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Influence of Work Environment Factors on Teachers' Job Satisfaction in Public Primary Schools in Murang'a East Sub County

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Abstract:

Introduction of Free Primary Education in Kenya, though a blessing to many parents, brought about increased cases of occupational hazards to teachers in public schools. The purpose of the study was to establish the influence of work environment factors on teachers' job satisfaction in Murang'a East Sub County. The study used a descriptive survey design. The target population was 53 public Primary schools with 596 teachers. Cluster sampling was used to pick 25 schools and 240 respondents. A self-administered questionnaire was used to collect data which was analysed using descriptive statistics, namely means, standard deviations and percentages. Relationships between independent variable (work environment factors) and dependent variable (job satisfaction) were established through correlation and regression techniques. Out of 240 questionnaires 215 were returned fully filled. From the study findings majority of respondents (66%) agreed on existence of good work environment factors. Using correlation a strong positive relationship was established between work environment factors and teachers' job satisfaction. By use of regression work environment factors variable were found to be a significant predictor of teachers' job satisfaction.

Keywords: Ergonomic factors, Psychosocial factors, Biological and chemical factors, Job satisfaction

1. Introduction

1.1. Background and Purpose of the Study

The Kenyan government introduced free primary school in all public primary schools in January 2003 with an intention that many of school going children that were out of school could go back to school as every child world wide has a universal right to receive basic education. This brought a high enrolment of children in these schools and by the end of 2016 there were more than 10 million children who had been enrolled in public primary schools. As a result there was an increase in number of children per classroom, increased workload on teachers and inadequate infrastructure to cater for the increased number of students. On the other hand the government did not hire teachers commensurate to this increase and also failed to provide good work environment for the teachers who according to Usop, Askandar, Langgiyuan-Kandtong and Usop (2013) are the most respected professionals, pivot to any education system and are strength of a nation. These conditions may bring about low morale, low esteem, low productivity, poor health and high turnover due to lack of job satisfaction.

Job satisfaction is a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences (Okumbe, 1998). It refers to the attitude and feelings people have about their work (Armstrong, 2006). Disgruntled teachers who are not satisfied with their job will not be committed and productive (Usop et al, 2013). Therefore the main purpose of the study was to establish the influence of work environment factors in these public primary schools on teachers' job satisfaction. These factors include ergonomic factors, psychosocial factors, biological and chemical factors.

1.2. Statement of the Problem

This study attempted to find out the influence of work environment factors on job satisfaction among the teachers in public primary schools in Murang'a East Sub County in Kenya. The study sought to answer the following questions:

1. What is the profile of the teacher-respondents in terms of (a) Gender (b) marital status (c) Marital age (d) teacher training (e) highest educational level of academic qualification (f) length of service, and (h) Administrative positions held in their schools?

2. What is the work environment factors rating by teacher respondents based on their availability in the school (a) the ergonomic factors (b) the psychosocial factors (c) biological and chemical factors? And

3. What is the job satisfaction rating by the teacher-respondents on the following work environment factors (a) office ergonomic factors; b) Psychosocial factors; c) Biological and chemical factors.

1.3. Significance of the Study

This study is important because it assessed the present work environment conditions in public schools and how it impacts on the teachers in their delivery of teaching services. It will help in noting some of work environment challenges facing public primary school teachers and how this influences their level of job satisfaction. It is hoped that the study findings will help education policy makers to be proactive in recommending provision of right work environment in schools to increase teachers' job satisfaction and thus increase their performance, job motivation and have a low staff turnover The findings may further help the school administrators to provide or improve the existing work environment conditions and practices with a hope that they can enhance work performance and job satisfaction among the teachers. It will also help the government identify specific demographic characteristics of the teachers which could influence work performance and job satisfaction of teachers as well guide in recruitment of new teaching staff in these schools Finally, the researcher finds this study very important because it will awaken the teachers to assess their work environment conditions and what role they can play in improving them to enhance their teaching performance and job satisfaction.

1.4. Scope and Limitation of the Study

This study is primarily concerned with the relationship between work environment factors and teachers' job satisfaction. The work environment factors include office ergonomic factors, psychosocial factors and, biological and chemical factors. Teachers' job satisfaction is seen in terms of high motivation, increased performance, high esteem and low turnover among teachers in Murang'a East sub county.

2. Methodology

2.1. Research Design

The study used the descriptive survey design. The descriptive part presented the demographic characteristics of the teachers, rating on existence of work environment factors and job satisfaction rating among teachers on various work environment factors. The relationship between work environment factors and teachers' job satisfaction were determined through correlation and regression techniques

2.2. Respondents and Sampling Procedures

The study population was 596 teachers from 53 public primary school in Murang'a East Sub County, Kenya. Cluster sampling was used to pick the participants, 40% of teachers were picked from 40% of school. That is, 240 teachers were picked form 22 schools drawn from the four education zones

2.3. Locale of the Study

The study was conducted among teachers in public primary schools in Murang'a East Sub County in Kenya. The respondents were picked from selected schools in four education zones namely Gaturi, Gikindu, Municipality and Kimathi.

2.4. Data Collection Instruments

The study made use of a mixed questionnaire. The questionnaire was divided into two sections. One section sought to get demographic data of respondents. The other section involved respondents rating the availability of work environment factors at the workplace and the level of job satisfaction of respondents. Their views on various items were also sought in this section

2.5. Data Collection Procedure

The researcher got the necessary authorization and the list of schools and teachers from Murang'a East Sub County education office and Teachers Service Commission (TSC) office respectively. Teachers' data (Name, Gender and school posted) in all the public primary schools in the four educational zones of Murang'a East Sub county were updated from TSC website (http://www.teachersonline.go.ke/masterbasic.aspx). The researcher personally administered the questionnaires. This helped to establish a rapport with the teachers and enhanced confidentiality. The participants were given a week to fill the questionnaires after which the researcher returned to collect them.

2.6. Statistical Treatment of Data

The researcher used descriptive statistics such as percentages, mean and standard deviation. The researcher also used Pearson Product Moment Correlation Coefficient(r) to determine the direction of relationship between work environment factors and job satisfaction. Regression techniques were used to determine the strength and degree of influence of work environment factors on job satisfaction.

3. Data Analysis and Presentations

3.1. Demographic Data of Respondents

3.1.1. Gender

The research data indicated that 119 (55%) of the respondents were females, whereas 96(45%) were males. This shows that majority of the public primary school teachers in Murang'a East are females.

3.1.2. Marital Status

When respondents were asked to indicate their marital status, 83% of respondents indicated they were married while 17% were single. Knerr (2006) opines that married people generally possess higher job-satisfaction than their single counterparts.

3.1.3. Age of the Respondents

The study revealed that majority of respondents (36.3%) was on the 41-50 years age bracket, followed by 30.7% of the respondents in the over 50 years age bracket. The respondents aged 31-40 years formed 22.8% while 10.2% were in the 18-30 years age bracket. In a study done by Saner and Eyüpoğlu (2012) among academics in 5 of the North Cyprus universities, it was established that job satisfaction levels of the older age groups of academics are on the whole higher than younger age groups.

3.1.4. The Highest Academic Qualification

The respondents had attained different levels of academic qualifications. The findings indicate that 52% had O' Level KCSE qualification followed by Bachelor's Degree at 19.5%. Those with O'Level KCE qualifications formed 14.4%, A 'Level qualification was at 13.5% while only 1(0.5%) who had post graduate qualification.

3.1.5. Professional Training

The study revealed that all the respondents had undergone through the teacher training. The information on teachers' professional qualification was sought because teacher's competence can influence job satisfaction (Ma & MacMillan, 1999; Arifin, 2015)

3.1.6. Other Trainings

The study findings revealed that 51 (23.7 %) respondents had in addition to teacher training pursued other courses to enhance their career or get professional qualifications in other areas. The rest 164 (76.3%) had no other courses or qualifications apart from teaching. In a study done in private banking sector in Karachi in 2013 it was established that there is positive relationship between career development and employee job satisfaction (Shujaat, Sana, Aftab & Ahmed, 2013).

3.1.7. Length of Service

The study results revealed that majority (40%) of the respondents had worked in their schools between 1 and 5 years, followed by those who had worked between 6 and 10 year (27.4 %). Those who had worked for over 10 years formed 16.3 % which was the same case with those who had worked for less than 1 year (16.3%). The information was sought because in a research done in Texas length of service was found to be related to job satisfaction for part-timers (Kirk, 2003).

3.1.8. Administrative Positions

Most of the respondents held different administrative positions in their respective schools; 4% were Head teachers, 5.6% were Deputy Head teachers, 1.4% Heads of Departments, 6.5% senior teachers, 3.7% were games masters or mistresses, 3.7% held positions such as Head of environment and dormitory masters while majority 76.7% were class teachers. Two respondents (0.93%) held no administrative positions in their schools. According to McGregor's theory Y, it is assumed if workers were respected and involved in the decision making process they were likely to be positively motivated. This motivation fostered a greater sense of work accomplishment and consequently improves job satisfaction (Wilson, 2009). Kamau, Gakure and Waititu (2013) state that staff participation in decision making among other factors motivates employees and ultimately brings about organizational and personal goal satisfaction.

3.2. Mean Rating on Existence of Work Environment Factors in the Workplace

The respondents were given statements to indicate the level of agreement with the existence of work environment factors in their schools (The likert scale was: Strongly Disagree-1, Disagree-2, Uncertain-3, Agree-4 and strongly agree-5). The main purpose of this section was to establish the existence of work environment factors in the selected schools before embarking on their influence on job satisfaction. The study findings indicated that 71% of respondents agreed that the chairs and desks support the right body posture with a mean of 3.53 and standard deviation (S.D) of 1.22. Similarly 73% agreed that there is enough space in the staff rooms and in the offices with a mean of 3.66 and standard deviation of 1.27. However, 55% of respondents disagreed that their schools had facilities for proper use of ICT devices with a mean of 2.24 and a standard deviation of 1.4 which means that 45% of respondents agreed. In average the teachers had a low level of agreement with the fact that right ergonomic factors exist at their place of work. Physical environment factors such as temperature levels, level of lighting, sound levels in the staffroom and housekeeping had a combined average mean of 3.55 and a standard deviation of 1.14 which shows a low level of agreement with the statement that the said factors are conducive for work. On psychosocial factors, respondents indicated that they were uncertain if they have higher workload with a mean of 3.02 but with a higher variation with a S.D of 1.4. Majority of respondents did not agree or were uncertain with the statement that there are higher numbers of pupils in a classroom than recommended with a mean of 2.74 and a S.D of 1.45. Majority of

respondents strongly agreed that there is good relationship among teachers with a mean of 4.1 and S.D of 1.18. Similarly they also agreed there is good communication between the school management and the teachers with a mean of 3.9 and S.D of 1.09.

On biological and chemical factors slightly more than half of respondents (51%) indicated that they were exposed to chemical hazards in their work place while 49% of the respondents were not exposed to these hazards. They had a relatively low level of agreement that measures have been put in place to counter chemical hazards in school with a mean of 3.27 and S.D of 1.43 indicating a huge variation in their responses. Respondents disagreed that there are measures put in place like immunization of teachers as prevention measures against contracting contagious diseases with a mean of 2.23 and a standard deviation of 1.34. A high number of respondents (81%) indicated that they have never suffered ailments as a result of work environment factors while 19% have had ailments such as frequent cold, breathing problems, sore throat and respiratory infections.

3.3. Levels of Teachers' Job Satisfaction with Work Environment Factors

The term job satisfaction refers to the attitude and feelings people have about their work. Positive and favourable attitudes towards the job indicate job satisfaction. Negative and unfavourable attitudes towards the job indicate job dissatisfaction (Armstrong, 2006). The questionnaires contained statements that asked the respondents to indicate their level of job satisfaction with work environment factors at the workplace. In Likert scale these levels of job satisfaction were ranked as follows; highly satisfied-5, satisfied-4, fairly satisfied-3, dissatisfied-2 and highly dissatisfied-1.

3.3.1. Office Ergonomics

On office ergonomic factors the study findings revealed that the 82.8% of respondents were satisfied with the teachers' chairs and desks while 17.2% were not, the mean scores was 3.2 with a S.D of 0.97. Majority of respondents (80%) were satisfied with office space in the staffroom and offices but 20% who were not, the mean score was 3.29 with S.D of 1.09. This concurs with views that the existence of a good seat for any type of work promotes efficiency of production and improves performance and well–being of the worker hence promoting their job satisfaction (Vanyck, Oppong, Senayah & Ba-am, 2013). In addition Employees who have appropriate work space and the correct, updated and well-working equipment needed to get the job done and will have a much more positive attitude about work than those who are dealing with frustrating and broken equipment and furniture (McGuire & McLarin, 2009).

Majority of respondents (65.6%) were dissatisfied with facilities provided for proper use of ICT facilities, the rest (34.4%) were satisfied; mean score was 2.21 with a S.D of 1.22. This concurs with Ajala (2012) argument that Poor and unsafe workplace environment result in significant losses for workers, their families, and national economy. In addition workplace features, facilities and communication network at workplace have effect on worker's welfare, health, morale, efficiency and productivity.

In terms of office physical environment factors the respondents were generally satisfied as follows-temperature (77.2% with a mean of 3.14), level of lighting (87% with a mean of 3.42), sound level (84.2% with a mean of 3.33) and housekeeping (80% with a mean of 3.09). In a study done in US it was established that lower noise levels were linked to a number of positive effects on staff such as job satisfaction (Applebaum, 2008). Availability of light especially the sunlight brings job satisfaction while poor quality of air in workplace can result in dissatisfaction with one's job as well as the building (Mroczek, 2005)

3.3.2. Psychosocial Factors

On psychosocial factors the respondents were relatively satisfied with current workload at 75.8% with a mean of 3.13 and S.D of 0.98 and on number of pupils in a classroom 72% the mean rating was 3.17 with a S.D of 1.08. This is similar to findings in the neighbouring Kirinyaga County by Kinyua (2014) that the workload teacher had elicited job satisfaction whereby 54.54% of teachers were satisfied. This can further be explained by findings of a study done by Wangui (2012) in Gaturi Location (zone) that enrolment rates in public primary schools declined due to poverty, negative attitude towards education, transfer of pupils to private academies, poor performance and influence of alcohol abuse. Apart from Municipality zone, the two other zones namely Kimathi and Gikindu had socio-economic factors similar to Gaturi zone. Low level of enrolment leads to less number of pupils in a classroom and therefore low workload for teachers. This, therefore, leads to the said levels of job satisfaction. The more the work load the lesser satisfied a teacher was and the lesser the work load, the more satisfied a teacher was. Nyagaya (2015) asserts that high Workload for a teacher becomes unbearable and tiresome hence lacks job satisfaction.

The 94.9% of respondents also indicated that they were satisfied with the relationship among teachers in their schools while 5.1% were not; the mean rating was 3.98 with a S.D of 0.91. This is in line with findings in Turkana among secondary teachers that Secondary school teachers were generally dissatisfied with their salaries but were satisfied with their interpersonal relations between their fellow teachers (Lukuyani, 2004). Regarding the communication between the school management and the teachers, majority of respondents, 92.6%, were satisfied while 7.4% were not; the mean rating was 3.81 and a S.D of 0.88. This concurs with findings of Nganzi (2014) that good communication network among teachers aid in job satisfaction. In a research conducted by National center for Educational research in US in 1997 teachers are more satisfied with teaching as a career when they receive support from administrators, cooperation from their colleagues, the resources needed to teach, and when they are not burdened with non-teaching duties.

3.3.3. Biological and Chemical Factors

The study findings revealed that 68% of respondents were generally satisfied with measures put in place to counter chemical hazards while 32 % were not; the mean rating was 3 and S.D of 1.19. It was established that dustless chalks are being used in the selected schools and much of primary school teacher's work does not involve going to laboratory as compared to secondary school teachers. Majority of respondents, 64.2% were dissatisfied with measures put in place by the government to prevent teachers against communicable diseases while the rest 35.8 were satisfied; this attracted a mean rating of 2.24 and a S.D of 1.22.

In summary it can be said that 74% of the respondents were satisfied with work environment factors while 26% were not. The total average mean rating was 3.15 and a S.D of 1.03. In Australia the Act work commissioner (2009) states that the health and well-being programs such immunization leads to increased productivity, improved staff health and well-being, staff who feel valued, increased staff morale, satisfaction and motivation among other benefits.

3.4. Determining the relationship between Work Environment Factors and Teachers' Job Satisfaction (Dependent Variable)

To determine the correlation between the independent variables and dependent variable Karl Pearson correlation coefficient (r) was used. This made it possible to determine the direction and strength (degree) of the relationship. It was established that availability of right work environment factors brings a high level of job satisfaction (R=0.9153). R^2 which is coefficient of determination is 0.8378 which means 83.78% of variability in job satisfaction can be explained by work environment factors. This means that there is a strong positive relationship between work environment factors and job satisfaction

3.5. The Estimated Influence of Work Environment Factors on Job Satisfaction

To determine the strength and predictability of the above relationship the simple linear regression analysis techniques (models) were used. To calculate the parameters on the influence of work environment factors on job satisfaction, SPSS was used. From table 4.1 it can be said that a unit increase in work environment factors increases job satisfaction by a factor of 0.773. The p-value is less than 0.05 which means work environment factors can reliably predict job satisfaction (dependent variable).

Coefficient								
Model		Unstandardised Coefficients		Standardized Coefficients	т	Sig	95.0% Confidence Interval for B	
		В	Std. Error	Beta	1	Sig.	Lower Bound	Upper Bound
1	(Constant)	.606	.343		1.767	.105	149	1.361
	ENVIRONMENT	.773	.103	.915	7.538	.000	.548	.999
			a Dependen	t Variable: JOB SATISFA	CTION			

 Table 1: The estimated influence of work environment factors on job satisfaction

 Source: Research data (2017)

4. Discussion of Findings

The objective of the researcher was to establish the influence of work environment factors on teachers' job satisfaction. The study established that the respondents were generally satisfied with ergonomic factors except the use of ICT facilities where majority indicated dissatisfaction as they were of low standards or they did not exist at all. Though the government is in the process of digitalizing learning in public primary schools, which is seen in its effort to provide electricity in schools, the government is yet to roll out the use of laptops or tablets in schools. On physical environment factors, the majority of respondents agreed with the existence of right temperatures, noise levels, light and housekeeping and most of the respondents indicated some level of job satisfaction. This concurs with the findings of Sarode and Shirsath (2014) that the levels of lighting, noise, colour and air quality influence the quantity and quality of work generated as well as employees' job satisfaction.

On psychosocial factors such as teachers' workload, number of pupils in a classroom, interrelationship among teachers and management, majority of respondents indicated existence of the right numbers of pupils in a classroom as well as right medium of communication and hence majority indicated high levels of job satisfaction. On biological and chemical factors, however, it was established that on measures to prevent teachers against some contagious diseases like TB and Hepatitis B through immunization, majority of respondents indicated disagreement with the statement and consequently majority indicated dissatisfaction. This indicates that the government has not done much to ensure teachers are immunized against communicable diseases as suggested by Sher (2016) that proper diagnosis and immunization improve overall health status and quality of life among teachers. However, it was established that measures to counter chemical hazards such use of dustless chalk were to a greater extent in place and as such majority indicated moderate level of job satisfaction.

Using data on correlation and regression on relationship between work environment and job satisfaction, it can be said that;

- a) Coefficient of Correlation between work environment and teachers' job satisfaction (R) is 0.9153 which is a very strong positive relationship. R² which is coefficient of determination is 0.8378 which means 83.78% of variability in job satisfaction can be explained by work environment factors.
- b) Using regression techniques we get the data in table1. From this data it can be said that a unit increase in work environment factors increases job satisfaction by a factor of 0.773. The p-value is less than 0.05 which means work environment factors can reliably predict job satisfaction.

5. Conclusion

The study established that teachers were generally satisfied with environment factors in their schools. This is because 74% of respondents indicated they were satisfied with various work environment factors such as ergonomic factors, psychosocial factors, biological and chemical factors; only 26% who were not satisfied. This indicates that work environment factors positively influence teachers' job satisfaction and that work environment factors can reliably predict employees' level of teachers' job satisfaction.

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