

**FACTORS AND STRATEGIES INFLUENCING FEMALE
PRINCIPALS' STRESS AND ITS EFFECT ON STUDENTS'
ACADEMIC PERFORMANCE IN RACHUONYO NORTH
AND HOMA-BAY SUB COUNTIES, KENYA**

BY

JANE K. A. JUMA

**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY IN EDUCATIONAL ADMINISTRATION**

**DEPARTMENT OF EDUCATIONAL MANAGEMENT AND
FOUNDATIONS**

MASENO UNIVERSITY

© 2017

DECLARATION

DECLARATION BY THE CANDIDATE

This thesis is my original work and has not been presented for a degree in any other university.

Signature.....

Date.....

JANE K. A. JUMA

PG/PhD/0016/2012

DECLARATION BY SUPERVISORS

This thesis has been submitted with our approval as university supervisors.

PROF. E.M.W. SIMATWA

Signature.....

Date.....

Department of Educational Management and Foundations,

Maseno University.

PROF. T.M.O. AYODO (DECEASED)

Faculty of Education, Theology and Arts,

Kabarak University.

ACKNOWLEDGEMENTS

I am grateful to the Almighty God who enabled me to undertake my studies that culminated into this thesis. I would also like to express my sincere gratitude to my supervisors' Prof. Enose M.W. Simatwa and Prof. T.M.O. Ayodo who worked tirelessly guiding me in developing the proposal, conducting the research and writing this thesis. I am also thankful to the School of Graduate Studies and the Department of Educational Management and Foundations for giving me an opportunity to pursue my Doctorate degree in Education Management. I would also like to express my gratitude to the respondents who were female principals of public secondary schools of Rachuonyo North and Homa Bay-Sub counties whose responses constituted the gist of this thesis. Finally, I would also like to sincerely thank my colleagues for their encouragement and Martha Wandera for typesetting and formatting this thesis. May God bless them abundantly.

DEDICATION

This work is dedicated to my parents and my family for the effort they put into my life and their inspiration towards my education. Thank you and God bless you all.

ABSTRACT

Principals play a pivotal role in performance of students in secondary schools. In many instances this calls for high professional and societal demands; and expectations. As a result, principals experience stress. Studies worldwide have revealed that moderate stress among principals enhances performance while low and excessive stress reduces performance measured by students' performance in national examinations. In Rachuonyo North (RN) and Homa Bay (HB) Sub Counties more female principals left principalship due to stress compared to other factors that is, 11(24.4%) and 15(28.3%) respectively due to stress and 4(8.9%) and 9(17%) due to other factors such as joining spouses. The mean scores for schools headed by female principals from 2010 to 2014 were 3.77 and 4.20 respectively lower compared to those headed by male principals whose mean scores were 5.05 and 5.67 for the same period. The purpose of this study was to establish factors and strategies influencing female principals' stress and its effect on students' academic performance in RN and HB sub counties, Kenya. The objectives of the study were to; determine stress levels among public secondary school female principals, determine factors influencing stress among public secondary school female principals, establish influence of coping strategies on female principals stress and determine the effect of stress among female principals on students' academic performance in public secondary schools in RN and HB Sub counties. A conceptual framework was used to focus on the variables of the study. Descriptive survey and correlational research designs were adopted. The study population was 211 consisting of 39 female Principals, 39 Deputy Principals, 72 Heads of Department, 39 Board of Management chairpersons and 2 Sub County Quality Assurance and Standards Officers. Saturated sampling technique was used to select 191 respondents as 20 had been used in the pilot study. Questionnaire, interview schedules and document analysis guide were used to collect data. Face and content validity of the instruments was determined by experts in Educational Administration whose input was incorporated. Reliability coefficient of female principals' questionnaire was .8 at set p-value of .05. Quantitative data were analyzed using frequency counts, means, percentages; and regression analysis. Qualitative data were analyzed for content in emergent themes and sub-themes. The study established that female principals were moderately stressed with a stress index of 3. There was a strong positive relationship between stressors and stress levels ($r=.728$, $N=39$, $p<.05$). This means that stress levels were attributed largely to these factors. Stressors explained 51.6% of stress level among female principals. The other 49.4% was due to other factors that were not part of the study. Coping strategies strongly influenced female principals' stress level ($r=.674$, $N=39$, $P<.05$). The coping strategies were significant predictors ($F(1, 37)=29.888$, $P<.05$). Coping strategies accounted for 43.8% of the stress level of female principals, the other 56.2% could be explained by other factors. High stress level accounted for 78.3% of variation in students' academic performance as signified by $R^2 .783$. The study concluded that female principals were moderately stressed and the coping strategies were effective in moderating principals' stress levels. High stress levels among female principals highly influenced students' performance. The study recommended that female principals be sensitized on impact of stress on student performance, and personal health for better functioning. The findings of the study are significant to education stakeholders in addressing issues concerning female principals' stress.

TABLE OF CONTENTS

Content	Page
Title.....	i
Declaration.....	ii
Acknowledgment.....	iii
Dedication.....	iv
Abstract.....	v
Table of Contents.....	vi
List of Abbreviations and Acronyms.....	ix
List of Tables.....	x
List of Figures.....	xiii
List of Appendices.....	xiv
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background to the Study	1
1.2 Statement of the Problem.....	12
1.3 Purpose of the Study	13
1.4 Objectives of the Study.....	13
1.5 Research Questions	13
1.6 Significance of the Study	14
1.7 Conceptual Framework	14
1.8 Scope and Limitations of the Study.....	16
1.9 Assumptions of the Study.....	17
1.10 Definitions of Key Operational Terms.....	18

CHAPTER TWO: LITERATURE REVIEW.....	19
2.1 Introduction.....	19
2.2 Stress Levels among Public School Female Principals... ..	19
2.3 Factors Influencing Stress among Secondary School Female Principals	22
2.4 Influence of Coping Strategies on Stress among Female Principals in Public Secondary School.....	26
2.5 Influence of Stress among Female Principals on Students Academic Performance.....	30
CHAPTER THREE: RESEARCH METHODOLOGY.....	38
3.1 Introduction.....	38
3.2 Research Design.....	38
3.3 Area of Study.....	39
3.4 Study Population.....	39
3.5 Sample Size and Sampling Techniques.....	39
3.6 Instruments for Data Collection.....	40
3.7 Validity and Reliability of Instruments.....	41
3.8 Data Collection Procedures.....	42
3.9 Data Analysis	42
3.10 Ethical Considerations.....	47
CHAPTER FOUR: RESULTS AND DISCUSSION.....	48
4.1 Introduction.....	48
4.2 Demographic Characteristics of Female Principals.....	49
4.3 Stress Levels among Public Secondary Schools' Female Principals	52

4.4 Factors Influencing Stress among Public Secondary School Female Principals.....	63
4.5 Coping Strategies for Managing Stress among Female Principals in Public Secondary Schools.....	76
4.6 Influence of Stress among Female Principals on Students' Academic Performance in Public Secondary Schools.....	94
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	104
5.1 Introduction.....	104
5.2 Summary.....	104
5.3 Conclusion.....	106
5.4 Recommendations.....	108
5.5 Suggestions for Further Research.....	110
REFERENCES.....	111
APPENDICES.....	124

LIST OF ABBREVIATIONS AND ACRONYMS

ABBREVIATIONS

HODs	Heads of Departments
ICT	Information Communication Technology
K.C.S.E	Kenya Certificate of Secondary Education
MOE	Ministry of Education
PTA	Parents Teachers Association
TSC	Teachers Service Commission

ACROYNMS

BOM	Board of Management
KESSHA	Kenya Secondary School Heads Association
MOEST	Ministry of Education Science and Technology
SCQASO	Sub County Quality Assurance and Standards Officer
WHO	World Health Organization

LIST OF TABLES

Table	Page
1.1: Number of Principals who left Principalship due to Stress and other reasons 2003-2013-----	6
1.2: KCSE Mean Scores 2010-2014-----	7
3.1: Sample Frame-----	40
3.2: Quantitative Data Analysis Matrix-----	44
3.3: Qualitative Data Analysis Matrix-----	46
4.1: Return Rate of the Principals Questionnaire used for Data Collection-----	48
4.2: Demographic Characteristics of Female Principals-----	49
4.3: School Data-----	51
4.4: Influence of Principalship life events on levels of stress among public secondary school female principals as determined by Social Readjustment Rating Scale-----	54
4.5: Stress levels of Female Principals of Public Secondary Schools in Rachuonyo North and Homa-Bay Sub counties-----	57
4.6: Factors influencing stress among Public Secondary School Female Principals-----	64
4.7: Correlation analysis of factors influencing stress among female principals-----	66
4.8: Coefficient of determination of factors influencing stress among female principals-----	69
4.9: Analysis of Variance of factors and stress among female principals-----	69
4.10: Linear Regression Analysis of Stress factors and female principals levels of stress--	70
4.11: Coping Strategies to Manage Stress among Public Secondary School Female Principals-----	78

4.12: Individual Ratings of Effectiveness of Coping Strategies used by Female Principals in Public Secondary Schools-----	81
4.13: Relationship between Coping Strategies and Stress Levels among Female Secondary School Principals-----	83
4.14: Regression analysis of Stress Management Coping Strategies and Stress Levels of Female principals-----	85
4.15: ANOVA of Stress Management Coping Strategies and Stress Levels of Female principals-----	85
4.16: Linear Regression Analysis of Stress Management Coping Strategies and Stress Levels of Female Principals-----	86
4.17: Students Academic performance in Public Secondary Schools 2011-2014 headed by Female Principals -----	95
4.18: Relationship between female principals stress level and students academic performance-----	96
4.19: Regression analysis of female principals stress levels and students academic performance-----	98
4.20: Analysis of Variance of stress levels among female principals and students academic performance-----	98
4.21: Relationship between Low Stress level and Students academic performance-----	99
4.22: Relationship between moderate Stress level among female principals and students academic performance -----	101
4.23: Regression analysis of moderate stress level among female principals and students academic performance-----	101

4.24:	ANOVA of female principals stress levels and students academic performance ---	102
4.25:	Relationship between High Stress level among female principals and students academic performance-----	102

LIST OF FIGURES

Figure	Page
1: A conceptual framework showing factors and strategies influencing female principals stress and its influence on students' academic performance-----	10
4.1: A Scatter gram showing the influence of principalship's life events on their stress-----	68
4.2: A scatter gram showing the relationship between coping strategies and effectiveness of coping strategies in managing stress-----	84
4.3: A Scatter gram showing the relationship between Female Principals' stress and Students' Academic Performance-----	97
4.4: The relationship pressures, work performance and stress reactions (stress level)-----	100

LIST OF APPENDICES

Appendix	Page
I: Principals Questionnaire --- -----	124
II: Principal’s Interview Schedule-----	134
III: Deputy Principal’s Interview Schedule-----	135
IV: Heads of Department Interview Schedule-----	136
V: Board of Management Chairpersons’ Interview Schedule-----	137
VI: SCQASO’S Interview Schedule-----	138
VII: Map showing Location of Homa Bay and Rachuonyo North Sub Counties -----	139

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The government of Kenya is concerned with the global agenda of achieving education for all. The academic performance of students has become a great concern to stakeholders of education. This has led the government to formulate and implement policies to improve academic performance. Stress has also been found to be a major contributing factor to academic performance. Newstroom (2007) established that moderate level of stress enhances performance among managers while high stress levels reduce performance.

Teachers and more so female principals do experience more stress than their male counterparts in schools. Studies worldwide have demonstrated this. For instance Boyland (2011) in a study on job stress and coping strategies of elementary principals; a statewide study in USA found out that a large majority of Indiana's elementary principal participants were experiencing moderate to high levels of job stress. In addition, most of the experienced principals indicate more stress now than in previous years. A total of 193 principals from 79 counties in Indiana responded to the survey. This was a return rate of 67% and represents 86% of the counties in the state of Indiana. However, the studies did not indicate study population, instruments of data collection and research methodology, therefore very hard to verify the accuracy of the results.

Forlin (2001) in a study in Western Australia reported that teachers experienced stress. Female teachers reported greater stress than their male counterparts when coping with

classroom issues. Forlin (2001) used Teachers Stress and coping questionnaire to collect data. Four-point Likert Type scale ranging from Not Stressful (1), somewhat stressful (2), quite stressful (3), to Extremely stressful (4). The target population was 571 teachers. Montgomery and Rupp (2003) in Meta –analysis of stress in teachers established that teachers do experience stress and it affects their operations. The study focused on the research literature on teacher and student teacher stress between 1998 and 2003 internationally.

Studies have revealed that educators experience higher levels of stress than other professional groups (De Jesus & Comby, 2001). McEwen and Thompson (1997) state that a survey in 1933 revealed that 17 percent of educators were unusually nervous and that a further 11 percent had suffered a nervous breakdown due to stress. Van Zyl and Pietersen (1999) and Jonas (2001) found out that educators experienced high levels of stress in South Africa. Various studies indicate that women experience significantly higher levels of stress (Bemansour, 1998; Hawe *et al.*, 1997; Ngidi & Sibaya, 2002). They attribute this to the fact that women often meet domestic commitments, and conflicting work and family demands. This is confirmed by Jonas' study (2001) which reports that female educators experience higher levels of stress, while male educators reported higher perceived social support from families and friends, explaining their lower levels of stress. Van Zyl and Pieterse (1999) report that married female educators in particular experience high levels of stress. They have to be the homemaker, a supportive wife and mother and at the same time a competent professional educator (Van Zyl Pieterse 1999; Van der Linde *et al.*, 1999).

These studies did not attempt to measure stress levels among female secondary school principals, despite the fact that they play a big role in school achievement, in which stress is a factor of interest. These studies also recognize the fact that stress influences performance and therefore established the levels was important.

Stamper and Johlke (2003) first introduced the idea of stress into the life of science. They defined stress as the force, pressure or tension subjected upon an individual who resists these forces and attempts to uphold its true state. Pressure is seen as positive and something that actually helps to improve our performance which therefore need a certain amount of pressure to perform well. (Newstroom, 2007). However, the problem then arises when the sources of pressure become too frequent without time to recover, or when just one source of pressure is too great for individuals to cope with.

In Kenya, Ngari, Ndugu, Mwonya, Ngumi, Mumikha, Chepchieng and Kariuki (2013), in their study on levels of stress among secondary school administrators and its implication in education management in Kenya established that the school administrators experience stress in their work. Fifty four point five percent of the respondents recorded high levels of stress resulting from their school work load and other responsibilities. Among the three administrative levels of stress compared to deputies and heads of departments. Ngari *et al* (2013) focused on stress among administrators in general but this study had narrowed down to female principals and education officials. The study therefore sought to fill this knowledge gap.

Stress in work place is a worldwide issue. A report on secondary education by World Bank (1999) revealed that the education systems the world-over had been ineffective and has failed to address the matter of principals' stress and burnout in secondary schools. This failure however has stifled natural efforts towards building a stronger human resource base which is invaluable for development in all its spheres in schools. However studies carried out in developed countries such as Canada and France have indicated that the employees working in educational institutions especially the high school principals and their deputies reported high levels of stress related illness, (Smith, 2004; Howard & Johnson, 2004).

However, in the developing countries, Kenya inclusive, similar sentiments of secondary school principals' exhibits stress related issues. A study in Ghana showed that teachers and educational administrators are experiencing series of stress and stressful situations (Schroeder, 2001). Koome (2007) who carried out a study in Kenya among the principals' found out that principals stress is on the increase such that most of them have dropped being principals due to stress and have joined other departments in the government like the Ministry of Education as Quality Assurance and Standards Officer / County Directors or as Teachers Service Commission (TSC) Directors and also the Ministry of Youth Affairs, Gender and Sports among others. These studies reviewed reveal that principals of school experience stress.

The inevitable reforms in the education system calls upon school principals in developing and developed world to stringently raise the level of their school agenda, commitments and actions and be continually dissatisfied with the status quo and dream of a brighter future. More than ever, the school principals are expected to manage their school finances properly,

ensure the school excels in academics and extra-curricular activities, meet political agendas and other societal expectations. Regrettably, the school principals are put under intense pressure to perform well beyond their capability.

Occupational stress levels are on the increase across many professions. According to research by Johnson Copper, Cartwright, Donald, Taylor and Millet, (2005), intense pressure to perform may lead to burnout and hence have a negative impact on an organization and the individual. In the context of public secondary schools, the principals are put under pressure especially during national exams, Form 1 selection and the release of K.C.S.E results. The principals are judged depending on their performance and their careers may be on the line. Bolin (2007) pointed out that such huge expectations and possibility of rash judgment negatively impact on an individual.

Stress in the workplace has been observed in various professional; For instance, employees in the medical field have been known to work under intense conditions (Travers & Cooper, 1994). Several studies have been carried out globally concerning - stress in the workplace but the major emphasis has been on industry and business sectors, In Kenya, some research has been done on issues of stress in the education sector. However, stress levels, factors, influencing stress and coping strategies used by public secondary female school principals in Homa-bay and Rachuonyo North Sub-counties were not addressed by the reviewed studies. In Rachuonyo North and Homa-bay Sub counties, female principals are stressed and some of them had opted to quit principalship and teaching profession all together (Table 1.1).

Table 1.1**Number of Principals who left Principalship due to Stress and other Reasons 2003-2013**

Sub County	Number of Schools	Principals who left Principalship due to other reasons other than stress	Principals who left Principalship due to stress	
			Female	Male
Rachuonyo North	45	4(8.9%)	11(24.4%)	7(15.6%)
Rachuonyo South	70	7(10%)	17(24.3%)	7(10.0%)
Homa Bay	53	9(17%)	15(28.3%)	13(24.5%)
Ndhiwa	38	3(7.9%)	13(34.2%)	8(21.1%)
Suba	20	4(20%)	7(35.0%)	6(30.0%)
Mbita	34	5(14.7%)	12(35.3%)	7(20.6%)
Total	260	32(12.3%)	75(28.9%)	48(18.46%)

Source: TSC Director Homa-Bay County Office (2013)

Table 1.1 shows that 75(28.9%) female principals left due to stress compared to 48(18.5%) male principals. This means that more female principals left principalship than male principals; hence the need for a study on stress levels among public secondary school female principals and its influence on students' performance.

Table 1.2
KCSE Mean Scores 2010 -2014

Sub County	Gender of Principal	Number of Schools	Year/ Mean Scores					Overall Mean scores
			2010	2011	2012	2013	2014	
Rachuonyo North	F	16	3.40	3.95	3.69	3.62	4.19	3.77
	M	26	4.85	4.93	5.09	4.94	5.49	5.05
Rachuonyo South	F	18	3.96	4.35	4.80	4.92	5.33	4.67
	M	29	4.29	4.98	5.09	5.60	6.02	5.20
Homa Bay	F	24	3.81	3.83	4.21	4.21	4.93	4.20
	M	23	5.31	5.46	5.73	5.76	6.11	5.67

Source: Homa-Bay County Education Office (2015)

Table 1.2 shows the comparison between female headed schools and male headed schools in relation to their performance in KCSE between 2010 to 2014.

Considerable research has recorded the correlates of stress for teachers, and the extent to which teachers experience potential stressors in their work (Chen & Miller, 1997; Wisniewski & Gargimbo, 1997). A detailed analysis undertaken of 72 research studies published between 1980 and 1993 identified 24 common potential stressors for teachers. (Forlin, 1995). These were classified into three general clusters of stressors: administrative, classroom –based and personal. The specific administrative stressors of workload, time management and lack of general support were recorded most frequently in studies as pervasive for teachers. The most stressful administrative issues for teachers included those that were perceived to as interfering with a teachers’ instruction time, including increasing

amounts of paperwork, extra-curricular demands and interpersonal conflicts. Specifically, work overload was considered to be a major problem for teachers (Farber, 1991). The most pervasive of the potential classroom stressors were those that involved direct contact with students. Disruptive behaviour and lack of students discipline were rated more often by teachers as potential stressors than were students' abilities or lack of materials or suitable curriculum. Chen and Miller (1997) indicated organizational stressors such as time constraints, workload, role conflict, role ambiguity and administrative bureaucracy as stressful. Stressful classroom issues included lack of resources, class size and student discipline. Schroeder, Akotia and Apekey (nd) in a study that investigated the type of stressors that Ghanaian school teachers encounter on their job and coping strategies they use in dealing with the stressors using 355 teachers from five regions in the country established that; lack of accommodation for teachers, no free education for teachers, children and low salaries were the three most stressful events experienced. Nasuridin, Ramayah and Kemaresen (nd) in a study, in Malaysia to determine the influence of organizational variables (conflict, blocked career, alienation, work overload, and unfavourable work environment) on job stress among managers established that three of the five variables (conflict, blocked career and alienation) had significant positive effect on job stress.

Since stress is part and parcel of life coping strategies or adaptive responses are inevitable. This is because by managing stress the individual educator and the school can benefit by allowing a more productive personal and professional life and limiting absenteeism, turnover and poor performance (Nahavandi & Malekzadeh, 1999). The two strategies or methods of managing stress to enhance performance and personal effectiveness are

reducing sources of stress and building resistance to stress. The first broad strategy involves individuals reducing personal stressors by seeking counseling and by being trained, learning new skills, including skills relating to assertiveness, managing time, managing disruptive learner behaviour and developing higher degree of learning orientation (Adams, 2001; De Jesus & Conboy, 2001; Jacobsson *et al*; 2001 Kyriacou, 2001; Nahavandi & Malekzadeh, 1999) school principals can also provide a positive atmosphere of social support, review of workload, improving relationship through team building and conflict management and assist by providing up-to-date resources and technologies (Adams, 2001; Jacobsson, Pousette & Thylefors, 2001; Kyriacou, 2001).

Building resistance to stress as a strategy involves addressing stressors. A primary strategy of developing resistance to stress is to achieve mental and physical health (De Jesus & Conboy 2001; Kyriacou 2001; Runt and Runt, 2002). This includes medication, relaxation and the development of a strong social support network (De Jesus & Conboy, 2001; Kyriacou, 2001; Nahavandi & Malekzadeh, 1999; Runt & Runt, 2002). The contribution of each coping strategies can be computed using regression analysis. Nevertheless the reviewed studies did not attempt to measure the influence of coping strategies on stress mitigation.

Stress has effect on persons. Some of the effect of stress include cardiovascular and gastrointestinal disorders, headaches and physiological fatigue (Harris & Hartman, 2002). Some physiological consequences include anger, depression, anxiety, low self-esteem and inability to concentrate (Harris & Hartman, 2002. Organizational effects include tardiness, absenteeism, missing deadlines, forgetting appointments and making unnecessary mistakes (Harris & Hartman, 2002).

Although negative stress has the potential to be destructive, there are ways in which stress can be managed for the benefit of both the individual and the system in which case stress has undeniable effect on performance of individuals and organizations. Though in most cases stress has been understood more from individual perspective. Most of research has been centred on individual performance. Newstroom (2007) cites the inverted “U” relationship as the most widely studied pattern. The logic underlying the inverted “U” is that moderate levels of stress stimulate the body and enhance performance. In contrast, too low or too high stress affects performance negatively. This inverted “U” pattern may also describe the reaction to stress overtime as well as to changes in stress intensity (Robbins, 2003).

The notion that stress has detrimental effects on individuals, and subsequently affects the performance of organizations is shared by several researchers. Lambert, Lambert and Ito (2004) cite stressor as a major contributing factor to corporate inefficiency, high staff turnover, absenteeism, decreased quality and quantity output and increased health care cost for staff.

According to Ivancevich, Konapske and Matteson (2006), while organization consequences are many and varied, they share one common feature. Stress cost organizations money. A notable research conducted in the USA by Kemery, Mossholder and Bedian (1987) found that stress negatively influenced organizational performance. Data collected from 370 employees of a South Eastern University and analyzed using a correlation design to examine the relationship between role ambiguity, role conflict and performance found that role ambiguity and role conflict resulted to high levels of job dissatisfaction which in turn influenced turnover intentions.

Studies conducted in the USA by Rabinowitz and Stumpf (1987) using a sample of 102 University faculty members of the Texas Technical University, found that role conflict was negatively related to performance. Imtiaz and Ahmad (2009) also investigated the relationship between stress and corporate performance using a correlation design. Data was collected from 78 medical officers in Pakistan. The study revealed that the medical officers were highly stressed by inadequate pay, rigid organizational structure and personal issues. This in turn affected their job performance and also reflected negatively on the organizations effectiveness. In a similar study on the relationship between stress and performance carried out on 47 bank managers Ali, Farooqui, Amin, Yahya, Idrees, Amjad, Ikhlag, Noreen and Irfan (2011) reported that their study did not support the negative linear relationship. Their study found a positive linear relationship between stress and performance. Unfortunately their study could not be generalized due to a limited sample size. Furthermore in order to comprehend the complexity of stress further studies should be initiated with a larger sample size. Empirical studies conducted in Nigeria by Salami, Ojokuku and Ilesnami (2010) also found that stress was negatively correlated to performance. The study interviewed 135 individuals holding managerial positions in their organizations. They reported long office hours and work overload as being most stressful. It was therefore necessary to establish the influence of female principals stress and students academic performance.

1.2 Statement of the Problem

Studies worldwide had revealed that female principals experience higher levels of stress than their male counterparts. This is because they have more responsibilities and expectations that increase stress as they perform their tasks and roles expected of them. This affects their quality of work performance among other factors. The other consequences are desertion and leaving of principalship. With regard to Rachuonyo North and Homa-Bay Sub counties, a higher number of principals had left principalship between 2003 and 2013. That is, in Rachuonyo North Sub counties 11(24.4%) left while 15 (28.3%) left in Homa-Bay sub counties. The principals who left due to other reasons from the same sub counties for the same period were 4(8.9%) and 9(17%) respectively. With regard to work performance as signified by students' performance in Kenya Certificate of Secondary Education Examinations between 2010 and 2014 secondary schools headed by female principals had performance in mean scores as 3.77 and 4.20 lower compared to those headed by male principals whose mean scores were 5.05 and 5.67 in Rachuonyo North and Homa-Bay sub counties respectively. In many cases, the demands and expectations from female principals are normally overwhelming. Enormous demands and expectations from school Boards of Management (BOM), parents, deputy principals, Heads of Departments (HODs), teachers, students, field Education Officers, sponsors, the community, politicians and mass media cause stress among secondary school principals. It is against this back drop that the study sought to establish factors and strategies that influence female principals stress and its effect on students' academic performance in public secondary schools in Rachuonyo North and Homa -Bay Sub counties.

1.3 Purpose of the Study

The purpose of this study was to establish factors and strategies influencing female principals' stress and its effect on students' academic performance in Rachuonyo North and Homa Bay Sub counties, Kenya.

1.4 Objectives of the Study

Objectives of the study relating to Rachuonyo North and Homa-Bay Sub counties were to:

- i) Determine stress levels among public secondary school female principals;
- ii) Determine factors influencing stress among public secondary school female principals;
- iii) Establish influence of coping strategies on female principals' stress;
- iv) Determine the effect of stress among female principals on students' academic performance in public secondary schools.

1.5 Research Questions

The research was guided by the following research questions

- i) What are the levels of stress among public secondary school female principals?
- ii) What factors influence stress among public secondary school female principals?
- iii) What is the influence of coping strategies on female principals' stress?
- iv) What is the effect of stress on among female principals on students' academic performance?

1.6 Significance of the Study

The findings of the study are significant to:

- i) Ministry of Education (MOE), Teachers Service Commission and other stakeholders in the education sector in making decisions and policies with regard to stress management among female secondary school principals.
- ii) Future researchers in education sector by providing baseline information for future research in the education sector.
- iii) School principals by enabling evaluation of management systems in the schools with a view to improving management process such that education policy implementations may not be adversely affected.

1.7 Conceptual Framework

The study was guided by a conceptual framework which presented the interrelations among the variables in the study shown in Figure 1. The conceptual framework helped to focus on the variables of the study. That is, factors and strategies as precursors of stress among female principals while the independent variable was stress among female principals. The independent variable as students academic performance and the intervening variables as teachers and students attitude.

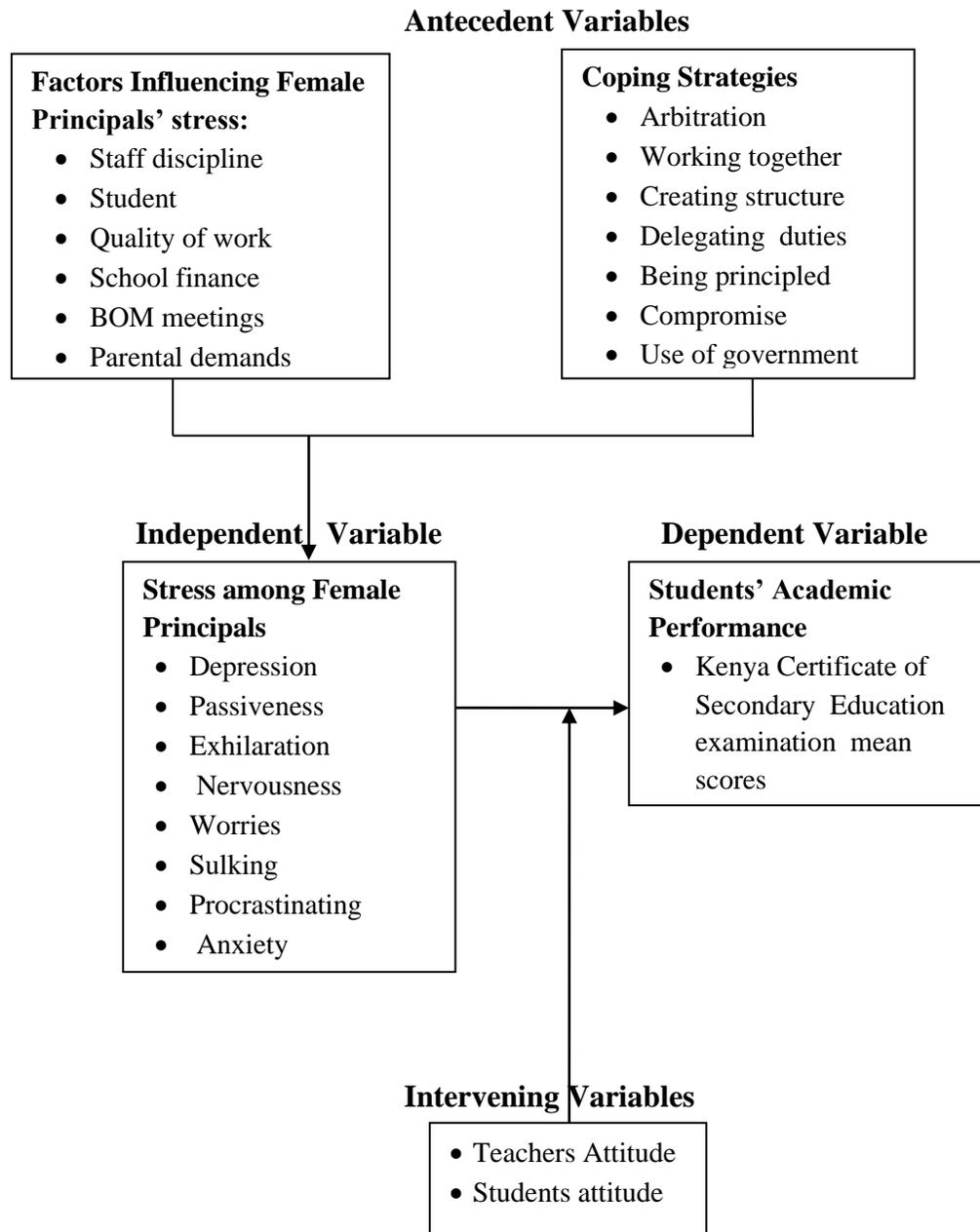


Figure 1: A conceptual framework showing factors and strategies influencing female principals stress and its effect on students academic performance in Rachuonyo North and Homa Bay Sub Counties.

Source: Researcher

The conceptual framework shows relationship between independent and dependent variables of the management of stress levels among female principals in public secondary schools. The independent variable is indicated as stress among female principals of public secondary schools while dependent variable is indicated as students' performance in KCSE which will be used to guide the study. However each of these variables has an influence on the dependent variable which is physiological indicators. The intervening are attitude of teachers and socio-economic status of teachers. The process between independent variables and dependent variable is direct while the process of intervening variable moderate the role of female principals' influence of stress on students' academic performance. The conceptual framework helped me to focus on the variables of the study that is, stress levels, factors, coping strategies and students academic performance. This is because I was not interested in other factors but the objectives of the study.

1.8 Scope and Limitations of the Study

1.8.1 Scope

The study was confined to Rachuonyo North and Homa-Bay sub counties. The study focused on factors and strategies influencing female principals stress and its effect on students' academic performance for the 2011 cohort. That is, the students who sat their Kenya Certificate of Secondary Examinations in 2014.

1.8.2 Limitations

- i) One of the female principals did not complete the section of questionnaire that was used to collect qualitative data. That is, open-ended items of the questionnaire.
- ii) Two of the principals did not participate fully in the interview sessions due to lack of interest.

Triangulation technique was used to counter these limitations and therefore adequate information was provided for the study.

1.9 Assumptions of the Study

The assumptions of the study were:

- i) Female principals experience stress in their endeavours to enhance students academic performance.
- ii) Female principals have a chance of using strategies to cope with stress experienced.

1.10 Definition of Key Operational Terms

In this study, the following terms are used in the contexts explained

Academic performance	Students performance in KCSE examinations
Board of Management	A body established and designated by the Ministry of Education Science and Technology in accordance with the Education Act (2013) to manage public schools and colleges
Burnout	Emotional exhaustion, depersonalization and a reduced sense of personal accomplishment.
Distress	Is the negative feeling, normally associated with stress, anxiety, tension, strain, pain, and frustration.
Eustress	The positive feeling when people face an exciting challenge.
Principals	A teacher who has been appointed to administer a designated school by the TSC in post primary or school governing body
Public Schools	A school developed or maintained by public funds from the government
Stress	It is a physical, mental or emotional response to events that causes bodily or mental tension
Stressors	Agents or demands that elicit stress response

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed related literature under specific themes and presented a theoretical knowledge of the phenomenon of stress. It puts in context the stress levels among public secondary school female principals in general and how this may relate to the cases in Rachuonyo North and Homa-bay Sub Counties. A review of the related literature on the causes of stress among public school principals is discussed. The influence of stress among female principals in public secondary schools and its effect on academic performance. Unbalanced situation in this research will lead into stress experience and into stress reaction. Stress among female principals is defined as an uncomfortable feeling, negative emotion such as anger, anxiety, pressure and disappointment sourced from their work aspect as an administrator. For this matter stressed administrator is someone with their uncontrollable emotion towards changes in emotion towards change in education culture which requires female principals to give their knowledge and time.

2.2 Stress Levels among Public School Female Principals

Stress among teachers and administrators in education including principals continue undebated, despite many years of research (Antonio, Polychroni & Vlachaki, 2006; Guthrie, 2006; Phillips, Sene & McNamee, 2008). In Australia stress levels in schools continue to be high (Forlin, 2001; Jorzbkowski 2002; McCorrick, 2000; Pithers & Soden 2002; Thomas, Clarke & Lavery, 2003) and although many changes have been implemented, they have been made & without examining the effects of work on expectations, workload and stress (Winefield Veale, 2002). Kyriacou (2001) argued that many of the changes undertaken in

the school system have contributed to higher stress, low morale and difficulties in recruiting and training teachers who are finally appointed as principals. Jonas (2001) and Hughes (2001) reported that stress is the leading cause of teachers taking time off, seeking compensation and taking early retirement on medical grounds. Phillips, Sen and Macmee (2008) and Dollard (2003) suggested that social status, within the profession, educational level. Profession, job title, income level, past accomplishment and feelings of insecurity and doubting the ability to maintain a position in the organization elevated stress levels for employees.

However, it is thought that many stress reactions arise from role conflicts and demands. It is important to note that individual skills or lack of them in dealing with the role demands of the job or inadequate coping renounces individual capacity to handle the role requirements. Some have argued that leadership style is associated with different stress reactions at all levels (DeNobile & McCorricks, 2005) argue that executive staff experienced greater stress due to time, resource and curriculum demands in the school environment leaving little time for self care and seeking social support although there are few studies on principals' stress to support their work. The current study is on stress among public secondary school female principals and its effects on academic performance in Rachuonyo North and Homa Bay Sub-counties. It is thought that leadership style used by the principal could be correlated with experienced stress levels (De Nobile & McCormick, 2005).

Siddiqui (2012), in a study on occupational stress in teachers; A comparative study of public and private schools in Hyderabad city found out that it was a fact that teachers working in public schools lack resources like advanced technologies that is internet and

variety of teaching methods are not available for them somehow. This could be considered contributing factor in their stress level. Siddiqui (2012) in Hyderabad city did comparative study between teachers working in private and public schools using the Ardu version of the occupational stress was developed. This study specifically dealt with teachers in both private and public schools and not clear about the stress level. This was a knowledge gap that the study sought to fill. The current study will be limited to finding factors influencing stress and its influence to performance among female principals in public secondary schools in Rachuonyo North and Homa-bay Sub counties. The study used questionnaire which was analyzed using rating scale.

Normally, high level stress would lead into work unsatisfactory, work absentee and work abandon. Stress adapting reactions of female principals in public secondary school includes psychological reactions (headache, high blood pressure) and attitude related (alcohol, smoke addiction, lifestyle). Bad working environment will lead into stress factor and causing work unsatisfactory. Ultimately, a female principal ill have desire to leave the profession (Kyriacou, 2001). High stress level of female principals in public secondary school causes disappointment, aggressive behavior, anxiety, avoidance of work, absentee and poor work performance. The studies reviewed did not address stress levels among female principals, the knowledge gap this study seeks to fill in Rachuonyo North and Homa-bay Sub counties.

2.3 Factors Influencing Stress among Secondary School Female Principals

Causes of stress in the school system have been identified in numerous earlier studies and yet there are continuing reports that stress is increasing (De Nobile; & McComick, 2005; Van Zyl Pieterse, 1999) Stress is a psychological and physiological response to events that upset our personal balance. The potential causes of stress are numerous. It may be linked to the outside factors such as the state of the world; environment in which one lives or works or the family. It may come from one's own irresponsible behavior, negative attitudes or feeling or unrealistic expectation. The causes of stress are highly individual; it depends on the personality, general outlook on life, problem solving abilities, and social support system. Many different things causes stress from physical to emotional, identifying what causes stress is the first step to deal with stress.

One of the stressors among public school Female principals is professional demands. In the Kenyan public school system, the functions of managing and administering the school falls on the principal, who is assisted by the deputy principal and others such as the senior master and mistress. The school principal and his/her deputy are regarded as custodians of an enterprise comprising considerable investment of resources in terms of finances, facilities and human skills. They are expected to preside over and manage the entire school. Being an important persons in the school system, they have the overall task of managing the schools by ensuring balanced academic programmes, and proper supervision of work as well as effective leadership, The ability of high school managers to withhold, contain and contend with the various school responsibilities, challenges and functions will largely depend on their capacity and capability (Nhundu, 1999).

Heavy workloads and time pressures are part of the occupational challenges that principals go through. For school principals to be able to function effectively, they have to be able to perform several functions that demand them to be not only experienced, but competent in these duties. The expectations on them necessitate that they supervise the delivery lines and activities of their individual schools. As much as possible, they are to create a very conducive atmosphere that would allow for maximum attainment of school goals and objectives and the education as a whole. The environment within which they operate cannot be free of problems that are typical of a populous African nation with a high demand for education. Some of these problems include over population of students; problems with the school structures; ill-equipped and inadequate principals to cope with the workload; students with poor academic backgrounds; poor funding that effects management; students negative attitude towards learning; parental ambivalence towards the educational well - being of their children; low motivation; low performance and overall lackadaisical attitudes of principals towards work; personal problems including role conflict; societal problems and pressings; financial problems; domestic worries; and a lot more (Pilners & Sohen, 2002).

The school Female principals in Rachuonyo North and Homa-bay Sub counties, Kenya are not immune to all these problems. Against all these odds, the school principals are expected to be competent professionals in their duties, Principals and students as well as parents and other stakeholders, look up to them to meet up with their various needs. They are to manage the meager resources at their disposal to attain results. They are also to promote useful and profitable interaction of minds within the school community through various media; thus bringing about the needed mutual confidence is pooling experiences for effective problem solving, They are similarly to establish an atmosphere that will ensure effective

management of the curriculum and its application to students' needs, aims, objectives and aspirations of the immediate environment and the nation (MacPherson, 1985).

As leaders, they are seen as those whose examples transcend their precepts at work, play, in the office/school. They show examples by patience, amicability, kindness, consideration and genuineness interest for their students. Hoyle (1989) pointed out that, the role of the school principal is charged and overloaded with expectations to the point at which if the school principals were to meet them all, will they risk burnout. Also, Ajayi (1995) alluded to this fact about the expectations of the school principal as an executive. This makes the school principal vulnerable to stress which may be mild or major, depending on environmental factors as well as the personality of the individual executive. As those who have to make things work in the organization, they cannot be exposed to a lot of stressful events. Like all formal organizations, the school system has specific administrative tasks and functions.

According to Kryiacou (2001), interpersonal relationships are also a factor causing stress among school principals. Working with people can be a source of support *or* stress. The complexities of life, both private and organizational have made stress to be an inevitable thing in their lives. The individual at work is always faced with some form of difficulty or painful experiences and which results in stress that could be a damaging factor to the individual's productivity, which is a challenging motivator. Learners' performance is a major cause of stress among principals. Students' failure is often viewed as failure on the part of principals which may lead to stress (Hughes, 2001). A study done by Van der Linde, Van der Westhuizen and Wissing (1999) indicates that parent pressure causes principals to experience stress. Parents' attitude towards principals is a most disturbing factor and

principals feel that they do not receive the necessary support and appreciation from parents and the community hence this is a hindrance to learning. Changes in family values and mental Status also greatly impact upon principals' stress (Thomas & Lvery, 2003). Principals often have to nurture, counsel and be a mother or father to certain learners due to family work factors or divorce. Almost any aspect of the job environment is capable of producing stress. Occupational stress remains one of the major causes of premature death world-over. As a result, clinical and health psychologists are increasingly becoming involved with clients identified as high risk group individuals either formally as part of preventive programme (Bennett & Cass,1998) or informally through contact with general practitioners (Winefield & Veale, 2002).

According to a review by the Department of Health and Human Services (DHHS, 1988), there are approximately 110 million workers in the United states who are exposed to a wide variety of occupational hazards that can pose significant risks to their health and most of which are stress related (Levi, 1990). Similarly life style stressors contribute greatly, more than environmental, biological and other festers to premature death. A World Health Organization (WHO) report stated that, about one half of the entire working population are unhappy in their jobs and as many as 90% may be spending much of their energy and time in work that brings them no closer to their goals in life. About 75% of those who consult psychiatrists are experiencing problems that can be traced on job satisfaction, or inability to unwind (Levi, 1987). The Swedish Government Commission for Work Environment and Health Report (1990) submitted that there are adverse conditions of work among professionals. A common and possibly decisive denominator of these work conditions is that

which expose workers to a combination of high psychosocial stress and physical work load and a low level of decision latitude (Karasek, Theorell & Levi, 1990).

The teaching profession, of which school principals and deputy principals as managers belong, can rightly be said to be seen as one stressful job. This is evident in the overwhelming frustrating situations within which they function in Rachuonyo North and Homa-bay Sub counties. As such therefore, many sources of stress can as well be identified in their job. As pointed out in the foregone submissions, principals and vice principals as school managers, are prone to complain about a variety of somatic concerns.(De Nobile & Mc Commick, 2005). In an era of globalization and reform agendas in education, the leadership to be provided by them is extremely important. But they can unfortunately be overwhelmed by conflicting expectations that had become associated with their role within the educational community. Reviewed studies tend to focus on factors that influence stress in general. They did not address factors that influence stress among female principals, the knowledge gap in this study sought to fill.

2.4 Influence of Coping Strategies on Stress among Female Principals in Public Secondary Schools

If one is suffering from stress, the aspect of life that causes it has to be identified. Changes in lifestyle or other small strategies can help to deal with stress. The work can be delegated or shared and avoid confrontation with problematic colleagues. Learning to be assertive, taking regular exercise, avoiding alcohol, drug can reduce stress. On the other hand, eating a healthy, balanced diet rich in fruits and vegetables, finding humor in stressful situations, time

management talking to friends or family and sharing thoughts and fears can fight stress. The person who is stressed should never take up more work that he knows or can cope with. Listening to music or relaxation tapes, tensing and relaxing muscles are some of the simple ways to manage stress (De Nobile & Mc Cormick, 2007).

Stress-management research conducted by Bunce and West (1996) found that many successful intervention programs begin by building participants' knowledge and awareness of stress and burnout. Awareness sessions presented in a non-threatening environment provide participants with updated information about the nature, signs, causes, and symptoms of stress. For example one stress management training program for school psychologists focuses on the definition of stress, the causes of stress in schools, the frequency of stress, and the effects of stress on students and teachers (Forlin, 2001). However the realization that you are in control of your life is the foundation of stress management. A stress journal can help female principals to identify the regular stressors in their life and the way to deal with them. Since everyone has a unique response to stress, there is no "One size fits all" solution of managing it. No single method works for everyone or in every situation. Female principals can increase their resistance through physical health and physical activity which play a key role in reducing and preventing the effect of stress.

Following an initial awareness presentation, a more active and participatory component of stress management is often provided to help participants determine, identify, and understand the origins of stress. Once causes of stress have been recognized and identified, preventive measures can be taken. Bunce and West (1996) demonstrated that participants can become empowered through various activities. After helping employees identify primary stressors,

employers can provide training in counseling skills so that staff members are able to offer support and guidance to colleagues who are facing difficulties at work and also, environmental adjustment and mind control can help in coping with stress. Principals can be trained in strategies that help them either change their reaction to specific stressful alter their work environment Strategies for changing how one thinks about stressful or stress-producing situations, that is, cognitive coping strategies, are an important component that leads to the reduction or prevention of stress (Bunce & West, 1996).

Today's leaders not only live and work at a faster pace but they must also deal with uncertainty and change. They need effective methods for coping with the kind of stress that affects anyone in leadership positions. People popularly identify principals as those most susceptible to stress and disease, however at all levels of management find themselves exposed to comparable pressure (Poornima, 2010).

In order to cope successfully with stress, leaders need to recognize stress as a facilitation as well as a barrier to effective leadership (Melgosa, 2006) stress as apart from causing emotional, mental and physical problems, can also can provide opportunities and while prolonged exposure to stress can decrease resistance to disorder and can also help female principals in public school in Rachuonyo North and Homa-Bay Sub counties to cope effectively and can actually strategies given their resistance (Robbins, 2001).

Job stress has been defined as the non-specific response of the body to any demands made upon it (Seyle, 1976). It is considered to be an internal state or reaction to anything we consciously or unconsciously perceive as a threat, either real or imagined. Robbins (2001)

defines stress as a dynamic condition in which the individual is confronted with an opportunity, constraint, or demand related to what he or she desires for which the outcome is perceived to be both uncertain and important. Stress can be caused by environmental, organizational, and individual variables (Cook & Hunsaker, 2001). Organizational-based factors have been known to induce job stress for employees at the workplace (Greenhaus & Beutell, 1985). These factors are commonly termed as organizational stressors since they serve as agents that trigger the various stress reactions (Von Onciul, 1996). Among the numerous organizational sources of stress, only five variables were investigated in this study namely conflict, blocked career, alienation, work overload and unfavourable work environment.

Stress involves an interaction of person and environment. Something happens out there which presents a person with a demand, or a constraint or an opportunity for behavior. Stress occurs when the environment imposes demands which are perceived as being substantially out of balance with the foetal person's capabilities, the environmental demands exceed the person's capabilities or the person's capabilities exceed the environmental demands.

Female Principals in public schools can cope with stress in many different ways. Simple tactics that can help a principal control stress are; a balanced diet, exercise, adequate sleep as well as being able to recognize work overload and stress resistant workplaces. Certain coping mechanisms can also have a negative effect on a person's mental health. Relieving stress using anger- induced methods such as placing blame on others and yelling can increase mental health problems such as insomnia and depression.

When a principal does not delegate some aspects of duties appropriately, she may encounter stress. Bull (2013) noted that up to one third of principals perceive their occupation as highly stressful. Principals are more stressful than their male counterparts because of combinations of domestic work with official roles hence the study of stress levels, coping strategies, factors and its relationship with students academic performance in Rachuonyo North and Homa-bay Sub counties is worth to be researched. Studies reviewed did not focus on strategies used by female principals, to cope with stress, the gap in knowledge that this study sought to fill.

2.5 Influence of Stress among Female Principals on Students Academic Performance

Stress can lead to problems in the workplace, such as poor morale, job dissatisfaction, absenteeism, lowered productivity, and high medical care costs (Phillips & McNamee, 2008). At the school level the increase of stress is reflected in a growing average annual days of teacher absences and arise in the number of early retirements. The importance of teachers' school attendance is clear. There is a signification positive correlation between teacher stress and the total number of days that teachers are away from school (Schiller, 2002). Many parents and students feel that student's difficulties are due, in part, of frequent teacher absenteeism. The principal serves as the leader of the school and therefore there is a leadership vacuum when they are absent from school. This automatically influences students' performance. Stress that results into absenteeism does negatively affect students' performance.

Stress has been identified as one of the factor related to teacher attrition and is believed to be a cause of high teacher turnover and absenteeism according to research by (Kyriacou, 2001).

Research by Forlin (2001) indicated that teachers who said they might leave teaching experienced higher degrees of stress burnout than their non-leaving peers. These “potential leavers displayed more emotional exhaustion, greater feeling of depersonalization and less personal accomplishment in their jobs.” These findings are corroborated by research conducted by Kyriacou (2001), who acknowledged that the intention of leaving teaching is associated with teacher stress. Unfortunately, high teacher turnover has a negative effect on student achievement (Walberg, 1974). Stress is one of the many reasons for female principals who leave their jobs; and schools in Rachuonyo North and Homa-bay Sub counties cannot find sufficient replacements and frequently face severe shortage of qualified principals (TSC Director County, 2013). Some recent studies indicate that a significant number of principals leave the teaching profession to pursue a career outside the education field. Given the challenges of geography and limited availability of prepared female principals in the Kenya, retaining trained teachers is of critical importance. Preventing teacher attrition is an educational and economic necessity, for female principal not to work under stress. Principals who operate in such circumstances hardly promote students academic performance.

Further studies in Kenya by Musyoka, Ogutu and Awino (2012) in their study on employee stress and performance of companies listed in the Nairobi securities Exchange found that stress had positive influence on corporate performance. The relationship between stress and physiological, physiological and behavioural manifestation was also positive. This can help Ministry of Education, Science and Technology to provide direction on how well to handle employees stress and to help improve stress.

Kendi (2012), in her study on the impact of occupational stress on headteacher task in secondary schools of Kisumu County, Kenya. However, the studies did not address factors influencing stress among public secondary school female principals and its effect on students' academic performance and the other studies did not use correlation and descriptive survey as in this study, therefore the knowledge gap this study sought to fill.

Principals who are not stressed indicate that they are satisfied with their jobs. Job satisfaction results in female principal's performance, job turnover, absenteeism and involvement in female principals' union activities (Organ & Batsman, 1991, Robbins, 2005, Robbins & Judge, 2008). According to Boyland (2011), "job satisfaction can do far more than help retain principals; it can improve their performance." This implies that satisfied principals can contribute significantly to the improvement of students' academic performance and school effectiveness at large. Similarly, Shann (2001) asserts that job satisfaction helps to retain principals and makes them committed to their job and through this also makes their schools very effective. In other words, job satisfaction contributes to improvement of teaching, student's learning and principal retention.

Travers and Cooper (1994) claim that low satisfaction due to stress contributed significantly to principal's intention to quit the job. This implies that high satisfaction with these variables would contribute to their intention to remain in the job. A recent survey conducted among 245 human resource representatives and 7,101 workers in United States of America revealed the employees stay in jobs that do not stress them and give them an opportunity to grow (Friedman, 1997).

Academic stress is the product of a combination of academic related demands that exceed the adaptive resources available to an individual if a student is unable to cope effectively with academic stress, then serious psycho-social emotional health consequences may result (Arthur, 1998; Mac George & Gillikan, 2005). Female participants who experience mental and physical health problems are in greater risk of poor KCSE performance, thus increasing stress, maladaptive coping, and compromised health (Haines, Norris & Kashy, 1996). Literature has shown that there is a strong relationship between stress and public secondary school principals performance (Educational Research Services, 1999).

Stress significantly affects performance and service delivery of workers. Given the important role that education plays in the society, coupled with the dynamic nature of education sector, there has been an increased social pressure on the education system in general and school administrators in particular (Taylor, 1995).

Stress has been known to impact negatively on the health of an individual. Research on work-related stress was conducted by the European Agency for Safety and Health at Work OSHA in the year 2000. The study in detail discusses the experience of stress at work which has undesirable consequences for the health and safety of individuals and health of their organization. The study of OSHA is more general compared to study of Friedman and Rosemann (2000) who tried and discovered link between stress and coronary heart disease. The sample was small yet it was a representative of one another. The study proves that middle aged men who show symptoms of stress are more likely to develop depression Foutana (1989) study of stress and the immune system.

Frankenhauser's study (1991) is different from the two. It does not deal with physical illness but lack of control and stress. It was found that workers with little control over work have higher stress level high BP, higher rate of stomach disorders and headaches. Because their work was monotonous and repetitive they had little control over it and greater stress. The objective of gallery and Whitley's study (1990) of occupational stress and depression among emergency physicians is to find their level of stress and study the variables.

According to occupational Dollard (2003), report that poor job description and specifications are contributing factors for stress among principals. The importance is of differentiating between executive and classroom principals, primary and infant principals. Sergio Guglienin and Kristin Tatron's (1995) occupational stress and health in principals shows a methodological analysis about Female principals burnout. The principals are not properly rewarded, difficult working conditions, heightened job pressure and reduced professional satisfaction are said to cause stress. The potential negative repercussions of these occupational hazards have caused stress irritable Empirical investigations have identified this as the threats on the principal's health.

The longitudinal study of occupational stress in First year principals by Dollard (2003) examines the link between occupational conditions and depressive symptoms in newly appointed female principals, findings suggest that principals show increase in depressive symptoms in accordance with working conditions, there is no pre employment. It is concluded therefore that teaching conditions cause stress. The high levels of stress are associated with a range of caused factors, those intrinsic to teachings, system influences stress creates an impact on principal retention.

Research reveals that burned out human service professionals, including principals have had and perhaps are still having a hard time, Although the fit between them and their job has been disrupted (Murray & Forbes, 1986), they continue their work, and by doing so, may well harm their own health and the wellbeing of their clients. Students need mentally and physically fit adults who can guide them as they find their way in our world. Burned out principals suffer from irritability (Hubermann, 1993) and they are found to be responsible for student apathy (Jenkins & Calhoun, 1991). Principals are known to continue working in spite of burnout symptoms (Dworkin, 1985; Hock, 1988) or reduced classroom management skills (Blase, 1984; Smith & Bourke, 1992).

As a burn out principals negatively affect themselves, their students, and the educational system (Hughes, 2001), it is necessary to develop and promote the use of instruments to accurately measure principals burnout. As a complement to principal reports on their own health, their students and staff could give valid information about them, thus helping to discover burnout among principals at an earlier stage and making timely prerogative or restorative intervention strategies possible. Principals play such a valuable rate in helping our children grow up knowing that any opportunity to promote their physical and mental health should be seized.

According to the definition of burnout (Maslach, 1976; Maslach & Jackson, 1981), burned out people suffer from emotional exhaustion, depersonalization and a reduced sense of personal accomplishment, Emotional exhaustion refers to feelings of being emotionally overextended and having depleted one's emotional resources, Depersonalization refers to a negative, callous and detached attitude towards the people one works with, that is patients,

clients or students, Reduced personal accomplishment refers to someone's negative self evaluation in relation to their job performance (Schaufeli *et al.*, 1993). Many studies on burnout stress a behavioural aspect of the syndrome while many others stress a mental aspect. Oranje (2001) divides studies on burnout into three categories, first, burnout is considered to be a coping problem (the interaction model), burnout stems from the negative outcome of an individual's judgment of their own abilities in relation to real or imagined stressors in their environment (Byrne, 1991; Cherniss, 1980; Eskridge & Coker, 1985).

Second, some studies view stress as a state of both physical and mental exhaustion that strikes individuals involved for a long time in situations that exact a heavy emotional toll (Kremer-Hayon & Kurtz, 1985). This view is categorized as the response or physiological model. Third, some studies like the view that it is the environment that produces stressors responsible for the onset of burnout. Examples of such environmental stressors are the social relationships of the principals with students, colleagues and stakeholders (Brouwers & Tomic, 1999; Feittler & Tokar, 1980) and the organizational working circumstances (Brenner *et al.*, 1985; Burke and Richardsen, 1996; Van Dierendonck *et al.*, 1998).

Human service workers appear to run a great risk of telling victims about burnout syndrome (Fraidenberger, 1975), Principals, in particular, experience many stressful events in their careers (Burke *et al.*, 1996). Although Seyle (1984) divided stress into eustress (stress that positively influencing behaviour) and distress (stress that negatively influencing behaviour), work stress is usually associated with the negative aspects of someone's professional career.

It is however a problem that so far, principal burnout studies have lacked a firm theoretical basis and that proof of causal relationships between environmental stressors and individual health consequences is almost entirely lacking. Guglielmi and Tatrow (1998) posit that burnout research lacks a theoretical framework that unifies and guides empirical research in this area. It is critical to apply the self-efficacy theory when composing our questionnaire on principal competence in order to measure domain specific principal school management behaviour, because in some studies self efficacy theory has appeared to be a promising conceptual framework for studying principal burnout (Hall & Cauvery, 1986). Generally speaking, self-report questionnaires and self-reported information to medical doctors and/or psychologists provide the proof that someone suffers from stress to a certain degree. Because of this many negative consequences accompanying burnout, it is important to improve on the stress among public secondary school female principals and its effect on students' academic performance in Rachuonyo North and Homa-bay Sub counties.

In the educational domain, Tatar and Yahav (1999) were the first to apply a shortened version; they had students, staff and stakeholders fill out the items on this instrument to report perceived symptoms of burnout among their principals. The reviewed literature does not address the influence of stress on female principals' performance as mirrored or evidenced in students' academic performance. The knowledge gap exposed by this literature is the influence of stress on female principals' performance as cascaded down to students' academic performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives a description of the research design used and its suitability. It also gives the location of the study. The study population, sampling procedure and sample size are also discussed. The validity and reliability of the instruments are ascertained. Data collection procedures and data analysis methods are provided. The rationale for selecting survey research design and instruments used for data collection is outlined.

3.2 Research Design

This study used descriptive survey and correlational design. Descriptive survey is a method of collecting information by interviewing, administering a questionnaire or direct observation. According to Orodho (2009), a sample survey involves the selection of a subset of the population called a sample to be measured. Descriptive survey is much more suitable because it helped to determine stress levels among female principals, factors influencing stress, establish coping strategies for stress and also to determine the relationship between female principals stress levels and performance. It was also appropriate for this study because it was an efficient way of collecting information from a large number of respondents targeted.

This study was conducted through correlation design that determines whether or not, and to what extent an association exists between two or more indicators (Willis Oso & David, 2009). Kothari (2003) defines research design as a blueprint for the collection, measurements and analysis of data. The study focused on stress management among public secondary schools, female principals and its influence on performance in Homa-Bay County, Kenya.

3.3 Area of Study

The sub counties are located between latitude 0⁰15 and 0⁰45 south and longitude 34⁰25 East and 35⁰0⁰ East. The County population as per 2009 census is 363,794 and population density is 303 per Square kilometer. Out of the population, 28,361 live in urban centers and the rest in rural setups. Sizeable area of the County is covered by water (Lake Victoria). Economic activities carried out are varied ranging from farming, agriculture, fishing, quarrying and trade mostly for subsistence. Administratively, the sub counties have four constituencies. Academic performance have been affected by understaffing and poverty. (Appendix VII).

3.4 Study Population

The target population for this study was 211. The population was stratified as follows: 43 female principals, 43 Deputy principals, 80 HODS, 43 BOM chairpersons, 2 Sub County Quality Assurance and Standards Officers (SCQASOs).

3.5 Sample Size and Sampling Techniques

According to Mugenda and Mugenda (2003) sampling is a process by which a small number of individuals, objects or events are selected and analyzed that is representative of the entire population under study. It is obtained using predetermined procedures (Koust, 1984). In this study saturated sampling technique was used to select 39 female principals, 39 Deputy principals, 72 Heads of Department, 39 BOM chairpersons and 2 SCQASOs after leaving out 4 schools were used for piloting. Saturated sampling was used because all the respondents were used.

Table 3.1
Sample Frame

Category of Respondents	Target Population	Sample Size
	N	n
Female Principals	43	39
Deputy Principals	43	39
HODs	80	72
BOMs chairperson	43	39
SCQASOs	02	02
Total	211	191

3.6 Instruments for Data Collection

The research was conducted using questionnaires, interviews, observation guides and document analysis guide.

3.6.1 Female Principal’s Questionnaire (FPQ)

The questionnaire were structured to provide information on female principals on factors influencing stress levels among female principals and its influence on students academic performance. Adequate numbers of open and close ended questionnaires related to the different aspects of the study were administered to the female principals (Appendix I).

3.6.2 Interview Schedule for BOMs chairman, HODs, SCQASOs female principals and Deputy principals

An interview was held with BOMs, HODs, SCQASOs female principals and Deputy principals to solicit information on stress related factors reported in the Rachuonyo North and Homa-Bay Sub counties. BOMs Principals, deputy principals, Heads of Department, BOMs

chairpersons and SCQASOs were interviewed. The interview questions guided the researcher to factors causing stress among public secondary schools' female principals in Rachuonyo North and Homa-Bay counties. Interviews also helped the researcher to follow up the respondents' answers in order to obtain more information and clarify ambiguous statements. Interviews build trust with the respondents thus made it possible to obtain information. However one limitation of interview was that anonymity of the respondents was not taken care of. (Appendices II –VI).

3.7 Validity of the Instruments

Content validity involved the researcher's interpretation of what the instrument measures (Spector, 1997). It is also concerned with whether the instrument "covers the domain or item that it purports to cover" (Cohen *et al.*, 2007). An instrument is valid if it measures what it is supposed to measure. To ensure validity of the instruments employed, the questionnaires were given to experts in the department of Educational Management and Foundations for verification. Their comments and recommendations were incorporated in the questionnaire to make it more meaningful and accurate.

3.7.1 Reliability of Instrument

According to Spector (1997), the term reliability is defined as the "consistency in measurement 'for example, if job satisfaction of a person is repeatedly assessed same result should be obtained each time, assuming the person's attitude does not change. Reliability of the instruments was established through a test re-test method 5(10%) of the schools that were not involved in the main study whereby Pearson r of 0.7 and above at a set p -value of 0.05 was considered reliable, in this case, the reliability coefficient was .8.

3.8 Data Collection Procedure

According to Mugenda and Mugenda (2003), it is argued that the researcher has to ensure confidentiality of data and sources. Additionally, they argue that names of the participants and the places they live or work must not be revealed. In this study, the confidentiality of participants and data collected was observed. The study did not bear participants names or names of their respective schools.

Introductory letter was sought from the School of Graduate Studies (SGS), Maseno University. Upon receiving the authorization letter, the researcher proceeded to the field. Public secondary schools headed by female principals was visited and questionnaires were distributed. The County Director and Sub county officers were interviewed to solicit information on stress related factors reported by female principals in the county. The county SCQASO will also be instrumental to provide information on performance.

Information from the interview was done through note taking whereby 20 female principals, 20 deputy principals, 25 HODs, 20 BOM chairpersons and 02 SCQASOs were interviewed. This was based on Mose (1994) who recommends that for interview, the minimum sample size is 15 in a cross sectional study because he argued that after 15 people, there is always a lot of repetition.

3.9 Data Analysis

Two approaches were used in the analysis of data. That is, quantitative and qualitative.

3.9.1 Quantitative Data Analysis

Quantitative data obtained was analyzed using frequency counts, means, percentages and regression analysis. Rating scale was used to analyze stress levels, factors influencing stress

levels and effectiveness of coping strategies for managing stress among female principals in public secondary schools and its influence on students' performance in Rachuonyo North and Homa-Bay sub counties.

Rating scale was interpreted as follows: **VL**- Very Low =1, **L**- Low =2, **MI** –Moderately Low =3, **H**- High =4 and **VH**– Very High = 5. The values indicated the strengths of influence and effectiveness for coping strategies. Regression analysis was used to analyze data so as to generate findings that could be used in making inferences on the relationship between stress levels, factors, strategies and students' academic performance.

Table 3.2: Quantitative Data Analysis Matrix

Objectives	Independent Variable	Dependent Variable	Statistical Method
i) Determine stress levels among public secondary school female principals.	Principalship life events	Stress level	Descriptive Statistics; Frequency counts, means and percentages
ii) Determine factors influencing stress among public secondary school female principals.	Factors	Stress level	Descriptive Statistics; Frequency counts, means, percentages, Pearson's r, Scatter plot, Coefficient of determination, ANOVA, Regression analysis
iii) Establish effectiveness of coping strategies for managing stress among female principals in public secondary schools.	Coping strategies	Stress levels	Descriptive Statistics; Frequency counts, means, percentages, Pearson's r, Scatter plot, Coefficient of determination, ANOVA, Regression analysis
iv) Determine the effect of stress among female principals on students' academic performance in public secondary schools.	Stress level	Performance	Descriptive Statistics; Frequency counts, means, percentages, Pearson's r, Scatter plot, Coefficient of determination, ANOVA, Regression analysis

3.9.2 Qualitative Data Analysis

Qualitative data included opinions of female principal's, deputy principal's, BOM chairpersons, SCQASOs and Heads of Department collected through in-depth interview approach. Results from the interviews were transcribed and categorized into themes and sub-themes and reported accordingly. Transcription is content analysis done line by line to categorize the responses according to the objectives as shown in Table 3.3 which shows how qualitative data was analysed and reported.

Table 3.3: Qualitative Data Analysis Matrix

Objectives	Independent Variable	Dependent Variable	Transcripts	Themes	Sub-themes
i) Determine stress levels among public secondary school female principals.	Principalship life events	Stress level	Female principals experience stress (BOM Chairperson 1)	SL	- Life event
ii) Determine factors influencing stress among public secondary school female principals.	Stress factors	Stress level	This year we have experienced frustrations in implementing school curriculum (Female Principal 5)	FIS	- Curriculum factors of stress
iii) Establish effectiveness of coping strategies for managing stress among female principals in public secondary schools.	Coping strategies	Stress level	I use the following coping actions to reduce stress (i). Trying to be focused in my work ii) Trying to relax after work---- Female Principal 20)	CS	- Curriculum based strategies

3.10 Ethical Considerations

An introduction letter was obtained from Maseno University to conduct the study in Rachuonyo North and Homa Bay Sub counties. Further permission was obtained from the County and Sub county Directors of Education in charge of Homa-Bay and the two sub counties. Thereafter, the researcher sought permission from the principals of all the secondary schools in the Sub-County to conduct the survey in their respective schools. Informed consent was obtained from respondents and they were assured of confidentiality of data provided. Participation was voluntary and no risk was expected in the study. No names were used in any of the reports resulting from this study. All the respondents were assured that they would have access to the final report of this study.

CHAPTER FOUR
RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents analysis, interpretation and discussion of the findings of the study. Descriptive statistics inform of frequency counts, percentages, means and Inferential statistics that is, Pearson's r and regression analysis were used in analyzing quantitative data in order to establish actual relationships between female principals' stress and factors, coping strategies and students' academic performance. Qualitative data was transcribed and analyzed in emergent themes and sub themes. The results and discussions are presented thematically based on the objectives of the study. Thus, the objectives of the study were to:

- i) Determine stress levels among public secondary school female principals;
- ii) Determine factors influencing stress among public secondary school female principals;
- iii) Establish influence of coping strategies on female principals stress;
- iv) Determine the effect of stress among female principals on students' academic performance in public secondary schools.

The return rates of questionnaire were as shown in Table 4.1.

Table 4.1
Return Rate of the Principals' Questionnaire used for Data Collection

Respondents	Issued	Number Returned	Percentage (%)
Principals	39	39	100
Totals	39	39	100

From Table 4.1, it can be observed that all principals' returned the questionnaire as was required. The rate of return for the questionnaires was 100%. This data on return rates helps to justify the validity of the data that was used in this study and the new knowledge generated.

4.2 Demographic Characteristics of Female Principals and School Data

The demographic characteristics of female principals was as shown in Tables 4.2 and 4.3.

Table 4.2: Demographic Characteristics of Female Principals (n =40)

Demographic Characteristics	Frequency (f)	Percentage (%)
Gender		
Female	39	100
Age		
31-40	5	12.8
41-50	25	64.1
51-60	9	23.1
Total	39	
Highest level of Education		
Diploma in Education	1	2.6
Bachelors Degree	27	69.2
Masters degree	10	25.6
Doctor of Philosophy Degree	1	2.6
Total	39	100
Headship Experience in current schools		
1-5	20	51.2
6-10	12	30.8
11-15	4	10.3
16-20	1	2.6
21-25	2	5.1
Total	39	100

Headship Experience in other schools

0-11 months	25	00.0
1-5	5	35.8
6-10	9	64.3
Total	39	100

Teaching experience

0-5	0	0.0
6-10	6	15.4
11-15	16	41.0
16-20	10	25.6
21-25	5	12.8
26-30	2	5.1
Total	39	99.9

From Table 4.2, the ages of female principals were 31-40 years, 5(12.8%); 41-50 years, 25(64.1%) and 51-60 years, 9(23.1%). This means majority of female principals were middle aged. The highest level of academic qualification were as follows: Diploma in Education 1(2.3%); Bachelors Degree 27(69.2%); Masters Degree 10(25.6%) and Doctor of Philosophy 1(2.6%). Headship experience in the current schools: 1-5 years 20(51.2%); 6-10 years, 12(30.8%); 11-15 years, 4(10.3%) and 21-25 years, 2(5.1%). Headship experience in other schools were as follows: 1-5 years 5(35.8%) and 6-10 years, 9(64.3%) and 25 female principals did not have experience in other schools. Teaching experience was as follows: 6-10 years, 6(15.4%); 11-15 years, 16(41.0%); 16-20 years, 10 (25.6%); 21-25 years, 5(12.8%) and 26 -30 years, 2(5.1%). These descriptive statistics reveal that female principals' responses were authentic and realistic on stress, factors influencing their stress, strategies and effects of stress. This was based on the premise that female principals were mature, qualified

and experienced in matters of stress with regard to stress levels, factors, strategies and effect of stress on students academic performance.

Table 4.3: School Data

Location	Frequency (F)	Percentage (%)
Rural	35	89.7
Urban	4	10.3
Total	39	100
Number of Teachers per School		
1-5	10	25.6
6-10	11	28.2
11-15	9	23.1
16-20	5	12.8
21-25	2	5.1
26-30	2	5.1
Total	39	99.9
Enrolment		
50-89	5	12.8
90-121	9	23.1
130-169	6	15.4
170-209	7	17.9
210-249	3	7.7
250-289	2	5.1
290-329	0	0
330-369	1	2.6
370-401	1	2.6
410-449	3	7.7
450-489	1	2.6
490-529	1	2.6
Total	39	100.1

From Table 4.3, it can be noted that 35(89.7%) schools were located in rural areas while 4(10.3%) in urban areas. The descriptive statistics revealed that 21(53.8%) had 1 to 10 teachers; 14(35.9%); 11 to 20 teachers and 4(10.2%) 21 to 30 teachers. This means that most schools were understaffed. This may translate to high stress among female principals as the demands from teachers, parents, Ministry of Education Science and Technology and students may be overwhelming. Student enrolments varied highly as follows: 14(35.9%) had enrolments of 50 to 121 students; 13(33.3%) 122 to 169 students; 5(12.8%) 170 to 249 students and 7(17.9%) 250 to 529 students. The descriptive statistics revealed that most of these schools (69.2%) were not cost-effective. This translates to high stress among school managers as the demands from students, teachers and parents can hardly be met to high satisfaction. These schools were therefore suitable for this study.

4.3 Stress Levels among Public Secondary School Female Principals

The research question responded to was: What are the levels of stress among public secondary school female principals?

The female principals rated their stress levels for the period 2011 to 2014 on a 5 – point rating scale and the results were as shown in Table 4.4. The interpretation of the ratings were that: one (1) meant that stress indicators (life event) was experienced once in every year which translated to very low stress levels; 2 meant that the life event or indicator was experienced twice in every six months, which translated to low stress level, 3 meant the life event or indicator was experienced three times in every three months which translated to moderate stress level, 4 meant the life event or indicator was experienced four times in every month which translated to high stress level and 5 meant that the life event or indicator

was experienced 4 times in every week which translated to very high stress level. For interpretation of means mid-points in the five point scale were used to generate the scale for interpreting stress levels as follows:

1.00 – 1.44	Very low stress level
1.45 – 2.44	Low stress level
2.45 – 3.44	Moderate stress level
3.45 – 4.44	High stress level
4.45 – 5.00	Very High stress level

The instrument used was adapted from Homles and Rahe (1967) stress inventory of common stressful, life events, whose reliability index was originally and after adaptation and piloting .8 . A life event is any factor both positive and negative that causes a person to deviate from normal functioning. The scale is known as Social Readjusting Rating Scale (SRRS). Although the scale was originally developed and validated using only male subjects it provides useful results with both male and female subjects and it has been validated in Japanese, Latin American European and Malaysian populations.

The “parameters” (life events of school principals) used were 20 in number. The adaptation involved tailoring them into Kenyan situation based on the day to day experiences of female principals in their operations.

The instructions to the respondents were precise and concise to enable them objectively rate themselves. The fact that they were assured of confidentiality enhanced their degree of objectivity and trust. This ensured the authenticity and robustness of the data collected.

To compute the influence of life events on stress level of all the female principals, principals were subjected to the Social Readjustment Rating Scale (SRRS) and the results were as shown in Table 4.4.

Table 4.4

Influence of Principialship Life Events on Levels of Stress among Public Secondary school Female Principals as determined by Social Readjustment Rating Scale

Life events in Principialship /Parameters	Mean Rating	Indices of Stress levels	Decision
a) I feel more enthusiastic for my principalship	2.71	3	Moderate
b) I feel frustrated in carrying out my responsibilities	2.97	3	Moderate
c) I am irritable and impatient over small inconveniences at my workplace with regard to staff discipline	2.43	2	Low
d) I feel negative, futile and depressed about my job as an integral Quality and Standards Assurer	2.32	2	Low
e) My decision –making ability in school operations matters with regard to hiring and firing support staff is good	2.35	2	Low
f) The quality of my work is good	2.76	3	Moderate
g) I feel physically, emotionally and spiritually depleted week by week due to overload	2.16	2	Low
h) My resistance to illness is lower compared to my earlier years when I was just a class teacher	3.11	3	Moderate
i) My communication with my seniors, colleagues, friends and family is upbeat from the time I was promoted to principalship	2.89	3	Moderate

j) I am having little difficulty concentrating on my administrative work in planning and executing school plans	3.00	3	Moderate
k) I am up beat in making school budgets which is my responsibility as a principal	3.3	3	Moderate
l) It bothers me when my students perform poorly in end term examinations as it's a bad indicator in academics and culminates in poor KCSE results	4.03	4	High
m) Frustrations arising from my daily operations ranging from implementation of school curriculum to staff personnel management make me work harder	3.26	3	Moderate
n) Boards of management meetings on academic and parents associations projects are increasingly motivating	2.72	3	Moderate
o) Students' indiscipline bothers me	4.07	4	High
p) I often get disturbed over delays in FSE disbursements to my school participation in sports	3.33	3	Moderate
q) I usually put off important decisions in school management operations like accountability of school funds which later haunts me	2.45	3	Moderate
r) I hate to fail at anything, ranging from public relations through good student management to school projects management which is a common phenomenon in my school these days	3.39	3	Moderate
s) I am preoccupied with fear of being assaulted by my students	2.03	2	Low
t) School creditors bother me due to schools inability to pay them on time.	2.97	3	Moderate
Overall mean	2.90	3	Moderate

Interpretations of Stress Levels Ratings:

1.0 -1.44 = Very low 1.45 – 2.44 = Low
2.45 – 3.44 = Moderate 3.45 – 4.44 = High
4.45 - 5.00 = Very high

Interpretation of Indices of stress levels

- 1** = Very Low stress level,
- 1** = Low stress level
- 2** = Moderate stress level,
- 3** = High stress level,
- 4** = Very High stress level

From Table 4.4 it can be noted that life events that had moderate influence on stress were feeling more enthusiastic about principalship, feeling frustrated in carrying out responsibilities, good quality of work, lower resistance to illness while in a position as a principal, upbeat in communication with seniors, colleagues, friends and family observed that female principals', little difficulty in concentrating on administrative work, upbeat in making school budget, frustrations arising from daily operations, motivating boards of management meetings, delays in FSE funds disbursement, hatred to failure, bother and bothersome school creditors as signified by the stress index of 3.0. The life events that had high influence were; poor performance by students and students indiscipline as signified by the stress index of 4.0. Those that had low influence were; inconveniences at work place, job of quality and standard assurer, decision making ability, physical, emotional and spiritual depletion due to overload and fear of being assaulted by students as signified by the stress index of 2.0. The average stress level of female principals in Rachuonyo North and Homabay sub-counties was moderate as signified by the stress index of 3.00.

To compute individual stress levels, all parameters were factored in for every female principal and the results were as shown in Table 4.5.

Table 4.5
Stress levels of Female Principals of Public Secondary Schools in Rachuonyo North and Homa Bay Sub counties (n =39)

Principals' S/N	Mean	Std. Deviation	Stress level index	Decision
1	2.60	1.19	3	Moderate
2	2.95	1.47	3	Moderate
3	2.50	1.40	3	Moderate
4	3.90	1.33	4	High
5	3.10	1.17	3	Moderate
6	3.20	1.44	3	Moderate
7	3.24	0.44	3	Moderate
8	3.35	1.42	3	Moderate
9	3.05	1.28	3	Moderate
10	2.90	0.97	3	Moderate
11	3.00	1.30	3	Moderate
12	2.05	0.97	2	Low
13	2.86	1.41	3	Moderate
14	1.90	0.91	2	Low
15	2.37	0.83	3	Moderate
16	1.70	1.38	2	Low
17	3.40	1.35	3	Moderate
18	3.45	0.69	4	High
19	2.90	1.83	3	Moderate
20	4.05	1.32	4	High
21	2.40	1.35	2	Low
22	4.05	1.31	4	High
23	3.45	1.39	4	High

24	1.74	0.65	2	Low
25	2.90	1.12	3	Moderate
26	2.95	1.15	3	Moderate
27	2.85	1.18	3	Moderate
28	4.60	0.60	5	Very high
29	2.58	0.77	3	Moderate
30	2.75	1.83	3	Moderate
31	4.15	0.81	4	High
32	2.90	1.29	3	Moderate
33	2.85	1.14	3	Moderate
34	1.45	0.69	2	Low
35	3.05	0.69	3	Moderate
36	2.00	1.15	2	Low
37	3.00	1.26	3	Moderate
38	3.00	1.70	3	Moderate
39	3.80	1.11	4	High
Overall Mean	2.95	1.16	3	Moderate

From Table 4.5 it can be observed that 7(17.95%) female principals' level of stress was low. The range of stress was from 1.7 to 2.4 mean ratings. Twenty four (61.54%) were found to have been experiencing moderate stress levels that ranged from 2.6 to 3.4 mean ratings. Seven (17.9%) rated their stress levels as high ranging from 3.5 to 4.6 mean ratings and 1(2.56%) rated her stress level as very high with a mean rating of 4.6. These results revealed that on the whole most female principals' stress levels was moderate.

It is important to note that most female principals in Rachuonyo North and Homa-Bay sub counties were experiencing moderate stress levels. This means that most female principals were contended with their jobs as principals. Seven (17.95%) were experiencing low stress

which means that they were not experiencing serious challenges in their work while 7(17.95%) and 1(2.56%) were experiencing high and very high stress. This means that they were experiencing many challenges in their principalship positions. Those principals who were experiencing low stress were not bothered by principalship life events. For instance, delay in disbursement of FSE funds, and disciplining students, quality of music among others. The interview and qualitative data in questionnaire in the open-ended questionnaire findings items concurred with these findings. For instance one principal stated;

By virtue of being a principal I have had many opportunities from educational trips within and outside this country. Every year KESSHA organizes these trips and conferences. These trips and conferences have cathartic effect on principals which is quite good.

These findings concur with most definitions of stress which portray stress negatively, as pressure, tension or worry resulting from problems in one's life. In most cases stress is considered a factor of illness (Anbu, 2015). Besides, it is important to note that stress is a person's adaptive response to a situation or stimulus that places excessive psychological and physical demands on him or her (Negi, 2013). The findings of this study further concur with this definition. This means that one of the reasons for educational trips is to mitigate stress. This is because it has been noted that stress occurs when pressure is greater than a person's ability to respond.

Nevertheless, since stress is a complex concept it is important to note that stress is perceived both positively and negatively. Ngari (2013) classifies stress into two types Eustress which means good stress or simply positive stress; and distress which means negative stress. Eustress accompanies achievement and exhilaration. Examples of eustress include meeting and engaging in a challenge, excelling in performance of activities, getting a promotion,

improving in performance, love for work and friends, being on holiday, purchasing something unique, gaining new friends, among others. Eustress characteristically motivates and focuses energy.

In contrast, distress or negative stress results when a person is unable to completely adapt to stressors and result in various inappropriate behaviours such as being anxious, aggressive irritable passive, helpless and unwillingness to work. Persons under constant distress are more likely to become sick, mentally or physically. This leads many people to believe that all stress is bad for people, which is not true. From Table 4.5 it can therefore be noted that female principals real experience moderate stress and the type of stress may be eustress or distress which may be intermittent or alternating.

Eustress enhances performance and therefore ordinarily people perceive themselves to be stress free when they are actually experiencing eustress. In this case it is common to hear principals' of schools expressions that they are not stressed. Distress decreases performance. Therefore principals experiencing negative stress fail to perform and it is common to hear non-performing principals of schools complaining of being stressed. Nevertheless stress and performance constitute a vicious circle and therefore there may be confusion as to which variable is independent and which one is dependent. The process is cyclical.

From Table 4.5 it can be noted that female principals often experience stress as a result of major events in their lives as principals. Stress also occurs in response to daily problems such as, indiscipline in school. Stress symptoms include increased heartbeat, higher blood pressure, muscle tension, mental depression, inability to concentrate and so on. In such

stressful situations, some people may turn to alcohol or drug abuse for the feeling of happiness. Some however, fight back by facing the problems squarely rather than flight. Hence stress is different from stressors or things, which cause stress. These may include environmental events, personal deficiencies, interpersonal conflicts that trigger off stress. Stress is also distinguished from stress reactions, the responses to stress which can be, and is controlled by disruptive or maladaptive means. Both males and females experience stress. According to Anbu (2015) female higher secondary school teachers have more stress than male higher secondary school teachers. The reason is that female teachers apart from guiding students they look after their family members. Anbu (2015) also adds that married higher secondary school teachers have more stress than the unmarried higher secondary school teachers because married teachers shoulder more responsibility than the unmarried in terms of school work as well as family and society.

The findings of this study confirms these findings as most principals were found having to have their stress levels bordering on high stress levels. Anbu (2015) also found in his study that higher secondary school teachers working in government in Nagercoil 629002 Tamilnadu India had more stress than those working in private higher secondary schools because the government teachers had to fulfill the work and the task given to them from the administration as well as from the government departments. The findings on female principals' stress level implies that female principals in Rachuonyo North and Homa Bay sub counties was at an acceptable level.

Interview findings indicated that stress among female principals in public secondary schools were experiencing stress. One of the BOM chairperson stated;

Stress has become synonymous with ill health among female principals. Virtually in all meetings principals keep on raising this issue, they argue that parents have abdicated their moral responsibility of moulding the character of their children. The consequences are that the principals are not only overworked but constantly irritated by the moral decantation among the youth.

The SCQASO on the other hand emphasized that there were many indicators manifested by female principals that leave no doubt that female principals were stressed. In this respect one SCQASO noted; many female principals in the Sub-county have been noted to manifest the following symptoms of stress: sleep disorders like insomnia; dizziness; palpitations; fatigue; memory lapses; disorientation; panic attacks; anxiety; restlessness; Eating disorders – anorexia, bulimia; increased intake of alcohol; impatience and tearfulness.

One deputy principal emphasized;

I do not envy the female principality element. In fact I have remained a deputy principal for five years, not that chances do not arise, but I deliberately decline. At times one can really sympathize with female principals. They are virtually whipping boys of many. That is the politicians, Education Officers, wealthy parents and some BOMs Chairpersons.

Head of Departments were of the same views and one HOD was categorical; Taking up principalship by female principals spells doom to them. This is because all and sundry believe that female principals are lesser human beings placed in those positions for purposes of exploitation. Some publicly express the view that no lady earns management position without responding to favours demanded by those who believe that they are king makers.

It is important to note that female principals' stress simply means the harmful physical and emotional responses that occur when the requirements of principalship do not match the capabilities, resources or needs of the principal. Stress among female principals, is often confused with challenge, challenge energizes people psychologically and physically and

motivates them to learn new skills and master their jobs. Thus when challenge is met, they feel relaxed and satisfied. Principalship stress on the other hand is a situation whereby challenges turn into job demands that cannot be met, relaxation turn into exhaustion and sense of satisfaction turn into feelings of stress. In a nutshell stress among female principals can be classified into two types; one Eustress or good stress characterized by meeting challenges, performing well, getting a promotion and getting overwhelming support; two, negative stress or distress characterized by difficult work environment, threat of personnel injury, working under constant pressure and overwhelming demands.

4.4 Factors Influencing Stress among Public Secondary School Female Principals

The second research question responded to was: what factors influence stress among public secondary school female principals? The responses were as shown in Table 4.6.

The female principals rated factors influencing their stress levels from 2011 to 2014 on a 5 – point rating scale and the results were as shown in Table 4.6. The interpretation of the ratings were that: one (1) meant that the factor had very low influence; (2) meant that the factors had low influence, (3) meant that the factor had moderate influence, (4) meant that the factor had high influence and (5) meant that the factor had very high influence . For interpretation of means mid-points in the five point scale used to generate the scale as follows:

1.00 – 1.44	Very low influence
1.45 – 2.44	Low influence
2.45 – 3.44	Moderate influence
3.45 – 4.44	High influence
4.45 – 5.00	Very High influence

The instrument used was adapted from that of Martha, Elizabeth and Mathew (1988). The adaptation involved tailoring them into Kenyan situation based on the day to day experiences of principals in their operations.

Table 4.6

Factors influencing Stress among Public Secondary School Female Principals

Factors /Female Principals life events	Mean Rating	Standard Deviation
a) Role conflict	3.30	1.222
b) lack of opportunities for career development	3.22	1.336
c) Lack of privacy	3.06	1.494
c) Working environment	3.67	1.287
d) Undisciplined teachers	3.58	1.131
e) Political interference	3.40	1.288
f) Pursuit for excellence	3.65	1.033
g) Increased participatory management	3.03	1.301
h) Increased use of ICT	3.32	1.532
i) Conflicting demands from stakeholders	3.68	1.156
j) Lack of time to teach and administer	3.73	1.122
k) Lack of office space for self and staff	3.17	1.404
L) Staff shortage	3.78	1.357
m) Sexual harassment	2.54	1.643
n) Poor communication	3.00	1.269
o) Inadequate support from stakeholders	3.27	1.427
p) Lack of opportunity for promotion	3.19	1.151

q) Work load	3.54	1.260
r) Uncertainty job in expectations	3.97	1.166
Overall Mean	3.37	1.29

Interpretations of Level of Influence:

1.00-1.44 = Very Low Influence;

1.45 -2.44 = Low Influence

2.45 -3.44 = Moderate Influence;

3.45 -4.44 = High Influence and

4.45 -5.0 = Very High Influence

From Table 4.6 it can be noted that 11(57.9%) factors had moderate influence on female principals' stress. These factors were role conflict M=3.30, SD =1.222; lack of opportunities for career development M=3.22, SD =1.336; lack of privacy M =3.06, SD = 4.494; political interference M=3.40 SD = 1.288; management M= 3.03, SD =1; increased use of ICT M =3.32 SD =1.532; lack of office space for self and staff M =3.17, SD =1.404; sexual harassment M =2.54 SD= 1.643; poor communication M =2.54 SD =1.643; poor communication M= 3.00 SD= 1.427; and lack of opportunity for promotion M =3.19 SD =1.151. Eight (42.1%) factors had high influence on female principals' stress. These factors included working environment M =3.67 SD = 1.287; undisciplined teachers M =3.58 SD = 1.131, pursuit for excellence M =3.65, SD =1.033; conflicting demands from stakeholders M = 3.68, SD = 1.156; lack of time to teach and administer M = 3.73 SD = 1.122; staff shortage M = 3.78, SD = 1.357; work load M =3.54 SD = 1.260 and uncertainty in job expectations M =3.97, SD = 1.166.

These data indicates clearly that female principals were moderately stressed as supported by the overall mean of $M= 3.37$ $SD = 1.290$. The moderate stress may be classified as either eustress or distress. When these factors were rigorously interrogated, the type of stress experienced was inclined to be negative stress. This is in agreement with what is in public domain. Thus it is commonplace to hear workers state that they are stressed, when they are distressed.

Pearson Product-Moment Correlation (r) was computed to establish the influence of principals' life events (factors) on their levels of stress. In order to interrogate data rigorously, the null hypothesis: "There is no statistically significant relationship between female principals' life events (factors) and their levels of stress" was generated. The data used in determining the influence was that of mean ratings of the impact of life events on stress by female principals and their stress levels. The results were as shown in Table 4.7.

Table 4.7
Correlation analysis of factors influencing stress among Female Principals (n=39)

		Stress
Factors influencing stress	Pearson Correlation	.728
	Sig. (2-tailed)	.000
	N	39

From Table 4.7 it can be noted that there was a strong positive correlation between factors influencing stress and levels of stress among principals. This was signified by Pearson's r coefficient of .728 as the calculated p -value of .000 which was less than the set p -value of .05. The null hypothesis "principalship life events have no influence on stress levels of female principalships in Rachuonyo North and Homa-bay Sub counties was rejected. The

factors that had high influence included uncertainty job expectations such as time for disbursement of Free Secondary education funds, quality of Kenya Certificate of Secondary Examination results, fee defaulters (M=3.97, SD=1.166), staff shortage (M=3.78, SD=1.357), lack of time for teaching and administration (M=3.73, SD =1.122), conflicting demands (M=3.68, SD =1.156), pursuit of excellence in Kenya Certificate of Secondary Examination (M=3.65, SD =1.033), supervision of undisciplined teachers (M=3.58, SD =1.131) and work environment (M=3.67, SD =1.287).

The factors that had moderate influence included; sexual harassment (M =2.54, SD =1.643), opportunity for promotion (M=3.19, SD =1.51), lack of support from fellow teachers, sponsors, school managers and job security (M =3.27, SD =1.427), poor communication in the schools (M= 3.00, SD =1.269), lack of office space for principals and staff (M= 3.17, SD =1.404), increase in use of ICT (M=3.32, SD =1.532) participatory management (M=3.03, SD =1.301), political distractions (3.40, SD = 1.288), lack of privacy (M=3.06, SD =1.494), lack of career development (M=3.22, SD =1.336) and role conflict (M=3.30, SD =1.222).

The influence of principalship life events on their stress was illustrated by use of a scatter gram (Figure 4.1).

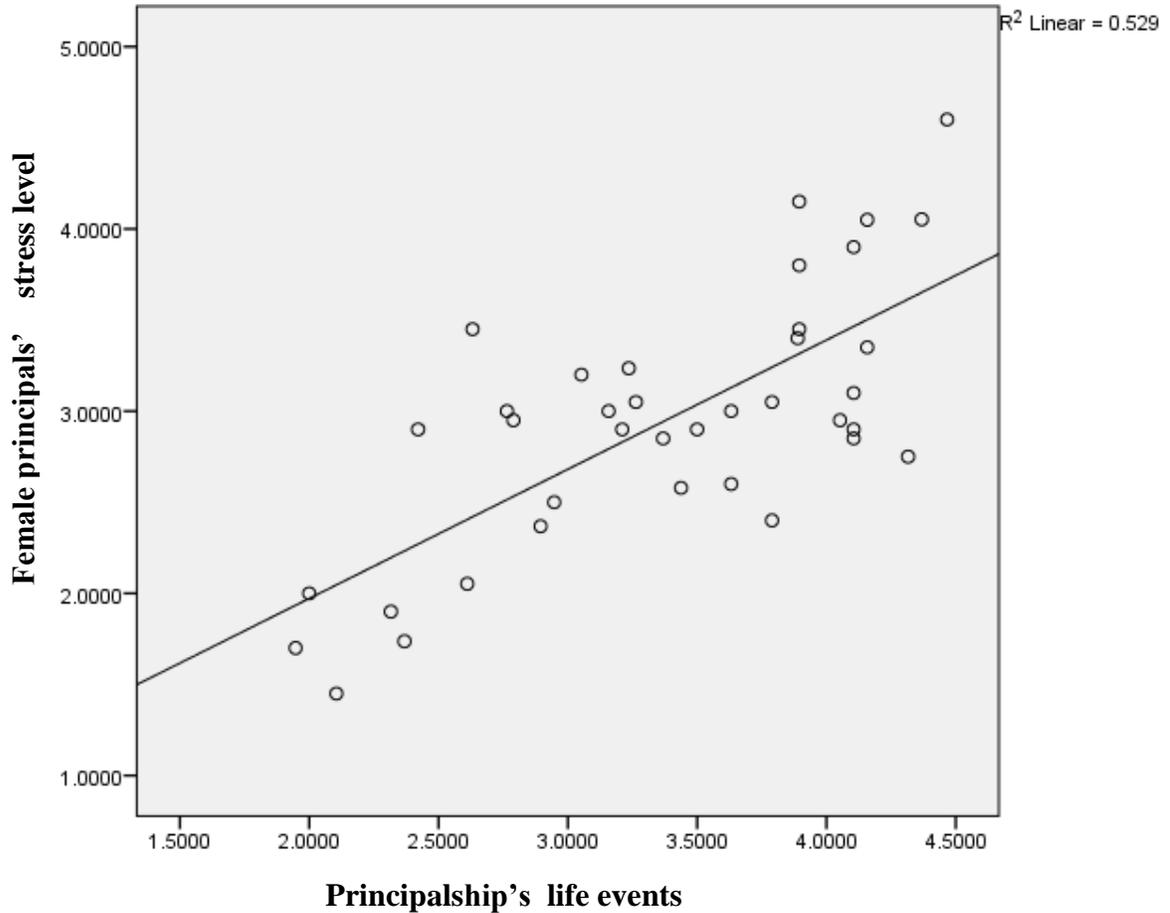


Figure 4.1: A Scattergram showing the influence of principalship's life events on their stress

From Figure 4.1 it can be observed that principalship's life events had a moderate influence on their stress. One unit increase in principalship's life events increased their stress by 0.529 units.

To confirm influence of these factors on female principals levels of stress, regression analysis was done and the results were as shown in Table 4.8.

Table 4.8**Coefficient of determination of Factors influencing Stress among Female Principals**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.728 ^a	.529	.516	.4922646

a. Predictors: (Constant), factors influencing stress

From Table 4.8 it can be noted that factors influencing stress among female principals accounted for 51.6% of the variation in levels of stress among female principals as signified by adjusted R square .516. The other 48.4% could have been due to other factors that were not investigated by this study. This means that the identified principals life events or factors were critical in determining the female principals' stress.

To determine whether factors influencing stress were was a significant predictors of stress among female principals, ANOVA was computed. The results were as shown in Table 4.9.

Table 4.9**Analysis of Variance of Factors and stress among Female Principals**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.814	1	9.814	40.500	.000 ^b
	Residual	8.724	36	.242		
	Total	18.538	37			

a. Dependent Variable: Female principals stress level

b. Predictors: (Constant), factors influencing stress

From Table 4.9 it can be observed that factors influencing stress levels among female principals in Rachuonyo North and Homa-bay sub counties were significant predictors of stress levels among principals ($F(1,36) = 40.500, P < .05$). This meant that these factors can be

relied upon in prediction of stress levels among female principals. Thus female principals' experiencing such life events over a period of time can lead to a stress level of a given magnitude.

To determine the actual effect or influence linear regression analysis was performed and the results shown in Table 4.10.

Table 4.10
Linear Regression Analysis of Stress factors and Female Principals levels of stress

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.553	.385		1.438	.159
	Factors influencing stress	.709	.111	.728	6.364	.000

a. Dependent Variable: stress level

Regression equation $Y = a + bx$,

Where: Y = Dependent variable

X = Independent variable

a = Constant

b = Principals' life events

From Table 4.10, it can be observed that increase in one unit of factors that influence stress would lead to increase in stress level by 0.709 as signified by the coefficient 0.709. The regression equation is female principals stress = .553 + .709 (principals' life event).

School principals play a critical role in the teaching and learning process which culminate in the achievement of overall objectives of education. School principals are aware of this notion and it is the driving force in their day to day operations. This is much more so in with the

realization that teaching is one of the noblest professions, because it shapes the socio-economic activities of a country by shaping the future of the child as it unleashes and actualizes the child's potential. To many teachers and principals alike teaching is a very fulfilling and rewarding profession. This is normally as a result of the students success in their lives which becomes a source of dignity, reverence and satisfaction for principals. However when students' fail to succeed, it becomes a source of frustrations, demeaning and despair for principals. Whichever way, the outcome either creates threats and /or more demands on the principal which affects his /her level of stress..

Factors that influence female principals' levels of stress in public secondary schools were found to be many. These factors or stressors included; Role conflict, professional development opportunities, indisciplined teachers, indiscipline among students, political interference, national examination results, time, shortage of staff, sexual harassment, communication, sponsors, managers, promotion, privacy, school funds and students enrolment. These findings concur with those of Sultana, Bano and Shafa (2012) who in their study titled " The nature and impact of teacher stress in the private schools of Gilgit – Baltistan, Pakistan "revealed that the teaching profession is challenging in both its intellectual and physical dimensions: Intellectually, the profession requires teachers to constantly enhance and reshape their knowledge and physically, because it requires them to be always dynamic proactive and smart. For the female school principals there are huge responsibilities and the deep –rooted sense of accountability. This arises from the fact that in girls secondary schools and mixed secondary schools principal's role is complicated, and the

threats and demands surpasses those in boys' secondary schools. Moreover female principals play dual roles as school administrators and surrogate mothers to the students.

The perception of general public on KCSE results is a major cause of stress because no consideration whatsoever is made on the corresponding parameter in schools achieving academic excellence for example infrastructure, staffing where the blame is always directed on the female principals by the proclaimed stakeholders of their school.

Participatory management puts high demands on the principal. For instance she is expected to prepare lesson plans and show punctuality and regularity in her duties. This fact coupled with the commonplace teacher shortage makes school principalship stressful. The impact of this factor was 3.03 meaning that it moderately influenced stress among female principals. This finding concurs with that of Kousar, Dogar, Ghazal and Khattak (2006) in a study titled "Occupational stress and job performance" in which they found that supervisors and managers can be major sources of stress to their subordinates. This means it is their seniors who cause them stress in the same vein as their participatory management stresses their subordinates. Furthermore when employees refuse to participate in decision-making stress is caused to the management.

Work environment was established to have an influence on female principals stress. The mean rating of 3.67 meant that work environment had a high influence. This finding agrees with that of Kousar, Dogar, Ghazal and Khattak (2006) who in their study found that dangerous tasks, toxic chemicals, high noise levels, dust, overcooling unpleasant odours created stress. These factors have a multiplier effect and affect the health of the principal

which in turn become major stressors. This view is supported by Gebrekirstos (2015) who in an empirical study titled “occupational stress among secondary school teachers and their coping strategies: The case of Central zone of Tigray region, Ethiopia” established that student had indicated that the growing health complications of workers was due to occupational stress. The consequence of occupational stress is that it impairs not only the health of the employed individuals but also for the society in general by declining effect on the amount of quality work and productivity when its level is high. Due to this reason, occupational stress costs employers as much as \$200 billion per year globally and consequently this issue of occupational stress among secondary school teachers has been recognized as a devastating problem in many countries of the world. For instance a study conducted in Hong Kong in primary and secondary school teachers showed that considerable number of teachers develop anxiety and depression problems in their work place (Leunga, Makb, Chuic, Chianga & Leea, 2009).

The other factor that influence female principals stress level is role conflict, mainly the female principal as a student counselor and a disciplinarian. The study established that the influence was moderate as the mean rating was 3.30. This factor stresses principals to the extent that some principals have delegated these responsibility absolutely. Being a disciplinarian and a counselor are two extremes on a continuum and that is why it is stressful to operate at bipolar points. Other conflicts are usually due to gender in situation where a couple serves in one school and discipline matter arise. It becomes stressful when it comes to decision making.

Sexual harassment has gained international currency in the 21st Century, whereby politicians and seniors have no respect for female principals with the consequence that gender sexual

harassment is traumatizing and this leads to stress. Sexual harassment make female principals become despairing in their profession, and young principals become more affected than their comparable groups.

Fees arrears and untimely disbursement of Free Secondary education funds coupled with parent unco-operativeness are quite stressful to female principals. These stressors coupled with several types of demands such as teaching, preparation of trial balances, excellent students performance and undisciplined students indeed put a lot of pressure on female principals. In fact during the interview, one of the principals stated; “This year we have experienced many tremendous frustrations in our attempt to implement the school curriculum and co-curriculum plans. Female principals have found themselves fighting for their subjects, trying to deal with micromanaging some departments where heads of department are less committed. In fact for most female principals, roles seem to have changed. In addition, they have had also to deal with anxiety in their offices. Part-time teachers are quite unpredictable, and paying them is another matter altogether.”

The lack of consultation and discussion by senior management in the Teachers Service commission and the Ministry of Education Science and Technology has added to the frustration felt by many female principals and this is highlighted by a number of principals who seriously consider leaving teaching in fact the principal of school “Y” decided to take early retirement as her way of coping with the stress resulting from her school. Another principal asserted: I think that the spontaneity of classroom relationships and the fun-has been displaced by strict organization, targets, appraisals, reports, parental pressure and expectations of teaching and to non-teaching staffs which is a source of stress.

The increased administrative responsibilities are now commonplace for female principals in secondary schools. In fact management of a secondary school has important dimensions that are major sources of stress. The difficult behaviour, indifferent attitudes and feigned incompetence of staff create considerable problems for female principals, particularly if there is lack of time to keep a careful check on what every staff member is teaching. Serious problems are bound to and do arise when the school is mainly composed of young novice teachers who need a lot of guidance, especially when most of them are presenting students for the first time for national examinations. The teachers, young and old who fail to be disciplined in their classes, who are inept in academic professional know how, or are the subjects of complaints by students, colleagues, parents and non-teaching staff are stressful. Lack of initiative, innovativeness, creativity, accountability and ambition in some staff, their lack of cooperation, lack of effort and resistance to change are responsible for the development of high levels of frustration. Staff turnover, absenteeism, negligence and lateness are other stressors to the female principals.

The job of principalship by female teachers is more stressful in cases where they have very limited number of experienced teachers, say one out of four who is experienced and committed to teaching as the case was in Rachuonyo North and Suba Sub county. The Constituency Development Fund established schools have as few teachers as two, the principal and her deputy, the rest, about three who are Board of Management employees. The implication is that the workload is unmanageable. The problem is compounded by the fact that when one or more teachers leave on promotion, securing their replacement is a nightmare.

In addition to these problems the female principals have to learn and acquire competencies in mediation, diplomacy, balancing the books, coping with professional challenges and extraneous matters. Female principals experience other kinds of problems in their day-to-day dealings with school management Boards, County Directors of Education and other Senior Officers from the Ministry of Education Science and Technology. The leadership behaviour was indicated by informants as a major source of stress. Serious difficulties are caused by facets of senior management styles including their reluctance to delegate any responsibility for decision-making, lack of communication between them and their middle management, failure to appreciate the needs of individual schools, low allocation of free secondary education funds and staffing, failure to provide clear roles of newly appointed staff besides teaching, inability to provide clear style of decision-making, appointment and posting of teachers without consultation, introduction of significant changes in school levies without participation of principals, deciding on term dates without reference to principals and “whittling away” of a school because of other principals’ negative opinion about the school were found to be great stressed to female principals.

4.5 Coping Strategies for Managing Stress among Female Principals in Public Secondary Schools

The research question responded to was: To what extent are coping strategies for managing stress among female principals in public secondary school effective?

The female principals rated coping strategies from 2011 to 2014 on a 5 – point rating scale and the results were as shown in Table 4.11. The interpretation of the ratings were that: one (1) meant least effective strategy; (2) meant less effective strategy (3) meant effective

strategy, (4) meant 1 more effective strategy and (5) meant most effective strategy. For interpretation of means mid-points in the five point scale used to generate the scale as follows:

1.00 – 1.44	least effective strategy
1.45 – 2.44	Less effective strategy
2.45 – 3.44	More effective strategy
3.45 – 4.44	Most effective strategy

The instrument used was adapted from that of Martha, Elizabeth and Mathew (1988).

The results were as shown in Table 4.11.

Table 4.11**Coping Strategies to Manage Stress among Public Secondary School Female Principals**

Stressor	Coping strategy	Mean Rating	Overall mean rating	Effectiveness indices of coping strategies
1. Role conflict				
• Disagreement with co-workers	Seek Arbitration	3.33	3.12	3
• Disagreement with supervisors	Seek Arbitration	3.14		
• Caught up in the middle	Recant	2.89		
2. Blocked Career				
• Critical supervisor	Respond politely	3.30	3.18	3
• Unacceptability by employer	Work harder	3.32		
• Unacceptability by employer	Complain less bitterly	2.63		
• Not noticed or appreciated		3.46		
3. Work Environment				
• Hazardous	Proactive approach	3.36	3.58	4
• Lack of privacy	Create structures	3.76		
• Dealing with many little hassle	Programme activities and meetings	3.63		
4. Work Overload				
• Too little time to do it	Work faster	3.48	3.60	4
• Tackling new and old responsibilities	Delegate	3.59		
• Interference with personal life	Be principled	3.65		
• Size of workload	Delegate	3.66		
5. Information gap				
• Unsure about responsibilities of my job	Seek advice from senior	3.76	3.68	4
• Lack of information to perform tasks	Get assistance from experts	3.61		

• Under qualified for certain tasks	Go for capacity building	3.78		
• Unsure of criteria used to evaluate my performance	Seek clarification from supervisor	3.56		
6. Sponsor				
• Insistence on religious tone	Compromise	3.33		
• Undermining other religious groups in school	Use MOEST policies	3.44	3.41	3
• Recruitment of staff and employment	Use official guidelines	3.47		
7. School discipline				
• Undisciplined teachers	TSC Code of Regulations for teachers 2005, Act 2012	3.31		
• Undisciplined students	School rules and regulations	3.58	2.96	3
• Undisciplined support	Employment Act 2007	126		
• Staff Incompetent staff	Retraining /capacity building	3.69		
8. Board of Management				
• Hiring of staff	Employment guidelines	3.59		
• School projects	MOEST policies	3.74		
• Meetings	MOEST policies	3.26	3.53	4
9. Creditors				
• Court cases	MOEST policies	2.94		
• Supply of goods	Negotiation	3.00	3.09	3
Overall Mean		3.35	3.35	3

Interpretations of Effectiveness of Coping strategies indices:

1 = Least effective strategy;

2 = Less effective;

3 = Effective strategy;

4 = more effective

5 = Most effective strategy

Interpretation of Mean Ratings

1.0 -1.44 = Least effective strategy

1.45 – 2.44 = Less effective

2.45 – 3.44 = Effective strategy

3.45 – 4.44 = more effective

4.45 - 5.00 = Most effective strategy

KEY: MOEST- Ministry of Education Science and Technology

TSC – Teachers Service Commission

From Table 4.11, it can be noted that arbitration and recantation were rated by female principals as effective strategies in coping with role conflict induced stress, polite response, working harder and complaining less bitterly were rated as effective strategies of dealing with blocked career induced stress. Proactive approach, creation of structures and programmed activities and meetings were rated as more effective strategies in dealing with work environment induced stress. Working faster, delegation of duties and responsibilities and being principled were rated as more effective strategies used by female principals to cope with work overload induced strategies. Seeking advice from seniors, getting assistant from experts, capacity building and seeking clarification from supervisors were rated as more effective strategies in dealing with information gap induced stress. Compromise, use of Ministry of Education Science and Technology policies and The Basic Education Act, 2013 were effective strategies used by principals to cope with sponsor induced stress.

Teachers Service Commission Code of Regulations for Teachers 2005, Teachers Service Commission Act 2012, School Rules and Regulations, Employment Act 2007 and capacity building were rated as effective strategies used by female principals in coping with school discipline induced stress that emanate from undisciplined teachers, support staff and students. Employment guidelines, Employment Act 2007, Ministry of Education Science and Technology policies were rated as more effective strategies for coping with Board of

Management Induced stress which emanate from recruitment and selection of staff, school projects and meetings. Ministry of Education Science and Technology policies and negotiation were rated as effective strategies for coping with creditors induced strategies that emanate from Court case and poor supply of goods. Overall the stress management strategies index of three meant that they were effective coping strategies.

Table 4.12

Individual Ratings of Effectiveness of Coping Strategies used by Female Principals in Public Secondary Schools (n =39)

Female Principals		Standard Deviation	Effectiveness indexes based on descriptive statistics
S/N	Mean		
1	3.72	.79716	4
2	3.79	.99469	4
3	4.00	0.00000	4
4	3.30	1.78403	3
5	4.17	.87428	4
6	3.79	.81851	4
7	3.03	1.21721	3
8	3.69	1.44181	4
9	4.03	1.03335	4
10	2.10	.85960	2
11	3.40	1.35443	3
12	1.66	.85673	2
13	1.40	.8550	1
14	2.97	1.12903	3
15	3.20	.40684	3
16	1.40	.85501	1
17	3.97	1.06620	3
18	3.00	1.31306	3

19	4.40	1.00344	4
20	4.59	.94556	5
21	4.59	1.23974	5
22	4.38	.90292	4
23	4.10	1.29131	4
24	2.33	.92227	2
25	3.67	.88409	3
26	3.61	1.40580	4
27	3.83	.83391	4
28	4.68	.47610	5
29	2.68	1.00369	3
30	4.53	1.10589	5
31	4.37	.80872	4
32	3.47	.77233	4
33	3.30	1.26355	3
34	1.62	.69725	2
35	3.60	1.13259	4
36	1.33	.54667	1
37	3.43	1.33089	3
38	2.60	1.67332	3
39	1.30	.51120	3
Overall mean	3.31	1.28155	3

Interpretations of Stress management strategies Effectiveness Indices:

1 = Vey low effect; 2 = Low effective; 3 = Moderate Effect;
4 = High effect 5 =Very high effective

From Table 4.12, it can be noted that 4(10.3%) rated coping strategies as least effective, 4(10.3%) as less effective, 12(30.7%) as effective, 15(38.4%) as more effective and 4(10.3%) and most effective. Overall, the coping strategies were rated as moderate in management of stress among female principals.

To determine the impact of stress management coping strategies on female principals stress levels, the coping strategies were correlated with those of stress levels using Pearson's r correlation and regression analysis. The results were as shown Table 4.13.

Table 4.13
Relationship between Coping Strategies and Stress Levels among Female Secondary School Principals

		Stress level
Coping strategies	Pearson Correlation	.674
	Sig. (2-tailed)	.000
	N	39

From Table 4.13, it can be observed that coping strategies had a strong positive significant relationship with female principals' stress. This was signified by the Pearson's r .674 and sig (2 –tailed) .000.

To illustrate the effectiveness of coping strategies on female stress levels, a scatter gram was generated. The results were as shown in Figure 4.2.

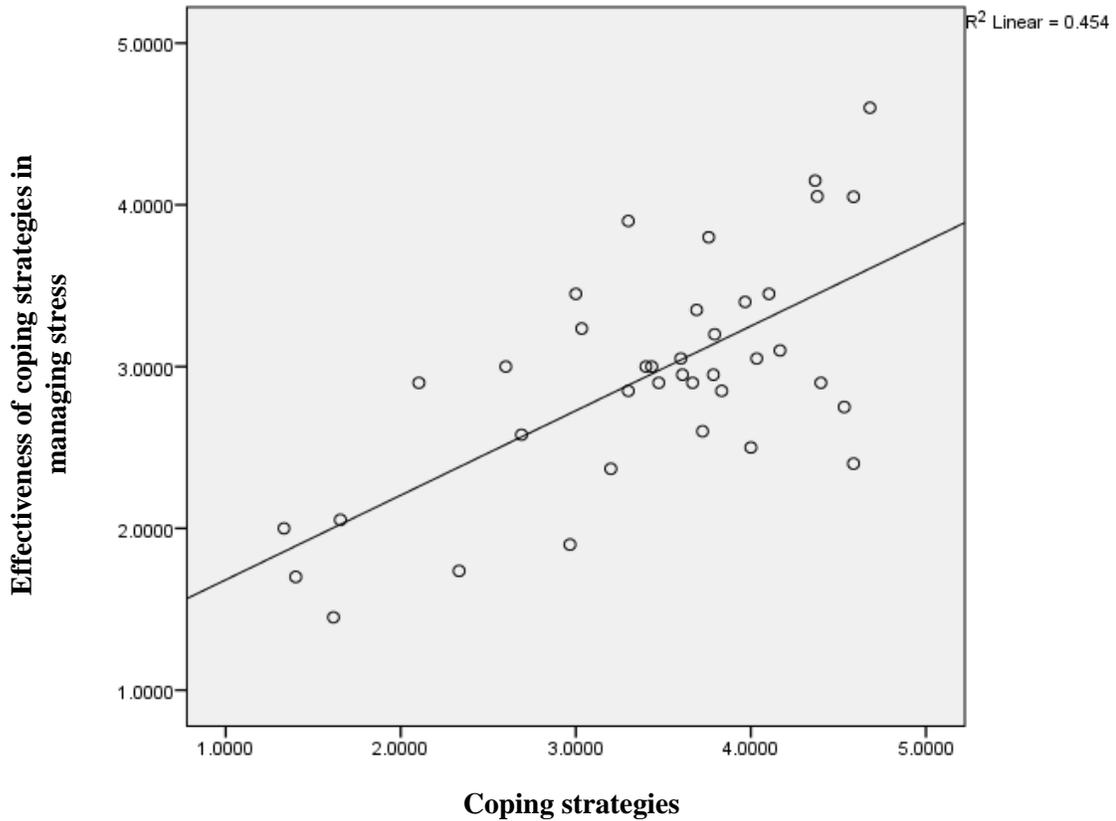


Figure 4.2: A scatter gram showing the relationship between coping strategies and effectiveness of coping strategies in managing stress

From Figure 4.2, it can be observed that one unit increase in coping strategies would increase effectiveness in managing stress by .454 units. This means that for good stress management many strategies should be used.

To estimate the influence they had, regression was performed and coefficient of determination was as shown in Table 4.14.

Table 4.14**Regression analysis of Stress Management Coping Strategies and Stress Levels of Female principals**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.674 ^a	.454	.438	.5304284

Predictors: (Constant): Coping strategies

From Table 4.14, it can be noted that the coefficient of determination was 0.438. This meant that the coping strategies accounted for 43.8% of the stress mitigation. It also meant that other factors were responsible for 56.2%. These factors included jogging in the evenings, organizing and attending get –together in involvement in “self help group” activities as indicated in the open-ended items in the questionnaire under the section titled any other important information.

To determine as to whether these strategies were significant predictors of stress level, ANOVA was computed and the results were as shown in Table 4.15.

Table 4.15**ANOVA of Stress Management Coping Strategies and Stress Levels of Female principals**

Model	Sum of Squares	df	F	Sig.
1 Regression	8.409	1	29.888	.000 ^b
Residual	10.129	37		
Total	18.538	38		

Dependent Variable: Stress level**Predictors: (Constant): Coping strategies**

From Table 4.15, it can be observed that coping strategies were statistically significant predictors of stress control among female principals ($F(1,37) = 29.888, P < 0.5$). To determine the actual mediating influence, linear regression was computed and the results were as shown in Table 4.16.

Table 4.16

Linear Regression Analysis of Stress Management Coping Strategies and Stress Levels of Female Principals

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	1.159	.339	3.423	.002
	Coping strategies	.523	.096	5.467	.000

Dependent Variable: Stress level Regression Equation: $Y = a + bx$

Predictors: (constant): Coping strategies

From Table 4.16, it can be noted that one unit increase in coping strategies would lead to 0.523 units increase in stress level of female principals. The regression equation would be as follows; female principals stress = $1.159 + 0.523x$.

Identifying and measuring the effectiveness of coping mechanisms female principals use when they experience stress was the concern of this study. To achieve this objective, 31 items, based on different stressors were used. Accordingly coping strategies based broad stressors experienced. The responses to all statements for every broad stressor were rated on five-point rating scale, adapted from Davis, Eshelman and McKay (1992) model of relaxation and stress reduction. The mean for each strategy was calculated to gauge the effectiveness. Regression analysis was computed to measure the effectiveness of these strategies in

management of stress among female principals. To determine how female principals cope with stressful situations, female principals from Rachuonyo North and Homa Bay Sub counties were asked what strategies have worked for them in coping with stress for the 2011-2014 school year.

As far as the coping strategies are concerned in terms of effectiveness, arbitration and recantation were found to be effective strategies for managing stress that emanated from role conflict when female principals disagreed with co-workers, colleagues and supervisors, while recantation was effective when managing stress that resulted from role conflict whereby the female principals found themselves between a rock and a hard place. These were situations in which they were expected to counsel and discipline a worker or even a student, who was a relative. The principal became relaxed once she recanted and initiated the arbitration process. During interviews, one of the female principals explained that after recanting, most principals turn to religious events, praying more than usual, seeking God's intervention through pastors and putting trust in God more than any other strategy in order to escape from stress. However, female principals who had not internalised the power of religion continued trying other strategies. These findings concur with those of De Nobile and McCormick (2005) who found that listening to music or relaxation tapes are ways of managing stress.

Polite response, working harder and complaining less bitterly strategies were rated as effective in managing stress that arise from critical supervision, unacceptability by employers and not being appreciative. The female principals who used these strategies argued that they were effective because their supervisors were compelled not to take them for granted in their operations as principals on realization that principals were hardworking, polite and less bitter

about the treatment from them. In this regard female principals desisted from emotional outbursts and impulsive reactions and kept themselves from getting distracted by other thoughts or activities by controlling their emotions. These findings concur with those of Greenhaus and Beutell (1985) and Von Onciul (1996) that stress due to blocked career can be managed through hard work and avoidance of confrontation.

Proactive approach, creating of structures and putting in place programmes for activities and meetings were rated as strategies that were more effective with an index of 4 in management of female principals stress generated by work environment stressors such as hazardous environment, lack of privacy and hassles. In this case female principal' stress was managed by arranging offices such that they could bolt the doors and relax for short periods before evening functions and read professional literature on management of stress. Arriving at school early say at 7.30am, to be available before school begins and to plan their days and try to clear their desks by 8.00am also reduced stress. Where stress was caused through work overload, female principals found working faster, delegation of duties and responsibilities, being principled and discussion with colleagues to be more effective stress reduction interventions among stress. This was achieved through the following measures as indicated by following measures as indicated by most of them during interviews. In fact one female principal stated; I use the following coping actions to reduce stress:

- i) Trying to be focused in my work.
- ii) Trying to relax after work
- iii) Taking immediate action on simple tasks
- iv) Acting objectively on emerging issues and keeping feelings under control.

- v) Trying to rationalise situations
- vi) Reassuring myself that everything was going to work out right
- vii) Trying to make sure colleagues are aware that I am doing my best.
- viii) Trying to forget work when the school day is over.
- ix) Trying to see humour in my work.
- x) Making concerted effort to enjoy myself with some pleasurable activities like playing volleyball.
- xi) Trying not to worry or think about overwork.
- xii) Trying to work harder and longer.

Another female principal had this to say:

- i) Working in the evenings and on weekends.
- ii) Deciding on priorities and dropping unimportant work.
- iii) Catching-up with family life during holidays
- iv) Dropping low-priority school tasks
- v) Physical exercises after work
- vi) Doing what I could but without worrying too much
- vii) Planning well ahead
- viii) Using different styles of working to enable me cope with over load.

Where information gap elements were stressors, that is, unsure of responsibilities, lack of information to perform tasks, under qualified for certain tasks and unsure of evaluation criteria; seeking advices from seniors, getting assistance from experts, undertaking capacity building and seeking clarification from supervisors were stress management strategies that were used and were rated as more effective with an effectiveness index of 4; in this regard

the study found that female principals sought for help where necessary. In fact one of the female principals stated; With regard to information gap induced stress the coping strategies I use are:

- i) Rigorous search for information
- ii) Free expression of ignorance to relevant persons
- iii) Asking for help from experts”

Another principal added that she used the following strategies:

- i) Developing cordial relationship with colleagues to solicit mutual support
- ii) Promoting teamwork and reliance on colleagues and juniors
- iii) Investigating problems promptly

Where stress among female principals was induced by sponsors, use of Ministry of Education Science and Technology policies, compromise and official guidelines sufficed. This was accomplished by keeping activities and programmes in perspective, avoiding confrontation and relaxation after work. With regard to insistence on religious tone, undermining other religious groups in school and biasness in recruiting and employment of staff most principals indicated that the following stress reduction actions worked well.

- i) Discouragement of change in religious faith of students
- ii) Prohibition of confrontation among religious groups in school
- iii) Handling religious emerging issues promptly
- iv) Discarding fear of unpleasant consequences when addressing religious conflict
- v) Being duly apologetic for cases of oversights to avoid being seen as ineffective.
- vi) Use of assertive skills when right
- vii) Keeping quiet rather than to disagreeing with religious leaders in public

- viii) Refusing inappropriate requests
- ix) Avoiding interruption of religious meetings in progress.
- x) Discouraging sponsor's meddling in school management

Where stress among female principals was induced by school discipline factors such as undisciplined teachers non-teaching staff and students; and incompetent staff, the following strategies were found to be effective: The use of Teachers Service Commission Code of regulations for teachers 2005, Employment Act 2007, Teachers Service Commission Act 2012, School rules and Regulations. Most female principals contended that these strategies could only succeed when the principals:

- i) Gained confidence through knowing more about the school and how it functions.
- ii) Understood how effective decisions are arrived at in discipline cases
- iii) Understood the deputy principal's area of responsibility
- iv) Had working knowledge the rights and privilege of staff and students in schools.
- v) Working knowledge of the basic history of the school and catchment area.
- vi) Had good understanding the complexity of school discipline.
- vii) Had expressed negative feelings, that is, showing annoyance when hurt.
- viii) Had expressed positive feelings, that is telling staff and students that they appreciate them rightfully, giving complements when they are done, initiating dialogue and receiving compliments appropriately.
- ix) Had developed good relationship with colleagues, especially with senior colleagues that facilitates more effective mutual support.
- x) Developed good personal relationship with staff.
- xi) Took teaching as their haven

- xii) Developed teamwork and reliance on other colleagues
- xiii) Constantly reminded themselves not to take self and day-to-day crises too seriously.
- xiv) Accepted the situation.

When stress among female principals was induced by Board of Management stressors such as hiring of staff, school projects and meetings; Ministry of Education Science and Technology Employment guidelines, Ministry of Education Science and Technology policies and Employment Act 2007 were rated as more effective stress management strategies. Most principals argued that stress pertaining to Board of management issues were well managed by:

- i) Making sure the agenda for Board of Management meetings were well defined.
- ii) Being available and setting up meetings while pressure is off.
- iii) Planning ahead
- iv) Talking to Board of Management members.
- v) Being philosophical, think of what you will do for the school rather than what the school will do for you; extending this philosophy to Board of management members and the whole school community at large.
- vi) Thinking positively – what an interesting and honourable job I have.
- vii) Accepting that some things will not be done.
- viii) Deciding on your own standards for the job of principalship rather than those of the other principals.
- ix) Attempting to discipline yourself to doing one thing at a time according to your list of priorities.
- x) Facilitating induction of Board of Management members on their mandate.

When stress among female principals was induced by creditors demands degenerating into court cases and poor supply; most principals asserted that the following strategies were effective in management of the stress.

- i) Deciding on priorities and dropping less urgent matters.
- ii) Dropping temporarily low-priority school tasks
- iii) Having closed door strategy
- iv) Constant self-reminders to oneself, "I will get organised next time."
- v) Trying to pretend that a lot of things are not important and application of religious faith.
- vi) Trying to avoid confrontation and relaxation after work
- vii) Taking immediate action on the basis of the present understanding of the situation
- viii) Thinking objectively about your creditors and keeping your feelings under control.
- ix) Reassuring yourself that things are good and will work out right.
- x) Not let the problem persist, solve it or reconcile it satisfactorily.

These coping strategies must have worked for many female principals as signified by regression analysis coefficient of .438 which meant that coping strategies on the whole accounted for 43.8% of variation in stress levels among female principals. Descriptive analysis on the other hand revealed that female principals were moderately stressed.

4.6 Influence of Stress among Female Principals on Students' Academic Performance in Public Secondary School

The research question responded to was: what is the influence of Stress among female principals on students academic performance in public secondary schools in Rachuonyo North and Homa Bay Sub counties. To actualize this objective the null hypotheses, there is no statistically significant relationship between female principals stress levels and students academic performance in KCSE in public secondary schools. Students' academic performance for the year 2011 to 2014 were computed and correlated (using Pearson's (r) with stress levels of principals (Table 4.5) The results were as shown in Tables 4.17 to 4.25.

Table 4.17**Students Academic performance in Public Secondary Schools 2011 -2014 headed by Female Principals**

Female Principals S/N	Performance Indices (Mean scores)
1	4.12
2	3.71
3	3.05
4	3.60
5	4.53
6	5.17
7	7.23
8	3.033
9	4.43
10	4.06
11	3.19
12	2.92
13	3.50
14	5.10
15	5.27
16	4.84
17	5.33
18	4.41
19	5.56
20	4.49
21	4.43
22	4.43
23	3.50
24	4.77
25	6.27
26	5.96
27	4.46
28	5.33
29	4.60
30	5.05
31	4.20
32	3.68
33	3.06
34	2.93
35	4.13
36	2.43
37	4.20
38	3.35
39	4.07
Overall mean	4.32

From Table 4.17 it can be noted that students' performance in KCSE was generally below average with an overall mean of score of 4.32, with a coefficient of variation of 16.5%. This means that the variability was not high. The results were below average in most schools. Indeed these findings reflected serious concerns relating to factors that influence students' academic performance, stress among female principals being one of them.

Equipped with this literature, the study used regression analysis to analyze the stress levels and students' performance using data from Tables 4.5 and 4.17. The results were as shown in Table 4.18 and 4.25.

Table 4.18

Relationship between Female Principals Stress Level and Students Academic Performance

		Students academic Performance
Female principals	Pearson Correlation	.164
Stress level	Sig. (2-tailed)	.317
	N	39

From Table 4.18 it can be observed that influence of stress level among female principals on student's academic performance was weak, positive and not significant ($r = .164$, $N = 39$, $p > .05$). Therefore the null hypothesis that "there is no statistically significant relationship between female principals stress levels and students academic performance in KCSE in public secondary schools" was accepted.

Scatter gram was generated to illustrate the relationship between female principals stress level and students academic performance.

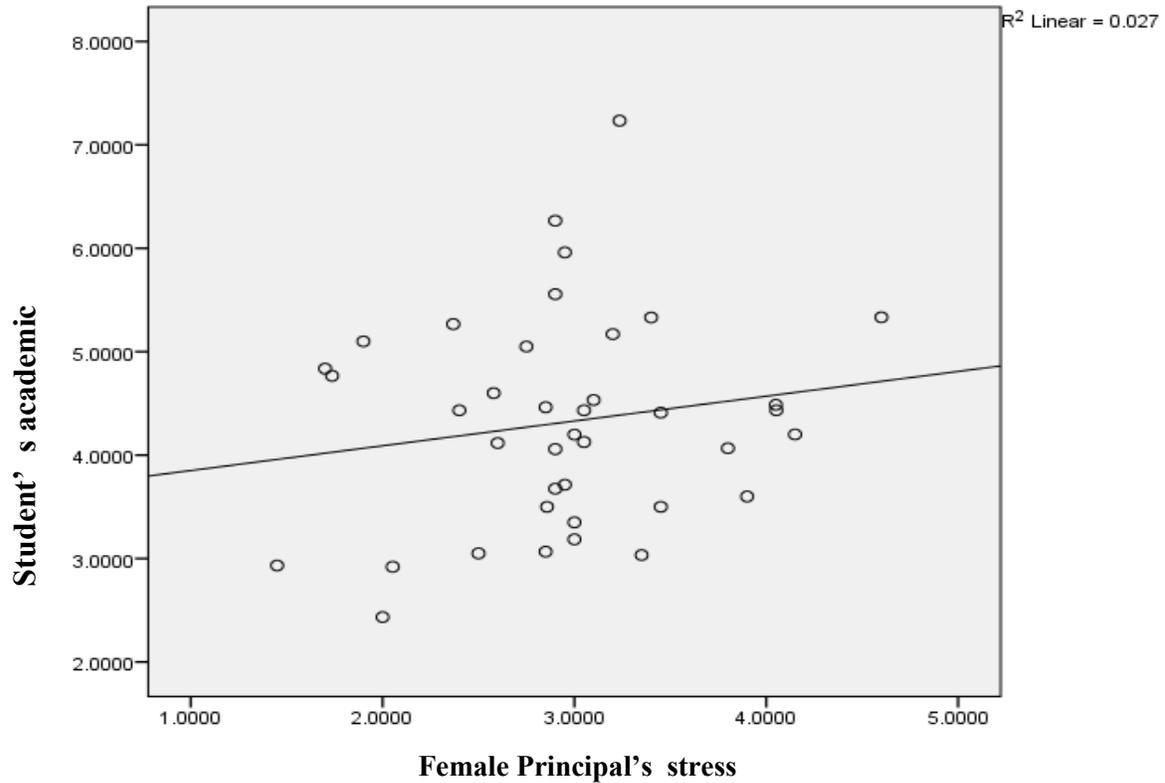


Figure 4.3: A Scatter gram showing the relationship between Female Principals' stress and Students' Academic Performance

From Figure 4.3, it can be observed that the relationship between female principals' stress and students academic performance was negligible as the co-ordinates fall further from the regression line, and were scattered all over. This means that the relationship was weak and not significant.

To rigorously interrogate these results further, coefficient of determination was computed and the results were as shown in Table 4.19.

Table 4.19

Regression analysis of female principals stress levels and students academic performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.164 ^a	.027	.001	1.0176798

a. Predictors: (Constant), stress level

From Table 4.19, it can be observed that stress among female principals accounted for 0.1% of variation in students' academic performance. This indicated stress was not a significant factor in KCSE. To confirm this ANOVA was done and the results were as shown in Table 4.20.

Table 4.20

ANOVA of Stress level among Female Principals and Students Academic Performance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1.065	1	1.065	1.028	.317 ^b
Residual	38.320	37	1.036		
Total	39.384	38			

a. Dependent Variable: Students academic performance

b. Predictors: (Constant), stress level

From Table 4.20 it can be noted that stress levels among female principals was not a significant predictor of students' academic performance. To interrogate these results rigorously, female principals experiencing different stress levels, were categorized as low, moderate and high and correlated with students' performance and the results were as shown in Tables 4.21 to 4.24.

Table 4.21: Relationship between Low Stress level and students academic Performance

		Student academic Performance
High Stress level	Pearson Correlation	.247
	Sig. (2-tailed)	.556
	N	7

From Table 4.21, it can be observed that low stress among female principals had a weak, positive and not significant influence on students' academic performance ($r = .247$, $N=7$; $p > .05$).

It is important to note that although there are many factors that influence the performance of students, the principal is a key factor. This is because he is the chief co-coordinator of factors of production in a school. This means that the principal must be physically and psychologically stable. There should be equilibrium between the body and the mind. This means that there should be no wear and tear either on the body or the mind or both. Studies have revealed that there is a relationship between stress and productivity. According to Bray, Camlin, Fairbank, Duntzman and Wheelers, (2001) the link between perceived work-related stress and impaired functioning on job is well documented, demonstrating the classic inverted u-shaped relationship between stress and performance. That is, employees who experience a moderate degree of job stress perform their jobs most efficiently, while those who experience either low or high work-related stress show reduced work efficiency. It is against this backdrop that stress level of female principals was correlated with students' academic performance (Table 4.17). The assumption held was that students' academic performance was a measure of female principals' performance. These findings concur with those of Hebb (1972) who proposed that work with few demands results in poor performance

of tasks. Increasing demands are perceived as stimulating and energizing but if they are beyond the person's coping abilities they lead to high levels of anxiety, poor concentration and reduced effectiveness in one's work. This is illustrated by Hebb (1972) while discussing stress in teaching (Figure 4.4).

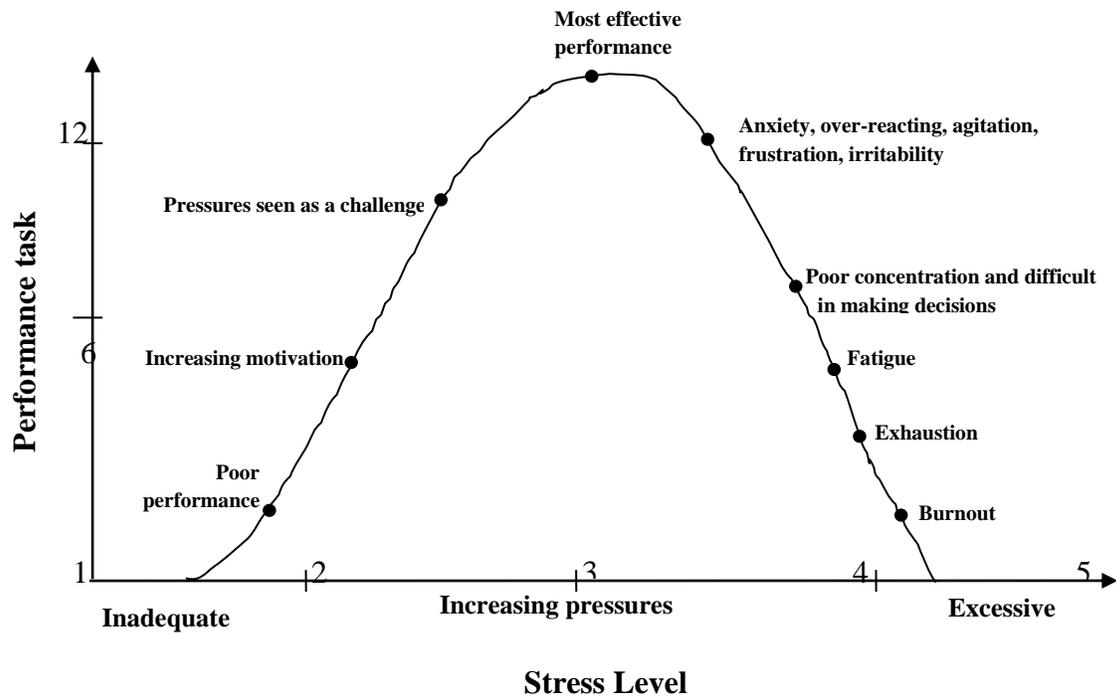


Figure 4.4: The relationship pressures, work performance and stress reactions (stress level)

Source: Hebb (1972) Stress in Teaching

The diagrammatic illustration (Figure 4.4) indicates that continued demands without an increase in coping resources, may lead to fatigue, exhaustion and burnout and eventually poor performance. According to Hebb (1972) shows what studies reveal on relationship between stress and teaching because teaching is a service industry and the managers efforts are measured by the ultimate output or product (KCSE results).

The study also sought to establish the relationship between moderate stress among female principals and performance of task. The results were as shown in Table 4.22.

Table 4.22

Relationship between moderate Stress level among Female Principals and Students Academic Performance

		Students academic Performance
Moderate Stress level	Pearson Correlation	.224
	Sig. (2-tailed)	.293
	N	24

From Table 4.22, it can be observed that moderate stress level among female principals had a weak, positive but not significant relationship with students' academic performance ($r = .224$, $N = 24$, $p > .05$). This finding does not agree with the findings of Bray et al (2001) and Hebb (1972) whose findings were that moderate stress result in high performance. Nevertheless, these results may have been due to the effect of intervening variables which were covariates. Alternatively the moderate stress may have been negative stress and not eustress. To confirm the actual contribution, regression analysis was computed and the results were as shown in Table 4.23.

Table 4.23: Regression analysis of moderate stress level among female principals and students academic performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.224 ^a	.050	.007	1.087271

a. Predictors: (Constant), moderate stress level

From Table 4.23 it can be revealed that moderate stress level among female principals accounted for only .7% of the variation of students' academic performance. To confirm

whether moderate stress level among female principals was a significant predictor of students academic performance, ANOVA was computed. The results were as shown in Table 4.24.

Table 4.24

ANOVA of Female Principals stress levels and Students Academic Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.375	1	1.375	1.163	.293 ^b
	Residual	26.007	22	1.182		
	Total	27.382	23			

a. Dependent Variable: Students academic performance

b. Predictors: (Constant), High stress level

From Table 4.24, it can be observed that moderate stress level among female principals was not a significant predictor of students academic performance.

Table 4.25

Relationship between High Stress level among female principals and students academic performance

		Students academic Performance
High Stress level	Pearson Correlation	.885
	Sig. (2-tailed)	.019
	N	8

From Table 4.25 it can be observed that high stress level among female principals had a strong and positive relationship with students academic performance ($r = .885$, $N = 8$; $p < .05$). Regression analysis was not computed because N-value was smaller than 10, the

minimum value recommended for regression analysis to be computed (Brace, Kemp & Snelgar, 2006). Nevertheless the output revealed that there was a strong positive relationship between high stress level among female principals and students' academic performance. These findings do not concur with those of Bray et al (2001) and Hebb (1972) whose findings associate high stress with poor performance. It is possible that the high stress experienced could have been eustress that enhances performance. This means the few principals may have been energized and focused by high stress levels rather than having had experienced, fatigue, exhaustion and burnout in the course of their principalship.

The findings of this study indicate that high stress levels among female principals led to improved academic performance. This is probably because the female principals were forced to go an extra mile to improve the results due to pressure from the stakeholders. This included the dubious activities as was reported by Cabinet Secretary of the Ministry of Education Science and Technology during the release of KCSE 2015 results (The Standard, 2016 March 3rd) where massive cheating in examinations and irregularities were reported. The study findings do not concur with other findings elsewhere by Hebb (1992) and Bray et al (2001) which is a contradiction.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions and recommendations of the study.

5.2 Summary of the Findings of the Study

The study findings were summarized as follows;

5.2.1 Stress levels among public secondary school female principals

The study established that female principals were moderately stressed with a descriptive index of 3. Seven (17.95%) were experiencing low stress level, 24(61.54%) moderate stress level, 7(17.95%) high stress level and 1(1.56%) was experiencing high stress level. The distribution of stress levels was in fact a normal curve.

5.2.2 Factors influencing stress among public secondary school female principals.

The study established that factors that influence stress among female principals were many. Eleven (57.9%) had moderate influence and 8(42.1%) had high influence. These results mean that most factors had moderate influence. Correlational analysis revealed that there was a strong positive relationship between stressors and stress level ($r = .728$, $N = 39$, $p < .05$). This means the stress levels can be attributed largely to these factors. Regression analysis indicated that stressors explained 51.6% of stress level among female principals. The other 49.4% was due to other factors that were not part of the study. These factors were also found to be significant predictors of stress among female principals ($F(1, 37) = 40.500$, $p < .05$). The regression equation is female principals' stress = $0.553 + .709X$

5.2.3 Influence of Coping Strategies on Stress among female principals in Public Secondary

The study established that on the whole coping were effective in management of stress among female principals. The following strategies were rated as being most effective. They included arbitration, creating new structures, assistance from experts, school rules and regulations delegation, capacity building and use of MOEST policies. Regression analysis revealed that coping strategies were effective as the relationship between coping strategies and stress level was positive, strong and significant ($r = .674$, $N = 39$, $P < .05$). The coping strategies were also significant predictors as was established by ANOVA ($F(1, 37) = 29.888$, $P < .05$). Regression analysis revealed that coping strategies accounted for 43.8% of the stress level of female principals, the other 56.2% could be explained by other factors. Regression equation is female principals' stress = $1.159 + .523X$.

5.2.4 Influence of Stress among Female Principals on Students' Academic Performance in Public Secondary Schools

The study established that overall relationship between stress levels among female principals and students' performance was weak, positive and not significant ($r = .164$, $N = 39$, $P > .05$). The relationship between principals experiencing low stress was weak and positive; and not significant ($r = .247$, $N = 71$, $P > .05$). The relationship between female principals experiencing moderate stress and students performance was weak positive and not significant ($r = .224$, $N = 24$, $P > .05$). Regression analysis revealed that moderate stress accounted for on 0.7% which is negligible. The relationship between female principals experiencing high stress levels and students, performance was strong, positive and significant

($r = .885$ $N = 8$ $p < .05$). Regression analysis was not done because the predictor variable “N” value was less than 10 times the dependent variable.

5.3 Conclusions

The study made the conclusions based on the findings of the study.

5.3.1 Stress Levels among public secondary school female principals.

Most female principals in Rachuonyo North and Homa Bay Sub counties stress level was moderate.

5.3.2 Factors influencing stress among public secondary school female principals.

Factors influencing stress level among female principals were many and the influence was strong, Positive and significant. Role conflict, lack of career development opportunities, lack of privacy, political interference, increased participatory management, increased use of ICT, lack of office space, sexual harassment, inadequate support from stakeholders, poor communication and lack of opportunity for promotion had a moderate influence on female principals stress. Moderate stress positively influences performance, therefore notwithstanding the negative effect it hardly deters performance. This is because the female principals strive to prove that they are equal to the task despite the difficulties they face. Working environment, undisciplined teachers, pursuit for excellence, conflicting demands from stakeholders, lack of time to teach and administer, staff shortage, work load and uncertainty in job expectations had high influence on stress among female principals'. Overall descriptive statistics analysis revealed that these factors had moderate influence on female principals stress.

Inferential statistical analysis output revealed that the factors under study had a high influence on female principals' stress which concurred with the descriptive statistics analysis output. The factors explained 52.9% of female principals' stress. The other 47.1% was due to other factors that were not investigated. This means that there are many other factors that influence female principals' stress that were not captured by this study. These factors were also established as significant predictors of female principals' stress levels.

5.3.3 Influence of Coping Strategies on Stress among Female Principals in public secondary schools

Stress management coping strategies were effective. These could be the reason as to why only female principal was established to be experiencing very high stress level. The stress management strategies used by female principals were effective in moderating their stress levels. These coping strategies explained 43.8% of stress levels and were significant predictors of stress levels among female principals. Stress management strategies are highly complex such that there is no single coping strategy that can be effective on its own but a constellation of them.

5.3.4 Influence of Stress among Female Principals on Students' Academic Performance in Public Secondary Schools

The relationship between female principals experiencing low and moderate stress levels and students performance was weak, positive and not significant. High stress levels among female principals influenced students performance highly.

5.4 Recommendations

5.4.1 Stress Levels among public secondary school female principals

Female principals should be encouraged to use appropriate stress management coping strategies to guard against very high stress levels and activities that add value be encouraged.

5.4.2 Factors influencing stress among public secondary school female principals.

- i) Principals should attend workshops on stress management. This will help them to easily identify strategies that can be used.
- ii) Female principals' stress should be managed by addressing the identified factors effectively. To do this the female principal should remind herself that the stress experienced is both internally and externally generated.
- iii) The principal should look at a school as her business. The basic supplies must be guaranteed and availed. Simple items like paper, folders, pens, binders should be well supplied as this would greatly reduce stress among female principals.
- iv) The in-tray and out-tray should be clean as it enhances time management for retrieval of documents and information, which in-turn reduces stress among female principals.
- v) Principals should delegate duties and responsibilities to suitable staff members. This reduces overwork and frustrations when infractions are experienced. Delegation also leaves the principal with duties and responsibilities that are unique and therefore ordinary ones are sorted out easily with ease.
- vi) The principals should be innovative and creative because most factors do not have clear approaches to their solutions. For instance time management is always an

individual initiative and is anchored in individual organizational skills which reduces frustration and stress.

vii) The issues of space, staff shortage, workload and role conflicts are best dealt with through benchmarking with successful principals and face-to-face approach with personnel who are charged with the responsibility of dealing with such matters.

5.4.3 Effectiveness of Coping Strategies in managing Stress among Public Secondary Female Principals

- i) Female principals should continue using coping strategies to keep stress at manageable levels.
- ii) Stress management programmes should be organised for principals of secondary schools to educate them on stress management strategies and their effect on school principals' effectiveness and health.
- iii) Principals should concentrate on school management issues per se, that is, they should delegate the teaching load assigned to them. This would reduce work overload.
- iv) Seminars and workshops should be organised for principals on causes, consequences of stress and stress management strategies in schools.
- v) The government should put in place mechanisms of reducing stress and depression as a worthwhile goal for principals of schools by reviewing employment policies.
- vi) Interventions should be put in place to improve work environment and work relationships that are a locus of stress for principals so as to mitigate the effect of stress on the quality of life and ability to function well on the job.

vii) Female principals should be protected against unnecessary harassment. Female principals should be appointed rather than deployed to schools as heads.

5.4.4 Effect of Stress among Female Principals on Students' Academic Performance in Public Secondary Schools

Female principals be sensitized on maintaining stress levels that make them productive and discard the outdated ones, that are irrelevant. That is eustress in female principals should be enhanced while negative stress be minimized.

5.5 Suggestions for Further Research

The study exposed the following areas that require further research;

- i) Influence of stress on teacher performance in public secondary schools in Kenya. This is necessary because stress was found not to be confined to female principals and its effect is vital in the teaching profession for purposes of achieving the objectives of education.
- ii) Influence of stress among Deputy principals and its effects on their performance in public secondary schools in Kenya. This is necessary because stress was found not to be confined to female principals and its effect is vital in the teaching profession and deputy principals normally assume positions of Deputy principals sooner or later.

REFERENCES

- Abouserie, R. (1996). *Stress, Coping and Job satisfaction in University Academic Life*. Educational Psychology.
- Adams, E. (2001). A proposed causal model of vocational teacher stress. *Journal of Vocational Education and Training*. 53(2):223-246.
- Adams, J.D. (1980). *Improving Stress Management: An Action Research Based OD intervention*. Understanding and Managing stress. A book of Readings. University Associates, San Diego, California.
- Ajayi, K. (1995). *Reflections on the Nigerian Education System: A college Provosts' perspective*. Ijebu Ode, Nigeria: Jimmy Press.
- Ali, F., Farooqui, A., Amin, F., Yahya, K., Idrees, N., Amjad, M., Ikhlag, M., Noreen, S. & Irfan, A. (2011). Effects of stress on job performance.
- Anbu, A. (2015). Professional Stress of Higher Secondary School Teachers. *International Journal of Multidisciplinary Research and Development* 2(1):1-3.
- Anderson, E.S., Coffey, S.B., & Byerly, T.R. (2002). Formal organization initiatives and informal Workplace Practices: Links to work-family Conflict and Job related outcomes. *Journal of Management* 2(8):787.
- Antonio, A.S., Polychroni, F., & Vlachaki, A.N. (2006). Gender and age differences in occupational stress and professional burnout between primary and high school teachers in Greece. *Journal of Managerial Psychology*, 2 Vol. (1)7: 682-692.
- Beehr, T.A. (1976). Perceived Situational Moderators of the Relationship between subjective Role Ambiguity and Role strain. *Journal of Applied Psychology* Vol. 6(1): 35-40.

- Benmansour, N. (1998). Job satisfaction, stress and coping strategies among Moroccan high school teachers. *Mediterranean Journal of Educational Studies* 3(1): 13-33.
- Bennel, P., & Akyeampong, K. (2007). Teacher Motivation in Sub-Saharan Africa and South Asia. New York: DFID Department of International Development.
- Bennet, N., & Cass, A. (1998). From Special to ordinary school. Case studies in integration. London: Cassel Educational Limited.
- Borg, M.G. (1991). Stress in Teaching: A study of occupational stress and its determinants. Job satisfaction and career commitment among secondary school teachers. *Educational Psychology*, Vol. 1.
- Boyland, L. (2011). Job Stress and Coping strategies of elementary principals: A statewide study. *Current Issues in Education*, 114(3):1-11.
- Brace, N., Kemp, R., & Snelgar, R. (2006). SPSS for Psychologist; New York Published by Pulgrave, Macmillan.
- Bray, R.M., Camlin, C.S., Fairbank, J.A., Dunteman, G.H. & Wheelless, S.C. (2001). The Effects of stress on Job Functioning of military men and women. *Armed Forces Soc.* 27 (3):397-417.
- Bull, C. (2013). The Research Project: How to write it. New York.
- Bunce, D., & West, M.A. (1996). Stress Management and Innovative Interventions at work. *Human relations*, 49 (2): 209-32.
- Chandolla, T., Brunner, E. & Marmot, M. (2006). Chronic stress at work and the metabolic syndrome: A prospective Study. London: Br Med J: 332:521-524.
- Chaplain, R.P. (2001). Stress and Job Satisfaction among primary head teachers: A question of balance? 197-215. London: Education Management Administration.

- Chen, M. R. & Miller, G. (1997). *Teacher Stress: A Review of the International Literature*.
ERIC Document 410 187.
- Cohen, L., Manion, L. & Morrison, K. (2007). *Research Methods in Education*. London:
Routledge Tylors & Francis.
- Cook, C. W., & Hunsaker, P. L. (2001). Management and Organizational Behavior.
Retrieved from [http:// Karlknapp.com/resources/management/mgt300booksummary.docon](http://Karlknapp.com/resources/management/mgt300booksummary.docon)
6/10/2014 at 9.00pam.
- Creswell, J.W. (2005). *Educational Research: Planning, Conducting and Evaluating
Quantitative and Qualitative Research*. New Jersey: Pearson Prentice Hall.
- Crossman, A., & Harris, P. (2006). Job Satisfaction of secondary school teachers.
Educational Management and Leadership, Vol. 34 (1): 29-46.
- Daily Nation Paper. (2014a, June 27th). Poor –results tutors ordered back to class. *Daily
Nation*. Nairobi: Nation Media Group. P. 6.
- Daily Nation Paper. (2014b, June 27th). Sexual abuse in schools worries TSC. *Daily Nation*.
Nairobi: Nation Media Group. P. 6.
- Daily Nation Paper. (2014c, June 27th). Thirty nine percent of teachers missing class *Daily
Nation*: Nairobi; Nation Media Group. P. 6.
- De Nobile, J.J., & McCormick, J. (2005). Job satisfaction and occupational stress in Catholic
Primary Schools. Paper presented at the Annual conference on the Australian
Association for research in education. Sydney: Australia.
- De Jesus, S. N., & Conboy, J. (2001). A stress management course to prevent teacher
distress. *The International Journal of Educational Management* 15(3): 131-137.
- Dinham, S. (1993). ‘Teachers under stress’, *Australian Educational Researcher*, **20**, (3)1–14.

- Dollard, M.F. (2003). *Occupational Stress in the Service professions*, New York: Taylor & Francis.
- Educational Research Service. (1999). *Professional Development for school principals. The informed Educator Series*.
- Farber, B. (1991). *Crisis in Education: Stress and Burnout in the American Teacher*. San Francisco, Calif.: Jossey-Bass.
- Fisher, M. H. (2011). Factors influencing Stress, Burnout, and Retention of Secondary Teachers. *Current Issues in Education*, 14(1). Retrieved from <http://cie.asu.edu>.
- Fontana, D. (1989). *Managing Stress*. London: The British Psychological Society and Routledge.
- Forlin, C. (1995). Concerns and beliefs about inclusive education: appraisal of stress and coping. Unpublished manuscript, University of Western Australia.
- Forlin, C. (2001). Inclusion: Identifying Potential Stressors for regular class teachers. *Educational Research*. 43(3): 235-245.
- Friedman, I. (1997). High and Low burnout principals: What makes the difference? ERIC Document Number ED410685.
- Gebrekiros, H.A. (2015). Occupational Stress among Secondary School Teachers and their Coping Strategies: The Case of Central zone of Tigray Region. *International Journal of Academic Research in Education and Review*. Vol. 3(6): 143-157. Ethiopia.
- Gonzalez, M. A. (1997). A Study of the relationship of stress, Burnout, hardiness and social support in urban secondary school teachers. Unpublished Ph.D Thesis, Layola, University of Chicago. *Dissertations Abstracts International*. Vol. 57 No. 2

- Green, F. (2000). The Head teacher in the 21st Century. *Being a successful school leader*. London: Pearson Education.
- Greenhaus, J. H., & Beutell, N. (1985). Working Hours, Work-family Conflict and Work-family Enrichment among Professional Women: A Malaysian Case. 2011 *International Conference on Social Science and Humanity*. Vol.5: 1-4. IACSIT Press, Singapore.
- Greenhaus, J. H., & Beutell, N. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10: 76-88.
- Guglielmi, R. S., & Tatrow, K. (1998). Occupational stress, burnout and health in teachers: A Methodological and Theoretical analysis. *Review of Educational Research*, 17(1): 39-52.
- Harris, O. J., & Hartman, S. J. (2002). *Organizational behavior*. New York: Best Business Books.
- Hall, K., & Savery, L.K. (1986). Tight Rein, More stress. *Harvard Business Review* 23(10): 1162-1164.
- Hawe, E., B., Tuck, R., Manthei, V.A., A & Moore, D. (2000). Job satisfaction and stress in New Zealand primary teachers. *New Zealand Journal of Educational Studies* 3(2):193-205.
- Hebb, D. (1972). *Textbook of Psychology*. Philadelphia: Saunders.
- Holmes, H. & Rahe, R. (1967). The Social Readjustment Rating. *Journal of Psychosomatic Medicine*, 11: 213-218.

- Hoyle, E. (1989). The study of Schools as Organizations. *Management in Education: The Management of Organizations and individuals*. Ward Lock Education /Open University.
- Hughes, R.E. (2001). Deciding to leave but saying: Teacher burnout, precursors and turnover. *International journal of Human Resource Management* 12(2): 288-98.
- Imtiaz, S. & Ahmad, S. (2009). Impact of employee productivity, performance and turnover; An important managerial perspective. *International Review of Business Papers*, 5(4): 468 -477.
- Ivancevich, J., Konapske, R., & Matteson, M. (2006). *Organizational behavior and management*. New York: McGraw Hill.
- Ivancevic. J. M., Gilbert, J. A., & Stead, B.A. (1999). A new organizational paradigm. *Journal of Business Ethics; Research Library* Vol. 21 (1):1-16.
- Jacobsson, C., Pousette, A. & Thylefors, I. (2001). Managing stress and feelings among Swedish comprehensive school teachers. *Scandinavian Journal of Educational Research* March, 45 (1):37-53.
- Johnson, S., Copper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). *The Experience of Work related stress across occupants*. New York: J Manage Psycho.
- Jonas, M. N. (2001). Relationship between perceived social support, stress levels and general health of black teachers: A descriptive study. Magister Artium in Clinical Psychology thesis. University of Port Elizabeth.
- Karasek, R. A., & Theorell, T. (1990). *Healthy Work. Stress Productivity and Reconstruction of working life*. New York. Basic books.

- Kelly, M. J. (1991). Occupational Stress among Principals /Director of Public sector educational establishments in the UK. Manchester: UMIST.
- Kemery, E., Mossholder, J. & Bedian, A. (1987). Role Stress, Physical Spontaneity and Turnover Intention. *Journal of Occupational Behavior*.8:11-23.
- Kendi, R.S. (2012). Impact of Occupational stress on head teachers tasks in secondary schools of Kisumu County, Kenya. Unpublished Master of Education Project. Kenyatta University.
- Kenya Secondary School Heads Association. (2014). The Principal. Nairobi. *Secondary School Magazine*.
- Kenya Secondary School Heads Association Conference. (2014). Proceedings at KESSHA Conference held at Mombasa, Kenya.
- Koech, S.J., Tikoko, B. J., Bernard, C., & Chemwei, B. (2014). Institutional Factors that influence teacher turnover in Public Secondary Schools in Baringo District.
- Koome, I.N. (2007). The Exodus of Principals Teacher Management Issues in East Africa. *UNESCO Africa*. 17 (10): 6.
- Kousar, S., Dogar, I.A., Ghazal, S., & Khatak, A.K. (2006). Occupational Stress and Job Performance. *International Journal of academic research in progressive education and development*. 1(2):64-84.
- Kothari, C.R. (2003). *Research Methodology: Methods and Techniques*. Wishwa Prakashian. New Delhi.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review* February, 53(1):27-35.

- Kyrianacou, C., Kunc, R., Stephens, P., & Hutren, A. (1999). Student teachers motivation to become secondary school teacher in England and Norway. *Educational Review*, 55: 255-263.
- Lambert, V., Lambert, C. & Ito, M. (2004). Workplace stressor, ways of coping and demographic characteristics as predictors of physical and mental health. *International Journal of Nursing Studies*. 41(11):85-97.
- Lait, J., & Wallace, J.E. (2002). Stress at work: A study of organizational professional conflict and unmet expectations. *Relations Industrielles*, 57(3):463-487.
- Levi, L. (1987). Occupational Stressors, Biological stress and workers Health. *Journal of the University of occupational and environmental Health*. (Kitakyuushu, Japan Vol. 11:229-245.
- McEwen, A., & Thompson, W. (1997). After the National Curriculum: Teacher Stress and morale: *Research in Education May*, 57:57-66.
- MacPherson, M.A. (1985). Burnout and the School Principal, *Canadian Administrator*, Vol. 2(5): 1-4.
- Martha, D., Elizabeth, R.E., & Matthew, M. (1988). Relaxation and Stress Reduction Workbook. Oakland: New Haerbinger publications, Inc.
- Mbua, F.N. (2003). Educational administration: Theory and Practice. Limbe, South West Province, Cameroon: Design House.
- Melgosa, J. (2006). Less Stress. Editorial Safety. Spain.
- Montgomery, C., & Rupp, A.A. (2003). A Meta-analysis for Exploring the Diverse Causes and Effects of Stress in Teachers. University of Ottawa. Canada.
- Morse, J.M. (1994). Designing funded Qualitative Research Thousand Oaks, CA: Sage.

- Mugenda, O.M., & Mugenda, A.G. (2003). *Research Methods: Quantitative and Qualitative Approaches*, Nairobi. ACTS Press.
- Murray, T.J., & Forbes, D. (1986). Where have all the middle managers gone? *Dun's Business month*, 31-34.
- Musyoka, M., Ogutu, M., & Awino, Z.B. (2012). Employee Stress and Performance of Companies listed in the Nairobi Securities Exchange. *DBA Africa Management review* 2012, Vol. 3 (1):115-129.
- Nahavandi, A., & Malekzadeh, R. (1999). *Organizational Behaviour. The person - organization fit*. Upper Saddle River, new Jersey: Prentice- Hall.
- Nasurudin, M.A., Ramayah, T., & Kemaresan, S. (nd). *Organizational Stressors and Job Stress among Managers: The Moderating Role of Neuroticism*. Retrieved from citeseerx.ist.psu.edu/.../download..on 10/9/2017 at 10.00pm.
- Newstrom, J. (2007). *Organizational behavior; human behavior at work*. New Delhi: McGraw Hill.
- Nhundu, T. (1999). Determinants and Prevalence of occupational stress among Zimbabwean school Administrators. New York: Education Administration. *Journal of Educational Administration* Vol.3 (7):256-272.
- Ngari, S.M., Ndungu, A., Mwonya, R., Ngumi, O., Mumiukha, C., Chepchieng, M., & Kariuki, M. (2013). Levels of Stress among secondary school administrators and its implication in education management in Kenya. *Academic Journals*.
- Ngidi, D. P. & Sibaya, P. T. (2002). Black teachers' personality dimensions and work-related stress factors. *South African Journal of Psychology* December, 32(3):7-15.
- Nkapa, N. (1997). *Educational Research for Modern Scholars*. Lagos. Dimension Pub.

- Nilleepa, N. (1997). *Educational Research for modern scholars*. Lagos: Fourth Dimension publisher.
- Orodho, J. A. (2004). *Elements of Education and Social Research Methods*. Masola publishers. Nairobi, Kenya.
- Ostell, A., & Oakland, S. (1995). Head teacher stress, coping and health. Aldershot: Avebury.
- Phillips, S., Sen, D., & McNamee, R. (2008). Risk factors for work related stress and health in head teachers. *Occupational Medicine* (London) 58(8):584-586.
- Pithers, R., & Sohen, R. (2002). Gender and Age as moderators of the relationship between efficacy of vocational teachers' personal resources and strain. *Australian and New Zealand Journal of Vocational Education Research*. 10(2): 45-68.
- Poornima, R. (2010). Emotional Intelligence, Occupational Stress and Job satisfaction of Special Education Teachers. Ph.D thesis Department of Education, Dravidian University, Kuppam.
- Quarles, H. R. (1996). Burnout in heads of Independent schools in Southern California, Unpublished PhD Thesis. *Dissertations Abstracts International*, Vol. 57, No. 7.
- Rabinowitz, S., & Stumpf, S. (1987). Facets of role conflict, role-specific performance and corporate level within the academic career. *Journal of Vocational Behavior*. 30(1):72-83.
- Reddy, G. L. (2011). Occupational stress, professional Burnout and job satisfaction of university teachers in South India, UGC major research project, PhD thesis Department of Education, Dravidian University, Kuppam.
- Robbins, S.P., Coulter, M., & Vohra, N. (2010). *Management*. Pearson Prentice Hall, India.

- Robbins, S. (2003). *Organizational behavior*. New Jersey: Pearson Education.
- Robbins, S.P. (2001). Organizational Stressors and Job Stress Among Managers: The Moderating Role of Neuroticism. *Journal Article*. Retrieved from ramayah.com/journalarticlespdf/organizationalstressors.pdf.
- Rout, U. R., & Rout, J. K. (2002). *Stress management for primary health professionals*. New York: Kluwer Academic/Plenum Publishers.
- Salami, A.O., Ojukuku, R.M. & Ilesanmi, O.A. (2010). Impact of job stress on managers performance. *European Journal of Scientific Research*, 45(2): 249-260. Retrieved from <http://www.eurojournals.com/ejsr.htm>.
- Seley, H. (1976). *The Stress of Life*. New York: McGraw-Hill.
- Seyle, H. (1984). *The Stress of Life*. New York. McGraw Hill Books Company.
- Shann, M.H. (2001). Professional Commitment and Satisfaction among teachers in urban middle schools. *The journal of Educational Research*, 92 No. 2: 67-73.
- Schiller, J. (2002). Teaching Principals in Smaller Primary Schools: Their issues, challenges and concerns AARE Conference.
- Schroeder, R.M., Akotia, C.S., & Apekey, A.K. (2001). Stress and Coping among Ghanaian School Teachers, *Ife Psychologia: An International Journal*. Vol. 9(1): 89-98.
- Sodoma, B., & Else, D. (2009). *Job satisfaction of lower public school principals*. *The Rural Educator*, Vol. 31(1): 10-18.
- Stamper L.C., & Johlke, C.M. (2003). The Impact of Perceived Organizational support on the Relationship between Boundary Spanner, role, stress and work outcome. *Journal of Management*. Vol. 2(9): 569.
- Siddiqui, F.A. (2012). Occupational Stress in Teachers: A comparative study of public and Private schools in Hyderabad City. *Journal of Education* Vol. 42 (13):62-73.

- Sultana, B., Bano, F., & Sherfa, M.D. (2012). The Nature and Impact of Teacher Stress in the Private Schools of Gilgit –Baltistan, Pakistan. *Journal of Pakistan Psychiatric Society*. 3(2):93-97.
- Taylor, E.S. (1995). *Health Psychology*. New York: McGraw Hill, Inc.
- Tatar, M., & Yahav, V. (1999). Secondary School Pupil's perceptions of Burnout among teachers. *British journal of Educational Psychology* 69:457-68.
- Teachers Service Commission. (2005). TSC Code of Regulations. Nairobi TSC.
- Thomas, N., Clarke, V., & Lvery, J. (2003). Self reported work and family stress of teachers. *Australian journal of Education*, 47(1): 73-88.
- Travers, C.J., & Cooper, C.L. (1994). Mental Health, Job Satisfaction and Occupational Stress among UK Teachers, *Work and Stress*. Vol. 7(3): 205-219.
- Van der Linde, A. H., Van der Westhuizen, P. C. & Wissing, M. P. (1999). Burnout in female educators. *South African Journal of Education August*, 19(3):192-197
- Van Zyl, E. & Pietersen, C. (1999). An investigation into work stress experienced by a group of secondary school teachers. *South African Journal of Education* February 19(1):74-78.
- Von Onciul, (1996). ABC of work Related Disorders: Stress at Work. Retrieved on 6/11/2014 from www.bmj.com/content/313/7059/745 10.30m.
- Walberg, H.J. (1974). Evaluating Educational Performance: A Sourcebook of Methods, Instruments, and Examples. *Educational Resources Information Center*. McCutchan Publishing Corp, 2526 Grove Street, Berkeley, California.

- Winefield, H.R., & Veale, B.M. (2002). Work Stress and Quality of Work Performance in Australian General Practitioners. *Australian Journal of Primary Health*. Vol. 8(2):59-65.
- Wisniewski, L., & Gargiulo, R. M. (1997). 'Occupational stress and burnout among special educators: a review of the literature', *Journal of Special Education*, 31 (3): 325-46.
- Witte, D.H. (2007). Testing Karasek's learning and strain hypotheses on young workers in their job. *Works & Stress*. 21(2): 131-141. Retrieved on the 2nd of April, 2008 from [URL:http://dx.doi.org/10.1080/026783707014005866](http://dx.doi.org/10.1080/026783707014005866).
- Woods, A.M., & Weasmer, (2002). Maintaining job satisfaction: Engaging professionals as active participants. *The Clearing House*. 75: 186-189.
- World Bank. (1999). *Secondary Education*. Washington. The International Bank of reconstruction and development.
- Yambo, J.M.O., Kindiki, J.N., & Tuitoek, J.K.F. (2012). Investigating High School Principals' Stress in Relation to their job experience in schools in Southern Nyanza /Region of Kenya *International Journal of Academic Research in Progressive Education and Development*, Vol. 1 (4): 44-63.

APPENDIX I

QUESTIONNAIRE FOR PRINCIPALS

The purpose of this questionnaire is to collect information on the stress levels, factors and coping strategies among public secondary schools female principals in Rachuonyo North and Homa-bay Sub counties, Kenya. The information collected will be treated with utmost confidentiality. You are requested to give information with the spaces provided. Indicate with a (√) where appropriate.

Section A: Background Information

1. Gender: Male () female ()
2. Category of school -----
3. Number of teachers-----
4. Students performance in KCSE in 2013 mean score -----
5. Number of students: Girls----- boys-----
6. Location of the school: urban () rural ()
7. School performance in KCSE mean score 2011-----2012-----2013-----2014
8. Headship experience -----years
In this school-----month
In other schools -----month
9. Teaching experience in girls or boys secondary schools -----years
10. Highest level of education
Bachelor science () Hons BED ()
Teachers Diploma () Doctorate ()
Masters ()
11. Age in years
20-30() 31-40() 41-50 () 51-60()

Section B: Specific Information

12. Stress Levels among Public Secondary School Female Principals – Self Appraisal

Stress is a product of demands on one, without which one would be bored and docile.

All principals of schools have a unique “performance zone” within which they experience stress that is vital in expending their energy, motivation, decision-making, and activities that culminate in productivity. Sometimes the stress becomes excess which results in diminishing returns. The purpose of items in the questionnaire is to estimate your level of stress. Kindly appraise yourself using the following 5- point rating scale by ticking (√) numerical values that best describes your status.

Where;

1 = Means the life event in principalship is experienced once in a year which translates to very low stress level

2 = Means the life event in principalship is experienced twice in six months which translates to low stress level.

3 = Means the life event in principalship is experienced in 3 months which translates to optimal stress level.

4 = Means the life event in principalship is experienced in 4 times in a year which Translates to high stress level.

5 = Means the life event in principalship is experienced five times in a week which translates to very high stress level.

1 = Very lowly stressed, **2** = lowly stressed **3** = Moderately stressed,

4 = Highly stressed, **5** = Very Highly stressed

No.	Life event in principalship	RATINGS				
		1	2	3	4	5
1	I feel Little enthusiasm for my principalship					
2	I feel frustrated in carrying out my responsibilities					
3	I feel irritable and impatient over small inconveniences at my workplace with regard to staff discipline					
4	Negative, futile and depressed about my job as an integral Quality and Standards Assurer					
5	Decision –making ability less than usual in school					

	operations matters with regard to hiring and firing support staff					
6	I feel that the quality of my work is less than it should be					
7	I feel physically, emotionally and spiritually depleted due to overload					
8	My resistance to illness is lower compared to my earlier years when I was just a class teacher					
9	I feel that my communication with my seniors, colleagues, friends and family is strained from the time I was promoted to principalship					
10	I do have difficulty concentrating on my administrative work in planning and executing school plans					
11	I feel upset by mistakes in school budgets which is my responsibility as a principal					
12	I feel disturbed by students' performance in end term examinations and the likelihood of poor performance in KCSE					
13	Frustrations arising from my daily operations ranging from implementation of school curriculum to staff personnel management do upset me					
14	I feel upset by Boards of management meetings on academic and parents associations projects					
15	I feel bothered by Students' indiscipline					
16	I feel disturbed over delays in FSE funds disbursements to my school that makes some school operations fail like participation in sports					
17	I feel putting off important decisions in school management operations like accountability of school funds which later haunts me.					

18	I feel Anxious about failing at anything, ranging from public relations through good student management to school projects management which is a common phenomenon in my school these days					
19	I feel pre-occupied with fear of being assaulted by my students					
20	I feel bothered by school creditors due to schools inability to pay them on time.					

Any other additional important information relating to stress levels among female principals.
Specify -----

13. Certain factors do influence stress among female principals. Rate any of the following factors based on your knowledge and experience that have impacted on your stress levels. Using 5 – point rating scale tick (√) numerical values that correspond with each factor where; **1 = Very Low Influence; 2 = Low Influence; 3 = Moderate Influence; 4 = High Influence and 5 = Very High Influence**

No	Factors influencing stress	RATINGS				
		1	2	3	4	5
1	Role conflict i.e. principal as a student disciplinarian and a student counselor					
2	Administrative career development opportunities					
3	Privacy					
4	Work environment					
5	Supervising undisciplined teachers					
6	Political distractions in fees structure					
7	The pursuit for organizational excellence in KCSE , sports and games					

8	Increased use of participatory management					
9	Increased use of ICT					
10	Demands from school stakeholders i.e. demand for better results, diet and lowering of fees or levies, unwillingness to co-operate					
11	Time to teach and provide administrative leadership in school					
12	Office space for self and staff					
13	Staffing of teachers and non teaching staff					
14	Sexual harassment (seniors, politicians)					
15	Sexual harassment (teachers)					
16	Poor communication in the school					
17	Support from, sponsors and BOM					
18	Opportunity for advancement growth or promotion					
19	Excessive work responsibility					
20	Job expectations (disbursement of FSE funds, KCSE results, Fee defaulters, cohort cases)					

Any other additional important information relating to factors influencing stress among female principals.-----

14. Female principals use certain coping strategies to manage stress that they keep experiencing in the course of their work. Based on your knowledge and experience, rate any of the following coping strategies using 5 – point rating scale by ticking (√) numerical values that correspond with each strategy, where **1= Least effective strategy, 2 = Less effective, 3 = Effective strategy, 4 = more effective and 5 = Most effective strategy**

No	Stressor	Coping strategy	RATINGS				
			1	2	3	4	5
1	Role conflict <ul style="list-style-type: none"> • Disagreement with co-workers 	Seek arbitration Any other specify and rate ----- -----					
		Seek arbitration Any other specify and rate ----- -----					
		Recant Any other specify and rate ----- -----					
2	Blocked career <ul style="list-style-type: none"> • Critical supervisors • Unacceptability by employer • Unacceptability by employer 	Respond politely Any other specify and rate ----- -----					
		Work harder Any other specify and rate ----- -----					
		Complain bitterly Any other specify and rate ----- -----					

	<ul style="list-style-type: none"> • Not noticed or appreciated by employer 	<p>-----</p> <p>Any other specify and rate</p> <p>-----</p> <p>-----</p>					
3	<p>Work environment</p> <ul style="list-style-type: none"> • Hazardous • Lack of privacy • Dealing with many little hassle 	<p>Proactive approach</p> <p>Any other specify and rate</p> <p>-----</p> <p>-----</p> <p>Create structures</p> <p>Any other specify and rate</p> <p>-----</p> <p>-----</p> <p>Programme activities and meetings</p> <p>Any other specify and rate</p> <p>-----</p> <p>-----</p>					
4	<p>Overload</p> <ul style="list-style-type: none"> • Too little time to do it • Tackling new and old responsibilities • Interference with personal life 	<p>Work faster</p> <p>Any other specify and rate</p> <p>-----</p> <p>-----</p> <p>Delegate</p> <p>Any other specify and rate</p> <p>-----</p> <p>-----</p> <p>Be principled</p> <p>Any other specify and rate</p> <p>-----</p> <p>-----</p>					

	<ul style="list-style-type: none"> • Size of workload 	Delegate Any other specify and rate ----- -----					
5	Information gap <ul style="list-style-type: none"> • Unsure about responsibilities of my job • Lack of information to perform tasks • Underqualified for certain tasks • Unsure of criteria used to evaluate my performance 	Seek advice from senior Any other specify and rate ----- ----- Get assistance from experts Any other specify and rate ----- ----- Go for capacity building Any other specify and rate ----- ----- Seek clarification from supervisor Any other specify and rate ----- -----					
6	Sponsor <ul style="list-style-type: none"> • Insistence on religious tone • Inability other religious groups in school 	Compromise Any other specify and rate ----- ----- Use MOEST policy Any other specify and rate -----					

	<ul style="list-style-type: none"> Recruitment of staff 	<p>----- Use official guidelines Any other specify and rate ----- -----</p>					
7	School discipline <ul style="list-style-type: none"> Undisciplined teachers Undisciplined students Undisciplined support Staff Incompetent staff 	<p>TSC Code of Regulation, Act Any other specify and rate ----- -----</p> <p>School rules and regulations Any other specify and rate ----- -----</p> <p>Employment Act Any other specify and rate ----- -----</p> <p>Retraining /capacity building Any other specify and rate ----- -----</p>					
8	Board of Management <ul style="list-style-type: none"> Hiring of staff School projects 	<p>Employment guidelines Any other specify and rate ----- -----</p> <p>MOEST policy Any other specify and rate ----- -----</p>					

	<ul style="list-style-type: none"> • Demand for meetings 	MOEST policy Any other specify and rate ----- -----					
9	Creditors <ul style="list-style-type: none"> • Court cases • Poor supply 	MOEST policy Any other specify and rate ----- ----- Negotiation Any other specify and rate ----- -----					

APPENDIX II
PRINCIPAL'S INTERVIEW SCHEDULE

Research Question	Question
i) What are the levels of stress among public secondary school female principals?	Estimate your level of stress as high, moderate or low
ii) What factors influence stress among public secondary school female principals?	State some of the factors that may be influencing your stress levels.
iii) To what extent are coping strategies for managing stress among female principals in public secondary schools effective?	How do you cope with stress levels as you manage your school

APPENDIX III
DEPUTY PRINCIPAL’S INTERVIEW SCHEDULE

Research Question	Question
i) What are the levels of stress among public secondary school female principals?	Estimate the level of stress of your female principal as high, moderate or low. Probe: Explain----- -----
ii) What factors influence stress among public secondary school female principals?	State some of the factors that influence stress levels among female principals. Probe: Explain----- -----
iii) To what extent are coping strategies for managing stress among female principals in public secondary schools effective?	How do female principals cope with stress levels as they manage schools. Probe: Explain----- -----

APPENDIX IV

HEADS OF DEPARTMENT INTERVIEW SCHEDULE

Research Question	Question
<p>i) What are the levels of stress among public secondary school female principals?</p>	<p>Estimate the level of stress of your female principal as high, moderate or low. Probe: Explain----- -----</p>
<p>ii) What factors influence stress among public secondary school female principals?</p>	<p>State some of the factors that influence stress levels among female principals. Probe: Explain----- -----</p>
<p>iii) To what extent are coping strategies for managing stress among female principals in public secondary schools effective?</p>	<p>How do female principals cope with stress levels as they manage schools. Probe: Explain----- -----</p>

APPENDIX V

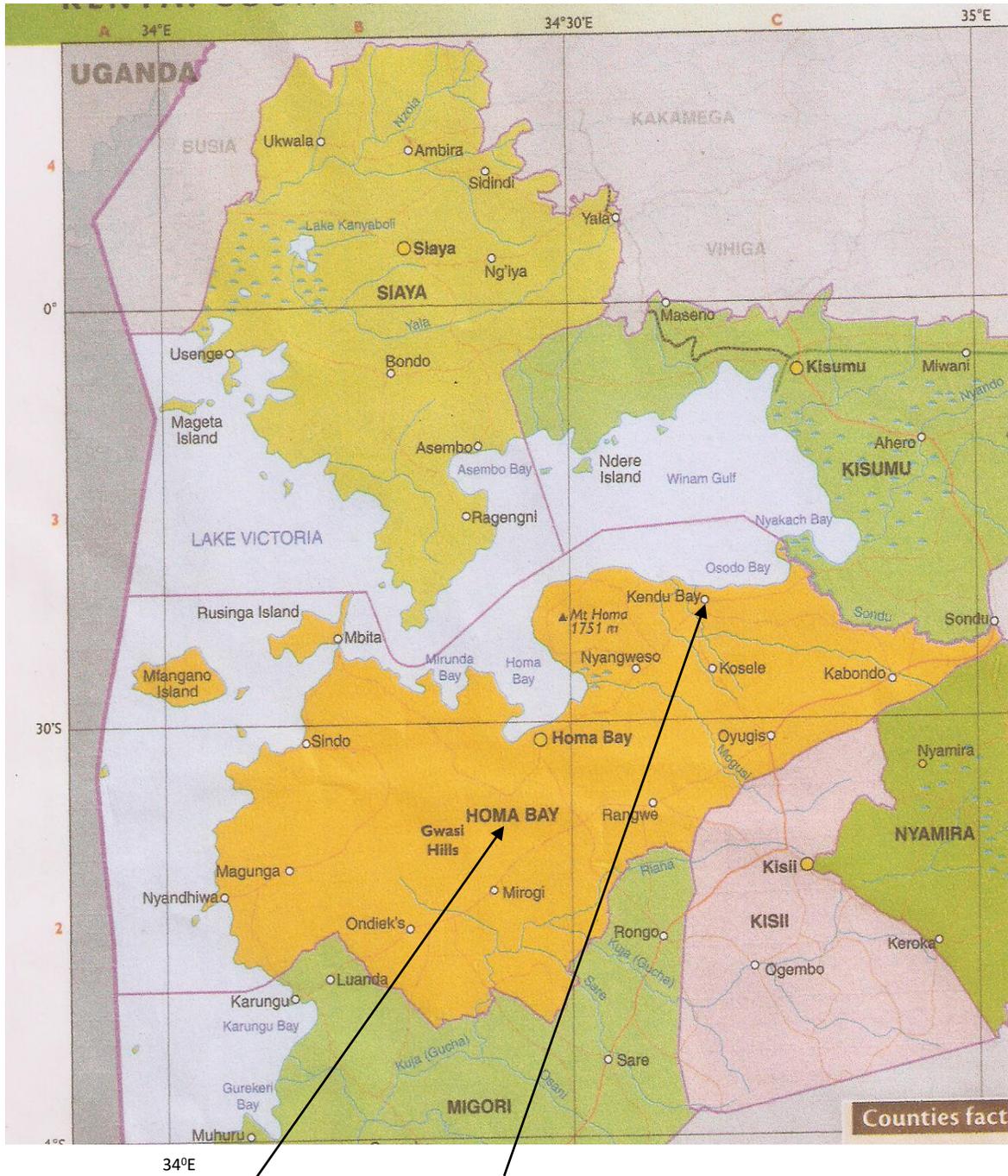
BOARD OF MANAGEMENT CHAIRPERSONS' INTERVIEW SCHEDULE

Research Question	Question
<p>i) What are the levels of stress among public secondary school female principals?</p>	<p>Estimate the level of stress of your female principal as high, moderate or low. Probe: Explain----- -----</p>
<p>ii) What factors influence stress among public secondary school female principals?</p>	<p>State some of the factors that influence stress levels among female principals. Probe: Explain----- -----</p>
<p>iii) To what extent are coping strategies for managing stress among female principals in public secondary schools effective?</p>	<p>How do female principals cope with stress levels as they manage schools. Probe: Explain----- -----</p>

APPENDIX VI
SCQASO'S INTERVIEW SCHEDULE

Research Question	Question
<p>i) What are the levels of stress among public secondary school female principals?</p>	<p>Estimate the level of stress of your female principal as high, moderate or low. Probe: Explain----- -----</p>
<p>ii) What factors influence stress among public secondary school female principals?</p>	<p>State some of the factors that influence stress levels among female principals. Probe: Explain----- -----</p>
<p>iii) To what extent are coping strategies for managing stress among female principals in public secondary schools effective?</p>	<p>How do female principals cope with stress levels as they manage schools. Probe: Explain----- -----</p>

APPENDIX VII
MAP SHOWING LOCATION OF HOMA BAY AND RACHUONYO
NORTH SUB COUNTIES



Homa Bay Sub-County

Rachuonyo North Sub-county

Source: <http://www.flickr.com/photos/albertkenyaniinima/6046066042/> accessed on 24th February 2013