



EFFECT OF OCCUPATIONAL HEALTH AND SAFETY PRACTICES ON EMPLOYEE'S PERFORMANCE IN ADMA INTERNATIONAL LIMITED MANUFACTURING COMPANY, RWANDA

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ABSTRACT: - Organizations have the moral and legal obligations to ensure there is safe and healthy working environments with the intent of ensuring their employees total-well-being. The provision of any form of health as well as safety program varies in accordance to the size and the location of an organization, the type of employees and the nature of work being performed. Occupational health is in this case driven towards improving the working conditions within an organization's environment. This study sought to determine the effect of occupational health and safety practices on employee's performance in ADMA international Ltd Manufacturing Company. The study adopted descriptive research design. The study used Yamane formula to determine the sample size of 212 respondents. A purposive sampling technique was used to select sample size of the study. The quantitative data was analyzed using descriptive and inferential statistics such as mean, standard deviation, Pearson correlation of coefficient, multiple linear regression analysis and moderated multiple regression analysis. The research findings indicated that the health and safety representative (HSR) infrequently conduct workplace safety inspection at the workplace and it uses checklist during workplace safety inspection and even the health and safety representative communicate workplace safety inspection report to management for coaching purposes. The study recommends that the Director of OSHS should ensure that OHS officers frequently hand over report of workplace safety inspection to the employer. The Director of OSHS should ensure that OHS officers frequently conduct OHS training programs at the workplaces. Besides, the employers should also ensure that workplace safety inspection report is communicated to the management for coaching purposes.

Key Words: Occupational Health and Safety, Workplace Safety Inspection, Employee Performance

INTRODUCTION

Health and safety at work is one of the most valuable assets of companies, individuals, communities, and countries. Occupational Safety and Health programs are therefore, key strategies within organizations in ensuring that the health and the safety of employees are observed, thus contributing positively to the productivity of an organization (WHO,2017).

ADMA international manufacturing Company in an effort to meet its Occupational Health and Safety measures designed guidelines, policies, and programs that would be later on implemented across all boards to ensure the wellness and safety of employees is at par with the required standards. ADMA international manufacturing Company developed an occupational health and safety program that was mainly established to take cognizance of their employee's performance (Jelimo, 2016). However, it is essential to note

that the statutory and health audit report that was recently conducted revealed that work-related illnesses, accidents, and injuries increased significantly by 20-30% among technical employees, with this attributed to the challenges in the implementation of OHS programs (Takanashi 2018). Ewekoro, Ogun State in Nigeria which revealed that a healthy worker is a productive worker. The study found out that lack of good safety practice, and health care costs are some of the issues that successful health and safety programs. Abuga (2018) conducted a case study at Pyrethrum Board of Kenya which sought to know the effects of occupational safety and health programs on organization effectiveness. His findings were that employees must be involved in planning of occupational safety and health programs. Thus, the current study sought to assess the effect of occupational health and safety practices on employee's performance in ADMA international Ltd Manufacturing Company.

Objectives of the study

Specifically, this study attempts to:

- To determine effect of workplace safety inspection on employee performance in ADMA international Ltd Manufacturing Company.

Hypothesis of the study

- There is no significant effect between workplace safety inspection and employee performance in ADMA international Ltd Manufacturing Company

LITERATURE REVIEW

This section presents a review of literature on effect of workplace safety inspection on

employee performance in ADMA international Ltd Manufacturing Company. This study was guided by Goal-Freedom Alertness Theory which was founded by Kerr in 1954. In this regard, it is essential to note that the Goal-Freedom Alertness Theory gives a clear explanation that safe work performance remains a phenomenon that may result from psychologically rewarding work environments given the fact that employees remain safe in a positive work environment in the event that managers and supervisors engage in actively alleviating these accidents, hazards, and illnesses within the workplace. This theory is relevant since employee must be safe at workplace psychologically satisfying and desirable work environment lead to the safe performance of tasks and activities. The theory expresses the idea that accidents are low-quality activities due to unpleasant psychological work environment.

Abuga (2017) in his study conducted in Malaysia sought to examine the safety and health practices that are applicable to manufacturing industry and evaluated the importance of Occupational Safety and Health Practices. The study similarly identified sorts of hazards, injury as well as accidents that occur in the workplace. Primary data was obtained by way of interview. The study's findings revealed that the industry undertook the Safety and Health Practices to lower the occurrences of the accidents in workplace. The study hence recommended that the knowledge regarding the Safety and Health Practices to the employees ought to be enhanced so as to lower accidents occurrences in the workplace.

Begendi (2018) carried out research in Turkey to ascertain the impacts of OHS on healthy lifestyle behavior of employees working in a private firm. A survey research design was employed in the research. Primary data was obtained in the study by way of questionnaire where data was derived

from responses to questions about socio-demographic features, OHS applications, health state, and working conditions, and Healthy Lifestyle Behaviors Scale (HLBS). Results revealed that even though 83.9 percent indicated employing personal protective equipment (PPE), just 2.1% indicated that they had encountered occupational accident. The study concluded that obtaining OHS and professional training

as well as employing of PPE positively influences lifestyle behaviors that are healthy.

Gatithi (2017) carried out a study in Kenya that sought to explore the degree of compliance with

METHODOLOGY

This research study adopted descriptive and correlational research design. Descriptive research design entails the researcher need to observe and describe a phenomenon as well as its characteristics (Umar, 2008). This study design was adopted because it allowed the researcher to describe data and attributes regarding the population and phenomenon that was studied. Besides, this study also utilized descriptive correlational research to measure the magnitude and direction of the relationship between two or more variables, revealing their associations.

The population involved in this study was staff from ADMA international Ltd Company. The study targeted these respondents owing to the fact that they are responsible for the management of the Company. At the time of the study the Company has a work force of 451 employees who

the health and safety regulations by manufacturing firms in Mombasa County. His study used a population that constituted 29 manufacturing firms in the County. His research employed survey design. Primary data was gathered by use of questionnaires. Both descriptive and factor analysis techniques were employed for data analysis. The findings showed that 100% of the respondents were largely cognizant of the presence of the OSHA, 2007. More than 69.9 percent of the respondents agreed that there was effectiveness in administration as well as implementation of the OSHA, 2007.

appeared on the payroll. These included 15 top managers 43 middle level managers, 68 supervisors, and 325 support staff in ADMA international Ltd Company.

A stratified random sampling procedure was used for selecting the participants in this study. This technique was employed to ensure a fairly equal representation of the respondents for the study. The stratification was based on selection of staff was by simple random sampling. This study used “simple random sampling”. Based on Sighn (2006), simple random sampling a research method which every member of the population has equal opportunity to be the participant. In addition, the study used the formula proposed by using Yamane (1973) to determine the sample size and come up with 212 respondents taken as sample size. The following table gives details:

Table 2: Representing the sample size

Respondents	Population	Sample size $ni = \frac{Ni * n}{N}$
Top managers	15	7
Middle level manager	43	20
Supervisor	68	32

Other staff	325	153
Total	451	212

Source: Primary data, 2022

To test reliability, test- retest technique was used. The reliability of the research instruments for this study was measured and was calculated using the test-retest method. Thus, the questionnaires were administered to the group members twice with a break interval of two weeks between the first and the second administrations. Besides, to ensure validity of instruments the expert judgment was used and was ascertained that the items of questions was related to the objectives of the study and suitable for their task. This means that Consultation with the experts in the area of special needs education was done and the instruments was modified and redesigned accordingly to determine the relevance of the content of questionnaires and objectives and to ensure the clarity of information in the questionnaires.

FINDINGS

The study sought to establish the relationship between workplace safety inspection and employee performance in ADMA international Ltd Manufacturing Company. The respondents were asked to rate the statements by indicating

the extent to which they apply to their organization in 5-point Likert scale as shown on (appendix II). 5. Strongly Agree (SA), 4 Agree (A), 3. Neutral (N), 2. Disagree (D) and 1. Strongly Disagree (SD). Besides, the mean and deviation were used for interpretation of the findings where mean (M) is the average of group of scores and it is sensitive to extreme score when the population samples are small. Moreover, the standard deviation (SD) was also used to measure the variability in those statistics as it shows how much variation is there from the average (mean). The findings of the study revealed that the health and safety representative frequently conduct workplace inspection at the workplace had the highest mean with a standard deviation (M=4.2473, SD=.72270), while organization monitoring corrective action by assigning responsibility to an individual had the lowest mean with a standard deviation (M=3.6720, SD=1.136). The workplace safety inspection had an aggregate score of (M=3.32, SD=.98364). These indicates that majority of the respondents were neutral when it comes to workplace safety inspection at the workplace.

Table 1: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.670 ^a	.448	.420	.36015

a. Predictors: (Constant), Workplace Safety Inspection

The Table indicates the model summary and gives the value for multiple R, and the adjusted R is 0.670a whereas R square is 0.448. This shows that the predictors Occupational health and safety practices (, workplace safety inspection)

performance is constant. This is frequently used to describe the goodness of fit or the amount variance explained by a given set of predictor variables and its value is 42 % of the variance in

the dependent variable is explained by independent variables in the model.

Table 2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.122	4	2.031	36.927	.000 ^b
	Residual	9.988	181	0.055		
	Total	18.110	185			

a. Dependent Variable: Employee Performance

b. Predictors: (Constant), Workplace Safety Inspection

The Table 2 indicates the regression ANOVA, which test for a linear relationship between the variables. F test is used to determine the significance of the function. The results indicated that it was to explain the effects of independents variables on dependent variable. Since from the Table 4.12 indicated an F-value of 36.927 is larger than the critical F ($v_1=4, v_2=181$) = 2.42 and

also, because p-value calculated =0.000 is less than Critical p-value =0.05 level of significant. Therefore, this implies that occupational health and safety practices such workplace Safety Inspection as independent variable are good predictors of occupational health and safety practice.

Table 3. Summary Result of Hypothesis Testing

Hypotheses	Relationship	Correlation matrix	Decision
H ₁	There is no significant effect between workplace safety inspection and employee performance in ADMA international Ltd Manufacturing Company	$r = 0.701^{**}$; p-value=0.000<0.01.	Rejected

The variation of Spearman Coefficient correlation is between -1 and 1. Spearman Coefficient correlation is significance when it is equal or greater than 0.01level. According to the research, the correlation of 0.701 (70%) which is positive and very high correlation. As the significant level is at 0.01 (1%), the p-value of 0.000 (i.e. 0.0%) is less than 1%. This leads to confirm that there is significant relationship between workplace safety inspection and

employee performance in ADMA international Ltd Manufacturing Company.

Therefore, the researcher can conclude by saying that the research hypotheses all were tested; verified and then they are rejected referring to the statistical (regression analysis) findings and then according to the research, the correlation of 70% categorized as positive and very high correlation; this leads to confirm that there is significant relationship between workplace safety inspection

and employee performance in ADMA international Ltd Manufacturing Company.

DISCUSSION

The findings revealed that the majority of respondents accepted that the health and safety representative (HSR) infrequently conduct workplace safety inspection at the workplace. On the second statement the majority of respondents also strongly agreed that the health and safety representative use checklist during workplace safety inspection and even the health and safety representative communicate workplace safety inspection report to management for coaching purposes but also the finding revealed that respondents were neutral on the statement that the organization is monitoring corrective action by assigning responsibility to an individual. The regression results revealed that Workplace Safety Inspection has significance positive effect on employee performance as indicated by $\beta_3 = 0.216$, $p\text{-value} = 0.049 < 0.05$. This implies that the workplace safety inspection is not effective as it is not conducted frequently by trained HSR and monitoring the corrective actions which have been put in place and it assist in detecting effectiveness in hazard control practices.

These findings concurred with Umeakafor et al., (2012) who stated that the workplace safety inspection can only be effective when it's conducted frequently by trained the health and safety representative and monitoring the corrective actions which have been put in place and it assist in detecting effectiveness in hazard control practices.

Conclusion

The study concludes that majority of the respondents agreed that HSR frequently conducts workplace inspection at the workplace, while few of the respondents agreed that the organization monitored the corrective action by assigning responsibility to individuals. The study concludes

that the aggregate score for the workplace safety inspection was moderate indicating that majority of the respondents were neutral regarding workplace safety inspection in ADAM International Ltd Company. When it comes to improvement of workplace safety inspection, the study concludes that the majority of the respondents agreed that management should implement the report of workplace safety inspection, while few of the respondents agreed that there should be frequent workplace safety inspection.

Recommendation further research

Based on the findings and conclusion researched, the following recommendations were addressed. The organization should make Occupational Health and Safety very successful as it is a pertinent in enhancing productivity and also safeguarding employees' health. Machinery, Equipment and other items purchased, designed, manufactured or installed for operations should conform to OHS protection requirements. All relevant information on new equipment's should be provided by the suppliers and manufacturers. Suppliers should guarantee safety of their supplies. Such information should reach the ultimate users of the machines and equipment. The organization should conduct frequent training which if possible should be monthly to train employees on Occupational health and safety and every employee working in the organization should attend regardless of cadre or level of education so as to enhance its productivity.

Areas for further research

The research was limited to occupational health and safety practices and employee performance in ADMA International Ltd Company. The study brought out four factors of occupational health and safety practices and such includes: safety training practices, hazard control practices, workplace safety inspection and safety records.

Future scholars should focus on other occupational health and safety practices that influence employee performance and such may include: employee wellness programs, occupational health and safety policies, emergency procedures, provision of health services, health and safety committees, safety procedures, safety supervision and risk assessment analysis.

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