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ESTHER W. NJIHIA, DR. JOYCE NZULWA, RONALD KWENA



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# INFLUENCE OF OCCUPATIONAL SAFETY AND HEALTH ON EMPLOYEE PRODUCTIVITY IN THE MANUFACTURING SECTOR IN KENYA

Esther W. Njihia<sup>\*1</sup>, Dr. Joyce Nzulwa<sup>2</sup>, Ronald Kwena<sup>3</sup>

\*1 Msc. Candidate, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Nairobi, Kenya <sup>2</sup> Jomo Kenyatta University of Agriculture and Technology, [JKUAT], Nairobi, Kenya <sup>3</sup> Jomo Kenyatta University of Agriculture and Technology, [JKUAT], Nairobi, Kenya

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# ABSTRACT

It is clear that the purpose of OSH is to create a safe working environment and employees are protected from workplace accidents or from adverse events. This is attributed to the factors that drive job satisfaction, such as supporting employment condition in which employees care about good working environment for personal comfort and to ease their task because they prefer to work in the physical environment that is not dangerous or troublesome. A good implementation of OSH would foster a sense of security and comfort in the heart of the employee. With the creation of a sense of security and comfort, these in turn would make employees in the better position to avoid work accidents and would not hinder their performance. Thus, the creation of a sense of security and comfort in the workplace would also enable improvement of employee's performance. A positive OSH achievement would create a sense of security that could improve performance, because if employees do not feel safe whilst working, they may not do their job well. The purpose of this research was to assess influence of OSH on employee productivity in Kenya. It was therefore, guided by Employee Wellness and Employee Safety as independent variables and Employee productivity as the dependent variable. The study adopted a descriptive research design. Questionnaires were used to collect quantitative data from the employees, while in-depth schedules were used to obtain qualitative data from the respondents. Data from questionnaires was analyzed by both descriptive and inferential statistics with the help of SPSS version 24 and inferential statistics such as Pearson correlation coefficient was used to compute the data, while qualitative data was analyzed thematically through content analysis technique. A multiple regression model was fitted to determine whether independent variables affected the dependent variable Employee Productivity. As a result, it examined whether the multiple regression equation could be used to explain the nature of the relationship that existed between the independent variables and the dependent variable.

Keywords: Employee Wellness, Employee Safety, Employee Productivity

#### INTRODUCTION

Ramlall (2014) notes that According Mejia (2010) asserts that occupational safety and health is abroad area which includes both physical and emotional well-being. Effectively managing workplace safety and health requires far more than reducing the number of job related accidents and injuries. Safety and Health is a positive concept that includes social and personal resources as well as physical capabilities (Nutbeam, 1990). It has been conceptualized as the ability to have and to reach goals, meet personal needs and cope with everyday life (Raphael, Brown, Renwick & Rootman, 2007).

The challenge of organizations today is how to enlist the hearts and minds of all their employees. Occupational exposures verse ergonomic, physiological and psychosocial factors are found in work environment. Such today's factors. individually or in several complex combinations, threaten workers' safety and health and reduce well-being and productivity (HSE, 2008). WHO (2013) estimates that over 160 million of new 3 cases of work related illnesses occur every year.

International Labour Organization estimates that 2.2 million workers die every year as a result of work related ill-health and injury, 350 thousand of these deaths are due to accidents and the rest due to occupational illness and accidents. On top of these International Labour Organization estimates that there are 264 million non-fatal accidents occur each year that result in more than three (3) days absence from work and 160 million people suffer from work-related diseases. In economic terms, the ILO has estimated that 4% of the world's annual GDP is lost because of occupational diseases and accidents (ILO, 2013). In past one year, slightly more three (3) million US workers suffered from occupational injuries and illnesses resulting from accidents at work number of fatal accidents.

This statistics results in an incidence rate of 3.3 cases per 100 equivalent to full time workers (Bureau of Labour Statistics, 2013). In the United

Kingdom 2 million people are reported to be suffering from illness believed to be caused or made worse by their current or past work. Overall UK performance is better than many other European countries such as Germany, France, Italy, Spain and Poland in the key areas of injuries, fatalities and self-reported work related ill-health (British Safety Council, 2014).

In Africa the issue of Occupational Safety and Health has been ignored by most countries and organizations. The ILO reported that 63,900 work deaths occurred in the 54 African countries and that an estimated 1,560,000 disabling work injuries occurred (ILO, 2010). The fundamental perspective on why majority of African countries and organizations struggle to foster an effective occupational safety and health workplace is that most employers put greater emphasis on productivity and profitability while compromising safety and health standards, procedures, policies and programmes.

In Kenya the status of occupational safety and health for situation/conditions is an issue of growing concern by the employers, government, industrialists, workers and managers, other stakeholders. Safety and Health has not been given increasing emphasis by managers, employers, employees, trade unions, employers' associations and other stakeholders in recent years (Nyakang'o, 2009). The above understanding coupled with the fact that at the core of every business is man whose output is partially dependent on his/her state of health, an appreciation of the concept of occupational Safety and Health becomes imperative to the success of any organization.

Employee Performance is the record of result which is gained from the function of certain work or certain activities in certain period of time. It is a set of behaviours that are relevant to the goals of the organization or the organizational unit in which a person works (Bernandin & Russell, 2009). Armstrong (2010) state that employee performance is a process for establishing a shared workforce understanding about what is to be achieved at an organization level. It is about aligning the organizational objectives with the employees' agreed measures, skills, competency requirements, development plans and the delivery of results. Many business organizations in this era of global competition are trying to create a high-performance work culture which is incorporated of both business and corporate strategies in order to develop individual's contribution to the overall success of the organization. In recent years, many organizations are trying to create a 'performance culture', which is incorporated of several strategies in order to develop individuals' contribution to the overall success of the organization. The human department commonly resource has the responsibility for ensuring the safety and health of employees is taken care of hence high performance output (Armstrong, 2007; Boxal and Purcell, 2008; Fletcher and Williams, 2016).

# Statement of the problem

Employee safety and health is a major area of concern in various countries. According\g to Cole (2012), safety and health of employees are issues that have been the subject of public debate since the turn of the century. He adds that this is illustrated by Parliament passing a variety of Acts and regulations to define employee protection, and the occurrence of major accidents and disasters and their resultant costs. Employers have also made deliberate attempts to enhance the level of policies and procedures to govern employee safety and health in their respective organizations.

Failure to ensure appropriate employee safety and health leads to various problems. Cole (2016) writes that, in the year 2014/2015 more than one million employees suffered accidents and thereby causing more than three days' absence from work resulting enormous waste of human resources and human suffering. He adds that the cost of accidents and work related illness to Kenyan manufacturers has been estimated at Sh. 2.5 billion at 2014/15 prices.

Lind and Nenonen (2008) also state that in manufacturing sector, 90 maintenance crew members were severely injured during the period 2014 - 2015 and 37 died during the period 2014 -2015, mainly as a result of crushing and falling. They state that among the factors that contributed to the accidents were deficiencies connected with machinery safety devices, work guidance and risk assessment and that risks are related to ergonomics, work environment, and direct injury. These facts show the importance of safety and health of workers. Eyre (2017) also states that industrial accidents account for considerable loss of labour hours in addition to personal suffering and it is therefore economically sensible as well as human to ensure that working conditions are as safe and as healthy as possible.

In Kenya, the Occupational Safety and Health Act (OSHA) came into force in 2007. The Act provides for the safety, health and welfare of workers and all persons present at workplaces and provides a foundation for all employers, including manufacturing to promote employee safety and in the workplace. The Authority's health management in its fourth corporate plan identifies improvement of employees working environment as an important initiative for developing a dedicated and professional team. This has led to the development and approval of a working environment standards policy that provides for employee health and safety. The OSHA Act, 2007 and Working Environment Standards policy facilitates sound employee safety and health conditions in the Authority. In spite of existence of the legal provisions and policy, past experience in the Authority depicts safety and health incidents during which employees have not strictly followed laid down guidelines in managing the incidents. Past

research studies have recommended further research in areas such as organization safety culture and safety performance measurement. Pun et al. (2006) have for example identified organizational safety culture as an area for further study.

# **Objectives of the study**

To ascertain the influence of occupational safety and health on employee productivity in the manufacturing sector in Kenya. The specific objectives were:-

- To determine the influence of employee wellness on employee productivity in Kenya.
- To establish the influence of employee safety on employee productivity in Kenya.

# LITERATURE REVIEW

# **Theoretical Review**

This section examined relevant theories to the study variables.

#### **Goal-Freedom Alertness Theory**

The Goal-Freedom Alertness Theory was developed by Kerr (1950) and it states that safe work performance is the result of psychologically rewarding work environment. Under this theory, accidents are viewed as low-quality work behaviour occurring in an unrewarding psychological climate. This contributes to a lower level of alertness. According to the theory, a rewarding psychological climate is one where workers are encouraged to participate, set sustainable goals and choose methods or safety programmes to attain those safety and health goals. They must be allowed to participate in raising and solving problems.

Goal-Freedom Alertness Theory essentially states that management should let workers have well defined goals and freedom to pursue those goals. The result is a higher level of alertness and a 16 focus on the tasks at hand. The theory suggests that managers and supervisors should try and make work more rewarding for workers. They may use a variety of managerial techniques including positive reinforcements, goal setting participative management and clear work assignments.

Heinrich et.al (1980) supports the theory by stating workers will be safe in a positive work environment. They argue that safe performance is compromised by a climate that diverts the attention of workers. They confirm that hazards divert the workers attention during work hours and thus the diversion increases susceptibility to injury. Heinrich et. al (1980) suggests that managers and supervisors can actively work to alleviate hazards in the work environment. Reaction of workers to unsafe conditions depends on the whether the worker identifies the unsafe condition

#### **Distractions Theory**

The proponent of the theory is Hinze (2007) and states that safety is situational. Because mental distractions vary, the responses to them may have to differ to maintain safe performance. Additionally, hazards or physical conditions with inherent qualities that can cause harm to a person, may or may not be recognized by the worker and influence safety of the task. The theory applies to a situation in which recognized safety hazard or mental distractions exist and there is a well-defined work task to perform. In the absence of hazards there is little to prevent workers from completing their tasks.

However, in the presence of hazards, work is greatly complicated. The theory has two components, first dealing with hazards posed by unsafe physical conditions and the other dealing with a worker preoccupation with issues not directly related to the task being performed. The theory basically states that when a worker has lower probability of injury and higher level of task achievement. When a worker has a higher focus on a mental distraction, the worker has a higher probability of injury and a lower level of task achievement. To avoid injury and achieve high levels of productivity, workers must avoid mental distractions.

Petersen (2016) states that managers must consider human capabilities from safety and health viewpoint when assigning tasks to their employees. He argues that accidents have identifiable sociotechnical cause resulting in human performance. Employers should take account of their capabilities and the level of training, knowledge and experience on safety and health in the workplaces. Petersen (2016) confirms that organizations should design human error oriented accidents prevention programs without slowing productivity or compromise performance since accidents and incidents in workplaces are unplanned and unwanted occurrences involving movement of persons, objects or materials which may result in injury, damage or loss to property or people.

#### **Conceptual Framework**





**Dependent Variable** 

#### **Figure 1: Conceptual Framework**

#### **Employee Wellness**

Wellness programs are designed to support employees in understanding their health risks and adopting healthy behaviors to decrease these risks. These programs can include health risk management (screening for elevated cardiovascular disease risk factors such as elevated cholesterol and blood pressure), behavioral health like smoking cessation, substance abuse and psychological counseling, and primary care promotion and lifestyle management especially on weight loss, fitness and nutrition. Such programs aim for decreases in more costly health care utilization including emergency room visits, hospitalizations, surgeries and specialist visits as well as reductions in absenteeism, increases in productivity and better quality of life. Corporate and worksite wellness programs can be described as employer' sponsored services designed to promote or maintain the good health of employees.

Although such programs differ widely in scope, they can be readily distinguished from corporate health care programs, which typically focus on employee assistance and health insurance. In contrast, corporate and worksite wellness programs focus on promoting healthy behaviors and correcting employees' poor health in ways that also enhance the operation and productivity of the organization. Worksite wellness programs can include a broad spectrum of activities, from smoking cessation to physical fitness centers (Society for Human Resource Management, 2008). Wellness programs have been introduced to worksites worldwide to try and improve the health and well-being of employees.

Although the overarching purpose of worksite wellness programs is to provide a positive return on investment by reducing absenteeism and lowering health insurance premiums, the altruistic benefit has been the creation of a healthier workforce, which translates into a healthier population. While this is a successful merger between the financial demands of corporate policy and goals of public health, not all employees have benefited equally from this union. In particular, the needs of employees with disabilities have not been addressed in worksite wellness programs.

# **Employee Safety**

Grawitch et al. (2007) while examining the affiliation between diverse workplace practices which comprised of safety and health practices and satisfaction level in terms of commitment and turnover intention in universities and asserted that the safety and health practices are positively related to employee job satisfaction in terms of turnover intentions. Thus it is critical to identify and understand the needs of human capital in order to enhance performance and service delivery in the form of individual basis and the organization as a whole.

Haines, Davis, Rancour, Robinson, Wilson, and Wagner (2007) studied on the effectiveness of the 12- weeks walking program in improving the health of employees walking program in improving the health of employees. The results emphasized that the health promotion programs have positively impacted on the welfare of employees and service delivery. Menezes and Kelliher (2011) define flexible scheduling as the working arrangement that allows employees to schedule their working hours respectively. Schedule flexibility is an employee benefit which aids in retaining skilled human capital. It meets the needs requirements of human capital which boost their efforts, reduce the job absenteeism, and ultimately enhance their job satisfaction according to the findings by Golden (2009).

Lack of proper enforcement mechanisms, capacity challenges, emerging production techniques creating new risks as some of the main obstacles to the effective implementation of the law on occupational safety and health in Kenya as a fundamental human right. By making a succinct implementation of overview on the the Occupational Safety and Health Act the author illustrates the main challenges facing occupational safety and health programs in the workplace and argues that it has not been realised as a fundamental human right in Kenya. The paper also assesses whether the Act has achieved the legislative intent, the opportunities it offers, and some of the key issues that need to be urgently addressed for occupational safety and health to be effectively and successfully managed in Kenya.

# **Employee Productivity**

According to McCunney (2001), the primary beneficial impact of occupational safety and health on productivity is reduced absenteeism. McCunney demonstrates that the health risks and failure of employees to participate in fitness and health promotion programmes are associated with higher rates of employee absenteeism. There is need for much emphasis on the employer's participation in ensuring that OSH programmes and policies are existent. If these OSH practices are set, it is more likely that the worker participates in order to preserve his/her life. However, absenteeism may be encountered but may be completely neither unjustified on medical grounds nor attributable to unsafe conditions or hazardous events in the workplace.

It is difficult to demonstrate conclusively the extent to which business prosperity benefits from good safety and health or on the contrary, to say that prosperous businesses have good safety and health because they are able to afford it (Safety and Health Executive, 2006). However, based on available evidence, the Occupational Safety and Health Reports argue that there is clearly a vicious circle in that a healthy and happy workforce is more productive, leading to increased investment in safety and health to reduce accidents, which in turn leads to further productivity gains. The Safety and Health Executive (2006) further explains that genuine productivity gains can be realized by those businesses that invest in high performance safety and health practices.

However, the Safety and Health Executive (2006) also recognizes that there need to be a positive

attitude by many organizations if they are to move on from simply attaining minimum legal compliance toward implementing the best practice of OSH. For those organizations that make the transition, the rewards are well worth the effort. In other words, when an organization is committed to OSH best practice and implements it in a properly managed manner, the result is a win-win situation that benefits both the workforce and the organization for which they work. There is need for a workplace improvement in terms of occupational safety and health for the benefit of the employer and the employee in order to increase productivity.

# **Empirical Review**

# **Employee Wellness and Employee Productivity**

According to Global Survey of Health Promotion and Workplace Wellness Strategies by Buck Consultants (2007), 86% of companies in the United States support some kind of wellness program, but only about one in five employers outside United States provide wellness programs. The components of wellness programs differ from company to company and on geographical location. These programs have evolved over time and now include a host of different types of activities for employees. Additionally, most companies hire outside consultants to provide this benefit or use the internal resources of their health insurance companies.

According to the Chapman Institute (2014) there is enormous scientific evidence that unhealthy behavior and modifiable health risks significantly increase health-care costs in all working populations. For over 30 years, researchers have been studying the higher costs associated with such behaviors as smoking, obesity, lack of exercise, poor eating habits, not using seat belts, and excess stress, among other behaviours. The unhealthier behaviors and risk factors people have, the exponentially higher their health-care costs will be (Chapman Institute, 2014). Unhealthy behaviors and modifiable health risks are very common in all working populations and are generating more costs as the population ages. Poor health and well-being at work leads to increased absenteeism and can have adverse effects on significant individual, organizational, economic and societal consequences (Boorman, 2009).

Employee wellness is the constant and deliberate effort to stay healthy and achieve the highest potential for total wellbeing (Hoeger, 1990). According to Donnell (1989) employee wellness programs are a set of organized activities and systematic interventions whose primary purposes are to provide health education, identify modifiable health risks, and influence health behavior changes. According to Hoeger (1990) wellness programs incorporates physical fitness, nutrition, stress spirituality, cardiovascular management, risk reduction, safety, health education, substanceabuse control, sexuality, cancer protection, smoking cessation and work life programs which help employees manage the interface between work and other important life activities

# **Employee Safety and Employee Productivity**

Goetzel and Ozminskowski (2008) state that many employers associate poor health with reduced employee performance, safety, and morale. The organizational costs of workers in poor health, and those with behavioral risk factors, include high medical, disability, and workers' compensation expenses; elevated absenteeism and employee turnover; and decreased productivity at work (often referred to as presentism). In addition, one worker's poor health may negatively affect the performance of others who work with him or her. They add the results in the literature suggest that Workplace Health Promotion (WHP) Programmes can increase employees' health and productivity, when properly designed. They describe the characteristics of effective programs including their ability to assess

the need for services, attract participants, use behavioural theory as a foundation, incorporate multiple ways to reach people, and make efforts to measure program impact. The authors also refer to the barriers like the perception of employers related to Workplace Health Promotion Programmes being luxurious, and their belief that the programmes during working hours may distract workers in their daily duties and negatively impact worker productivity. Small businesses complain they lack the resources necessary to implement such programmes as they do not enjoy the advantages of larger firms. The authors also state if WHP programs are implemented in accordance with the behavioural theory, implemented effectively using evidence-based principles, and measured accurately, they are more likely to improve workers' health and performance. They also conclude that successfully integrated programmes and safety initiatives can also help ensure the safety of work environments, leading to healthier and more productive employees and that more research is needed on the optimal design and cost of interventions and this research has to be disseminated for exploitation by the employers.

# **Employee Productivity**

A study by Lamm, Massey & Perry, 2006) 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. Lamm et al (2006) also refer to the argument of some commentators that productivity gains are often at the expense of workers' health and safety. Businesses typically strive to become more productive and in doing so are driving their workers to work longer, harder and with higher utilization often in extremely hazardous conditions, and only implement Safety and Health measures to keep compensation costs down (Massey and Perry, 2006; Mayhew and Quinlan, 1999; Dorman 2000; Quinlan, 2001). As noted by

Lamm et al (2006), James (2006) observes that while exposure to risks associated with machinery and manual labour are being reduced, other risks related to the increase in labour productivity are on the rise. Lamm et al (2006) also suggest efforts to increase productivity through occupational safety and health can have contradictory results and point out the gaps in literature that while there is evidence that occupational injuries and illnesses impact on productivity losses, it is not clear whether or not reducing injuries and illnesses will automatically influence productivity gains. Findings of another study (De Greef and Van den Broek, 2004a) demonstrate that safety and health measures have a positive impact not only on safety and health performance, but also on company productivity. However, identifying and quantifying these effects is not always straightforward. In addition, although experience shows that in many cases proof of profitability can be given, it might be rather difficult in a certain number of cases to develop solid evidence. The authors also state although the literature survey was fairly limited, research findings support the existence of an important link between a good working environment and the performance of a company. Thus, the quality of a working environment has a strong influence on productivity and profitability.

The study also suggests that poor OSH performance can lead to a competitive disadvantage impairing the firm's status among stakeholders. This is a motivating factor to company management to invest in OSH. The findings of the literature survey (De Greef and Van den Broek, 2004a) were also supported by the collection of case studies. By making the link between safety and health and the performance of the company, the case studies demonstrate that OSH should no longer be seen as purely a cost, but also as an instrument to improve the overall performance of a company, meaning that OSH should be an integral parameter in general management. Therefore, investment in OSH becomes profitable. Investment of 1 euro in wellbeing at work produces 3 - 7 euros return (Yrjänheikki, 2011).

#### **RESEARCH METHODOLOGY**

Descriptive design was the most appropriate design for the study. This enabled the researcher to collect original data from the population and this saved time and resources. The study targeted 180 registered manufacturers in Nairobi County, specifically, safety and health managers in the companies. A questionnaire was designed to collect information contained open ended and closed ended questions. Open and closed ended questions were included in the questionnaires so that each respondent is capable of receiving the same set of questions in exactly the same way. Data was analysed using both descriptive and inferential statistics.

#### FINDINGS AND DISCUSSIONS

The study targeted a sample size of 180 respondents from which 135 filled in and returned the questionnaires making a response rate of 75%. This response rate was satisfactory to make conclusions for the study as it acted as a representative. The respondents were requested to indicate their gender in order to establish if there was gender balance in the positions indicated. The findings showed that majority (55%) were male respondents with (45%) being females respondents. This showed that there were more male employees in the manufacturing firms. On the respondent's age distribution, the study found out that; most of the respondents 20% were aged between 26 to 35years, 32 % of the respondents 36 to 45 years, 28% of the respondents were aged 46 to 55 years, whereas 5% of the respondents were aged 18 to 25 years and 15% 56 and over years. These implied participants were well distributed in terms of their age and that respondents of all ages were

represented during the study. From the study findings majority (50%) indicated that they had diploma certificates, followed by those who indicated that they had university degree at (35%), 10% of the respondents stated that they had secondary certificate (10%) with few (5%) indicating that they had master's degree. This implied that respondents were well educated and that they were able to respond to research questions with ease. The study findings agree with literature review by Munyiva (2014) who observed that only a few employees of the manufacturing sector with high academic qualifications tend to stay in the sector. The study determined the working experience held by the respondents to ascertain the extent to which their responses could be relied upon to make conclusions on the study problem using their working experience. From the findings, (60%) indicated to have a working experience of 6-10 years, 20% had a working experience of less than 5 years, 15 % had a working experience of 11-15 years and 5% had a working experience of 16 years and above. These findings were in line with Braxton (2008) that respondents with a high working experience assist in providing reliable data on the study problem since they have technical experience on the problem being investigated by the study.

#### **Employee wellness**

The study sought to establish the extent to which respondents agreed with the statements relating to Employee wellness on Employee Productivity in manufacturing firms. A scale of 1-5 was used. The scores "Very Small Extent" and "Small Extent" were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale ( $1 \le Small Extent \le 2.5$ ). The scores of 'Moderate' were represented by a score equivalent to 2.6 to 3.5 on the Likert scale ( $2.6 \le Moderate \le 3.5$ ). The score of "Great Extent" and "Very Great Extent" were represented by a mean score equivalent to 3.6 to 5.0 on the Likert

Scale ( $3.6 \le \text{Great Extent} \le 5.0$ ). The results were presented in mean and standard deviation. The mean was generated from SPSS and is as illustrated in Table 1. The study findings indicated that majority of the respondents stated that the firm ensured that it offered noticeable opportunities of attraction and retaining qualified personnel (mean of 3.586), The firm had a strategy for attracting competent personnel (mean of 3.654), The complex recruitment process would generate more qualified applicants than a simple process (mean of 3.531), There were clear policies that govern renewal of employment contracts in the firm (mean of 3.876), The recruitment policy was suitable and sensitive to the employee needs (mean of 3.572), The organization ensured that keeping employees enabled them to be satisfied with their job (mean of 3.762). The recruitment and selection process determines the decisions as to which candidates would get employment offers. The aim of this practice was to improve the fit between employees, the organization, teams and work requirements and thus, to create a better work environment (Tzafrir, 2006). Sophisticated recruitment and selection system can ensure a better fit between the individuals' abilities and the organization's requirement (Fernandez, 2012).

Table 1: Influence of Employee wellness on	<b>Employee Satisfaction</b>
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Statement	VGE	GE	ME	SE	VSE	Mean	Std deviation
The firm ensures that it offers noticeable opportunities of attraction and retaining qualified personnel	5%	50%	20%	15%	10%	3.586	.258
The firm has a strategy for attracting competent personnel	2%	44%	36%	15%	3%	3.654	.729
The complex recruitment process would generate more qualified applicants than a simple process	8%	36%	32%	13%	11%	3.531	.278
There are clear policies that govern renewal of employment contracts in the firm	4%	48%	26%	12%	10%	3.876	.928
The recruitment policy is suitable and sensitive to the employee needs The organization ensures that keeping	2%	14%	46%	32%	6%	3.572	.429
employees enables them to be satisfied with their job	10%	18%	40%	30%	2%	3.762	.628

#### **Employee safety**

The study sought to establish the extent to which respondents agreed with the statements relating to

Employee safety on Employee Productivity in manufacturing firms. A scale of 1-5 was used. The scores "Very Small Extent" and "Small Extent" were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale ( $1 \leq Small Extent < Small Extent$ 

2.5). The scores of 'Moderate' were represented by a score equivalent to 2.6 to 3.5 on the Likert scale  $(2.6 \le Moderate \le 3.5)$ . The score of "Great Extent" and "Very Great Extent" were represented by a mean score equivalent to 3.6 to 5.0 on the Likert Scale (3.6  $\le$  Great Extent  $\le$  5.0). The results were presented in mean and standard deviation. The mean was generated from SPSS and is as illustrated in Table 2.

From the results, majority indicated to a small extent that salaries and benefits provided are adequate to the employees in the organizations as shown by a mean of 3.018. There are periodic salary reviews for the employees in the organizations as shown by a mean of 2.992. Salaries and benefits are paid promptly to the employees in the

organizations as shown by a mean of 3.003. Provision of incentives such as risk allowances, overtime pay, strenuous allowances, pension are adequate as shown by a mean of 2.334. Payment system provided is competitive, fair and equitable in the organizations as shown by a mean of 2.654; there exists employee benefits such as car loans, mortgage, paid holidays and other fridge benefits as shown by a mean of 2.336. Employee recognition are in the forms of awards, employee merits, promotions and monetary incentives. However, a simple saying of thanks and round of applause can also become a good form of recognition that may boost the morale of a certain worker (Dessler, 2007). The importance of recognizing your personnel is as important as making them productive and achieving organizational goals.

Statement	VGE	GE	ME	SE	VSE	Mean	Std deviation
Salaries and benefits provided are adequate to the employees in the organization	4%	12%	50%	14%	20%	3.018	.440
There are periodic salary reviews for the employees in the organization	2%	18%	22%	55%	3%	2.992	.650
Salaries and benefits are paid promptly to the employees in the organization	4%	36%	48%	8%	4%	3.003	.323
Provision of incentives such as risk allowances, overtime pay, strenuous allowances, pension are adequate	10%	16%	12%	58%	4%	2.334	.442
Payment system provided is competitive, fair and equitable in the organization	2%	10%	34%	52%	2%	2.654	.323
There exist employee benefits such as car loans, mortgage, paid holidays and other fringe benefits	2%	14%	32%	50%	2%	2.336	.368

Table 2: Influence of Employee safety on Employee Satisfaction

# **Employee Satisfaction**

The study went further to establish the extent to which Employee Productivity in the study area in terms of completion of tasks in time, intent to continue working, loyalty and commitment and creativity in the organizations. The data was collected from the different indicators of the variable Employee Productivity which was ordinal categorical. The data was therefore presented in frequency tables with the median being used as the appropriate measure of central tendency. The results were presented in Table 3. The first indicator for the dependent variable required to know what the Employee Productivity in terms of level of completion of tasks in time was, 15% of the respondents had 0%, 30% had less than 10%, 20% stated 10-20% , 15% indicated 21-30% , 10% posited 31-40%, 10% indicated over 40% . The mode was found to be 2 which imply that on average the most of the level of completion of tasks in time is less than 10%. The next indicator required

# the respondents to state level of intent to continue working, 7% of the respondents had 0%, 40% had less than 10%, 12% stated 10-20%, 20% indicated 21-30%, 13% posited 31-40%, 8% indicated over 40% The mode was found to be 2 which imply that on average the most of the respondents intent to continue working is less than 10%.

When the respondents were asked what the level of loyalty and commitment in the organization was, 8% of the respondents had 0%, 44% had less than 10%, 12% stated 10-20%, 16% indicated 21-30%, 8% posited 31-40%, and 12 % indicated over 40%. The mode was found to be 2 which imply that on average the most of the loyalty and commitment in the organization is less than 10%. Finally, when the respondents were asked what the level of creativity in the organization was, 12% of the respondents had 0%, 40% had less than 10%, 10% stated 10-20%, 20% indicated 21-30%, 8% posited 31-40%, 10% indicated over 40%. The mode was found to be 2 which imply that on average the most of the level of creativity in the organization is less than 10%.

Statement	0%	< 10%	10- 20%	21%- 30%	31%- 40%	Above 40%	Mode
What is the level of completion of tasks in time?	15%	30%	20%	15%	10%	10%	2
What is the level of intent to continue working in your organization?	7%	40%	12%	20%	13%	8%	2
What is the level of your loyalty and commitment to the organization?	8%	44%	12%	16%	8%	12%	2
What is the level of your creativity in the organization?	12%	40%	10%	20%	8%	10%	2

# **Table 3: Employee Productivity**

#### CONCLUSION AND RECOMMENDATIONS

The study findings indicated that majority of the respondents stated to a small extent that the sector ensure that it offered noticeable opportunities of

attracting and retaining qualified personnel. The sector had strategies for attracting competent personnel. The complex recruitment process would generate more qualified applicants than a simple process. To a small extent there were clear policies that governed renewal of employment contracts in the firms. The recruitment policy was suitable and sensitive to the employee needs. The organizations ensured that keeping employees enabled them to be satisfied with their job. The sector ensured that they offered noticeable opportunities of attracting and retaining qualified personnel. To a moderate extent, the sector has strategies for attracting competent personnel.

From the results, majority of the respondents indicated to a small extent that salaries and benefits provided were adequate to the employees in the organization. There were periodic salary reviews for the employees in the organizations. Salaries and benefits were paid promptly to the employees in the organizations. Provisions of incentives such as risk allowances, overtime pay, strenuous allowances and pension were adequate. Payment system provided was competitive, fair and equitable in the organizations. To a very small extent there existed employee benefits such as car loans, mortgage, paid holidays and other fringe benefits.

The study sought to determine the influence of human resource management practices on Employee Productivity in manufacturing sector based in Nairobi City County, Kenya; attributed to the influence of Employee wellness and Employee safety. The level of completion of tasks, employee continue working, intent to loyalty and commitment and creativity recorded low achievements in the firms. From inferential statistics, a positive correlation was seen between determinant variable and each Employee Productivity in manufacturing firms. All the independent variables were found to have a significant association with statistically the dependent variable at ninety-five level of confidence. This was since the P values of their coefficients were all less than 0.05.

#### **Conclusions of the Study**

Based on the findings, the study concluded that Employee wellness and Employee safety were the major factors that mostly affected Employee Productivity in manufacturing sector in Kenya.

The study concluded that Employee wellness constituted the first important factor that affected Employee Productivity in manufacturing firms. The regression coefficients of the study showed that Employee wellness had a significant influence on Employee Productivity in manufacturing firms. This showed that Employee wellness had a positive influence on Employee Productivity in manufacturing firms.

Additionally, the study concluded that Employee safety was the second important factor that affected Employee Productivity in manufacturing firms. The regression coefficients of the study showed that Employee safety had a significant influence on Employee Productivity in manufacturing firms. This showed that Employee wellness had a positive influence on Employee Productivity in manufacturing firms.

#### **Recommendation of the Study**

The study recommended for the adoption of Employee wellness to enhance Employee Productivity in manufacturing firms. There was need for the sector to ensure that they offered noticeable opportunities of attracting and retaining qualified personnel. The sector should have strategies for attracting competent personnel. The recruitment policy should be suitable and sensitive to the employee needs. The sector should ensure that they offer noticeable opportunities of attracting and retaining qualified personnel.

The study recommended for the adoption of Employee safety to enhance Employee Productivity in manufacturing firms. There should be periodic salary reviews for the employees in the organizations. Salaries and benefits should be paid promptly to the employees in the organizations. Provisions of incentives such as risk allowances, overtime pay, strenuous allowances and pension should be adequate. The payment system provided should be competitive, fair and equitable in the organizations. There is need to have employee benefits such as car loans, mortgage, paid holidays and other fringe benefits.

# **Recommendations for Further Studies**

This study was done in manufacturing sector in Nairobi County in Kenya. A longitudinal study should be carried out to monitor the relationship between demographic factors such as the age, marital status, family status, educational level and experience of employees and their satisfaction with

their work in the organizations. Secondly the study only explored the influence of resourcing, reward management, training and development and Accident Prevention on Employee Productivity in manufacturing sector in Nairobi County. For better insight into the role of these human resource management practices in the manufacturing firms, similar studies should also be done in other institutions in other counties in order to generalize the findings to manufacturing sector in the Country. Further research in this area should focus on the role of management style, employee motivation, recruitment practices, employee participation and communication involvement, and Accident Prevention among others on Employee Productivity in manufacturing sector in the County.

# REFERENCES

Amuedo-Dorantes C, 2002, "Work safety in the context of temporary employment: the Spanish experience" Industrial and Labor Relations Review 55 262–285

Arocena P, Núñez I, Villanueva M, 2008, "The impact of prevention measures and organisational factors on occupational injuries" Safety Science (in press), doi: 10.1016/j.ssci.2007.09.003

Baldock R, James P, Smallbone D, Vickers I, 2006, "Influences on small-firm compliance-related behaviour: the case of workplace health and safety" Environment and Planning C: Government and Policy 24 827–846

Bartel A P, Thomas L C, 1985, "Direct and indirect effects of regulations: a new look at OSHA's impact" Journal of Law and Economics 28 1–25

Bayo-Moriones A, Merino-Díaz de Cerio J, 2001, "Quality management and high performance work practices: do they coexist?" *International Journal of Production Economics* 73 251–259

Becker B, Huselid M, 1998, "High *performance work systems and firm performance*" Research and Human Resources Management 16 53–101

Beechner A B, Kock J E, 2007, "Integrating ISO 9001 and ISO 14001" Quality Progress 30 33-36

Boone J, van Ours J C, 2006, "Are recessions good for workplace safety?" *Journal of Health Economics* 25 1069–1093

Bradbury J C, 2006, "Regulatory federalism and workplace safety: evidence from OSHA enforcement, 1981– 1995" *Journal of Regulatory Economics 29 211–224* 

Burke M J, Sarpy S A, Smith-Crow K, Chan-Serafin C, Salvador R, Islam G, 2006, "Relative effectiveness of worker safety and health training methods" *American Journal of Public Health 96 315–324* 

Butler R, Worral J, 1991, "Claims reporting and risk bearing moral hazard in workers' compensation" *Journal of Risk and Insurance 63 191–204* 

Cameron C, Trivedi P K, 1999 Regression Analysis of Count Data (Cambridge University Press, Cambridge)

Champoux D, Brun J P, 2003, "Occupational Safety and Healthin small size enterprises: an overview of the situation and avenues for intervention and research" Safety Science 41 301–318

Curington W P, 1986, "Safety regulation and workplace injuries" Southern Economic Journal 53 51–72

EASHW, 1999 Economic Impact of Occupational Safety and Health in the Member States of the European Union European Agency for Safety and Health at Work, Bilbao

EEC, European Economic Community, Brussels 1989a, "Directive 89/391/EEC of 12 June 1989

on the introduction of measures to encourage improvements in the safety and health of workers at work" Official Journal of the European Communities L183 1–8, 29 June

Fenn P, Ashby S, 2004, "Workplace risk, establishment size and union density" *British Journal of Industrial Relations 42 461–480* 

Filer R K, Golbe R L, 2003, "Debt, operating margin and investment in workplace safety" *Journal of Industrial Economics* 51 359–381

Gray W B, Jones C, 1991, "Longitudinal patterns of compliance with OSHA Safety and Health regulations in the manufacturing sector" *Journal of Human Resources 26 623–653* 

Guadalupe M, 2003, "The hidden costs of fixed term contracts: the impact on work accidents" Labour Economics 10 339–357

Harrisson D, Legendre C, 2003, *"Technological innovations, organizational change and workplace accident prevention"* Safety Science 41 319–338

Hatzichronoglou T, 2007, "Revision of the high-technology sector and product

classification", OECD Science, Technology and Industry Working Papers 2007/2, OECD Publishing,

Hausman J, Bronwyn H, Griliches Z, 1984, "Econometric models for count data with an application to the patents R and D relationships" Econometrica 52 909–938

Herranz V, Toharia L, 2006, *"Do temporary contracts increase work accidents*? A microeconometric comparison between Italy and Spain" Labour 20 475–504

Hsiao C, 2003 Analysis of Panel Data 2nd edition (Cambridge University Press, Cambridge)

Lanoie P, 1992a, "The impact of occupational safety and health regulation on the risk in the workplace accidents: Quebec 1983–1987" *Journal of Human Resources 27 642–660* 

Lanoie P, 1992b, "Safety regulation and the risk of workplace accidents in Quebec" Southern Economic Journal 58 950–965

Larraza M, Urtasun A, García C, 2006, "High-performance work systems and firms' operational performance: the moderating role of technology" *International Journal of Human Resource Management 17 70–85* 

Marlow S, 2003, "Formality and informality in employment relations: the implications for regulatory compliance by smaller firms" Environment and Planning C: Government and Policy 21 531–547

Mendeloff J M, 1980 An Economic and Political Analysis of Occupational Safety and Health (MIT Press, Cambridge, MA)

Merino-Díaz de Cerio J, 2003, "Factors relating to the adoption of quality management practices:

Myro R, Gandoy R, 1999, "Sector industrial", *Lecciones de Economía Española 4th edition*, Eds García-Delgado J L, Myro R, Martínez-Serrano J A (Civitas, Madrid) pp 209–233

Nelder J A, Wedderburn R W N, 1972, "Generalized linear models" *Journal of the Royal Statistical Society A* 135 370–384

Rahimi M, 1995, "Merging strategic safety, health and environment into total quality management" International Journal of Industrial Ergonomics 16 83–94

Robson L, Shannon H, Goldenhar L, Hale A, 2001 *Guide to Evaluating the Effectiveness of Strategies for Preventing Work Injuries National Institute for Occupational Safety and Health,* Cincinnati, OH

Ruser J W, Smith R, 1991, "Reestimating Osha's effects: have the data changed?" *Journal of Human Resources* 26 212–235

Sesé A, Palmer A, Cajal B, Montaño J, Jiménez R, Llorens N, 2002, "Occupational safety and health in Spain" *Journal of Safety Research 35 511–525* 

Shannon H, Robson L S, Sale J M, 2001, "Creating safer and healthier workplaces: role of organizational factors and job characteristics" *American Journal of Industrial Medicine 40 319–334* 

Shapiro S, 2000, "Occupational Safety and Health Regulation", Encyclopedia of Law and Economics. Volume III: The Regulation of Contracts Eds Bouckaert B, De Geest G (Edward Elgar, Cheltenham, Glos) pp 569–625

Sørensen O H, Hasle P, Bach E, 2007, "Working in small enterprises—is there a special risk?" Safety Science 45 1044–1059

Terrés de Ercilla F, Rodríguez-Mondelo P, Álvarez-Casado E, Castejón-Vilella

E, 2004, "Economic fluctuations affecting occupational safety: the Spanish case" Occupational Ergonomics 4 211–228

Viscusi W K, 1986, "The impact of Occupational Safety and Health Regulation 1973–1983" Rand Journal of Economics 17 567–580

Viscusi W K, Vernon J M, Harrington J E, 2000 *Economics of Regulation and Antitrust 3rd edition* (MIT Press, Cambridge, MA)

Zacharatos A, Barling J, Iverson R D, 2005, "High-performance work systems and occupational safety" Journal of Applied Psychology 90 77–93