EFFECTS OF SAFETY HEALTH PRACTICES ON COMPETITIVENESS OF GRAIN MILLING FIRMS IN UASIN GISHU COUNTY-KENYA

Okita, G. O., & Onyango, R.,

The Strategic JOURNAL of Business & Change MANAGEMENT
ISSN: 2312-9492 www.strategicjournals.com
Vol. 8, Iss. 2, pp 178 – 187. May 2, 2021. www.strategicjournals.com, ©Strategic Journals

EFFECTS OF SAFETY HEALTH PRACTICES ON COMPETITIVENESS OF GRAIN MILLING FIRMS IN UASIN GISHU COUNTY-KENYA

Okita, G. O.,[1*] & Onyango, R. [2]

[1]* Master Student, Kisii University, Kenya
[2] PhD Student, Masinde Muliro University of Science and Technology [MMUST], Kenya

Accepted: April 29, 2021

ABSTRACT

Milling industries are becoming very competitive thus forcing them to seek suitable management strategies with the intention of enhancing their competitiveness and efficiency. In Uasin Gishu County there is a depression of demand and increased competition adversely affecting performance of the grain milling companies. Occupational health and safety remain one of the challenges hampering their competitiveness owing to their challenges in implementation as a strategy. Its significance is hinged on the fact that occupational health and safety management contributes to competitive advantage both directly and indirectly by creating safe workplaces and a healthy environment. However, studies on outcomes of occupational health and safety management are scarce on competitiveness of the grain milling industry in the Kenyan context. This motivated the study on effect of safety health practices on competitiveness of grain milling firms in Uasin Gishu county-Kenya. This study adopted descriptive survey research design with a target population of 686 employees from the four grain mailing companies in Uasin Gishu County. The sample size was 292 respondents to take care of non-response rate. Data was analyzed by use of descriptive and inferential techniques using SPSS version 25 and presented using tables. From the findings the value of adjusted R squared was .202 an indication that there was a variation of 20.2 % on the competitiveness in grain milling firms in Uasin Gishu county due to occupational health and safety management practices at 95% confidence interval. Thus, all the Occupational health and safety management practices have a significant effect on competitiveness as supported by Porters generic theory. This implied that grain milling companies should create a safe workplaces and healthy environments to increase employee satisfaction which in turn increases competitiveness and firm performance

***Key words**: Occupational Health and Safety Management Practices and Competitiveness*

CITATION: Okita, G. O., & Onyango, R. (2021). Effects of safety health practices on competitiveness of grain milling firms in Uasin Gishu County-Kenya. *The Strategic Journal of Business & Change Management,* 8 (2), 178 – 187.

INTRODUCTION

Globally a growing number of business owners are waking up to the fact that keeping workers safe isn't just a matter of being a good corporate citizen or an astute executive, it's becoming a matter of survival (Phil, 2013). In Kenya, occupational health and safety is both a voluntary mechanism through occupational health and safety assessment series and an enforced mechanism through occupational Safety and Health Act No.15 of 2007 (Labour laws,2007). Despite these occupational accidents still contribute to work-related health problems worldwide and Kenya it's no exception (Kaguathi, 2013). Besides statutory occupational safety and health audit report conducted in 2012 shows that there are challenges with the implementation of this strategy (Manduku, 2015). Thus, many industries are victims of work-related accidents ascribed to poorly designed plants and equipment and problems inherent in the work environment. This compromises on their level of competitiveness which calls for attention of their management.

Occupational health and safety address all the risk factors of working environments namely physical, chemical, biological, psychological and ergonomically risks (Hassanzadeh, 2013). Occupational health and safety can contribute to competitive advantage since it is unique to each organization and it is a part of company history and culture that adds value to an organization above the cost of creating it (Wiltshire & Franklin, 2019). Wiltshire and Franklin, 2019 adds that Occupational health and safety management also contributes to competitive advantage both directly and indirectly by creating safe workplaces and a healthy environment. Thus, the organization should adopt a concerted effort where all employees are involved in enhancing OSH in the organization. Thus, all employees must understand their role in protecting the organization and everybody who associates with the organization for efficiency and positive image to engender competitiveness. From worker retention and recruitment to improved reputation and cost savings or even increased contracts, creating a culture of safety can have wide reaching effects (Kazagrandi, 2019). The converse of OSH strategies would precipitate high recruitment costs courtesy of increased turnover which seriously impacts on the budget of operation and threat on meeting deadlines due lapse in production and breakdowns due to accidents. Studies have found there is a clear and direct relationship between the social behaviors of an organization and its reputation, sales, brand perception and in fact their overall value (Kazagrandi, 2019). This in addition to the legal frameworks gives credence to the adoption of OSH practices by the manufacturing sector.

A wide range of structures, skills, knowledge and analytical capacities are needed to coordinate and implement all the building blocks that make up OHS systems so that protection is extended to both workers and the environment at large Noe, (1986) cited in (Muthuviknesh & Kumar, 2014). Training on industry best practices, along with necessary safety and health guidelines to ensure both compliance and safe and healthy workers, is foundational to build an engaged and productive workforce. A comprehensive set of quality safety certifications sets standards for the knowledge and skills required of individuals at every level of an organization, supports their participation, and results in a stronger overall safety culture. When everyone in an organization knows and implements the actions that make a difference to the bottom line, the resulting focus moves the entire company forward (Wiltshire & Franklin, 2019). In addition, it's an organization are obligated by ISO 45001:2018 specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving its OH&S performance (www.iso.org., 2018)

Burton, (2006) states that in Africa, studies on human perception and experience of environmental safety management are sparse. Despite reviewed

studies Manduku, (2015);Kaguathi, (2013); Gitonga, (2011) Okumbe, (2011) focused on the importance of health and safety measures, none has focused on the effect of OSH practices on the competitiveness of the grain milling companies. The Kenyan manufacturing industry is faced with a number of challenges one of which is competition. The manufacturing industry must compete locally with imports from well-established multinational firms while at the same time try to have a competitive edge in the world (World Bank, 2016). Milling industries are also becoming very competitive thus forcing them to seek suitable management strategies with the intention of enhancing their competitiveness and efficiency. In Uasin Gishu County there is a depression of demand and increased competition adversely affecting performance of the grain milling companies (Andae, 2019). However ,Previous research leans towards the acceptance that health and safety measures have both direct and indirect benefits, including raising the level of productivity and minimizing on the costs of incidents and the loss of productivity and quality but scarce on competitiveness of the grain milling industry.

Objective of the study

To access the effect of safety health practices on competitiveness of grain milling firms in Uasin Gishu county-Kenya

LITERATURE REVIEW

Safety health, environment and competitiveness

Occupational health and safety address all the risk factors of working environments namely physical, chemical, biological, psychological and ergonomical risks. Occupational health and safety is a multidisciplinary concept touching on issues relating to subjects such as medicine, law, technology, economics and psychology (Leka, 2003). Felicity Lamm described link between productivity with OHS systems outcomes by four core reasons,the need to find more innovative ways to reduce the high rates of workplace injury and illness than has previously been the case,the pressure to reduce the social and economic costs of injury and illness, particularly compensation costs, the need to improve labor productivity which does not result in employees working longer hours and taking on more work and the need to provide good working conditions as a way of recruiting and retaining skilled workers in a tight labor market (Felicity, 2007). Occupational Health & Safety is one of the most critical basic skill sets workers require in every country to reduce the costs of injuries and illness, while improving competitiveness, productivity and economic gain (Longoni, Pagell, Johnston & Veltri, 2013). Companies with strong OSH programs promote themselves as socially responsible and well-managed organizations, increase morale and encourage recruitment and retention of skilled workers thus being competitive. And, OHS is generally a necessity to be a best-in-class company (Hymel, et al., 2011).

There is increasing and compelling evidence that providing a healthy and safe working environment has the potential to increase labour productivity and in turn increase business profits (Cunningham, Galloway-Williams & Geller, 2010). It is also evident that there are certain necessary ingredients required, such as a good level of cooperation between the management and employees, to ensure the success of an OHS intervention and the subsequent increases in productivity (Champoux & Brun, 2015). However, one of the issues facing managers is to provide safe and healthy working conditions. Healthier employees have a direct influence on a healthier bottom line for corporations and business owners (Pavlova & Pisev, 2011).

Ramazan, Arzu, Meral and İsmail (2016) investigated occupational health and safety (OHS) practices in five dimensions, i.e. safety procedures and risk management, safety and health rules, first aid support and training, occupational accident prevention, and organizational safety support. The survey was developed in order to investigate the effect of OHS practices on work alienation, organizational commitment, and job performance

as a throughput of such practices. The data set obtained from private sector enterprises was analyzed by structural equation modeling using least squares method. The findings of the analysis suggested that such OHS practices as safety procedures and risk management, safety and health rules, first aid support and training, and organizational safety support had a positive effect on organizational commitment. Moreover, it was seen that safety and health rules and organizational safety support decreased alienation, where first aid support and training played a role in increasing work alienation. Finally, safety procedures and risk management, safety and health rules, and organizational safety support had indirect effects on job performance of the employees. However, the study focused on job performance as an output of OHS and not organizational competitiveness.

Pavlova and Pisev (2011) analysed the role of occupational medicine to achieve higher competitiveness and implementation of a program for better health and safety at work. The study focused on aanalysis of cost structure in SMEs, including the contract with the occupational health service; approaches to reduce absenteeism due to illness or accident; A program for health and safety at work - the foundation and prerequisite for competitive SMEs. Findings were that through the program employers and employees will focus their efforts on establishing and improving the working environment. Authors have elaborated approaches to healthy lifestyle at the workplace (active physical regime, smoking cessation, healthy diet, regular medical check-ups), considering that this is where employees spend 8-10 hours a day. The study focused on the promotion of a healthy work place and not competitiveness of the organization as result of safety and healthy work place.

DonHee,(2018) empirically examined the effect of safety management and sustainable activities on sustainable performance of work safety and workplace environments. The proposed model with developed hypotheses were tested using the data collected from 189 respondents in Korean firms across various industries. The research findings indicate that planning and control systems affect activities of participation and monitoring in supply chain management (SCM) processes, which in turn positively affect sustainable performance. The results of the study present practical implications regarding the relationships among planning and control, participation and monitoring activities, and the performance of work safety and workplace environments. The study was conducted in the Korean context with a focus on sustainable performance and not competitiveness.

Naser and Akram, (2017) Health and Safety Culture as a Competitive Advantage for Knowledge based Organizations: An HSEC Model Perspective. This study employed the health, safety, environment, and culture (HSEC) model as a managerial tool to help managers create a health and safety culture for creating and managing knowledge and also gain a real competitive advantage in this highly competitive era. According to this model, knowledge based organizations must consider the role of cultural assessment, control risk, cultural hazards, and cultural syndromes when creating a health and safety culture. A successful HSEC model enables an organization to manage its complexity and uncertainty, improve performance, create competitive advantages, and enhance its business reputation. However, the study focused on Knowledge based Organizations and not manufacturing industry.

Mugi, (2011) influence of corporate environmental management on business competitiveness: a case of East African Portland Cement Company J. To achieve this objective the study utilized both secondary and primary sources of data. In the field study questionnaires were administered and interview data was captured from selected respondents. Content analysis and statistical tools of analysis were used to analyze data i.e. the qualitative data was cleaned and coded and interpreted by attaching significance to the emerging themes and patterns. While analyzing quantitative data, the Yes and No responses were

re-coded into dummy scores which were evaluated in terms of expected scores. The expected scores were assigned most favoured score of two while less favoured assigned the value of one. All the results were added and averaged to get an environmental score. The environmental scores were tested for difference by department using Kruskal Wallis H test and by gender using ManWhitney U test. Data analysis indicated that integrating environmental concerns can result to both environmental excellence and sustainable profitability e.g., the CDM project initiated by EAPCC, had the potential to reduce the overall cost of production and hence position the organization competitively in the cement industry. However, the study was limited to the Cement Company and not grain milling industry.

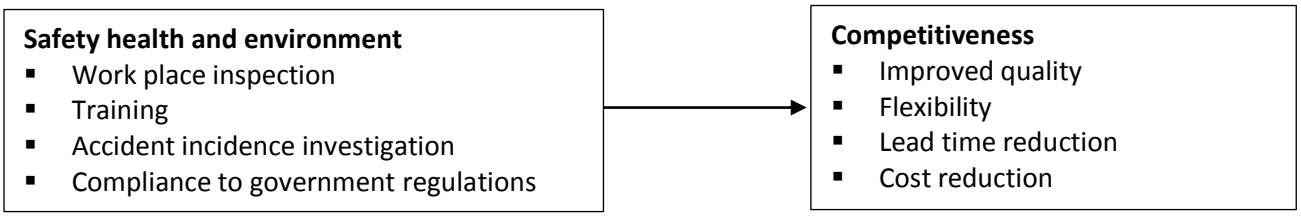

Figure 1: Conceptual Framework
(Source: Researcher, 2021)

METHODOLOGY

This study adopted a descriptive survey as the primary research design. The choice of this design was dictated by its effectiveness to secure evidence concerning all existing situations or current conditions, to identify standards or norms with which to compare present conditions in order to determine how to take the next step, having determined where one is and where they wish to go (Curtis, Murphy& Shields, 2013). Therefore, using this design, the researcher aimed at collecting information on the effects of safety and health management practices on competitiveness in grain milling firms in Uasin Gishu County-Kenya. The target population was the management of grain milling companies. Study population (also known as accessible population) was the actual sampling frame, from which we randomly drew our sample. The accessible population was 686 respondents who included the top and middle level management and lower level employees of four grain milling firms in Uasin Gishu County-Kenya. They included; Jamii Milling Ltd, Eldoret Grains Ltd, Mfalme grain milling company and Unga Limited – Eldoret. The sample size for this study was calculated from the target population, due to their small number and ease of location. Sample size was determined by a sampling formula proposed by Krejcie and Morgan (1970). The distribution of the sample size within the grain milling companies was done through proportional allocation technique.

The study used primary data collection instruments. Primary data entailed collection of information for the first time and it was done through the use of closed a ended questionnaire which was self-administered. Likert scale was anchored on a five-point rating ranging from strongly disagreeing to strongly agree used in the design of the questionnaires (1 depicted Strongly Disagree, 2-Disagree, 3-Moderately Agree, 4-Agree and 5-Strongly Agree). The raw data was collected from the questionnaires which were systematically organized in a manner as to facilitate analysis. Where quantitative data was collected, numbers were assigned for the possible responses, for example where the response was Strongly agree, Agree Undecided, Disagree and Strongly disagree numbers 5, 4, 3, 2, and 1 was assigned for the responses respectively. The data was entered into the Statistical package for social scientists (SPPS) version 25 and analyzed. Data was analyzed by both

descriptive and inferential statistics. The study employed multiple regression model in data analysis. The following model was used to show the relationship between safety and health management practices and the competitiveness:

$Y=a + B_1X_1 + \varepsilon$ ……Eqn 1

Where Y=competitiveness, a = the Y intercept when x = B_1, is the regression weights attached to the variables;

X_1 = Safety health management practices,

ε = the error term (To account for all other Variables not considered in the study), assumed to be normally distributed with mean zero and constant variance.

RESULTS FINDINGS AND DISCUSSION

Descriptive Statistics of Safety Health and Environment Practices

The study hypothesized the link between safety health and environment practices had an effect on competitiveness. Thus; five questionnaire items were used to study the status of safety health and environment practices in the grain milling companies in Uasin Gishu County, Kenya presented in table 1 which revealed that a total of 76.4% respondents agreed and strongly agreed that their company conducted work place inspection regularly (M=4.03 SD=1.005), 12.6% disagreed while 11.1% were undecided. 71.4% of the respondents agreed and strongly agreed that their company carried out health and safety training to all employees regularly (M=3.89 SD=.982), 12.6% disagreed while 16.1% were undecided. Besides, a majority of the employees at 65.9% agreed and strongly agreed that their company investigated accident and incident promptly (M=3.85 SD=1.053), 14.1% were in disagreement while 20.1% were undecided. 65.3% of respondents agreed and strongly agreed that their company strictly adhered to government legislation on employees' health safety (M=3.90 SD=1.128), 15.6% were undecided while 19.1% were undecided. 74.9% of the respondents were in agreement that refresher courses on safety were oftenly offered (M=4.03 SD= .942), 8.0% were in disagreement while 17.1% were undecided.

Table 1: Descriptive Statistics of Safety Health and Environment Practices

Responses	SD %	D%	UD%	A%	SA%	MEAN	SD
My company conduct work place inspection regularly	0.0	12.6	11.1	37.2	39.2	4.03	1.005
My company carry out health and safety training to all employees regularly	0.0	12.6	16.1	40.7	30.7	3.89	.982
My company investigates accident and incident promptly	0.5	13.6	20.1	32.2	33.7	3.85	1.053
My company strictly adhere to government legislation on employees' health safety	1.0	14.6	19.1	24.1	41.2	3.90	1.128
Refresher courses on safety are oftenly offered	0.5	7.5	17.1	38.2	36.7	4.03	.942
Safety Health and Environment Practices						**3.94**	**.690**

Source: Research Data, (2021)

Descriptive Statistics of Competitiveness

The dependent variable of the study was competitiveness of grain milling firms in Uasin Gishu County. Results presented in Table 2, revealed that 89.9% of respondents concurred that their company provided quality products to the customers' needs (M=4.33 SD= .666) while 0.5% were in disagreement. 91.4% of the respondents were of the view that the company was flexible in terms of schedule, product change, and product release (M=4.41 SD= .651), 1.0% were in disagreement while 6.5% were undecided. 83% of

the respondents were also in agreement that their company responds faster to the market as a result of reduced lead time (M=4.35 SD= .770), 0.5% were in a disagreement while 16.6% were undecided. 79.4% of the respondents agreed that their company practiced cost reduction as a way of gaining market share (M=4.23 SD=.770) while 20.6% were undecided. 80.4% of the respondents also agreed that their company products demand were on the rise (M=4.29 SD= .788) while 0.5% were in disagreement and 19.1% were undecided.

Table 2: Descriptive Statistics of Competitiveness

Responses	SD %	D%	UD%	A%	SA%	MEAN	SD
My company provides quality products to the customers' needs	0.0	0.5	9.5	46.7	43.2	4.33	.666
My company is flexible in terms of schedule, product change, and product release	0.0	1.0	6.5	43.2	49.2	4.41	.659
My company responds faster to the market as a result of reduced lead time	0.0	0.5	16.6	30.2	52.8	4.35	.770
My company practices cost reduction as a way of gaining market share	0.0	0.0	20.6	35.7	43.7	4.23	.770
My company products demand are on the rise	0.0	0.5	19.1	31.2	49.2	4.29	.788
Competitiveness						**4.36**	**0.568**

Source: Research Data, (2021)

Effect of Safety Health and Environment Practices on competitiveness of grain milling firms in Usain Gishu County

The study sought to determine the effect of Safety Health and Environment Practices on competitiveness. From the model summary in table 3, the R-value showed a simple correlation value of all the independent variables to the dependent variable, which was 0.450. This was an indication of a strong positive correlation between the independent variables to the dependent variable. The reported R squared value .202 or 20.2 % showed how much of the variance in the dependable(competitiveness) variable was explained by Safety Health and Environment Practices (independent variable) in the model. The value of adjusted R squared was 0.198 an indication that there was variation of 19.8 percent on competitiveness due to changes in Safety Health and Environment Practices at 95 percent confidence interval. This showed that 80.2 percent changes on competitiveness in grain milling firms in Uasin Gishu County could be accounted to Safety Health and Environment Practices.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.450[a]	.202	.198	.447	1.191

a. Predictors: (Constant), Safety Health and Environment Practices

b. Dependent Variable: Competitiveness

The statistical significance of this value was reported in the ANOVA table where the analysis results revealed that the significance of F statistics (49.948) is 0.000 which is less than 0.05. This implies that there is a significant relationship between Safety Health and Environment Practices and competitiveness as seen in table 4. This tested the null hypothesis and indicated that total Safety

The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

Health and Environment Practices significantly affects competitiveness in grain milling firms in Uasin Gishu county. Thus, the rejection of the null hypothesis. These findings were supported by Naser and Akram, (2017), Mugi, (2011).

Table 4: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.995	1	9.995	49.948	.000[b]
	Residual	39.422	197	.200		
	Total	49.417	198			

a. Dependent Variable: Competitiveness

b. Predictors: (Constant), Safety Health and Environment Practices

The regression coefficients table 5 showed the contribution of the independent variable to the dependent variable. Finally, from the data, the study established regression equation was Y = 2.820 + .381X_1.

Therefore, competitiveness in grain milling firms in Uasin Gishu county = 2.820 + .381 Safety Health and Environment Practices.

From the above regression equation it was revealed that holding Safety Health and Environment Practices to a constant zero, competitiveness in grain milling firms in Uasin Gishu County would be be at 2.820 units. A unit increase in Safety Health and Environment Practices would lead to increase in competitiveness in grain milling firms in Uasin Gishu county by a factor of 0.381(B=0.381, P<0.05).

Table 5: Regression Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Model	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2.820	.215		13.130	.000		
	Safety Health and Environment Practices	.381	.054	.450	7.067	.000	1.000	1.000

a. Dependent Variable: Competitiveness

DISCUSSION

The study identified the effect of safety health practices and environment on competitiveness of grain milling firms in Uasin Gishu County. The hypothesis was stated in the null form was as:

H_{01}: Safety health practices and environment have no statistically significant effect on competitiveness of grain milling firms in Uasin Gishu County.

From the findings the value of adjusted R squared was 0.198 an indication that there was variation of 19.8 percent on competitiveness due to changes in Safety Health and Environment Practices at 95 percent confidence interval. The R-value showed a simple correlation value of all the independent variables to the dependent variable, which was 0.450. the significance of F statistics (49.948) is 0.000 which is less than 0.05. This implies that there is a significant relationship between Safety Health and Environment Practices and competitiveness. This tested the null hypothesis and indicated that total Safety Health and Environment Practices significantly affects competitiveness in grain milling firms in Uasin Gishu County. Thus, the rejection of the null hypothesis. These findings were in line with Porters generic theory. These findings were supported by Naser and Akram, (2017), Mugi, (2011) who also found a positive and significant

The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

relationship between Safety health practices and environment on competitiveness. This implies that grain milling companies should create a safe workplaces and healthy environments to increase employee satisfaction, motivation, productivity, communication, work quality, operational effectiveness and efficiency, organizational learning, risk management, and firm reputation which in turn increases competitiveness and firm performance.

CONCLUSION

Safety Health and Environment Practices contribute to the creations of safe working conditions. Thus, accidents at work and absenteeism are minimized, resulting in greater productivity, competitiveness. Finally, the findings were supported by empirical literature and subscribed to the aspirations of both porters generic theory and resource based view. Thus the study recommended that the grain milling companies should continuously improve and maintain the physical, mental and social wellbeing of their employees by mitigating accidents while performing their duties. OSH management should be integrated into the overall organizations operations to ensure improvements in workers' health and safety. Besides the companies should ensure that their operations are environment friendly in accordance with the environmental laws.

REFERENCES

Burton, A. (2006). Human Experimentation: A rule Gone Awry . *Pub Med*.

Champoux, D., & Brun, J. P. (2015). OSH practices and interventions in small businesses: global issues in the Québec context. *Policy and practice in health and safety*, 13(1), 47-64.

Cunningham, T. R., Galloway-Williams, N., & Geller, E. S. (2010). Protecting the planet and its people: how do interventions to promote environmental sustainability and occupational safety and health overlap? *Journal of Safety Research*, 41(5), 407-416.

Curtis, W., Murphy, M., & Shields, S. (2013). *Research and education.* Routledge.

DonHee, L. (2018). The Effect of Safety Management and Sustainable Activities on Sustainable Performance: Focusing on Suppliers. *Department of Business Administration, Inha University, Incheon* .

Felicity, L. (2007). Is There A Link between Workplace Health and Safety and Firm Performance and Productivity? *The University of Auckland*.

Ghauri, P., Grønhaug, K., & Strange, R. (2020). *Research methods in business studies.* Cambridge University Press.

Gitonga, D. W. (2011). Relationship between occupational stress and job satisfaction at Kenya Customs administration. *(Doctoral dissertation, University of Nairobi).*

Hassanzadeh, M. A. (2013). Competitive Advantages of Occupational Health and Safety Management Systems for Ports. *Occupational Medicine & Health Affairs.*

Hymel, P. A., Loeppke, R. R., Baase, C. M., Burton, W. N., Hartenbaum, N. P., Hudson, T. W., & Konicki, D. L. (2011). Workplace health protection and promotion: a new pathway for a healthier—and safer—workforce. *Journal of occupational and environmental medicine*, 53(6), 695-702.

Kaguathi, J. N. (2013). Challenges of implementing occupational health and safety strategies at east Africa Portland cement company limited, Kenya. *(Doctoral dissertation, University of Nairobi).*

Kazagrandi, I. (2019). *4 Reasons Health & Safety can be a Competitive Advantage for your Organisation*. Retrieved from www.vanguardwireless.com.au acessed on 25/04/2021

Leka, S. (2003). Occupational health and safety practices in small and medium sized enterprises: A comparative study between England and Greece. *University of Nottingham*.

Longoni, A., Pagell, M., Johnston, D., & Veltri, A. (2013). When does lean hurt?–an exploration of lean practices and worker health and safety outcomes. *International Journal of Production Research*, 51(11), 3300-3320.

Manduku, F. M. (2015). Extent of the implementation of the occupational safety and health act 2007 in the Sarova group of hotels in Nairobi. *Doctoral dissertation, University of Nairobi*.

Mugi, N. (2011). Influence of corporate environmental management on business competitiveness: a case of East African Portland Cement Company J. *Geography and Environmental Studies University of Nairobi* .

Muthuviknesh, R., & Kumar, K. A. (2014). The effect of occupational health and safety management on work environment: a prospective study. *International Journal*, 2(6).

Naser, H. F., & Akram, H. (2017). *Health and Safety Culture as a Competitive Advantage for Knowledge-based Organizations: An HSEC Model Perspective*. Retrieved from onlinelibrary.wiley.com retrieved on 09/06/2020

Pavlova, J., & Pisev, V. (2011). *Impact of Healthy Workplace on Competitiveness in Small and Medium Enterprises (Examples from Bulgaria).* Retrieved from Available at SSRN 2007326 papers.ssrn.com retrieved on 09/06/2020

Phil, D. (2013). *Safety: the new competitive advantage in a world of liability*. Retrieved from www.ishn.com assesed on 23/04/2021

Ramazan, K., Arzu, T. T., Meral, E., & İsmail, T. T. (2016). Effects of Occupational Health and Safety Practices on Organizational Commitment, Work Alienation, and Job Performance: Using the PLS-SEM Approach . *International Journal of Business and Management*, 11(5),146-167.

Wiltshire, S., & Franklin, J. (2019). *Safety and Health Excellence: Creating Competitive Advantage Through Employee Engagement*. Retrieved from www.constructionexec.com accessed on 25/04/2021

www.iso.org. (2018). *ISO 45001:2018 Occupational health and safety management systems — Requirements with guidance for use*. Retrieved from https://www.iso.org/standard/63787.html