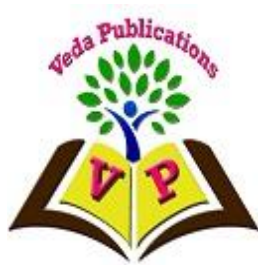


STRESS MANAGEMENT STRATEGIES EMPLOYED BY HEAD TEACHERS AND THEIR EFFECT ON JOB SATISFACTION AND COMMITMENT OF TEACHERS IN PRIMARY SCHOOLS IN BOMET COUNTY, KENYA

Dr Joshua Manduku¹, Moses Koech², Zipporah Muia³

^{1,2,3}University of Kabianga, Kenya

Abstract



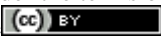
The environment of a working place has great impact on the level of stress. The purpose of this study was to assess stress management strategies used by school management and its influence on teachers' commitment in primary schools in Bomet County, Kenya. The study was guided by the following objectives: to find out the extent of the relationship between stress management strategies employed by school managers and teachers' job satisfaction and to examine the effect of stress management practices on teachers' commitment in primary schools in Bomet County. The study adopted the cross sectional survey research design approach. Target population was 1,695 respondents comprising of 83 head teachers, 83 deputy head teachers, 1,529 teachers of primary schools in Bomet county. The sample was 203 respondents consisting of 25 head teachers, 25 deputy head teachers and 153 teachers. The study adopted stratified and purposive sampling techniques in order to obtain the sample of the study. In ensuring content validity, suggestion from educational research experts was sought to establish whether the questionnaire truly measured what was aimed at. These suggestions were integrated in designing the main tool that was used in data collection. Data generated by the questionnaires and entered into the Statistical Package for Social Sciences (SPSS) computer program for analyses and interpretations. The data were analyzed using descriptive statistics which included frequencies, percentages and means. The study findings indicated that majority (61.6%) of the teachers believed that stress amongst teachers was mainly caused by school related factors. In addition, majority (79.5%) of the teachers believed that employment of PTA teachers had eased teachers' workload in most schools reducing stress amongst teachers. It was further found out that majority (69.2%) of the teachers believed that teachers' self-efficacy contributed to teachers' job satisfaction in schools. Similarly, the findings suggested that majority (73.3%) of the teachers were of the view that management of teacher stress enabled teachers to be committed to students' needs.

0

Author(s) retain the copyright of this article

Copyright © 2015 VEDA Publications

Author(s) agree that this article remains permanently open access under the terms of the Creative Commons

Attribution License 4.0 International License 

1.1 INTRODUCTION

Stress in our society is not something that is invisible. In everyday life we come across many situations. Some of them act as a source of inspiration for us and some cause challenges. It is the human nature to face the challenges boldly or to escape from them. All this varies from person to person. Any challenge that exceeds the coping abilities of the individual becomes stress (Conley & Wooseley, 2000).

Teaching can be a stressful occupation. The daily interactions with students and coworkers and the incessant and fragmented demands of teaching often lead to overwhelming pressures and challenges, which may lead to stress. Where work stress is unrelenting, some negative physiological, psychological, and behavioral consequences may result (DeRobbio & Iwanicki, 1996).

The effects of stress can lead to reduced employee performance at work, increased sickness absence and even death. In most organizations many people experience stress at some time. However, it should be noted that all people do not react in the same way to stressful situations. For some people stressful work situations may positively motivate them to strive to achieve more, while others may over worry about such situations (Okumbe, 2001).

Teacher commitment has been identified as one of the most critical factors in the success and future of education (Huberman, 1997). Teacher commitment has been found to be a critical predictor of teachers' work performance, absenteeism, burnout and turnover, as well as having an important influence on pupils' achievement in, and attitudes toward school (Tsui & Cheng, 1999).

A decrease in commitment levels during the course of the teaching career is also problematic in relation to the retention of experienced teachers in the classroom. However, some Australian research suggests that this pattern may not necessarily hold true for teachers in rural schools. Boylan & McSwan (1998) found that teachers who had served in rural schools for more than six years reported a high level of commitment to teaching which appeared to increase as teaching experience increased.

1.2 STATEMENT OF THE PROBLEM

In the educational process, the teacher occupies a very important place. A teacher is the medium through which objectives and plans can be actualized. For this, the teacher must have sound mental and physical health. The person's mental health has direct and significant relationship with his / her working efficiency. Despite endeavors by school management to try to retain their employees, cases of stressed employees continue to exist which in turn results in lack of commitment amongst teachers. About 7% of teachers leave every year for other jobs due to workload and non-commitment (GoK, 2004).

Teaching is a profession where every day radical changes occur in the educational system. These changes are likely to increase rather than reduce the level of stress in teachers.

Primary school teachers experience higher levels of stress due to demanding situations, while dealing with adolescent pupils. Overcrowded classes, heavy syllabus and inadequate facilities make teachers' work more complex (Shukla, 2008). This study therefore seeks to assess stress management strategies used by school management and its influence on teachers' commitment in primary schools in Bomet County, Kenya.

1.3 Purpose of the Study

The purpose of this study was to assess stress management strategies used by school management and its influence on teachers' commitment in primary schools in Bomet County, Kenya.

1.4 Objectives of the Study

The study was guided by the following objectives;

- i) To find out the extent of the relationship between stress management strategies employed by school managers and teachers' job satisfaction in primary schools in Bomet county.
- ii) To examine the effect of stress management practices on teachers' commitment in primary schools in Bomet County.

1.5 Research Questions

This study sought answers to the following research questions

- i) What is the extent of the relationship between stress management strategies employed by school managers and teachers' job satisfaction in primary schools in Bomet County?
- ii) What effect do stress management practices have on teachers' commitment in primary schools in Bomet County?

1.6 Justification of the Study

Statistics shows that about 7% of primary schools teachers in Kenya leave the teaching profession every year for other jobs due to workload and non-commitment (GoK, 2004). In addition, most teachers are not committed to their work due to constant danger of burnout and stress. Further, teaching has become a more demanding and intense job as it is associated with very high levels of occupational stress (Acirrt, 2002). It has been shown that there is a relationship between occupational stress and job satisfaction among various populations especially teachers (Cotton, Dollard, & de Jonge, 2002). This study was therefore necessitated by the fact that there is high teacher turnover in Bomet County.

2 LIMITATIONS of the study

The sampled schools are spread widely in the entire Bomet county and therefore the uniformity stress management strategies may vary from one school to another therefore

caution was taken when generalizing the findings of different schools to the entire District. Also the variables identified as intervening variables were not controlled for during the sampling and data analysis.

2.1 THEORETICAL Framework

The study was guided by Transaction Theory of stress as reformulated by Dienstbier (1989). According to the Transaction Theory of stress, the cognitive appraisal of stress is a two-part process which involves a primary appraisal and a secondary appraisal. Primary appraisal involves the determination of an event as stressful. During primary appraisal, the event or situation can be categorized as irrelevant, beneficial, or stressful. If the event is appraised as stressful, the event is then evaluated as a harm/loss, a threat, or a challenge. A harm/loss refers to an injury or damage that has already taken place. A threat refers to something that could produce harm or loss. A challenge event refers to the potential for growth, mastery, or some form of gain. Lazarus argues that we cannot assess the origins of stress by looking solely at the nature of the environmental event; rather stress is a process that involves the interaction of the individual with the environment. These categories are based mostly on one's own prior experiences and learning. Also, each of these categories generates different emotional responses. Harm/loss stressors can elicit anger, disgust, sadness, or disappointment. Threatening stressors can produce anxiety and challenging stressors can produce excitement. This theory helps to integrate both the motivational aspects of stress and the varying emotions that are associated with the experience of stress. Secondary appraisal occurs after assessment of the event as a threat or a challenge. During secondary appraisal the individual now evaluates his or her coping resources and options. According to the theory of transactions, stress arises only when a particular transaction is appraised by the person as relevant to his or her well-being. In order for an event to be appraised as a stressor, it must be personally relevant and there must be a perceived mismatch between a situation's demands and one's resources to cope with it.

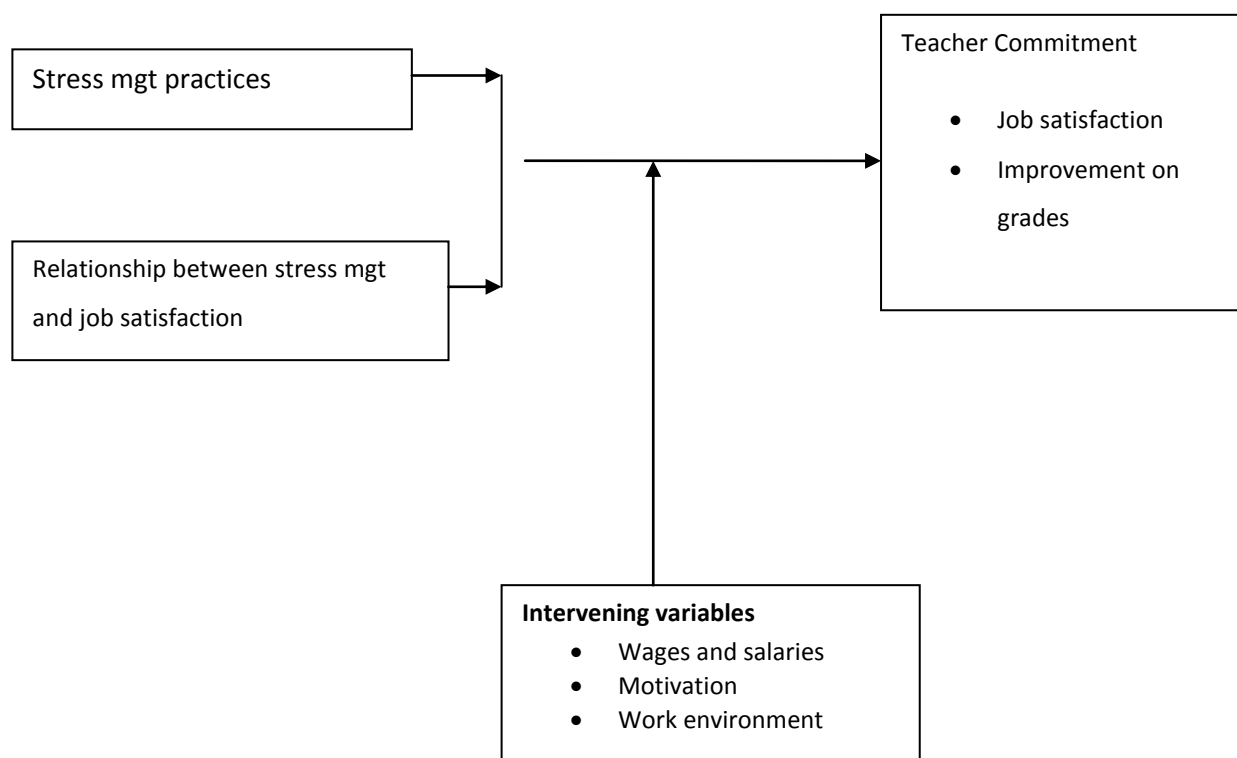
Dienstbier (1989) asserts that when an event is appraised as a challenge, it lead to different physiological consequences than when it is appraised as a harm/loss or threat. Dienstbier uses the term stress to refer to transactions that lead only to negative emotions and he uses the term challenge to describe a transaction that could lead both to positive and negative emotions. Dienstbier asserted that a stressor evaluated as a challenge should be viewed more positively than a harm/loss or threat event. Physiological reactions to stressors depend on two factors: effort and distress. There are three categories of physiological responses to stress. Effort with distress leads to increases of both catecholamine and cortisol secretion and result from daily hassles. These stressors are experienced as negative emotions. This category corresponds to Dienstbier's characterization of the negative emotions present in an event appraised as a harm/loss or as a threat. Effort without distress leads to an increase of catecholamine and suppression of cortisol secretion. These stressors are experienced as positive emotions.

3 Conceptual Framework

The conceptual framework is developed through explaining relationship between independent, dependent and intervening variables. The relationships are depicted in figure 1.1.

Independent variables

Dependent variables



The study adopted the cross sectional survey research design approach, where the cases under study were described as phenomenon in the real-life context in which they occurred. Target population was 1,695 comprising of 83 head teachers, 83 deputy head teachers, 1,529 teachers teaching in primary schools in Bomet county. The head teachers and deputy head teachers participated in the study because they are the ones in charge of day to day management in primary schools. The education officers further participated in the study because they are feedback agents. The target population are categorized as shown in Table 3.1.

Table 3.1 Target population

Strata	Public	Private Schools	Total
--------	--------	-----------------	-------

Schools			
Head Teachers	54	29	83
Deputy Head Teachers	54	29	83
Teachers	1,126	403	1529
Total	1234	461	1695

Source: District Education Office, Bomet County (2012)

3.1.1 Sample Size and Sampling Techniques

The sample was 203 respondents consisting of 25 head teachers, 25 deputy head teachers and 153 teachers. The sample size constituted 12% of the target population. For any population below 1000, 30% formed the sample size, 10% for any population above 1000 (Neuman, 2000).

The study adopted stratified sampling technique and purposive sampling techniques to select the respondents that were included in the study. To select primary schools included in the study, stratified sampling technique was used to select 16 public schools and 9 private schools which constituted 30% of the schools in the study which were 25 schools. Purposive sampling technique was used to include head teachers from the 25 selected primary schools. From the 25 schools, 153 teachers were selected by random sampling by way of lottery. The distribution of the sample is as shown in the Table 3.2.

Table 3.2 Sample size of Respondents

Strata	Frequency	Sample Size Determination	Sample Size
Head Teachers	83	83 x 0.3	25
Deputy Head Teachers	83	83 x 0.3	25
Teachers	1529	1529 x 0.1	153
Total	1695		203

Source: Researcher 2012

3.2.1 Research Instruments

In order to meet the objective of the study, the study used questionnaires and interviews to collect primary data.

3.3 Data Analysis and Presentation

The data was coded and entered into the Statistical Package for Social Sciences (SPSS) computer program for analysis and interpretations. Collected data was analyzed using descriptive statistics such as frequencies and percentages. Analyzed data was presented in

tables, bar graphs and pie-charts in order to facilitate interpretation. Descriptive statistics used were frequencies, percentages and means. To analyze responses from open ended questions and interviews the researcher first read through all of the responses to get a sense of the emerging themes. The next step was to develop categories that included the themes that emerged in initial review. Once the categories were established the researcher assigned each comment to one or several categories that is “coding”. After that the researcher checked if the categories were actually appropriate. After coding the responses and refinement of categories, a review was carried out to determine which of the categories had the most responses and, therefore, represented major themes. The next step was to see which categories were related and where patterns and trends could be identified. Finally the researcher summarized themes in the form of descriptive text incorporating some of the comments that exemplified the major themes. This enabled the researcher to draw inferences. Multiple regression analysis was further used to determine the effect of each management strategy on job satisfaction.

4 Demographic Description of Respondents

A total of 146 out of 153 teachers fully filled and returned the questionnaires while a total of 43 out of 50 head teachers and deputy head teachers were interviewed. Therefore the return rate of questionnaires and interview schedules used for data analysis was 95.4% and 86.0% respectively. These were considered sufficient and acceptable to provide information on stress management strategies used by school management and its influence on teachers’ commitment in primary schools.

4.1 Teaching Experience

Similarly, the respondents were asked to indicate their teaching experience. The results are presented in Table 4.2.

Table 4.2: Teaching Experience of Respondents

Teaching Experience	Teachers		Head teachers/deputies	
	Frequency	Percentage	Frequency	Percentage
Below 5 years	27	18.5	0	0.00
5-10 years	62	42.5	3	6.98
Above 10 years	57	39.0	40	93.02
Total	146	100.0	43	100.00

Source: Field Data, 2013

Table suggests that 62(42.5%) teachers and 3(6.98%) head teachers/deputies had a teaching experience of 5 – 10 years, 57(39.0%) teachers and 40(93.02%) had a teaching experience of over 10 years while 27(18.5%) teachers had a teaching experience of less than

5 years. It seems therefore that most teachers in secondary schools in Nandi North District had a teaching experience of 5 – 10 years. This shows that Head teachers in Bomet County had a higher teaching experience as compared to ordinary teachers and therefore able to manage conflicts using different strategies. Boylan & McSwan (1998) found that teachers who had served in schools for more than six years reported a high level of commitment to teaching which appeared to increase as teaching experience increased. This shows that most of the teachers and head teachers in public primary schools in Bomet County, Kenya.

4.3 Effect of Stress Management Strategies on Teachers' Job Satisfaction

The first objective of this study was to find out the effect of stress management strategies employed by school managers on teachers' job satisfaction in primary schools in Bomet County. To achieve this objective, the participants were requested to indicate their level of agreement/disagreement on a five point Likert scale questions on effect of stress management strategies on teachers' job satisfaction. Their responses were scored and the results are presented in Table 4.4.

Table 4.4: Effect of Stress Management Strategies on Teachers' Job Satisfaction

STATEMENTS	SD		D		UD		A		SA	
	F	%	F	%	F	%	F	%	F	%
Teachers' self-efficacy contributes to teachers' job satisfaction in schools	25	17.1	19	13.0	1	.7	96	65.8	5	3.4
Students' progress in academic performance contribute to teachers' job satisfaction	7	4.8	24	16.4	2	1.4	100	68.5	13	8.9
Teachers who work in team work with colleagues are more satisfied with their work	14	9.6	29	19.9	3	2.1	97	66.4	3	2.1
Teachers who are committed to their work have higher job satisfaction and will remain in the teaching profession for a higher number of years.	2	1.4	15	10.3	1	.7	120	82.2	8	5.5
Teachers who are dissatisfied with their work display lower commitment and are at greater risk for	28	19.2	24	16.4	8	5.5	48	32.9	38	26.0

leaving the profession

Heavy teaching workload reduces teacher satisfaction from teaching 12 8.2 27 18.5 3 2.1 100 68.5 4 2.7

Poor teacher–pupil rapport influences negatively teacher commitment and job satisfaction 4 2.7 9 6.2 4 2.7 125 85.6 4 2.7

Student misbehavior contribute to teachers' overall stress and job dissatisfaction 19 13.0 9 6.2 2 1.4 114 78.1 2 1.4

Source: Field Data, 2012

On interviewing the head teachers, it emerged that teachers' workload and at times student misbehavior coupled with poor pay has contributed greatly to teacher stress and job dissatisfaction leading to high teacher turnover and attrition.

Further multiple regression analysis was performed to determine the effect of each management strategy on job satisfaction. Regression analysis combined selected independent variables with the job satisfaction being dependent variable and variables such as teachers' self-efficacy, pupils' academic performance, team work, teachers' commitment and teachers' workload as predictors representing the independent factors. This was to determine any significance for the assumed relationships based on the magnitude and direction of the relationship. R represents the values of multiple correlation coefficients between the predictors used in the model and teachers job satisfaction in public primary schools. The R^2 represented the measure of variability in job satisfaction that is accounted for by the predictors (independent variables). From the model, ($R^2 = .563$) shows that all the predictors account for 56.3% variation in job satisfaction.

Table 4.5: Model Summary on Job Satisfaction

Model	R	R Square	Adjusted R Square	Std. Error of the	Change Statistics					Durbin - Watso
					R	F	df	df	Sig. F	

				Estimate	Square Change	Change	1	2	Change	n
1	.774 _a	.599	.563	.55430	.599	16.429	4	44	.000	1.690
a. Predictors: (Constant), Teacher' self-efficacy, pupils' academic performance, team work, commitment workload.										
b. Dependent Variable: Job Satisfaction										

The adjusted R^2 gave the idea of how well the model generalizes and ideally, its value would be the same or very close to R^2 . In our case the value of adjusted R^2 is .563, showing that if the data was derived from the population rather than the sample it accounts for approximately 56.3% less variance in the Job satisfaction. From the Multiple Regression results it showed the stress management factors applied in various schools significantly influenced teachers' job satisfaction in public primary schools ($p < 0.05$). It therefore follows that teachers' self-efficacy, improved pupils' academic performance, teamwork and reduction in teachers' workload all lead to job satisfaction. Research indicates that team work could be an important resource for teachers' professional development and for improving teaching in classrooms as indicated by Andrews & Lewis (2002) Goddard & Tschannen-Moran (2007) and Hindin *et al.* (2007). It has also been shown further that professional development enhances teacher commitment (Plauborg *et al.* 2007) which in our study leads to job satisfaction.

4.6 Effect of Stress Management Practices on Teachers' Commitment

The second objective of this study was to examine the effect of stress management practices on teachers' commitment in primary schools in Bomet County. To achieve this objective, the participants were requested to indicate their level of agreement/disagreement on a five point Likert scale questions on effect of stress management practices on teachers' commitment. Their responses were scored and the results are presented in Table 4.7.

Table 4.7: Effect of Stress Management Practices on Teachers' Commitment

STATEMENTS	SD		D		UD		A		SA	
	F	%	F	%	F	%	F	%	F	%
Management of teacher stress enables	21	14.4	14	9.6	4	2.7	105	71.9	2	1.4

teachers to be committed to students' needs

Teachers are committed to teaching profession when not stressed due to workload 10 6.8 6 4.1 1 .7 127 87.0 2 1.4

Teachers who have higher work stress, show low levels of organizational commitment 4 2.7 9 6.2 4 2.7 125 85.6 4 2.7

Role ambiguity negatively influences teachers organizational commitment 3 2.1 47 32.2 4 2.7 63 43.2 27 18.5

professional development opportunities boosts skills and teachers' self-efficacy enhancing teacher commitment to work 4 2.7 27 18.5 3 2.1 100 68.5 12 8.2

Source: Field Data, 2012

5 Effect of Stress Management Strategies on Teachers' Job Satisfaction

It was found out that majority 101(69.2%) of the teachers in public primary schools in Bomet county believed that teachers' self-efficacy contributed to teachers' job satisfaction in schools. This echoed the findings of Caprara *et al.*, (2003) who considered job satisfaction a decisive element influencing teachers' attitudes and performance and found self-efficacy to be an important contributor to teachers' job satisfaction. Similarly majority of the teachers were of the view that students' progress in academic performance contributed to teachers' job satisfaction. This implies that students who perform better academically encourage teachers to be committed to their work hence getting satisfied with their work. This concurred with the findings of Cockburn & Haydn, (2004) who argued that job satisfaction was gained from the nature of day-to-day classroom activities, such as working with children, seeing students make progress and overall school climate.

In addition, the study findings indicated that majority 100(68.5%) of teachers were of the view that teamwork at work place create job satisfaction. This was found to be in line with the studies of Cockburn & Haydn, (2004) who cited that working with supportive colleagues enabled teachers to be satisfied with their work. Further majority of the teachers 128 (87.7%) were of the view that committed teachers have higher job satisfaction and could remain in the teaching profession for a higher number of years. This echoed the findings of Evans, (2001) and Ingersoll, (2001) who indicated that teachers who are dissatisfied with their work display lower commitment and are at greater risk for leaving the profession. Similarly, majority 86(58.9%) of the primary school teachers believed that dissatisfied teachers displayed lower commitment and were at greater risk of leaving the profession. This

implied that teachers who were dissatisfied with their work were not committed and could be absent from place of work and some could leave the profession. According to Evans, (2001) and Ingersoll, (2001) teachers who are dissatisfied with their work displayed lower commitment and are at greater risk for leaving the profession. Furthermore, majority 104(71.2%) of the teachers were of the view that heavy teaching workload reduced teacher satisfaction from teaching implying that primary school teachers have heavy workloads which could affect negatively their job satisfaction and could leave the profession. This was found to be in agreement with the findings of Dick & Wagner (2001) who found that workload and feeling overwhelmed by the tasks led to stress reactions among school teachers.

The study findings further showed that majority of the teachers believed that poor teacher–pupil rapport influences negatively teacher commitment and job satisfaction. This was found to be in agreement with the works of Kokkinos, (2007) who reported in his findings that poorer teacher–pupil rapport could lead to teacher stress and job dissatisfaction. In addition, majority 116(79.5%) of the teachers were of the opinion that student misbehavior contribute to teachers’ overall stress and job dissatisfaction leading to higher teacher turnover. Teaching may bring personal satisfaction, but it also brings stress resulting from student misbehavior (Greenglass & Burke, 2003). Teachers may be stressed due to student misbehavior and could lead to job dissatisfaction which could in turn lead to high teacher turnover and attrition from the teaching profession. On interviewing the head teachers, it emerged that teachers’ workload and at times student misbehavior coupled with poor pay has contributed greatly to teacher stress and job dissatisfaction leading to high teacher turnover and attrition.

5.1 EFFECT of Stress Management Practices on Teachers’ Commitment

The study findings suggested that majority 107(73.3%) of the teachers were of the view that management of teacher stress enabled teachers to be committed to students’ needs. The student needs include the teaching and learning and in particular the passing of national examinations. Day, (2004) define commitment as the investment in a particular career, in the case teaching a teacher commitment includes commitment to the students work. Further, majority (88.4%) of the teachers were of the view that teachers could only be committed to their work once there is reduced stress as a result of students’ workload. This shows that in schools where there is a high student to teacher ratio, teachers could be stressed as a result of the work load due to high number of students as compared to the number of teachers. This was found to concur with GOK (2004) report which indicated that about 7% of teachers leave every year for other jobs due to workload and non-commitment. Similarly, 88.3% indicated that stress could lead to low organizational commitment leading to high teacher turnover and attrition from the teaching profession. This supports the findings of studies by Vakola & Nikolaou (2005) who found out that employees who experienced stress at work exhibited decreased organizational commitment.

In addition majority 90(61.7%) of the teachers supported the view that role ambiguity negatively influences teacher's organizational commitment. This supports the findings of Yousef (2002) who indicated in his studies that role ambiguity directly and negatively influenced the organizational commitment. Furthermore, he found that job satisfaction mediates the relationships of role conflict and role ambiguity with the dimensions of organizational commitment except that of its one dimension of continuance commitment. Further, majority 112(76.7%) of the teachers were of the view that professional development opportunities boost skills and teachers' self-efficacy enhancing teacher commitment to work. Day, (2000) on his part cited that the present educational environment required that those who wish to survive and thrive must become involved in an increased rate of personal adaptation and professional development. Therefore teachers need to be accorded chances for professional development to enhance teacher commitment.

6 Conclusions of the Study

Stress management strategies applied by school administrators which include: employment of PTA teachers to ease teachers' workload, use of guidance and counseling to enhance student discipline, teacher motivation, formation of teacher welfare committees and team work teaching have enabled teachers to have self-efficacy contributing to teachers' job satisfaction at the same time dissatisfied teachers displayed lower commitment and were at greater risk of leaving the profession.

Management of teacher stress has enabled teachers to be committed to students' needs and organizational commitment. However, role ambiguity negatively influenced teacher's organizational commitment leading to high teacher turnover and attrition.

7 RECOMMENDATIONS of the study

The following recommendations were made based on the findings of this study;

- i. There is need for school administrators to motivate teachers to reduce teacher stress at work place.
- ii. There is need for education stakeholders in the District and the country at large to devise ways of making teachers to be committed to their work and stay more in the teaching profession.
- iii. There is need for the government to employ more teachers in public primary schools to reduce teacher workload which has been shown to increase teacher stress.
- iv. There is need for counselling services at school level to enable teachers cope with stress and therefore having a low teacher turnover from schools.

References

Abassi, S.M & Hollman, K.W. (2000). "Turnover: the real bottom line". *Public Personnel Management*, 2 (3):333-342.

- Acirrt, T (2002). *Focus Groups with Teachers in Catholic Systemic Primary Schools*. Sydney: University of Sydney Research Training and Information Services on the World of Work.
- Allen, N.J. & Meyer, J.P. (1990). "The measurement and antecedents of affective, continuance and normative commitment", *Journal of Occupational Psychology*, Vol .63, pp .1-18.
- Amin, M.E (2005). *Social Science Research: conception, methodology and analysis*. Kampala Makerere University Printers
- Andrews, D. & Lewis, M. (2002). The Experience of a Professional Community: Teachers Developing a New Image of Themselves and Their Workplace. *Educational Research* 44 (3): 237-54.
- Ballou, D. (1996). *The condition of urban school finance: Efficient resource allocation in urban schools. Selected papers in school finance 1996*. [Online]. Available: <http://nces.ed.gov/pubs98/finance/982174.html> [1999, November].
- Banet, P & Clifford, W. (2005). Reducing stress and avoiding burnout. *A collection of activities for preschoolers*, 11(2): 28-32.
- Bennell, P.S. & Acheampong, K. (2003). *Research project application to DFID: Teacher motivation and incentives in low-income developing countries*. Knowledge and Skills for Development, Brighton.
- Bennett, S., L., Franco, R., Kafner, M & Strubblebine, P. (2002). *The development of tools to measure the determinants and consequences of health worker motivation in developing countries*. Partnerships for Health Reform. Bethesda. Newbury Park, CA: Sage
- Berry, J. W. (1990). Psychology of acculturation: Understanding individuals moving between cultures. In R. W. Brislin (Ed.), *Applied cross-cultural psychology* (pp. 232-253).
- Bertoch, M., Neilson, E., Curley, J., & Borg, W. (1989). *Reducing Teacher Stress*. Newbury Park, CA: Sage
- Betoret, F. D. (2006). Stressors, self-efficacy, coping resources, and burnout among secondary school teachers in Spain. *Educational Psychology*, 26, 519–539.
- Boxall, P., Macky, K. & Rasmussen, E. (2003). 'Labour turnover and retention in New Zealand; the causes and consequences of leaving and staying with employers', *Asia Pacific Journal of Human Resources*, vol.41(2), pp.196-214.
- Boyle, G. J., Borg, M. G., Falzon, J. M., & Baglioni, A. J., Jr. (1995). A structural model of the dimensions of teacher stress. *British Journal of Educational Psychology*, 65, 49–67.
- Bunce, D., & West, M. A. (1996). Stress management and innovative interventions at work. *Human Relations*, 49(2), 209-231.

- Bunce, D., & West, M. A. (1996). Stress management and innovative interventions at work. *Human Relations*, 49(2), 209-231.
- Capelli, P (2004). Why do Employers Pay for College? *Journal for Econometrics*. 121(2004) 213- 241
- Caprara, G. V., Barbaranelli, C., Borgogni, L., & Steca, P. (2003). Efficacy beliefs as determinants of teachers' job satisfaction. *Journal of Educational Psychology*, 95, 821–832.
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology*, 44, 473–490.
- Chaplain, R. P. (2008). Stress and psychological distress among trainee secondary teachers in England. *Educational Psychology*, 28, 195–209.
- Chiboiwa, M. W., Samuel, M. O. & Chipunza, C. (2010). An examination of employee retention strategy in a private organisation in Zimbabwe. *African Journal of Business Management* Vol. 4(10), pp. 2103-2109.
- Cockburn, A. D., & Haydn, T. (2004). *Recruiting and retaining teachers: Understanding why teachers teach*. London, England: RoutledgeFalmer.
- Cole, G. (2002). *Personnel and Human Resource Management*. 5th Ed. London. Continuum.
- Conley, S. & S. Wooseley, A. (2000). *Teacher stress, higher order needs and work outcomes*. London, England: Routledge Falmer
- Cooley, E. & Yovanoff, P. (1996). Supporting professionals-at-risk: Evaluating interventions to reduce burnout and improve retention of special educators. *Exceptional Children*, 62(4), 336-355.
- Crowley, R. (1998). *A class act: Inquiry into the status of the teaching profession*. Canberra: Senate Employment, Education and Training References Committee. London, England: Routledge Falmer
- Cotton, S. J., Dollard, M. F., & de Jonge, J. (2002). Stress and student job design: Satisfaction, well-being, and performance in university students. *International Journal of Stress Management*, 9(3), 147-162.
- Darboe, K. (2003). *An empirical study of the social correlates of job satisfaction among plant science graduates of a Midwestern University*, Lanham, MD: University Press of America.
- Day, C. (2000). Stories of Change and Professional development: The costs of commitment. In C. Day & A. Fernandez & T. Hauge & J. Moller (Eds.), *The life and work of teachers: International perspectives in changing times* (pp. 109-129). London: Falmer Press.

- DeRobbio, R. A., & Iwanicki, E. (1996). *Factors accounting for burnout among secondary school teachers*. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Dienstbier, R. A. (1989). Arousal and physiological toughness: Implications for mental and physical health. *Psychological Review*, 96:84-100.
- Ebmeier, H. & Nicklaus, J. (1999). The impact of peer and principal collaborative supervision on teachers' trust commitment, desire for collaboration, and efficacy. *Journal of Curriculum and Supervision*, 14(4), pp. 351-369.
- Elliott, B., & Crosswell, L. (2001). *Commitment to teaching: Australian perspectives on the interplays of the professional and the personal in teachers' lives*. Paper presented at the International Symposium on Teacher Commitment at the European Conference on Educational Research, Lille, France.
- Evans, L. (2001). Delving deeper into morale, job satisfaction, and motivation among education professionals. *Educational Management and Administration*, 29, 291–306.
- Firth L., Mellor, D. J., Moore, K. A. & Loquet, C. (2004), 'How can managers reduce employee intention to quit?', *Journal of Managerial Psychology* 19, 11–30.
- Fraenkel, J.R. & Wallen, N. E. (2000). *How to Design and Evaluate Research in Education*. 4th ed. McGraw Hill Boston
- Fraser, H., Draper, J., & Taylor, W. (1998). The Quality of Teachers' Professional Lives: Teachers and job satisfaction. *Evaluation and Research in Education*, 12(2), pp.61-71.
- Fullan, M. (1992) *The New Meaning of Education Change*. Ontario Teachers College Press.
- Fullan, M.G. (1997). *Successful school improvement: The implementation perspective and beyond*. Open University Press.
- Ganster, D. C., Mayes, B. T., Sime, W. E., & Tharp, G. D. (1982). Managing Organizational Stress: A field experiment. *Journal of Applied Psychology*. 67(5), 533-542.
- Gaziel, H. H. (1993). Coping with occupational stress among teachers: A cross-cultural study. *Comparative Education*, 29(1), 67-79.
- Georges, T., Suzanne, M. & Gary, E. (2003). *Life Skills and HIV Education Curricula in Africa: Methods and Evaluations*: Africa Consultants International Technical Paper No. 119 USAID
- Gold, Y. & Roth, R. A. (1993). *Teachers managing stress and preventing burnout: The professional health solution*. Washington, D.C.: Falmer Press.

- Greenglass, E. R., & Burke, R. J. (2003). Teacher stress. In M. F. Dollard, A. H. Winefield, & H. R. Winefield (Eds.), *Occupational stress in the service professions* (pp. 213–236). New York, NY: Taylor and Francis.
- Hammond, O. W., & Onikama, D. L. (1997). *At risk teachers*. Honolulu, HI: Pacific Resources for Education and Learning.
- Henkin, A. B., Park, S. & Singleton, C. A. (2007). Teacher Teams, Teamwork and Empowerment: Exploring Associations and the Nexus to Change. *International Journal of Educational Reform* 16(1): 71-86.
- Hindin, A., Morocco, C. C., Mott, E. A. & Aguilar, C. M. (2007). More than just a group: teacher collaboration and learning in the workplace. *Teachers and Teaching: theory and practice* 13(4): 349-76.
- Improving Educational Quality Project (2000). *What happened to the teachers? A teacher mobility study in Mangochi and Balaka Districts, Malawi*, IEC Malawi Team, Domasi. *International Journal of Medicine*, 12: 14-71.
- Ingersoll, R. (2001). Teacher turnover and teacher shortage. *American Educational Research Journal*, 38, 499–534.
- Jepson, E., & Forrest, S. (2006). Individual contributory factors in teacher stress: The role of achievement striving and occupational commitment. *British Journal of Educational Psychology*, 76, 183–197.
- Jimenez, R. (1999). Managing Employee retention Through recognition. T + D, 53 *Journal of Educational Administration*. 38 (2): 179 – 201.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127, 376–407.
- Kalliath, T.J., & Beck, A. (2001). Is the path to burnout and turnover paved by a lack of supervisory support: A structural equations test. *New Zealand Journal of Psychology*, 30:72-78.
- Kedjidjian, C. B. (1995). Say no to booze and drugs in your workplace. *Safety and Health*, 152(6), 38-42.
- Kerlinger, K. (2006). *The Knowledge Base Homepage: Research Methods*, Cornell University. New York, NY: Taylor and Francis.
- Kevin, M.M., Joan, L.C. & Adrian, J.W. (2004). “Organizational change and employee turnover”. *Personnel Rev.* 33 (2):161-166.

- Khmelkov, V. T. (2000). *Developing professionalism: Effects of school workplace organization on novice teachers' sense of responsibility and efficacy* (Doctoral dissertation, University of Notre Dame). Dissertation Abstracts International 61 (04), 1639.
- Kokkinos, C. M. (2007). Job stressors, personality, and burnout in primary school teachers. *British Journal of Educational Psychology*, 77, 229–243.
- Kombo, O. K & Tromp, D.L.A. (2006). *Thesis and proposal writing. An Introduction*. Nairobi Pauline's Publications Africa.
- Kothari, C. R. (2004). *Research Methodology Methods and Techniques*. (2nd Edition) New Delhi Wishwa Prakashan.
- Koul, L. (1993). *Methodology of Education Research*. New Delhi: Vikas Publishing.
- Koustelios, A. & Tsigilis, N. (2005). The relationship between burnout and job-satisfaction. *Journal of Experimental Education*, 57, 117-128.
- Kramer, M.W., Callister, R.R., & Turban, D.B. (1995). Information-receiving and information-giving during job transitions. *Western Journal of Communication*, 59: 151-170.
- Kyriacou, C. (1987). Teacher stress and burnout: An international review. *Educational Research*, 29, 89-96.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53, 27–35.
- Kyriacou, C., Hultgren, A. & P. Stephens. (1999). "Student Teachers Motivation to Become a Primary School Teacher in England and Norway." *Teacher Development* 3:3, 9-19.
- Landsbergis, P. A., & Vivona-Vaughn, E. (1995). Evaluation of an occupational stress intervention in a public agency. *Journal of Organizational Behavior*, 16, 29-48.
- Lezotte, L. (1991). *Correlates of effective schools: The first and second generation*. Okemos, MI: Effective Schools. New York, NY: Taylor and Francis.
- Lieberman, A. and L. Miller (2000). *Teaching and Teacher Development: A New Synthesis for a New century*. Education in a New Era: 2000 ASCD Yearbook. R. S. Brandt.
- Liu, X. S., & Ramsey, J. (2008). Teachers' job satisfaction: Analyses of the Teacher Follow-Up Survey in the United States for 2000–2001. *Teaching and Teacher Education*, 24, 1173–1184.
- Losos, L. W. (2000). *Comparing the motivation levels of public, private and parochial high school teachers*. (Doctoral dissertation, Saint Louis University, 2000).

- Maicibi, N.A. (2003). *Pertinent Issues in Employees' Management*. Kampala; M.P.K graphics (U) Ltd
- Martin, C. (2003) .‘Explaining labour turnover: Empirical evidence from UK establishments, *Labour*, vol.17(3), pp.391-412.
- McLaughlin, M. W. & Talbert, J. E. (2006). *Building School-Based Teacher Learning Communities*. New York, Teachers College Press.
- Meaghan, S, & Nick B. (2002), Voluntary turnover: knowledge management-friend or foe? *J. intellect. Cap.* 3 (3): 303-322
- Meyer, J.P., Allen, N.J .& Gellatly, I.R. (1990), “Affective and continuance commitment to the organisation: evaluation of measures and analysis of concurrent and time-lagged relations”, *Journal of Applied Psychology*, Vol .75 No .6, pp .710-20.
- Minnett, A. M. (2003). Collaboration and Shared Reflections in the Classroom. *Teachers and Teaching: theory and practice* 9(3): 279-85.
- MoEST, (2005). *KRT School empowerment Programme for Secondary School Teachers*. Nairobi, Government printers.
- Morris, C. G. (1990). *Contemporary Psychology and Effective Behaviour* (7th Edition), Glenview, IL. Scott & Foresman
- Mugenda, M. & Mugenda, G. (2003). *Research Methods, Qualitative and Quantitative Approaches*. Act Press, Nairobi.
- Murray, J.E., (1997). Physician job satisfaction: developing a model using qualitative data. *Journal of Occupational and Organizational Psychology*, 80: 77-89.
- Musaazi, J.C.S. (1982). *The Theory and Practice of Educational Administration*. 1st Ed. London: Macmillan Education Ltd
- Neuman, W. L. (2000). *Social Research Methods, Qualitative and Quantitative Approach*. Allyn & Bacon publishers: Boston.
- Nias, J. (1981). Commitment' and Motivation in Primary School Teachers. *Educational Review*, 33(3), pp.181-190.
- Nsubuga, E. (2000). *Descriptive Research*. Act Press, Nairobi Kenya.

- Nwanko, J.I (1982). *Educational Planning: Theory and Methods* (Nigeria). Lahore: Izharsons
- Okumbe, J. A. (2001). *Human Resource Management: An educational perspective*. Nairobi, Kenya Educational Development and Research Bureau.
- Ongori, H. (2007); A Review of the Literature on Employee Turnover. *African Journal of management*. Vol 24 123 -135
- Organ, D.W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predators of organizational citizenship behaviour. *Personnel Psychology*, 48: 775-802.
- Oso, W.Y. & Onen, D.O. (2005). *A General Guide to Writing Research Thesis and Report*. Kisumu: Lake Publishers
- Pacific Region Educational Laboratory R & D Cadre. (1995). *A study of risk factors among high school students in American Samoa*. Honolulu, HI: Pacific Region Educational Laboratory.
- Pacific Resources for Education and Learning R & D Cadre. (1998). *Retention and Attrition of Pacific School Teachers and Administrators (RAPSTA) Study*. Honolulu, HI: Pacific Resources for Education and Learning.
- Park, I. (2005). Teacher commitment and its effects on student achievement in American high schools. *Educational Research and Evaluation*, 11, 461-485. Products, Ltd.
- Plauborg, H., Andersen, J. V. & Bayer, M. (2007). *Action Learning - Learning in and from practice*. Copenhagen, Denmark, Copenhagen University College Press.
- Saari, L.M., & Judge, T.A. (2004). Employees' attitudes and job satisfaction. *Human Resource Management*, 43: 395-407
- Schwarzer, R., & Hallum, S. (2008). Perceived teacher self-efficacy as a predictor of job stress and burnout: Mediation analysis. *Applied Psychology: An International Review*, 57, 152-171.
- Scott, K. D. & Wimbush, J. C. (1991). Teacher absenteeism in Secondary education. *Educational Administration Quarterly*, 27(4), 506-529.
- Selye, H. (1974). *Stress without distress*. Philadelphia, and New York: J. B. Lippincott.
- Shukla, I. (2008). Burnout and stress among secondary school teachers in relation to their teaching effectiveness. *European Journal of All India Association for Educational Research* (12), 20: 3-4.

- Siong, Z.M.B, (2006). Predicting Intention to Quit in the Call Center Industry: Does *Social Psychology*; Vol. 67, pp. 422-36.
- Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology*, 99, 611–625.
- Smith, M. & Bourke, S. (2002), Teacher stress: examining a model based on context, workload and satisfaction, *Teaching and Teacher Education*, 8, 1, 31-46.
- Snow-Gerono, J. L. (2005). Professional Development in of Culture of Inquiry: PDS Teachers Identify the Benefits of Professional Learning Communities. *Teaching and Teacher Education* 21: 241-56.
- Tor Guinmaraes JE Owen (1997). "Assessing employee turnover intentions before and after TQM". *International J. Qual. Reliability management*. 14 (1): 46-63.
- Tsui, K. T., & Cheng, Y. C. (1999). School organisational health and teacher commitment: A contingency study with multi-level analysis. *Educational Research and Evaluation*, 5(3), 249-268.
- Tsui, K. T., & Cheng, Y. C. (1999). School organizational health and teacher commitment: A contingency study with multi-level analysis. *Educational Research and Evaluation*, 5, 249-268.
- Tyree, A. K. (1996). Conceptualising and measuring commitment to high school teaching. *Journal of Educational Research*, 89(5), pp. 295-304.
- Vroom, V. H. (1964). *Work and motivation*. John Wiley & Sons, Inc. Abstract: Vroom's seminal book that introduces his Expectancy Theory cognitive model.
- Wegge, J., Schimedit, K. Parker, E. & Van Dick, K. (2007). Taking a sickie: job satisfaction and job-involvement as interactive predictor of absenteeism in a public organization and work outcomes. *Human Relations*, 49: 429-451.
- Wood, P. (1992). Symbolic Interactionism: Theory and Method. In M. D. LeCompte & W. L. Millroy & J.
- Woods, R. C., & Montagno, R. V. (1997). Determining the negative effect of teacher attendance on student achievement. *Education*, 118(2), 307-316.
- WorkCover Western Australia. (1998). *Overview of occupational stress in Western Australia*. (Online). Available: http://www.workcover.wa.gov.au/injmang/jc_stres.htm.

World Bank (2007). 'Kenya Country Brief' (<http://tinyurl.com/yypw2z>).

World Bank (2007). Recruiting, Retaining, and Retraining Primary School Teachers and Principals in Sub-Saharan Africa. Africa human development series; Washington, D.C. 20433, U.S.A.

Yong, B. C. (1999). "The career commitment of primary teachers in Brunei Darussalam: Perceptions of teaching as a career" *Research in Education* (62), pp.1-7.
