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PHYSICAL WORKPLACE ON ACADEMIC PERFORMANCE IN PUBLIC PRIMARY SCHOOLS IN TURKANA COUNTY, KENYA

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ABSTRACT

Every Employee is entitled to a comfortable, safe and supportive environment that stimulates productivity and boosts performance. On the contrary, the former 8-4-4 system of learning in Kenya has been replaced by the new Competency Based Curriculum (CBC), this is where the ECD changes to two levels namely preprimary one and Two (PP1 and PP2) and Subjects referred to as Learning areas while topics/sub topics are replaced by Stands/Sub Strands and Class three changed to Grade three respectively in the new Education system. The main aim of the CBC is to transform classroom discourse from a predominantly teacher-centred to a learner-centred one in order to promote learners' participation and engagement with the learning process that later stimulate Creativity and Innovativeness of the Learner. However, the Government and educational actors need to realize that there are numerous factors that contribute to better and effective learning and better results in our public primary schools. The study sought to address the effect of physical workplace on academic performance in public primary schools in Loima Sub-County. Descriptive research design was adopted and stratified; purposive and random sampling techniques were used. Target population consisted of one (1) County Education officer in Loima, one (1) Sub-County Administrator of Loima Sub County, the four (4) wards administrators in Loima Sub County, 115 of Turkana County Government staffs in Loima sub County and 26 Primary school head teachers in Loima Sub County. Primary data was collected via use of the questionnaires. Pilot study was conducted in Kanamkemer Ward in Turkana Central Sub County. Collected data was analyzed using Statistical package for social sciences (SPSS, version, 22). Results showed that there was a statistically significant positive relationship between physical workplace and academic performance. Physical workplace accounted for 72.1% (R2 = 0.721) variations in the academic performance. It was concluded that physical workplace accounted for 72.1% ($R^2 = 0.721$. The following were the recommendations of the study: school management and the Ministry of Education should provide an attractive and supportive working environment to enhance learning. This finding will be intended to be used by County Humana Resource Department in all sub-counties, in the county and finally, the National Human Resource Department in the Ministry of Education.

Key Words: Diversification Expansion Strategies, Performance of SACCOs, SACCOs and Turkana County

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INTRODUCTION

The Global Monitoring Report on Education for All (2012) Reported by UN Educational, Scientific and cultural Organization on 16th October in Paris, acknowledges putting education to work while revealing the urgency and needs to invest in skills for Youth. The report while appraising various stages of education among UN member states, ranging from Primary Education, Secondary Education and Higher Education, placed greater emphasis on the primary education as a stepping stone for young people from the world of school to the world of work. The report equally advocated the importance of extending access and improving the relevance of primary schooling to ensure that all young people are equipped with the skills they need as they enter the workplace. It reveals, there are 250 million children of primary schools age today who cannot write or read whether they are in school or not. Likewise, 71 million teenagers who are probably out of schools because they missed an effective attention while in school. Working environment plays a very crucial role towards the workers 'performance at a given place of work. According to Najike, Keith, McRobbie and Campbell (2002) in their study in Papua, New Guinea, school environment plays an important role in the academic achievement of school children.

Researchers in environmental psychology have developed a rich literature on ways of measuring how the physical environment meets people's (users') needs, in which many varieties and examples of misfit are recorded (Vischer, 2007). Studies have tended to focus on the height and density of workstation partitions, the amount and accessibility of file and work storage, and furniture dimensions such as work surfaces as being these elements of furniture and spatial layout which have the most effect not only on the satisfaction of individual workers but on the performance of teams. One study indicated that the additional investment in ergonomic tables and chairs for workers yielded a 5-month payback in terms of increased productivity (Miles, 2000). Several studies

provide evidence that office workers are uncomfortable in open plan configurations and prefer private enclosed workspace (Brennan, Chugh, & Kline, 2002; Fried, Slowik, Ben-David, & Tiegs, 2001).

Kenyans continue to experience stress as a result of environmental conditions, poor political uncertainty, poor working conditions and extreme levels of poverty (Ngeno, 2007) and further points out that employees in Kenya have to contend with low salaries, lack of involvement indecision making, heavy workload, and few opportunities for promotion. According to the KCPE analysis of 2015 and 2017 in Loima Sub County in Turkana County, it was evident that the of performance kept on dropping from 223.52 to 217.90 respectively. These showed how the workplace environment in the region was being mishandled hence to the demotivation of the teaching staff in the region. It's for this reason that the County government and other Actors had to fill the gap in order to improve the performance and raise the Education standard in the region.

Statement of the Problem

Poor academic performance and workplace stress in low and middle income counties in Kenya may be particularly exacerbated by human resources shortages that reached critical levels in many resource-poor set ups. The research sought to establish if these factors may have contributed to poor performance of pupils among others in the region; the human capital miss match of professions, retrogressive cultural believes in the area, extreme dry spells and remoteness, unpredictable floods that ruin dilapidated school structures, poor access roads and networks across the Sub County, poor social amenities and endless insecurity in the region. The researcher sought to find out why there was high poor performance in the region. This was replicated by the 44 number of pupils out of 2930 pupils who joined National schools in the consecutive 5 year's analysis of 26 selected schools in Loima Sub County. The Kenya Population Housing Census of 2009 rated the area

to be one of the poorest in the entire County, More so; the KNEC–KCPE results data of 2013 showed four (4) pupils of Private Primary schools against one (1) of Public Primary school in the top five (5) Category of primary school within Lodwar and Kakuma respectively (KCPE, 2013) hence exposing gaps that needed to be filled.

LITERATURE REVIEW

Behaviourism Theory

Behaviourists' perspectives of learning originated in the early 1900s, and became dominant in early 20th century. Behaviourism contends that knowledge is an accumulation of associations between stimuli and responses. Watson (1913) is considered to be the founder of the behaviourist theory which is made of two main theories notably Classical Conditioning and Operant Conditioning. As per Watson, the theoretical framework of behaviourism has advanced by Watson received a lot of criticisms during his time but he defended it has a measure of objectivity of the other fields of science just like physics and chemistry. That says that people behave the way they do due to the consequences learned from their past actions. Therefore, reinforcers control the occurrence of the desired partial behaviours. The best known application of Skinner's theory is "programmed instruction" whereby the right sequence of the partial behaviours to be learned is specified by elaborated task analysis. Therefore, the learners acquire a lot from the environment and this explains why they are the products of the environment and this is where the workplace resonates with the accrued and developed terrain that may end up controlling the performance at a place; therefore, the County and National Government has to improve and create a controlling environment that can stimulate efficient and conducive workplace for teaching staff in the region for a better performance in our Primary schools.

Hierarchy of Needs Theory

The motivation theory integrates well with Abraham Maslow's (Maslow, 1943) of the hierarchy

of needs. Abraham Maslow's hierarchy of needs presents different motivations at different levels. First, people are motivated to fulfil basic biological needs for food and shelter, as well as those of safety, love and esteem. Once the lower level needs have been met, the primary motivator becomes the need for self-actualization, or the desire to fulfil one's individual potential this is according to Abraham Maslow, the psychologist of 20th century. In the Hierarchy of Needs, Theory posts that the needs at the bottom are the most urgent and need to be satisfied before attention is paid to the others. According to Maslow, lower needs such as physiological need take priority. They must be fulfilled before the others are activated this is according to Abraham Maslow. Otherwise, it is pointless to worry about education if one is dying of starvation, or if life is threatened. Therefore, there was need to investigate on the physiological needs of Loima pupils based to the Maslow's Hierarchy of Needs if the Workplace environment of the Teaching staff, a better performance and increased number to National schools goers was to be realized in the future.

The Social Learning Theory

The social learning theory is a perspective that states that people learn within a social context that is facilitated through modelling and observation. People, especially children, learn from the environment and seek acceptance from society by learning through influential models. The social behaviour is also influenced by being rewarded and /or punished for these actions. This takes live model in which an actual person demonstrates the desired behaviour, verbal instruction in which an individual describes the desired behaviour in detail and instructs the participant to engage in the behaviour, and symbolic modelling which occurs by means of the media, including movies, television, internet, literature, and radio. The most critical element of the social learning theory is that for pupils to learn they must pay attention, retain what they have learnt; reproduce what they have learnt; and be well motivated. The theory will be applied to the

area of study to determine these critical elements of successful earning are operationalized and the extent to which parents and teachers are good models to the learners (Bandura, 1977). Albert in his theory supports and agrees with Watson's Theory and of Classical conditioning of Operant of Skinner for so accepting that behaviour is learnt from the environment through observational learning. Nevertheless, when teaching staffs are well motivated and retained they can be able to reproduce based on the level of motivation hence replicated in the pupil's performance.

Physical Workplace and Academic Performance

According to Najike (2002) in his study in Papua, New Guinea, school environment plays an important role in the academic achievement of school children. The success or failure of schoolchildren greatly depends on the quality of classroom environment and social climate. Bradley et al. (1988) studied home environment and found out that there was significant correlation between home environment and the children's achievement, test scores and their classroom behaviour. According to Sharma (1984) in their study on the effects of family climate of pupils 'academic achievement, revealed that highly significant and positive relationship existed between the variables, family climate and academic achievement.

An attractive and supportive working environment provide conditions that enable employees to perform effectively, making best use of their knowledge, skills and competences and the available resources in order to provide high-quality entire County service. Physical working environment can result a person to fit or misfit to the environment of the workplace like work stress. A physical work environment can also be known as ergonomic/Human factor engineering of workplace. Researches on the workplace environment need to be done in order to get an ergonomic workplace for every each of the employees. By having this ergonomic physical workplace a workplace, it will help employees from not getting the nerve injury (Cooper & Dewe, 2004).

A study by William, Persaud and Turner (2008) quoting Marsden (2005) reported that safe and orderly classroom environment (aspect instructional space) school facilities (accessories) were significantly related to pupils' academic performance in schools. The three researchers also quoted Glassman (1994) asserting that among other treatment helped to contribute to pupil's academic performance. The physical characteristics of the school have a variety of effects on teachers, pupils and the learning process. Poor lighting, noise, high levels of carbon dioxide in classroom and inconsistent temperature make teaching and learning difficult. Poor maintenance and ineffective ventilation systems leads to poor health among pupils as well as teachers which, leads to poor performance and high absentees rates (Lyons, 2001).

Amir (2010) mentions elements that related to the working environment, there are two main elements which are the office layout plan and also the office comfort. Amir (2010) also stated that a physical workplace is an area in an organization that is being arranged so that the goal of the organization could be achieved. McCoy and Evans (2005) stated that the elements of working environment need to be proper so that the employees would not be stressed while getting their job done. In their article, they also stated that the physical element plays an important role in developing the network and relationship at workplace. Result of the employees' performance can be increased from five to ten percentage depending on the improvement of the physical workplace design at their workplace (Brill, 1992).

The notion that the physical workplace affects the people who live in the workplace is rooted in the social cognitive models of behaviour (Bandura, 1986), which perceive an individual's environment as an important source of information about appropriate behaviours. Previous empirical research has shown that physical environment is closely related to the employees' performance and morale (Brewer, Carnes, & Garner, 2007). It is also

associated with the improvement of organizational outcomes and if it is not designed properly, employees will react negatively (Ryu, & Jang, 2008; Whedon, 2000).

In previous studies, the effect is explained mainly from the lens of social interference and overstimulation proposed by that individuals react negatively to dense work area which will induce the unwanted, unpredictable and uncontrollable interactions in the work place, thus trigger the psychological state of stimulus overload and subsequent negative behavioural and affective responses (May, Oldham, & Rathert, 2005). Altering the physical workplace is a potent lever for inducing change in organizational members' behaviour. Numerous studies in the area of management and organizational behaviour have shown that physical workplace does not only influence employees' psychological state (Brewer et al., 2007; Jeong & Lee, 2006; May, Oldham, & Rathert, 2005) but also their working behaviour (Kupritz, & Hillsman, 2011; Badayai, 2012).

METHODOLOGY

This study employed both descriptive survey design. The study was carried out in Turkana County and focused on academic performance of public primary schools. Target population consisted of one (1) County Education officer in Loima, one (1) Sub-County Administrator of Loima Sub County, the four (4) wards administrators in Loima Sub County, 115 of Turkana County Government staffs in Loima sub County and 26 Primary school head teachers in Loima Sub County. The sample size was made up one (1) County Education officer in Loima, one (1) Sub-County Administrator of Loima Sub County, the four (4) wards administrators in Loima Sub County, 35 Turkana County Government staffs in Loima sub County and 26 Primary school head teachers in Loima Sub County. Stratified, purposive and random sampling techniques were used. Primary data (quantitative data) was collected by use of questionnaires. Collected data was analysed using Statistical package for social sciences (SPSS). Pilot study was conducted in Kanamkemer Ward in

Turkana Central Sub County. This study employed the Cronbach's alpha coefficient as a measure of reliability of research instruments at threshold of 0.7 and above. Reliability test was carried out and the results showed that a Cronbach alpha of coefficient of 0.825 was attained implying that the research instrument was reliable. The study used construct validity of the instruments, and content validity to make structured changes for the purpose of improvement and refinement before embarking on the actual data collection process. Analysis involved the use of both descriptive and inferential statistics. Descriptive statistics used mainly the means and standard deviations; while inferential statistics employed linear regression analysis. Inferential statistics were used to test research hypotheses at p-value of 5% (0.05) at confidence interval of 95%.

FINDINGS AND DISCUSSIONS

The purpose of this study was to determine the effect of physical workplace on academic performance in public primary schools in Loima Sub-County. The results of descriptive statistics (the means and standard deviations) were as shown in Table 1. The measures of diversification expansion strategies were fifteen (15) as shown in the Table 1. The statements were anchored on a five point Likert-type scale. The respondents were required to state their level of agreement with fifteen (15) questions in relation to diversification expansion strategies and performance of SACCOs, where, 1= strongly disagree, 2= disagree, 3= not sure, 4= agree, 5= strongly agree. Descriptive statistics was carried out on fifteen (15) questions asked on the diversification expansion strategies in relation to performance of SACCOs and the results tabulated in Table 1. SACCO is involved in finding new users for its current product had a mean of 4.1878 with standard deviation of The questions on whether my furniture is comfortable enough to enable me perform my jobs without getting tired had a mean of 3.2581 with standard deviation of 0.97401; my workplace provides an undisturbed environment without any noise that gives me alone time to

perform my duties had a mean of 3.9516 with standard deviation of 1.24700; I am happy with my office space and arrangement had a mean of 4.2742 with standard deviation of 0.87158; I work in a good environment had the mean of 2.6613 with standard deviation of 1.47040; there is enough light and ventilation in my office had the mean of 3.8548 with standard deviation of 1.32871; the office space is spacious and comfortable had the mean of

3.4194 with standard deviation of 1.52088; my place of work is quiet and noise free had the mean of 4.3710 with standard deviation of 1.05944; office space is clean and dusty free had a mean of 2.6290 with standard deviation of 1.35784; office space has internet connectivity and electricity had a mean of 3.5323 with standard deviation of 1.00356 and I derive a lot of satisfaction at my workplace had a mean of 2.4839 with standard deviation of 1.55492.

Table 1: Descriptive Statistics of Physical Workplace

Descriptive Statistics

Descriptive Statistics								
Questions	N	Minimum	Maximum	Mean	Std. Deviation			
My furniture is comfortable enough to enable me		1.00	5.00	3.2581	0.97401			
perform my jobs without getting tired	62	1.00	3.00	3.2361	0.57401			
My workplace provides an undisturbed								
environment without any noise that gives me alone	62	1.00	5.00	3.9516	1.24700			
time to perform my duties.								
I am happy with my office space and arrangement	62	1.00	5.00	4.2742	0.87158			
I work in a good environment	62	1.00	5.00	2.6613	1.47040			
There is enough light and ventilation in my office	62	1.00	5.00	3.8548	1.32871			
The office space is spacious and comfortable	62	1.00	5.00	3.4194	1.52088			
My place of work is quiet and noise free	62	1.00	5.00	4.3710	1.05944			
Office space is clean and dusty free	62	1.00	5.00	2.6290	1.35784			
Office space has internet connectivity and electricity	62	2.00	5.00	3.5323	1.00356			
I derive a lot of satisfaction at my workplace	62	1.00	5.00	2.4839	1.55492			
Valid N (list wise)	62							

Source: Field data, 2018

N=147, n =67, Researcher, 2018

Results from the ten (10) questions showed that two (2) questions had means of 4.0 and above, while eight (8) questions had means of below 4.0.

The respondents gave varied views on the question asked on physical workplace in relation to academic performance.

Table 2: Regression Results of Physical Workplace and Academic Performance

Model Summary									
			Change Statistics						
	R	Adjusted R	of the	R Square				Sig. F	
 R	Square	Square	Estimate	Change	F Change	df1	df2	Change	
 0.849a	0.721	0.664	0.60219	0.721	12.652	10	49	0.849a	
		ANOVA							
		Sum of		Mean					
		Squares	df	Square	F		Sig		
 Regression		45.881	10	4.588	12.652	0.000 ^b		O _p	
Residual		17.769	49	0.363					
Total		63.650	59						

a. Dependent Variable: Academic Performance

b. Predictors: (Constant): Physical Workplace

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta	="			
	(Constant)	3.153	0.632		4.990	0.000		
1	Physical Workplace	0.448	0.131	0.423	3.419	0.001		
a.	Dependent Variable: Academic Performance							
b.	Independent Variable: Physical Workplace							

Significance level ≤0.05 Source: Field data, 2018

Variables of physical workplace were regressed with mean of academic performance and the results were as shown in Table 2. Results showed that physical workplace had a positive, linear and significant (p=0.001)with the academic performance {regression coefficient, B=0.448;p=0.001correlation coefficient, R=0.849, beta=0.423; p=0.001, ANOVA, F=12.652; p=0.000 and t-test value, t=3.419; p=0.001}.

The results were represented in the model:

 $Y = \beta_0 + \beta_1 X_1 + \epsilon$

Where Y= academic performance,

 β_0 = 3.153 (constant)

 $\beta_1 = 0.448$

X₁= physical workplace

 ε = error term

Replacing in the equation above, the model becomes: Y= $3.153 + 0.448X_1 + \epsilon$. The results indicated that there was a statistically significant (p=0.001) positive relationship between physical workplace and academic performance. Physical workplace accounted for 72.1% ($R^2 = 0.721$) variations in the academic performance. In the test criterion, the null hypothesis is accepted when the p-value is more than 5% (0.05) and the null hypothesis is rejected when the p-value is less than 0.05. From these results, the null hypothesis was rejected since a positive, linear and significant (p-value was less than 0.05) relationship was established between physical workplace and academic performance.

These findings were in agreement with past studies which revealed that there existed a positive and significant between physical workplace and

academic performance. For example, Cooper & Dewe (2004) observed that an attractive and supportive working environment provide conditions that enable employees to perform effectively, making best use of their knowledge, skills and competences and the available resources in order to provide high-quality of entire County service. Physical working environment can result a person to fit or misfit to the environment of the workplace like work stress. A physical work environment can also be known as an ergonomic/Human factor engineering of workplace. By having this ergonomic physical workplace, it will help employees from not getting the nerve injury this is in response to the setting of a volatile and insecure workplace environment in Loima Sub County.

CONCLUSIONS AND RECOMMENDATIONS

Physical workplace accounted for 72.1% (R² = 0.721) variations in the academic performance while the rest of the percentage is accounted for by other factors. The regression coefficient of 0.448 and beta of 0.423 showed that the effect of physical workplace on academic performance is not strong, an indication it was inadequate in public primary schools in Turkana County. School management and the Ministry of Education should provide an attractive and supportive working environment; provide conditions that enable their employees to perform effectively, making best use of their knowledge, skills and competences and also available necessary resources to enhance academic performance.

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