "*teacher attrition in Zambian schools: an educational management analysis*".

Kindly welcome him.


Paul Ngoma
PROVINCIAL EDUCATION OFFICER
LUSAKA PROVINCE

/smk

APPENDIX D

FOCUS GROUP INTERVIEW FOR SCHOOL MANAGERS

1 BASIC INTERVIEW QUESTIONS

- 1.1 In your opinion what do you understand by teacher attrition?
- 1.2 In your opinion, how has teacher attrition affected functioning of schools?
- 1.3 In your view, which measures can be used to sustain teacher retention in public schools?
- 1.4 In your opinion, which factors influence teacher attrition in public schools?
- 1.5 How do school managers identify and use strategies to the retention of teachers?
- 1.6 Briefly explain the reward system in your school
- 1.7 Are there specific factors that have led to continued teacher outflow in your school?
- 1.8 Mention some of the employer related factors that cause teacher attrition
- 1.9 Do you think teachers themselves are responsible for attrition in your school?
- 1.10 What recommendations can you make to reduce on teacher attrition?

It was an informative experience interviewing you. Thank you for your time and valuable contributions.

APPENDIX E

INTERVIEW SCHEDULE FOR DISTRICT EDUCATION BOARD SECRETARIES (DEBS)

- 1.1 In your opinion, how has teacher attrition impacted on schools?
- 1.2 Are there specific factors that have led to continued teacher outflow in your district?
- 1.3 In your view, which measures can be put in place to ensure that teachers do not leave the teaching profession?
- 1.4 In your opinion, which factors influence teacher attrition in your district?
- 1.5 In your view, what strategies can be used to ensure that the challenge of teacher attrition is addressed?
- 1.6 How does the DEBS office assist schools to retain teachers?
- 1.7 Which recommendations can you make to reduce on teacher attrition?

It was an informative experience interviewing you. Thank you for your time and your valuable contribution.

APPENDIX F

QUESTIONNAIRE FOR SCHOOL MANAGERS

The purpose of this questionnaire is to obtain information about teacher attrition in your school as part of my doctoral studies at the University of South Africa. The title of my Thesis is *Teacher attrition in Zambian Schools: an educational management analysis*. The information collected with this instrument will be used solely for academic purposes and the confidentiality and anonymity of the respondent will be assured.

SECTION A: DEMOGRAPHIC PROFILE

Please indicate your response by checking the appropriate category that applies to you.

1. Are you male or female?

Male	
Female	

2. What is your age group?

24 and below	
25-34	
35-44	
45-54	
55 and above	

3. What is your highest professional/academic qualifications?

Post –secondary teaching certificate, diploma, non-degree equivalent	
Bachelor in Education or equivalent	
Master in Education or equivalent	
PhD or equivalent	
Other, please specify	

4. Years of work experience as school head teacher or head of department?

0-5	
6-10	
11-15	
16-20	
21-25	
26 and above	

SECTION B

PART I: EFFECT OF TEACHER ATTRITION IN FUNCTIONING OF SCHOOLS

The following statements describe why secondary school teachers usually leave their schools. Please indicate the extent to which each statement characterises your school.

5= strongly agree; 4= Agree; 3= undecided; 2= disagree; 1= strongly disagree

5. The impact of teacher attrition					
5.1 disturbs the relationship between teachers and Students	5	4	3	2	1
5.2 allows students benefit from services of less effective teachers who leave the profession	5	4	3	2	1
5.3 results in vacancies in schools filled in by untrained teachers	5	4	3	2	1
5.4 results in poor student achievement	5	4	3	2	1
5.5 leads to fragmented instructional and professional staff development plans meant to address needs of a teaching staff	5	4	3	2	1

PART II: DETERMINE AND DESCRIBE MEASURES TO SUSTAIN TEACHER RETENTION

6.Measures used to sustain teacher retention					
6.1 sufficient school management support	5	4	3	2	1
6.2 fair promotion opportunities	5	4	3	2	1
6.3 participatory decision making in school programs	5	4	3	2	1
6.4 fair treatment of teachers by school head teachers	5	4	3	2	1
6.5 physical violence against teachers from students	5	4	3	2	1
6.6 continuous disturbance of students during class	5	4	3	2	1
6.7 adequate salary	5	4	3	2	1

PART III: FACTORS INFLUENCING TEACHER ATTRITION

7. Factors influencing teacher attrition					
7.1 poor working conditions	5	4	3	2	1
7.2 poor administrative support	5	4	3	2	1
7.3 Inadequate salary	5	4	3	2	1
7.4 student character and disciplinary problems	5	4	3	2	1
7.5 low social status accorded to the teaching profession and to teachers by society	5	4	3	2	1
7.6 teachers lack of opportunity for continuous professional development	5	4	3	2	1

PART IV

8. What recommendations can you make to reduce on teacher attrition in schools?

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9. In your view, do you think teacher attrition affects student achievement?

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Thank you for taking your time to complete this questionnaire

