



Original Research Article

Self-efficacy as a predictor of stress management among secondary school principals in Kenya

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The study investigated self-efficacy as a predictor of stress management among secondary school principals in Homa Bay County of Kenya. Kelly's personal construct theory supported by Carl Rogers Person Centred theory informed the study. The study adopted a Convergent Parallel research design. From a population of 295 principals, the study used Krejcie and Morgan's (1970) table to select 169 principals to be included in the study. Quantitative data was collected using self-efficacy questionnaire and stress management questionnaires while an interview schedule was used to collect qualitative data from twenty (20) principals. The reliability of the research instruments was determined by the use of Cronbach's Alpha and a co-efficient ($r = 0.814$) was obtained. The quantitative data was analyzed using Statistical Package for Social Sciences (SPSS) windows version 22 by use of statistical tests such as Pearson's Product Moment Correlation Coefficient and Analysis of Variance (ANOVA), while qualitative data was analyzed using thematic analysis. The calculated coefficient of determination ($R^2 = .1697$) show that the two variables share 17% of their variance. The study established a moderate positive ($r = .412$) but highly significant ($p < .05$) relationship between self-efficacy and stress management. A strong sense of self-efficacy enhances human accomplishment and personal wellbeing. The study recommends that the Ministry of Education should induct newly appointed principals on how to enhance their intrapersonal traits; this would help them understand how to manage stressful situations in their schools.

Key words: Self-efficacy, stress management, secondary school, principals

INTRODUCTION

Stress is a normal and an essential part of life that goes hand in hand with working towards any goal or challenge. A stressful situation can spur us on to greater effectiveness and achievement. In fact whether we like it or not we can't escape stress for complete freedom from stress is death (Motah and Pointe, 2008). A World Bank Report (2009) on secondary school leadership revealed that the education system world over have been ineffective and has failed to address the issue of secondary school principals stress and burnout. This has negated efforts to create a stronger human resource base which is invaluable for development in all spheres in the school. Stress management is the ability of secondary school principals to manage their daily work

challenges. It entails the management of their work force students and other administrative chores without much burnout.

Ortega et al. (2007) study in United States of America noted that two thirds of visits to physician by secondary school principals seem to be stress related ailments. The study found out that what accounts for differences in stress management of an employee in an organization setup are things like remunerations, position of an officer in the organization and the family situations. Response to stress by an individual secondary school principal will depend on their work expectation, experience, personality trait, beliefs, resources available, values and drives. Grant and

Fox, (2006) further indicated that secondary school principals are generally unique physically, emotionally and intellectually and their characteristics which include personality traits, attitude, beliefs and cognition as well as their physical environment are good determinants of their behaviour. The reviewed study indicated that secondary school principals are strongly influenced by their environment in terms of motivation, performance and work output.

Whitehead (2011) study in New Zealand found out that 82% of secondary school principals reported moderate or high stress and stress management was positively associated with more work-overloads and role conflict; self-efficacy was also high and statistically independent of stress. A study by Gramstad et al. (2013) in Norway found out that novice secondary school principals face incidences of depression, neurotic disorders and are stressed more than experienced secondary school principals in public secondary schools. The study further noted that the inexperienced secondary school principals suffer more frequent stress than experienced assistant teachers. Secondary school principals in Norwegian public secondary schools exhibited more stress that emanates from their daily routine or tasks in their job description. Stress management could determine how individual secondary school principals deal with stressful experiences.

Literature on relationship between self-efficacy and stress management exists. Grant and Fox (2006) in the United States studied effective teaching and learning environment and principals' self-efficacy. The result of the study indicated that principals' self-efficacy belief increase with complexity of the job. Similarly, Seratore (2015) in the United States of America revealed that aspects of teachers stress were also found to be negatively and significantly correlated with self-efficacy, motivation and SRL. On the other hand, Evangelia and Spiriddom (2011) study in Greece indicated interplay of self-efficacy with the pros and cons of stress management and the pros and cons of stress. On the other hand, Howart (2012) in Walden indicated that employees who demonstrate high level of self-efficacy had better understanding on how to evaluate and develop employee's abilities. On the other hand, Dempster et al. (2014) study in the United Kingdom showed that there is a differential relationship between self-efficacy domains (SSE), but higher on emotional self-efficacy. Similarly, Prati et al. (2010) in Italy indicated that the relationship between stress management and professional quality of life was significant only among rescue workers with low levels of self-efficacy but not among those with higher levels of self-efficacy. In another study, Ruble et al. (2011) in Austria indicated a significant association between physiological/affective states and self-efficacy, but no associations were observed for the other sources. In addition, Schwarzer and Hallum (2008) study in New Zealand found such an effect in particular for younger teachers and those with low general self-efficacy. Alternatively, Natovova and Chylova (2014) study in Czech showed that self-efficacy, behavioural markers connected to

vulnerability to stress and well-being in particular appear to be meaningful concepts that can be well used in education and counselling related to coping with stress during university studies. On a similar note, Gran et al. (2011) study in South Africa indicated that the rating scale did not advance monastically nor did it demonstrate acceptability goodness of fit to the Research model. The study indicated that several items had differential item function in relation to age, education or work status. On the other hand, Klassen and Chiu (2010) in Cameroon indicated that, teachers with positive self-efficacy had good classroom management. Similarly, Howart (2013) study in Iran indicated significant negative correlation between self-efficacy and stress. Also it was found that both dimensions of self-efficacy, namely, classroom and organizational efficacies, either collectively or separately, could predict stress among teachers. On the other hand, Bjork and Thorildsson (2007) study in Tanzania showed that the instrument was not able to identify who need extra support during child birth.

On the same note, Koome (2007) study in Kenya reiterated that most of the secondary school principals had stepped down due to stress and have joined other ministries and departments in the government such as Youth Affairs, Gender and Sports, which depict poor stress management mechanisms among the secondary school principals. Uwezo Kenya (2012) report shows that pupil ratio has in many cases extended the 1.40 prescribed by UNESCO (1990, 2000) by far and has made the functions of a secondary school principal to be a bit overloaded and stressful compared to the duties of other state officers. On the same note, Koome (2007) study in Kenya revealed that more than a half of the principals 64% had quit principalship for other jobs between 2010-2015 (TSC Report, 2015), 72% of the secondary school principals reported that the extent of their stress is so much. In addition a report by the Kenya Secondary Schools Heads Association (KESSHA) indicated that 67% of their deaths were as a result of heart attacks, high blood pressure, hypertension and other ailments triggered by stress (KESSHA Conference Report, 2014). The report further reiterated that secondary school principals were held responsible for student's performance and school management. This entails planning meetings with parents, teachers, and coordinating all development activities in their schools (KESSHA Conference Report, 2014).

RESEARCH METHODOLOGY

This research study was based on Convergent Parallel research design within a mixed methods approach. Convergent Parallel research design was used for collecting, analyzing and mixing both quantitative and qualitative data obtained from secondary school principals. The target population of the study were secondary school principals in public secondary schools in Homa Bay County. There are six categories of public secondary schools in Homa Bay County namely, national two (2), County Boys' secondary

schools sixty four (64), County Girls' secondary school fifty one (51), Co-Educational schools one hundred and ten (110), Boys' Day secondary school thirty seven (37) and Girls' Day secondary school thirty one (31). Simple random sampling was then used to select the other one hundred and sixty seven (167) principals in the other categories of secondary schools to take part in the study. The study used self-efficacy questionnaires and an interview schedule to collect quantitative and qualitative data respectively.

Self-efficacy questionnaire developed by Bandura (1995) was modified to suit the study. The questionnaires had 10 test items to test the individual secondary school principals' self-efficacy. It had a rating Likert scale of (1-5). Informed consent was sought from the 169 sampled secondary school principals who were assigned arbitrary numbers to conceal their identity and boost their confidentiality. The questionnaire was then administered to the 169 sampled secondary school principals in their respective offices. After the responses, the scores were added up which ranged from 10-40 points and coded and analysed. The items indicated the level of which secondary school principals viewed themselves capable of performing tasks. Bandura's (1995) stress management questionnaire was adopted and modified to suit the study. The stress management questionnaires contained 25 test items on a 5 point Likert scale from Completely false (1) Mostly false (2) Neither True nor false (3) Mostly true (4) and Completely True (5). A maximum score of 125 could be obtained or a minimum score of 25. This would mean a positive or negative stress management.

The researcher then made a visit to the Sub County Directors of Education in the six Sub Counties to notify them of the intended study. The questionnaires were given to the sampled secondary school principals in their respective schools by the two research assistants. The secondary school principals were assigned arbitrary numbers to conceal their identity and maintain confidentiality. The researcher and the two research assistants then proceeded to visit the sampled schools and hand in the questionnaires to the sampled secondary school principals as the researcher conducted the interviews. The respondents were given between forty five minutes and one hour to fill and complete the questionnaires before handing them over to bliss computers which was a more centralized and well known place and which was convenient for easy collection. To test the hypothesis, response on self-efficacy questionnaire for each respondent was summed up and the totals obtained. Self-efficacy questionnaire had 10 test items on a 5 Likert scale. Stress management questionnaires which had 25 test items on a 5 Likert scale.

The mean scores on the responses of the questionnaire for each respondent were obtained too. This made the data be at the interval scale hence a parametric test (Pearson correlation) was used. A Pearson Product Moment Correlation was used to determine the relationship between the mean score from self-efficacy questionnaire and stress management.

FINDINGS AND DISCUSSION

The null hypothesis-there is no statistically significant relationship between self-efficacy and stress management among secondary school Principals in Homa Bay County was tested. This was done by use of a Pearson Product-Moment Correlation Coefficient. The scores of self- efficacy, which was measured by use of Bandura's (1995) self-efficacy scale questionnaire, was the independent variable and the scores on stress management was the explanatory variable. Table1 shows SSPS output indicating the results of Pearson correlation analysis.

As indicated in Table1, the findings of the study show that there was a positive ($n=169$, $r=.412$) but highly significant ($p<.05$) relationship between Principals' self-efficacy and stress management, with high level of self-efficacy associated with high level of stress management and vice-versa. Therefore the null hypothesis was rejected and the alternative hypothesis accepted. This means that a secondary school principal with a high level of self-efficacy has a high ability of stress management and is more successful in their administrative duties. The calculated coefficient of determination ($R^2 = .1697$) show that the two variables share 17% of their variance. This indicate that there was an overlap between the two variables; implying that principals' level of self-efficacy alone account for about 17% of the variance in respondents' scores in the stress management scale. This was a significant amount of variance explained by only one independent variable. This finding is in agreement with Howart (2012) study in Walden which found out that those employees who demonstrate high level of self-efficacy provides leaders with insight into the potential benefits of better understanding of how to evaluate and develop employees' abilities on how to improve their self-efficacy. Similarly, Evangelica and Spirradom (2011) in Greece emphasized the interplay of self-efficacy with the pros and cons of stress management mainly at the stages of completion and preparation. There is a difference in relationship between self-efficacy domain and stress management domain. Self-efficacy determines how people think, feel, motivate themselves and behave. A strong sense of self-efficacy enhances human accomplishment and personal wellbeing. Principals with high assurance in their capabilities approach, difficult task as challenges to be mastered rather than threats to be avoided. This finding is in agreement with Rodgers (1950) theory which postulates that individuals have within themselves vast resources for self-understanding and for altering their self-concepts, basic attitudes and self-directed behaviour.

Qualitative results from interviews on self-efficacy and stress management provided additional data. Self-efficacy is ones believe that he/she is capable of performing a particular task successfully. The secondary school principals reacted differently for example excerpts from one of the principals was:-

"I really believe in myself. I have transformed this school since I came here. When I came the school had no fence and

Table 1. Correlations between self-efficacy and stress management

	Self- efficacy	Stress management
Pearson Correlation		.412**
Self-Efficacy	1	
Sig.(2-Tailed) N		.000
Pearson		169
Correlation Stress Management	.169**	
Sig.(2-Tailed)	.412	1
N	.000	169
	169	

**Correlation is Significant at the 0.05 Level (2-Tailed)

in the evening the students were all over in the village. The school performance was at its lowest with a mean of 4.47 right now the school had a mean of 8.37 in last year's KCSE exams .I ensure that each teacher knows what to do. I normally delegate duties to my staff but with adequate supervision." (Principals, 2)

Principal 2 is seen to have a lot of confidence in herself. She does not believe in failure. It is evident from the school performance records that the school was at its lowest in terms of performance and discipline. At the time of this interview the school posted a mean standard of 8.37 with the principal's subject rated second best overall. This finding is in agreement with Howart (2012) study in Walden which found out that those employees who demonstrate high levels of self-efficacy provided leaders with insight and potentials to manage stressful situations. This means that Principals with positive self-efficacy adopted better methods of stress management. Further to this Carroll (2011) in United States noted that teacher's sense of self-efficacy was influenced by their own philosophy of teaching, opportunities for collaboration and instructional challenges. Furthermore Klassen and Chiu (2010) study in Cameroon which indicated that significant relationship exists between self-efficacy and academic performance.

"Quite well, I am a go getter and would go an extra mile to achieve what I want to achieve, that is, I have some two teachers whose subjects mean is wanting. I have engaged two BoM teachers to alleviate the challenges as I look for their transfers and replacement. The two BoM teachers teach their normal lessons but find time to teach the examination class in the two subjects. This ensures the success of the school community" (Principal, 4)

On the other hand principal 4 reported that he is a go getter and would always go an extra mile to achieve better results. This is in agreement with Ruble, Usher and McGrew (2011) study which revealed a significant association between teachers' physiological/ affective state and self-efficacy. Similarly Evangelia and Spiriddom (2011) in Greece also found out that different factors of teachers stress management are positively related to teachers' self-efficacy. In contrast Howart (2012) in Canada found a

significant negative correlation between self-efficacy and stress management among English Foundation learners. Similarly Principals 7 postulates:

"I normally strive to bring out the desired outcome in my students and believe there is no situation which is impossible. As a principal it is my responsibility to ensure that my school performance is improved. This cannot be realized if I am not committed to my ideal goal." (Principals, 7)

Principal 7 is principal with high self-efficacy for she believes that there is no situation in her institution which she cannot solve. She has hands on type of leadership. This is in agreement with Klassen and Chiu (2010) study in Cameroon which revealed that teachers with positive self-efficacy had good classroom management. In addition Prati, Piettrantoni and Cicognani (2010) in Italy noted a relationship in stress management and employees self-efficacy. In contrast, Dempster, Byrne and McKay (2014) in United Kingdom found that there was a differential relationship between self-efficacy and stress management.

"Oh yes I am capable of changing any situation to what I want. This school has had a lot of strikes and arson attack, all that has been a thing of the past. I made sure that I called I had a meeting with members of the community and also talked to the students' body and made both aware of the need to secure the school and its properties" (Principal 5)

From the verbatim quote from Principals 5 it is realized that Principals with positive self-efficacy are focused and have proper understanding in handling critical issues in a school environment and are considered pillars in improving educational programmes. This means that these categories of Principals have good stress management strategy and hence experience less stress in challenging situations. This is in agreement with Natovova and Chylova (2014) study in Czech which found out that there was a significant different level of improvement experienced by the treated group compared to control group. On the other hand Principals with negative self-efficacy has little belief in their ability to transform a learning institution. Verbatim quotes from Principals 3 reiterates:

"Managing a school is not an easy task especially if there is no political good will from the politicians and the community." (Principals, 3)

Similarly, Principals 3 indicates that the management of a school is not very easy especially if there is no external support. This type of principal has low self-efficacy and therefore depends much on social support for him to succeed. This finding is in agreement with Howart (2013) in Iran which indicated that teachers with low self-efficacy believe in consultative decision making. They involve the other staff members to come up with sound decision that could be owned by all. On the other hand Ruble, Usher and McGrew (2011) in Austria revealed that student with low self-efficacy were not high achievers as students with high self-efficacy. Another Principal retorted:-

"In this school I face unprecedented pressure to account for the achievement of all the students. There are a lot of quasi-inspectors such as the parents, education officers even students. These demands for accountability and transparency despite my concerted efforts you cannot satisfy them all and therefore I simply ignore some of their demands." (Principals, 18)

For principal 18 he acknowledge the pressure he meets in the school from interested parties in the school such as parents and Education officers who would like him to improve the school academic standards regardless of the student entry behaviour. This in agreement with Bjork and Thorildsson (2007) in Tanzania revealed a significant relationship between level of students' academic improvement and class teachers' self-efficacy.

"It is true that on several occasions I have several things to do until I don't know where to start from. Some teachers would want to undermine you and incite students against your administration. You have to think of ways to contain the situation" (Principal 6)

From the excerpts from Principals 6 it is true that Principals with low self-efficacy easily get discouraged in challenging circumstances. They either ignore or just don't get actively involved. This means that Principals with low self-efficacy have poor stress management techniques. This finding is in agreement with TSC Report (2015) study in Kenya which noted that there exists considerable negative correlation between low self-efficacy of teachers and stress management among secondary school principals.

"When I feel weighed down with my work then I delegate some of the responsibility on my deputy, senior teacher or Head of relevant department. It is sometimes illogical to do almost all that pertains to my job as a principal I will be bogged down" (Principal 10)

Another Principal retorted that she normally delegates duties when she feel that she has too much in her hands, this helps to her to relax and think positively. This is in line with Schwarzer and Hallum (2008) in New Zealand which revealed that principals with low self-efficacy use delegation as away on managing stress. When principals delegate some duties to their other staff members they feel relieved.

Conclusion and Recommendation

The finding of both quantitative and qualitative results

showed that there was a fairly strong positive relationship between principal's self-efficacy and stress management. This means that secondary school principals who exhibited high sense of self efficacy had better ways of managing stressful situations than those who had low sense of self-efficacy. Principals with high self-efficacy could manage stress better than principals with low self-efficacy. This was because secondary school principals with high self-efficacy had the ability to manage any stressful situation as they have a strong will of success. Ministry of Education Science and Technology should induct newly appointed secondary school principals on how to enhance positive self-efficacy. This would help them in their stress management strategies. This is because the study found out that secondary school principals' self-efficacy influences stress management.

Conflict of interests

The authors declare that they have no conflict of interests

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