

ANALYSIS OF SELF EFFICACY AS INTERVENTION STRATEGY IN MANAGEMENT OF BURNOUT AMONG TEACHERS IN BUSIA COUNTY, KENYA

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Abstract

This study sought to determine the mitigating role of self-efficacy in teacher burnout. Participants in this study were 150 primary school teachers for grade one to four from Busia County who took part in a training workshop for the implementation of new Competence Based Curriculum being launched in Kenyan schools. The Maslach Burnout Inventory to measure levels of burnout and Teachers' Sense of Efficacy scale to measure self-efficacy were both completed by all teachers. Pearson's correlations found a weak negative statistically significant intervention of Teacher self-efficacy on Teacher burnout ($r = -0.205$, $p < 0.05$). Pearson's correlation matrix on the three dimensions of teacher burnout demonstrated that teacher self-efficacy has a strong statistically significant intervention on teacher burnout as characterized by emotional exhaustion ($r = 0.986$, $p < .05$). Personal accomplishment revealed low negative correlation with self-efficacy ($r = -0.260$, $p < .05$). However, depersonalization showed insignificant positive weak ($r = 0.109$, $p > .05$) correlation with teacher self-efficacy. An independent t-test found insignificant relationship between male and female teachers on burnout in school $t(148) = 0.713$, $p > .05$. Teachers' level of self-efficacy had a significant relationship with teacher burnout which ascertained the results of past studies.

Key words: Analysis, burnout, intervention mechanism, management, self-efficacy

Introduction

Teaching is a very stressful occupation and long-term stress can result in chronic exhaustion that may lead to burnout. Besides fulfilling core responsibilities in the classroom, teachers need to accomplish other non-teaching role expectations such as co-curricular activities and students' discipline, etc. Apart from that, teachers need to work hard to meet the expectations of their school board of management and the ministry of education. In addition, the continuous contact with students, parents and teacher employer, generates an accumulation of stress and tension that often leads to the burnout (Ashraf *et al.* 2017). In this sense, burnout among teachers is defined as the outcome of the relationship between a great load of enduring stress and the performance of one's own work (Veronese & Pepe 2014). Burnout elicits emotional exhaustion, distrustful attitudes, depersonalization, as well as low job satisfaction which consequently generates difficulties to control and regulate emotions in an expected way (Baranovska & Doktorova 2014).

Teacher burnout has been found to negatively influence wellbeing. For instance, Geving (2007) found that teacher burnout elicited negative student behaviours, such as vandalism of school property, quareling other students, and insulting teachers. In addition, Kokkinos (2007) found that teacher burnout was significantly associated with higher levels of student antisocial and defiant behaviours (e.g., cruelty or rudeness to schoolmates). Prior study by Keith *et al.* (2017), indicate that teacher burnout led to reduced levels of physical and mental health problems and below average levels of job satisfaction compared with individuals with other occupations (Johnson *et al.*, 2005). This confirmed additional findings by (Jennings & Greenberg, 2009), that burnout among teachers trigger physical or psychological absence from work, leading to less effective instruction and behaviour management practices.

Teacher burnout is a progressive in the sense that it starts at preliminary phase of a teaching career, but is most often seen within three to five years after initial teacher induction (Fives *et al.*, 2007; Maslach *et al.*, 2001). However, teachers who are resilient and confident in their ability to teach tend to modify, accept, or reject innovative intervention for reasons that are constructive, thoughtful, and in the best interest of student need (Patterson, Collins, & Abbott, 2004). But, teachers who are significantly affected by the symptoms of burnout often choose to devalue innovations in an effort to conserve energy and divert additional stressors. Gaitan's, (2009) study on levels of teacher burnout found moderate levels of emotional exhaustion, low levels of depersonalization, and high levels of satisfaction with personal accomplishment. These findings suggest that levels of teacher burnout may influence the degree to which a teacher adheres to prescribed procedures of implementation.

According to Tartwijk & Hammerness (2011), most teachers begin their career profession with the expectation that they will experience feelings of joy and accomplishment. However, teachers also work constantly in an atmosphere of evaluation, judgments and expected to perform innumerable roles (Santoro, 2011). The combination of these factors creates a persistent feeling of frustration among teachers leading to burnout. With such burnt out, many teachers are losing enthusiasm in their work and becoming less satisfied with their jobs and hence greater turnovers, transfers, absenteeism, decrease in quality teaching and a decrease in their physical and mental health (Melgosa, 2000). For instant, research in Kenya by Ngeno (2007); Mugambi, (2012) revealed that teachers experienced high burnout due to high demand to offer exemplary results, unpopular government education policies (posting teachers outside their home counties, rollout of new competence based curriculum with lack of proper training of teachers , understaffing, constant wrangles between teachers trade union and employer, teachers service commission on labour issues), heavy workload, few opportunities for promotion and multiple tasks at school. (Sichambo *et al* 2012). Such experiences may lead to dysfunctional teacher behaviour with negative implications to their well-being and student learning

Self-efficacy is the belief in one's capabilities to organize and execute the courses of action required to produce given attainments (Bandura *et al* ,2001; van Dinther *etal*, 2011). Self-efficacy is regarded a factor protecting teachers from experiencing stress, a decrease in feelings related to personal skills, achievements, and successes, leading to the burnout syndrome. Teachers with high self-efficacy believe in their personal influence, power, and impact on students' classroom learning and outside the classroom management (Smetackova, 2017).

Teacher self-efficacy is studied as a personal resource factor that may protect from the experience of job strain and, thus, make the escalation of burnout less likely (Schwarzer & Suhair, 2008). Teachers' self-efficacy is thought to derive from their mastery experiences, physiological and emotional feedback, observation of models, and through social persuasion (Tschannen-Moran & Woolfolk, 2001). As such, teachers' level of self-efficacy is likely to vary depending on the particular instructional situation or group of students they are considering.

Studies in self-efficacy reveals that if a teacher experiences success on a task, then he/she is likely to believe that he/she will be successful again in that task (Tschannen-Moran & Woolfolk, 2001). A higher feeling of efficacy tends to produce a greater effort in the individual to persist with tasks in which they feel efficacious, and a low feeling of efficacy will cause a person to avoid the tasks that evoke this feeling (Ferreira, 2013). In addition, teachers who feel more confident in their capacity to manage classroom behaviours are more likely to deliver effective practices and observe positive student outcomes (Reinke *et al*, 2013). On the contrary, lack of confidence or efficacy may interfere with a teacher's ability to be effective in meeting the needs of students. For instance, Pas *et al* (2010) found that teachers with low efficacy were less likely to make referrals for their students to student support teams. The results extracted from some studies such as Tschannen-Moran & Woolfolk (2001) and Woolfolk & Burke (2005) showed a significant rise in teachers' self-efficacy during teacher training, followed by a decline at the end of their first teaching year. However, the findings were hampered by a small sample size of respondents.

Another study by Wolters and Daugherty (2007) used a large online sample of teachers ($N = 1,024$) from the United States to examine the influence of teaching experience on teachers' self-efficacy and goal structures. Teachers were divided into four experience groups: "1 year, 1–5 years, 6–10 years, and 11 years of experience. Results showed modest effects of experience on self-efficacy for instructional strategies, low self-efficacy for classroom management, but no effect of experience on self-efficacy for student engagement. One problem is that the relationship between teachers' self-efficacy and experience may not be linear. For example, Woolfolk & Burke (2005) found that teachers' self-efficacy initially rose and then fell over three data collection points at the beginning of teachers' careers. However, the influence of the sources of self-efficacy, however, may change over time, with verbal persuasion and contextual factors playing a more important role for novice teachers than for veteran teachers (Tschannen-Moran & Woolfolk, 2001). Self-efficacy beliefs in the workplace are not static and reflect a lifelong process of development that ebb and flow according to personal attributes and interpretation of environmental circumstances.

Klassen & Chiu (2010) undertook study on the effects on teachers' self-efficacy and job satisfaction: teacher gender, years of experience, and Job Stress. The participants were picked through convenience sample of 1,430 practicing teachers (69% women, 31% men) from western Canada. The age and experience of teachers ranged between 40–44 years and 10–14 years respectively. The results showed that teachers' self-efficacy was influenced by years of experience in a nonlinear relationship, with the three factors of teacher efficacy increasing with experience for early and mid-career stage teachers and declining for teachers in the late career stages.

The present study examined the effect of teacher self-efficacy on teacher burnout to school and classroom activities. The survey was conducted among primary school teachers teaching grade one

to four pupils who attended a training workshop on implementation of new competence based curriculum in Busia County, Kenya. The independent variable was teacher self-efficacy (TSE) measured by Ohio state teacher efficacy scale (OSTES). The dependent variable was teacher burnout (TB) measured by Maslach burnout inventory (MBI).

2. Materials and Methods

2.1. Research Design

The study used a correlational research design (Mertler, 2019), in which quantitative data were collected and analyzed. A correlational research design study involves of collection of two sets of data and determining the extent to which they co-vary (Martella *et al.*, 2013). Correlational research design was adopted for purpose of discovering and measuring possible relationships between two or more variables in order to understand the nature and strength of the relationship between the variables (Mertler, 2019). Correlational design was employed because the participants were picked randomly from their natural setting and for instant it was not possible to subject them to experimental or control conditions in order to study their characteristics. According to Martella *et al* (2013); Mertler, (2019), the variables measured occur naturally, therefore no manipulation of any of the variables being measured in the current study

2.2. Participants

The data used for this study were collected as part of a larger ongoing randomized evaluation of self-efficacy and burnout among primary school teachers. The teachers were involved in classroom-management training towards the implementation of new Competence Based Curriculum (CBC) in Kenyan education sub-sector. The new CBC was meant to transform the education to competence and skilled development as opposed to rote learning. Participants in this study consisted of a total of 150 teachers, 59 men and 91 women, from Busia County in Kenya. The primary school teachers while undergoing training on implementation of CBC were approached to participate in an anonymous questionnaire study on self-efficacy and burnout at school. Of the 150 teacher participants, 60.7% were female and 39.3% were male (see Table 1). Seventy percent of the teachers were between the ages of 30 and 40 years, while 30% were older.

Table 1. Participants Description

Gender	Frequency	Percentage
Male teachers	59	39.3
Female teachers	91	60.7
Total	150	100
Age		
30-35 years	46	30.7
36-40 years	59	39.3
Above 40 years	45	30
Total	150	100

2.3. Procedures

To test the research hypotheses associated with this study, the researcher employed a correlational research design (Martella *et al.*, 2013; Mertler, 2019). Furthermore, this study utilized self-reported

data collection procedures. Teacher participants were recruited for the study among those selected from grade 1-4 attending CBC training workshop across the county. Because the focus of the present study was on characterizing the nature of burnout and the use of self-efficacy on management of burnout, the researcher sought to maximize the sample size and use of self-efficacy on burnout intervention. Teachers in this study responded to the variables by completing self-administered questionnaire on their self-efficacy and burnout. This information was collected at the end of the four day training on CBC for the cohort of preprimary and lower primary teachers.

Validity and reliability of instruments were assessed. Through expert review, content validity of TSE and TB was conducted. The raters' report for both tests indicated that the tests measured what they purported to measure. Cronbach's α , a measure of internal consistency was computed using SPSS reliability analysis for the predictor variable

2.4. Instruments.

The Ohio State Teacher Efficacy Scale (OSTES; short form by Tschannen-Moran & Hoy, 2001) was completed by all teachers as a measure of TSE. Given the focus in the evaluating TSE as intervention strategy on burnout in school and classroom-management, only the twelve items on the subscales of teacher self-efficacy of classroom management were given to teachers to answer. Teachers responded to each items by indicating the amount they can do on a Likert-type scale. The final instrument had 12 items on a 9-point Likert-type scale ranging from 0 (nothing) to 9 (a great deal). Cronbach's alphas for the short form teacher self-efficacy was $\alpha=0.898$ in this study was above the acceptable levels.

The Maslach Burnout Inventory (MBI) of (1996) was completed by all teachers to measure their levels of burnout. The authors described burnout as emotional exhaustion, depersonalization, and reduced feelings of accomplishment. The MBI uses three subscales to measure three aspects of burnout: "emotional exhaustion, depersonalization, and lack of person accomplishment. Scores on each scale were considered separately. Respondents answer on a 7-point Likert-type scale from 0 (never) to 6 (every day). The nine-item emotional exhaustion subscale was utilized in this study. Cronbach's alphas for the subscale were emotional exhaustion $\alpha=0.860$; depersonalization, $\alpha=0.681$; reduced accomplishment $\alpha=0.754$; overall burnout scale, $\alpha=0.830$) across cohorts in this study.

3. Results

Pearson correlations were computed for dependent and independent variables (table 2). The calculation of Pearson's correlation coefficient met the assumptions to hold; ratio level, linearity and bivariate normal distribution. The statistical hypothesis test for this p-value is:

Test I examined the hypothesis that self-efficacy does not intervene on teacher burnout on school and classroom management.

Test II tested examined the hypothesis that self-efficacy does not intervene on teacher burnout constructs on school and classroom management. The results are given in Tables 2 and 3.

For test I Pearson correlations were computed for self-efficacy as independent variable and burnout constructs as dependent variables (table 2).

Table 2. Results of Correlation between Self-efficacy and Teacher Burnout

	Teacher Self-efficacy	Teacher Burnout
Pearson Correlation	1	-.205*
Teacher Self-efficacy Sig.(2-tailed)		.012
N	150	150
Pearson Correlation	-.205*	1
Teacher Burnout Sig.(2-tailed)	.012	
N	150	150

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

From the correlations in table 2, it can be seen that the correlation coefficient is $r = -0.205$, $p < 0.05$, indicating a weak negative statistically significant relationship between Teacher self-efficacy and Teacher burnout. Because $p < .05$, reject the null hypothesis that self-efficacy does not intervene on teacher burnout on school and classroom management. This implies that there is weak negative evidence that teacher self-efficacy intervene to teacher burnout. In particular, it seems that the more teacher knows about their self-efficacy beliefs, the lesser the burnout on their school and classroom management ($r = -0.205$, $p < 0.05$).

-For test II Pearson correlations were computed for self-efficacy as independent variable and burnout constructs as dependent variables (table 3).

Table3. Correlation matrix of Teacher self-efficacy and the three burnout constructs

		Self- efficacy	Emotional exhaustion	Depersonalizat ion	Personal accomplishment
Self-efficacy	Pearson Correlation	1	.986**	.109	-.260**
	Sig. (2-tailed)		.000	.184	.001
	N	150	150	150	150
Emotional exhaustion	Pearson Correlation	.986**	1	.112	-.262**
	Sig. (2-tailed)	.000		.173	.001
	N	150	150	150	150
Depersonalization	Pearson Correlation	.109	.112	1	.419**
	Sig. (2-tailed)	.184	.173		.000
	N	150	150	150	150
Personal accomplishment	Pearson Correlation	-.260**	-.262**	.419**	1
	Sig. (2-tailed)	.001	.001	.000	
	N	150	150	150	150

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

Correlation coefficient indicated that emotional exhaustion and personal accomplishment variables correlated significantly with TSE with the exception of depersonalization which did not correlate

with TSE. Emotional exhaustion showed high positive correlation with self-efficacy ($r = 0.986$, $p < .05$). Personal accomplishment revealed low negative correlation with self-efficacy ($r = -0.260$, $p < .05$). For this reason, we conclude that there is a strong positive intervention of TSE on teacher burnout through emotional exhaustion and personal accomplishment, such that, when the amount of TSE increases, the teacher emotional exhaustion and personal accomplishment on burnout behavior on school and classroom management decreases. However, depersonalization showed insignificant positive weak ($r = 0.109$, $p > .05$) correlation with TSE, we can conclude that there is no statistically significant correlation between TSE and depersonalization variable on burnout. That means, increases or decreases in TSE do not significantly relate to increases or decreases depersonalization construct of teacher burnout.

The third null hypothesis stated that teacher gender has no influence on teacher burnout behaviour. An independent t-test was conducted to compare the teacher gender and burnout. The results are reported in table 4 and 5.

Table 4. Mean differences on teacher gender and school and classroom management burnout

	Gender	N	Mean	Std. Deviation	Std. error
Burnout	Male	59	73.7458	22.37270	2.91268
	Female	91	71.2527	19.92575	2.08879

From table 4, the results reveal differences in the mean between male and female teachers with regard to teacher burnout. From table 4 the assumption of the independent t-test is that the two groups compared have a similar dispersion of scores. From table 4, the male teachers score ($M = 73.7458$, $SD = 22.37270$) while the female teachers score ($M = 71.2527$, $SD = 19.92575$). In addition, the standard deviation shows that variation in the data is a little wider ($SD=22.37$) for male teacher as compared to female teachers ($SD=19.92$).

The inferential statistics on independent t-test for teacher burnout is given in table 5.

Table 5. Results of independent t-test on teacher burnout

		Levene's test					
		F	Sig	t	Df	Sig.(2tailed)	Mean dif.
Burnout	Equal variances assumed	1.155	.284	.713	148	.477	2.49302
	Equal variances assumed			.696	11.363	.488	2.49302

From table 5, the value of F is insignificant ($p=.284$). This indicates that there are statistically insignificant differences and the assumption of homogeneity has been met. Levene's test of equality of variances in table 5 indicates that the value of F is insignificant, this indicates that there are statistically insignificant differences in the way the data are dispersed, and the assumption of homogeneity has been met. Therefore, our variances can be assumed to be equal as the F-value is insignificant ($p = .284$). As such, we only need to read the values from the first row of the table 5.

The results showed male teacher participants had high burnout score ($M=71.25$, $SD=22.37$) than their female counterparts ($M=71.25$, $SD=19.92$). An independent t-test showed insignificant relationship between male and female teachers on burnout in school $t(148) = 0.713$, $p > .05$. This

suggests that there is no difference between male and female teachers on burnout to school and classroom management. Thus the null hypothesis is not rejected.

4. Discussions

The findings supported the prediction that self-efficacy will have an influence teacher burnout. As has been established by prior research and confirmed with this sample of primary school teachers, self-efficacy has a strong influence on teacher burnout in school and classroom management. Of particular concern is that teacher's awareness of self-efficacy beliefs moderate burnout feelings in order to engage in productive school and classroom work. As teachers increase their self-efficacy beliefs, and vice versa: these self-efficacy beliefs allow the teachers focus on intervention ability to overcome burnout and vice versa. Furthermore, in the studies carried out by Brief & Weiss (2002) and Klusmann *et al.* (2008) found that -burnout in teacher profession; hits in particular those who lack the appropriate coping resources. They also posit that teacher high self-efficacy is positively associated with personal coping resources, whereas teacher burnout is linked with negative personality characteristics, such as low levels of self-efficacy. However, these findings notwithstanding, the participants were teachers who were summoned from vacation to come for workshop which had been criticized by the teachers union in Kenya for non-inclusion of teachers in curriculum review process. This could have contributed to majority feeling burnout.

The results of Pearson correlation matrix demonstrated support for Maslach *et al.* (2001); Schwarzer & Suhair (2008) view that burnout is characterized primarily by emotional exhaustion and personal accomplishment in which feelings of depersonalization are inhibited. More importantly, the results of the present study revealed that emotional exhaustion is a core symptom of burnout, followed closely the construct of personal accomplishment as indicated by their strong covariance. Indeed, the present study found that emotional exhaustion is a significant predictor of burnout behaviour. The results of this study further confirmed prior assumption that emotional exhaustion has far reaching influence on burnout as compared to personal accomplishment and depersonalization. The findings suggest that intervention efforts through self-efficacy should focus on emotional exhaustion to fight both perceived and actual burnout among teachers in schools. For instance, teachers who report elevated levels of burnout and lower levels of coping are more likely to require the most assistance on self-efficacy intervention strategy. Emotional exhaustion and personal accomplishment were found significant in this study perhaps teachers who were pulled out from vacation to attend a workshop felt agitated since it cut short their vocation. This could have heightened emotional exhaustion including fatigue and debilitation, and disconnect response directed towards the planners of the workshop.

Although male had high mean score than female on burnout, the difference was insignificant. This was supported by insignificant t-test result of $t(148) = 0.713, p > .05$. In view of this, both gender had no differences in the way they responded to burnout at work. This indicates that both gender were seriously affected by burnout in terms of commitment towards their job. The result is contrary to earlier study by Adekola (2006) who found female teachers to experience higher level of burnout than their male counterparts. Findings could be associated with present paradigm shift in social economic structure which has forced most women to multitask between work and housework. The inequality between the treatments of both genders in the work-place could also be responsible for the feelings of the female staff in terms of burnout. The findings further alluded to the fact that

since the teachers were together in an organized workshop, they influenced each other in the manner in which they responded to burnout.

5. Study Limitations

Given that we did not manipulate any variables in this study, causal inferences are not warranted. In addition, that the research design was correlational, further research is needed to confirm whether self-efficacy and burnout constructs affect teachers classroom delivery to students lead to changes. A randomized design with such a manipulation would determine the role of teacher self-efficacy and burnout on student performance.

In addition, as noted, teachers were involved in the study at different time points in this cohort design. It is possible that the time of year affected teacher adjustment and could account for differences in teacher reports and experiences of stress and coping. Further research is needed to explore the stability of teacher stress and coping profiles over the course of the year. It is also important to note that data analysis were based on teacher report in training on CBC that had attracted controversy between the ministry of education and teacher employer on one side versus the teacher and teacher union on the other side. Thus the teachers might have reported biasness and dissatisfaction to the research tool.

4. Conclusions

The present study has shown that teacher self-efficacy is essential factor in moderating teacher burnout. The results of this study emphasize the importance teacher self-efficacy in managing burnout at school and classroom work. The teachers with high level of self-efficacy beliefs stands high chance to control work related burnout. These are more likely to raise performance of their students and the school in general. The findings of the present study showed that emotional exhaustion and reduced personal accomplishment are major determinant of burnout while depersonalization is a insignificant construct on burnout. This indicates that these two constructs are closely related to teacher burnout. The effects found in these two constructs imply that intervention strategies on teacher burnout through self-efficacy should focus on emotional exhaustion and reduced personal accomplishment.

The study further revealed that both female and male teachers don't differ significantly in their response to burnout behavior at school. While the sample in this study involved a section of primary school teachers selected to attend training workshop in Busia County on implementation of new CBC in Kenyan Primary schools, there is no assumption that the participants of this study were a fair representative of all primary school teachers in the County or Country. The study should be replicated with different samples from different backgrounds. However, these findings inform on the role of self-efficacy on moderating the effect burnout among the teachers with a view of improving on teacher performance on school and in classroom. To help teachers overcome burnout at work, there is need to pay attention to promoting self-efficacy levels.

6. Recommendations

To manage burnout, teachers ought to practice sense of work control through some useful interpersonal and communication skills, including assertiveness to help cope with disruptive students' behaviours like aggression.

In order to enhance self-efficacy and a sense of self-mastery the teachers are encouraged to identify all the positive meanings of their work including their role in the process of shaping young personalities. Develop peer support activities through counseling, discussing difficult cases and also through gaining some emotional support from their close ones. Avoid workload by exercising time management and prioritize goal settings.

Teachers while performing their work at school and classroom should learn to practice realistic professional roles by avoiding perfectionism, and some dysfunctional beliefs like "I cannot fail", "I have to know everything", Should also seek for additional professional training to acquire new knowledge and skills to enable handle strenuous work.

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