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Supportive Work Environment and Teacher Performance among Public Secondary School in Homa-Bay County, Kenya

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Abstract:

Supportive working environment is significant in enhancing employee satisfaction and, by far, worker retention and performance. Supervisor support, availability of conducive physical and learning resources, fair job demand are some of the factors in employment that affect job satisfaction and turnover intention. However, there has been rampant teacher transfer request in some parts of Kenya hence questioning whether this is due to lack of supportive work environment. During 2016-2020, high rates of transfer requests among public secondary schools in Nyanza Region were noticed in Homa Bay County (11860). This was in contrast to low requests noted in Kisumu (512), Siaya (647) or Migori (781). Similarly, performance in Kenya Certificate of Secondary Education examination (KCSE) of the County has also been dropping by an average annual mean of 0.142 during the same period. This study therefore sought to investigate the influence of supportive work environment on performance of teachers among public secondary schools in Homa Bay County. Specific objectives were to determine the level of teacher performance, and to establish the influence of supportive work environment on performance of teachers. Descriptive research design was adopted on a target population of 257 public secondary schools comprising of 257 Principals and 2, 231 teachers. Yamane's formula was used to calculate 157 schools from which 157 principals and 314 teacher were drawn using stratified random sampling. Questionnaire and interview schedule were used to collect data from teachers and principals respectively. Findings showed that existing WLB situation favoured teacher performance ($M=3.68$; $SD=0.923$), although supportive work environment put in place by the administration explains only 28.3% variation in teachers' performance ($R^2=0.283$). It is concluded existing support by school administration fall short of addressing issues such as workload hence does not induce teacher performance to the maximum. .

Keywords: Performance of teacher, supportive environment, public secondary schools, supervisor support, instructional supervision, workload

1. Introduction

Most people spend more than half of their entire lifetime in closed work environment hence the need for a healthy and supportive work environment (ILO, 2018). To retain talented workforce for better organizational performance, it is important to provide a supportive work environment (SWE) (Naz et al, 2020). According to Boswell, Tully and Mills (2017)), the climatic component of a workplace including supervisory/peer support, adequacy of working resources and physical facilities as well as prospects to apply learned behavior form SWE. On their part, Yusliza et al (2020) considered perceived climate, supervisory relationship, peer group interaction, perceived organisational support, and person-organisation fit as factors composing SWE. Many scholars (Kundu&Lata, 2017; Okello, Sichari&Odera, 2017; Naz et al, 2020) have strongly linked SWE with employee retention. Paucity of information seems to exist regarding the relationship between SWE and performance especially among teachers in public secondary schools.

In the success of education curriculum delivery continuum, importance of teachers cannot be gainsaid. Teachers are professionals who have a positive effect on student learning and development through their ability to deliver learning content (Kuncoro&Dardiri, 2017). They employ their good pedagogical, professional, communication and interpersonal skills to deliver curriculum requirement for the enhancement of student performance (Alyaha&Mbogo, 2017). This is an important contribution especially in the secondary level of learning which provide a gateway to tertiary education, a key component of economic development of a country (Baumann&Winzar, 2014). Conducive work environment can gift comfort and security to teachers in carrying out their instructional works and other duties (Kuncoro&Dardiri, 2017). Whereas SWE has been largely associated with employee retention especially in profit making entities, focus on how the same influences performance of the teacher remains limited.

It is critical to note that investigations focusing on factors for poor academic achievement have overlooked the mediation role of SWE in the relationship between job satisfaction and work performance of teachers. A study by Turkey, Uzun and Özdem (2017) examined the relationship between teachers' perceptions of supervisor support and job performances. They found a positive linear relationship between supervisor support, job performance and job satisfaction. In Pakistan, Naz et al (2020) investigated the causal relationship between supportive work environment SWE and employee retention in the hospitality sector. They found that SWE has a positive and significant association with employee retention. In India, Kundu and Lata (2017) investigated the mediating effect of organizational engagement in the relationship between supportive work environment (SWE) and employee retention. Findings suggested that SWE plays a crucial role in predicting employee retention while organizational engagement partially mediates the relationship between SWE and employee retention. On their part, Yusliza et al (2020) examined the relationship between SWE, organisation fit and employee retention among academic staff in one of the Malaysian public universities. Results showed a direct and positive relationship between supportive work environment and academic staff retention. Regionally, Iwu, Gwija, Benedict and Tengeh (2013) investigated the relationship between poor performance of learners and teacher motivation in selected high schools in the Western Cape Province of South Africa. The results suggest that highly motivated educators experience job satisfaction; and also perform better than their poorly motivated counterparts. In Nigeria, Edo and Nwosu (2018) investigated the relationship between working environment and teachers' productivity in secondary schools in Port-Harcourt Metropolis. Findings indicated that adequate lighting, temperature and space availability significantly influence productivity of the teachers. Locally, Okello et al (2017) investigated the influence of school environmental characteristics on retention of secondary schoolteachers in Homa Bay County of Kenya. The findings showed that high levels of conducive school environment was associated with high teacher retention rate. It is thus emerging from the aforementioned studies that much impetus is given to SWE and retention, relegating teacher performance especially among teachers in secondary schools.

Situational analyses of teacher records in some regions of Kenya demonstrate seemingly inadequate teacher commitment as well as high turnover intentions. This is particularly evident among public secondary schools in Homa Bay County during the last five years (Homa County Director of Education [HBCDE, 2020]). For instance, teacher transfer requests have escalated in various sub counties within the county in the last five years. Table 1 presents trends of transfer requests of teachers in public secondary schools by end of 2020.

Year	Transfer Request from	Transfer Request to
Homa Bay	1,871	489
Kisii	671	792
Kisumu	429	871
Migori	765	672
Nyamira	650	562
Siaya	537	629

Table 1: Public Secondary School Teacher Transfer Requests as at End of 2020

Source: Homa Bay County Education Office (2020)

Table 1 illustrates that high teacher transfer requests exist in higher rates for those who want to move out of Homa Bay County. For the period 2016 – 2020, For instance, most teachers requested to be transferred to: schools in Kisumu County than those who requested to be transferred from the area (871:429); schools in Siaya County than those who have requested to be transferred from the area (629:537), and schools in Kisii County (792: 671). This tends to imply that factors that lead to retention among teachers exist in these areas (Kisumu and Siaya Counties) more than the other Counties. On the other hand, Table 1 illustrates that there is a very high transfer requests of teachers from schools in Homa Bay County. This seems to suggest that there are factors that lead to teacher dissatisfaction among public secondary schools in these sub counties.

There have also been disparities in academic performance among public secondary schools in the six counties. Table 2 presents mean scores in Kenya Certificate of Secondary Education examinations attained by public secondary schools between 2017 and 2020 among the six counties in the area.

Year / Name of Sub-County	2017	2018	2019	2020	Average Mean
Homa Bay	6.52	6.47	6.23	6.21	6.36
Kisii	6.91	6.95	7.12	7.23	7.05
Kisumu	6.93	6.97	7.32	7.47	7.12
Migori	6.37	6.38	6.38	6.39	6.38
Nyamira	6.41	6.45	6.46	6.48	6.45
Siaya	6.89	6.95	7.36	7.51	7.18
National Mean Score	253.09	252.42	262.44	267.20	258.75

Table 2: Kisumu County Mean Scores in KCSE from 2010 to 2017

Source: County Director of Education: 2018

Table 2 illustrates that performance as shown by average mean scores in KCSE during 2017 – 2020 is highest in Siaya (7.18); Kisumu Central (7.12), and Kisii (7.05). This seems to suggest that work performance of teachers in these

counties is better than other counties in the region (formerly Nyanza Province). Similarly, the same counties that have posted better academic performance in KCSE have tended to attract more teachers based on transfer requests received by end of 2020 (Table 1). However, limited information is available with regard to whether SWE is more favourable in these counties than the others.

1.1. Statement of the Problem

Provision of SWE is a critical factor in any endeavor to ensure commitment and work performance of employees. Climatic component of a workplace including supervisory/peer support, adequacy of working resources and physical facilities as well as prospects to apply learned behavior are critical SWE factors for organizational performance. Teachers are critical in the realization of equitable quality education by 2030 as envisaged by the SDG 4. Provision of conducive SWE to teachers is therefore a critical ingredient among efforts aimed at ensuring work commitment and academic performance of learners. However, there are indications of insufficient inadequacy in SWE among teachers in some counties in Kenya as witnessed in massive transfer requests and disparities in KCSE performance. During 2016-2020, high rates of transfer requests to public secondary schools were noted in Kisumu (871), Kisii (792), and Siaya (629). Similarly, disparities in KCSE performance have been recorded in the region, with schools in counties which teachers requested to be transferred to such as Kisumu (7.12), Kisii (7.05) and Siaya (7.18) recording higher average mean scores during 2017 – 2020 than the rest. Limited information is however available as to whether SWE is more unfavourable among public secondary schools in counties such as Homa Bay than the others. There was therefore need to analyse the influence of SWE among public secondary schools in Homa Bay County.

1.2. Purpose of the Study

This study investigated the influence of supportive work environment on performance of teachers in public secondary schools in Homa Bay County, Kenya.

1.3. Objectives of the Study

Specific objectives of the study were to;

- Determine the level of teacher performance among public secondary schools in Homa Bay County
- Establish the influence of supportive work environment on performance of teachers in public secondary schools in Homa Bay County

2. Empirical Literature Review

Existing literature regarding how SWE influences performance of teachers is scanty, with the available few fraught with incongruity, particularly in secondary education. In Turkey, Uzun and Özdem (2017) examined the relationship between teachers' perceptions of supervisor support and job performances and the mediating role of job satisfaction in this relationship. According to the results, there is a positive linear relationship between supervisor support, job performance and job satisfaction and job satisfaction has a full mediating role between supervisor support and job performance.

In Indonesia, Kuncoro and Dardiri (2017) explored how teacher performance is influenced by work environment during instructional process in vocational schools. Findings showed that there was no correlation between work environment and teacher performance. This implied that the work environment (conditions of physical work environment, psychological work environment, and non-physical work environment) does not positively support the pedagogical and professional performance of teachers. In Malaysia, Yusliza et al (2020) examined the relationships between supportive work environment, person–organisation fit and employee retention among academic staff in one of the public universities. The study conceptualised supportive work environment as perceived climate, supervisory relationship, peer group interaction, and perceived organisational support. The results revealed a direct and positive relationship between supportive work environment and academic staff retention.

In India, Singh and Kumar (2017) assessed the impact of infrastructural facilities and teaching-learning resources on the academic attainments and placements of management graduates of selected Bangalore basedB-Schools. Analysis of the captured data from two Bangalore B-Schools reveals that there is a positive correlation between the variables under study and thus the findings strongly supports the necessity of having all the prescribed physical infrastructural facilities and the teaching-learning resources on the campuses of the B-Schools for more effective and efficient delivery of knowledge, which is a pre-requisite in any knowledge-based economy. Another study in India by Kundu and Lata (2017) investigated the mediating effect of organizational engagement in the relationship between supportive work environment (SWE) and employee retention. The findings suggested that SWE plays a crucial role in predicting employee retention while organizational engagement partially mediates the relationship between SWE and employee retention. In Pakistan, Naz et al (2020) investigated the mediating role of organizational commitment and person– organization fit between the causal relationship of supportive work environment and employee retention. The study's findings elucidated that SWE has a positive and significant association with employee retention. In addition, organization commitment and person organization fit acted as mediators between the relationship of a SWE and employee retention.

Regionally, Alyaha and Mbogo(2017)examined the impact of working conditions on teacher's job satisfaction and performance in the private primary schools in Yei town, South Sudan. The study employed descriptive survey design. The study concluded that the inadequacy of school facilities led to teachers' dissatisfaction with their job. In their study, Edo and Nwosu (2018) analysed how working environment influence teacher productivity in secondary schools in Port

Harcourt Metropolis. The population of the study consists of 22 (principals) 440 (teachers) from 22 senior secondary schools. Findings indicated that adequate lightening, temperature and space availability significantly influence productivity of the teachers.

Locally, Okello et al (2017) investigated the influence of school environmental characteristics on retention of secondary schoolteachers in Homa Bay County of Kenya. The study adopted an ex-post facto research design. This study used questionnaires as the instrument of data collection. The findings indicated that there was a significant fairly moderate, positive correlation between the two variables [$r = .463$, $n=422$, $p<.05$], with high levels of conducive school environment associated with high teacher retention rate. Similarly, Wambua, Murungi and Mutwiri (2018) analysed the influence of physical facilities and strategies used by teachers to improve pupils' performance in social studies in Makueni County, Kenya. The study employed descriptive survey design. The independent variable was classroom learning environment while dependent variable was pupils' academic performance in social studies. Results showed that lower primary school classroom environment in Kibwezi zone were not conducive for pupils to learn Social studies effectively. Availability and use of physical facilities in social studies was below average and pupils scrambled to use the little available resources. Pupils' performance in social studies was below average

3. Materials and Methods

3.1. Research Design

This study adopted mixed-methods research approach utilizing both quantitative and qualitative methods of data collection and analysis. Mixed-methods approach involves gathering both numeric information using questionnaires as well as text information using interviews so that the final database represents both quantitative and qualitative information (Poth&Munce, 2020). Dawadi, Shrestha and Giri (2021) state that mixed method approach offered a bridge and a continuum by using quantitative methods to measure some aspects of the phenomenon under study and qualitative methods for others. This approach provided for complementarity and diversity in data collection and interpretation, hence bringing together the differing strength and non-overlapping weaknesses of quantitative methods with those of qualitative methods (Shorten & Smith, 2017).

Qualitative designs collect data that is open-ended without predetermined responses while quantitative designs usually include closed ended responses such as found in questionnaire instruments (Creswell & Plano, 2018). The design was deemed appropriate by the researcher because the study directly compared and contrasted quantitative statistical results with qualitative findings, thus gaining from the concept of concurrent triangulation.

3.2. Target Population, Sample Size and Sampling Procedure

The target population comprised 257 principals and 2231 teachers drawn from 257 public secondary schools in Homa Bay County. This study employed Taro Yamane's (1967; cited in Israel, 2013) formula to calculate the sample size, as:

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size; N is the population size, and e is the level of precision (0.05). The computed sample size was 157 schools from which the researcher drew three respondents: one Principal and two teachers (one subject teacher and one class teacher) per school.

School Category (*Stratum)	No of Schools	Sample Size (Schools)	Sample Size (Respondents)
National	2	2	6
Extra County	23	14	42
County	43	26	78
Sub County	189	115	345
Total	257	157	471

Table 3: Presents the Distribution of Sample Size

The two national schools were included in the study through census method while stratified technique based on the population of school category was used to select 14 extra county schools; twenty six county schools, and 115 Sub County schools. This yielded a total of 471 respondents (157 Principals and 314 teachers) as the sample size.

3.3. Data Collection Instruments

Questionnaire and interview schedule were used for data collection. The study used closed ended questionnaire to collect quantitative data from the respondents. Questionnaire was deemed suitable in this study since it solicited views of class and subject teachers on their experiments SWE as provided by the school administration in the area (Taherdoost, 2016). Semi structured interviews were used in the study to collect data from Principals. The interview schedule was appropriate for the study as it provided in-depth information and a detailed understanding of the issue under research.

3.4. Validity of Instruments

For validity measurement, the researcher used content validity index (CVI). Content validity is the degree to which assessment instrument is considered as relevant and representative of expected constructs for a particular purpose of assessment (Yusoff, 2019). Judgments of five experts were rated on a scale of 1 to 4 as: 1 = Relevance; 2 = Clarity; 3 = Simplicity, and 4 = Ambiguity. Ratings of the experts were summed up and averaged. The instrument was rated as highly relevant by the five experts, with a calculated average rating of 0.96 (96%). The researcher therefore concluded that the content validity index met satisfactory level (Hadie et al. 2017; Ozair et al. 2017; Lau et al, 2018).

3.5. Reliability of Instruments

Split-half method was done during pilot study with randomly selected 31 respondents to test instrument reliability. Internal consistency of the instrument was determined via split-half reliability index using Cronbach's Alpha coefficient (Cronbach, 1970, cited in Akhtar, 2016). This involved splitting the instrument questions into two halves of equal items then calculating the coefficients of each half (Taherdoost, 2016). The internal consistency (reliability) of the study generated an Alpha coefficient of 0.849 which is greater than the threshold 0.7 espoused by Creswell and Plano (2018)

3.6. Data Analysis and Presentation

Data collected was processed and analyzed using descriptive statistics: mean (M), and Standard Deviation (SD) with the aid of Statistical Package for the Social Sciences (SPSS) tool. The relationship between SWE and performance of teachers was measured via regression analysis. Qualitative data obtained from interviews was analysed through Thematic Analysis. This entailed categorization of generated answers into outstanding themes and reported in narrative forms (Braun & Clarke, 2019).

4. Results and Discussions

4.1. Results

4.1.1. The Level of Teacher Performance

The first section of the survey assessed the respondents' views on their performance based on the 10 items. The respondents were asked to rate the items on a scale of 1 - Strongly Disagree, 2 – Disagree, 3 Neutral, 4 – Agree and 5 - Strongly Agree. The results were analyzed and presented in Table 4.

SN	Items	N	Mean	Std Error	Std Dev
1	I am satisfied with my job	240	4.40	0.041	0.630
2	I complete the syllabus as per the school requirement	240	4.43	0.037	0.566
3	Students perform as expected in my subject	240	3.35	0.064	0.986
4	I have no plans of asking for transfer from this school	240	3.24	0.080	1.237
5	WLB practices help me in improving my time management skills	240	3.75	0.059	0.916
6	I continue working in this school because it has most WLB practices	240	3.33	0.074	1.147
7	There is performance culture which keep pushing me to perform	240	3.53	0.057	0.886
8	I am extrinsically motivated to perform	240	3.49	0.064	0.994
9	With current WLB my performance keep improving	240	3.58	0.055	0.845
10	Reflection of previous performance has helped me to perform	240	3.72	0.066	1.027
	Overall Mean		3.68		0.9232

Table 4: The Level of Teacher Performance

Table 4 shows that the respondents agreed ($M=3.68$; $SD=0.923$) that prevailing WLB was conducive to their work performance. These findings concurred with those from the principals' interview. When asked to comment on teachers' job satisfaction in their schools and how they complete their syllabi, one of the principals had this to say;

Teachers' job satisfaction is an important aspect of their commitment towards the success of their schools. Personally, I consider my teachers to be satisfied with their jobs. This is evident by the way they appear intrinsically motivated to assist learners to perform well academically. (Principal A).

From the above interviewee's comments, it appears clear that teachers' job satisfaction contributes to the success of schools as it gives them a sense of obligation to perform. Hence teachers become committed to their work.

4.1.2. Supportive Work Environment and Teachers' Performance

The respondents were asked to rate the items on Supportive work environment by the school administration on a scale of 1 - Strongly Disagree, 2 – Disagree, 3 Neutral, 4 – Agree and 5 - Strongly Agree. The results were analyzed and presented in terms of means and standard deviation as shown in Table 5.

Sn	Items	N	Mean	Std Error	Std Dev
1	The working condition in the school is supportive	240	4.10	0.050	0.768
2	The school offers teacher incentives	240	3.29	0.079	1.226
3	My relationship with my colleagues is good	240	4.27	0.045	0.690
4	The school has adequate teaching and learning facilities	240	3.46	0.075	1.160
5	The principal is very friendly and sensitive	240	4.36	0.046	0.719
6	The physical facilities in the school such as classrooms are in good shape	240	3.68	0.071	1.094
7	The workload is too much such that I do not have enough time for myself	240	2.78	0.073	1.127
8	The school has tidy and safe environment	240	4.15	0.058	0.893
9	Student leaders are friendly	240	3.69	0.054	0.841
10	Parents/teachers leadership are supportive	240	3.68	0.062	0.961
	Overall Mean		3.74		0.948

Table 5: Descriptive Analysis for SWE and Teacher Performance

Table 5 shows respondents agreed ($M=3.74$; $SD=0.948$) that SWE provided by the school sufficiently enable them give optimum performance. This is in line with the findings from the interview with the principals. When asked to comment on their administrative support to teachers and its impact on teacher performance, one of them had this to say; My administration gives support to teachers by creating cordial relationships, supporting teachers' task and helping them to improve their quality of teaching. This is done by providing tidy and safe environment, adequate and relevant teaching resources among others. (Principal D).

The statement attributed to Principal D suggests that teacher safety alongside provision of working resources form the main components of SWE created by the administration among schools in the study area.

4.2. Correlation between SWE and Teacher Performance

The study sought to establish the relationship between Supportive work environment by the school administration and performance of teachers. A correlation analysis was conducted to determine the relationship and the results are presented in Table 6.

		Teacher Performance	Supportive Working Environment
Teacher Performance	Pearson Correlation	1	.532**
	Sig. (2-tailed)		.000
	N	240	240
Supportive working environment	Pearson Correlation	.532**	1
	Sig. (2-tailed)	.000	
	N	240	240

Table 6: Correlation between SWE and Teacher Performance

Table 6 shows a correlation of $r = 0.532$ with $p = 0.000$. A correlation of $r = 0.532$ implies that there is a positive moderate correlation between supportive work environment by the school administration and performance of teachers.

4.3. Regression analysis of SWE and teacher Performance

The study sought to determine how SWE by the school administration explain teachers' performance. In this regard, a linear regression analysis was computed based on the following model

$$Y = a + \beta X + \epsilon$$

Where

Y – Teachers' performance (Dependent variable)

a – Constant

β - change in Y

X – Supportive work environment by the school administration (Independent or Predictor Variable)

Regression analysis were presented in Table 7, Table 8 and Table 9 as follows:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.532 ^a	.283	.280	5.306

Table 7: Regression model summary of SWE and Teacher Performance

Table 7 shows R Square of 0.283 with an adjusted R square of 0.280. This implies that Supportive work environment by the school administration explains 28.3% variations in teachers' performance.

The study further sought to determine whether the model represented in Table 7 was fit and significant. This led to computation of ANOVA analysis as presented in Table 8.

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2642.909	1	2642.909	93.881	.000 ^b
Residual	6700.087	238	28.152		
Total	9342.996	239			

Table 8: ANOVA Table on SWE and Teacher Performance

Table 8 show statistics to ascertain whether the model which shows Supportive work environment by the school administration and teachers' performance is fit. The results show F = 93.881 with P- Value = 0.00. Since P- values were found to be less than 0.05 level of significant, it was concluded that model was significant and that Supportive work environment by the school administration is a significant predictor of teachers' performance.

The study sought to establish how a unit of Supportive work environment by the school administration led to increase in teachers' performance. The results of analysis were presented in Table 9.

	Unstandardized Coefficients		Beta	t	Sig.
	B	Std. Error			
(Constant)	12.746	2.506		5.087	.000
Supportive working environment	.642	.066	.532	9.689	.000

Table 9: Coefficients of SWE and Teacher Performance

Table 9 shows a unit of Supportive work environment by the school administration might lead to 0.642 unit change in teachers' performance. Based on P-Value of 0.00 as shown on Table 9, this unit change was found to be significant (P> 0.05). If this statistics is substituted in the above model

$$Y = a + \beta X_2 + \epsilon$$

Then

$$Y = 12.746 + 0.642 (X_2)$$

The results on the regression analysis of Supportive work environment by the school administration and teachers' performance indicated that Supportive work environment by the school administration predicted teachers' performance by 28.3%. Further analysis showed that a unit of Supportive work environment by the school administration in public secondary schools in Homa Bay County, Kenya can lead to an increase of 0.642 in teachers' performance and this increase was found to be significant at 0.05 level of significant. It was also established that SWE by the school administration is a significant predictor of teachers' performance.

5. Discussions

The study found a relatively low influence of existing supportive work environment on teachers' performance. With 28.3% potential influence of SWE on performance of teachers, the findings seem to contrast a number of earlier studies. For instance, Yusliza et al (2020) found supportive work environment to be having high influence on academic staff retention in Malaysia. Similarly findings were reported in Kundu and Lata (2017) as well as Naz et al (2020). Therefore it seems SWE effects are contextual and heterogeneous.

6. Conclusions

The study concludes that employee leave policies as administered in public secondary schools have had minimal influence on performance of teachers. It is also concluded that the policies do not consider teachers with young families who need close attention, especially lactating teachers.

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