

# Safety Promotional policies and employee performance in textile manufacturing companies in Kenya

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**Abstract:** There has been increased poor performance of textile industry in the recent past. This has been largely attributed to non-compliance of safety standards in the textile industry. The work environment consists of various factors which introduce new dimensions to health, causing diseases and injuries which include, work accidents and exposure to hazards. In this regard, the purpose of this study was to determine the influence of safety promotional policies on employee performance in textile manufacturing companies in Kenya. The study population included all the textile manufacturing companies in export processing zone which are 22 under Epz program. This study sampled 400 respondents; selection will be based on cluster random sampling. A cluster of 6 was sampled out of a total of 18 clusters. Individual respondents were sampled using systematic random sampling technique. The first respondent was sampled using simple random sampling then the rest were sampled using the interval of 7. This study adopted a descriptive cross sectional research design. Data was collected using questionnaire and key informants interview. Data was revised, coded for computerized data entry. A statistical technique that was used was Pearson correlation and stepwise analysis. Statistical methods was applied including descriptive statistics (i.e. frequency percent, mean, standard deviation) and tests of significance (Analysis of variance) which was done using the statistical package (SPSS version 22) to ascertain relationship between independent and dependent variable. P-values were considered as statistically significant when less than 0.05. There was a significant positive relationship ( $r = 0.791$ ,  $P = 0.0001$ ). Better safety promotional policies in the organization resulted into better performance of the employees in an organization.

**Keywords:** textile industry, textile manufacturing companies, safety, Work Safety Compliance.

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## 1. INTRODUCTION

Employee performance is defined as whether a person executes their job duties and responsibilities as well. Many companies assess their employee's performance on an annual or quarterly basis in order to define certain areas that need improvement. Performance is a critical factor in organizational success. There is increasing evidence that providing a healthy and safe working environment has the potential to increase labour productivity. (Lamm, Massey and Perry, 2006) There are series of managerial inputs leading to performance outputs. The inputs are business strategy, HR strategy and HR practices. The HR practices include induction, job design, recruitment and selection, appraisal, pay and reward, training and development, financial flexibility, harmonization, communication and job security. The outputs are effective HR outcomes, quality of goods and services, productivity and financial performance. Evaluating the effectiveness of these HR activities allows an assessment of how well they are working in practice.

The more HR practices are used, and the more effective they are, the better organizational performance is likely to be. HR effectiveness appears to demonstrate the link between HRM and business performance. {28}. Several studies have shown that there is a relationship between a better working environment and labor productivity {3}. This is particularly relevant in Bangladesh, where the readymade garment (RMG) sector has played significant role in the socioeconomic

development. The total contribution of RMG to exports is more than 76% of the total export earnings. The RMG sector has developed here rapidly because it labor intensive industry (Repon & Ahmed, 2005) that require ordinary technology, cheap labor and little capital. In 1984, the number of garments sold was 587; in 1998 the number stood at 2650 and now the number is 3300 in Bangladesh. In spite of these positive aspects, there have been at least 83 fire related incidents and 246 deaths since 1990 in the country (The Independent, 2006)

Workplace safety is a critical consideration for workers and the organizations that employ them. For organizations, workplace accidents and injuries impact financial and talent resources, which in turn, deteriorate competitive advantage. In calculating occupational injuries in 175 countries worldwide, Hamalainen *et al.*, {31} estimated that 264 million workplace injuries occurred in 1998, with more than 700, 000 workers a day suffering the workplace injury causing absence of three days or more. Managing risks in an integrated way with the organization's operations has become increasingly important in recent years in order to prevent accidents and the firm's productivity, economic and financial results.

To mitigate potential risks to employee and organizational safety, it is important to evaluate and identify the cause of workplace accidents and injuries. In general, there are three causes of workplace accidents: failure of equipment and machinery, failure of a process or procedure and human error. It is widely accepted that 80% - 96% of all occupational accidents are caused by human error. Although the employer is responsible for the safety of his workers, the participation of workers is indispensable. One type of behavior that can have an effect on safety performance is safety compliance and adherence to organizational rules, regulation and procedures

Healthy workers working in healthy working conditions are thus an important precondition for the enterprise to work smoothly and productively {39}.

## **2. LITERATURE REVIEW**

A safety management system provides for goal setting, planning, and measuring performance.

A safety management system is woven into the fabric of an organization. It becomes part of the culture, the way people do their jobs {41}. The safety management system is composed of five components which include: knowledge of safety standard, Safety Promotional policies, Workers' Participation, Safety Communication and Management commitment.

The safety policy establishes a senior management's commitment to continually improve safety; defines the methods, processes, and organizational structure needed to meet safety goals. Every organization has been established with certain objectives to attain. These objectives can be attained by utilizing resources like people, machines, material and money. The most important resource out of all the resources is manpower. It plays an important role in performing tasks for accomplishing organizational goals. The question that may arise in many instances is why human resources are important. resources are intellectual property of the firm, they prove to be a good source of competitive advantage {34}

The garment and textile industry in Kenya dates from the colonial period. As early as 1954, the industry had a total of 74 enterprises employing 2,477 workers. Growth of textile industry after independence saw the local availability of fibers such as cotton, wool and sisal while synthetic fibers (nylon, polyester, acrylics) jute and linen as well as dyes, chemicals and resins were imported. (African Development and Economic Consultant Ltd, 1998). The garment industry was one of the most important manufacturing activities in Kenya; it thrived mainly due to the protection offered to firms under the import substitution strategy and heavy government investment through its parastatal - Industrial and Commercial Development Corporation (ICDC). The hurdles that the textile industry faces in Kenya may change for the better with the government having embarked on initiatives to revive the sector which collapsed in the 1980s, mainly due to the increasing import of used clothes.

The garment sector has performed relatively well under the African Growth and Opportunity Act (AGOA) provision. In the last 12 years, the garment sector in Kenya has been principally driven by exports to the US under the AGOA initiative. According to ACTIF, (2010) there were over 170 large scale garment manufacturing units operating in Kenya outside the EPZ. In the EPZ there are 22 large companies. The garment sector still remains as the dominant sector within the EPZs accounting for 29% of all EPZ enterprises, 78% of total EPZ local employment, 56% of all EPZ exports, 52% of total EPZ sales and 30% of all EPZ private investments. As of December 2011, Kenya among other SSA countries was ranked as the leading exporter into US market under AGOA with a market share of 31.6% and export value of US\$ 261 Million.

The Ministry of Industrialization and Enterprise Development plans to set up a Textile City at the Export Processing Zone (EPZ) in Athi River through investments from at least 100 textile firms. The plan is expected to create over 200,000 new jobs by December 2016. The government was also a significant shareholder in textile firms such as KICOMI (Kisumu), Rivatex (Eldoret), Kenya Textile Mills (Thika) and Mountex (Nanyuki). Privately owned garment firms such as Yuken, Thika Cloth Mills, United Textile Mills, Sun flag, Spinners and Spinners and Raymond evolved and thrived in the import substitution era. Production stagnated from mid-80 and fell sharply after liberalization in the early 1990's.

The policy encouraged export promotion creating schemes such as Export Processing Zones (EPZ's), Manufacturing under Bond (MUB) and Export Compensation Schemes. Markets were liberalized through the abolition of quantity restriction and lowering of tariffs to enable exportation of their products (Ikiara *et al*, 2004). Even with the abundance of comparative advantages, Kenya textile manufacturers face a number of competitive disadvantages compared to firms in competitor countries, many of which relate to the cost of doing business. Some of the key factors that have been identified as contributing to the lack of competitiveness in the manufacturing sector and by extension, to the specific sub sectors such as the textile and apparels in Kenya include: poor infrastructural conditions and high input costs; low productivity levels; inefficient flow of goods and services and unfavorable business environment. (The Manufacturers, 2013)

Kenya's textile Manufacturing industry is affected by a common set of core business challenges. These challenges include the need to keep employees safe and healthy, perform diligent incident management, achieve regulatory compliance, and a need for supply chain traceability and visibility. Given the highly competitive nature of the industry, manufacturers need to reduce and mitigate operational risks, and drive performance improvements in order to reduce costs and improve the quality of their products. The costs associated with compliance with health and safety legislation are cited as a major barrier to compliance, particularly if the benefits are not realized (Wright *et al*, 1999). It is possible that the management and employees may not have complied with the OSHA standards.

The government of Kenya has made enormous effort to improve the safety conditions of workers in textile industries to improve on productivity of the workers by reinforce {45}. However studies have shown that an estimated 36,000 people toil under harsh conditions in Kenya's Export Processing Zones (EPZs), according to Kenyan NGOs {37}. This has impacted negatively on the performance of the workers because they absent themselves from work due to injuries and occupational related illnesses {37}. This is evident from a study conducted by Chemengich *et al.*, (2013) that showed that textile industries have been under-performing. It is possible that such under-performance is associated with poor working conditions such as non-compliance of safety standards which include lack of safety promotional policies. This study therefore was to investigate the relationship between safety promotional policies and employee's performance in textile manufacturing companies in Kenya.

Today, the major concern of corporations is to implement strategies that may enhance employees' job performance in order to get the desired results from them. This is becoming more challenging and difficult due to the competitive nature of corporate environment. This study will make a significant contribution to the theory, policies and management practices of keeping safety standards in the industry and thus in turn increase the performance of employees. The study was beneficial to several stakeholders who include: Government of Kenya, researchers and scholars, HRM practitioners, management and employees of textile industries. The Study covered the textile manufacturing companies in export processing zone in Machakos County and Nairobi County. It targets the employees and management of the textile manufacturing industries. There are 18 textile companies in Machakos and Nairobi County. Machakos and Nairobi counties were chosen because of their largest number of textile companies in Kenya.

In this study, it is expected that companies have safety promotional policies such as, promoting a Positive Safety Culture, Management Involvement, Personnel Competency and Training, and Communication. Employees in companies that have safety promotional policies are likely to observe work safety procedures and perform better compared to their counterparts. Safety promotion policies set the tone that predisposes both individual and organizational behavior and fills in the blank spaces in the organization's policies, procedures and processes, providing a sense of purpose to safety efforts. Through safety promotion an organization adopts a culture that goes beyond merely avoiding accidents or reducing the number of incidents, although these are likely to be the most apparent measures of success. It is more to do the right thing at the right time in response to normal and emergency situations. (FAA, 2014)

Safety promotion supports safety culture, communication, dissemination of lessons learnt and enables the continuous improvement process. The level of safety and health awareness or consciousness between employers and workers is a critical factor in securing safe and healthy workplaces. Thus creating and promoting a safety culture as a corporate culture is important. In enhancing work performance

There are several factors that affect safety compliance among employees safety training, management commitment, safety promotional policies, worker participation and communication and feedback. Employees must be trained properly for them to prevent and enhance safety in their work environment. Management's commitment to safety will create a positive impact to the industry as they will be involved in formulation, communication and enforcement of its safety program. The organization must also have safety promotional policies to enable continuous safety improvement and thus adopt a culture where safety compliance is prioritized within the industry. Through worker participation, the employees will be involved in making informed and appropriate decisions about their safety in their work environment and finally through effective communication the employees will have adequate information about safety in terms of the hazards and risks involved and how to prevent and maintain safety within the industry.

### 3. RESEARCH METHODOLOGY

This chapter covered the effect of safety compliance on employee's performance in textile manufacturing industries in selected counties in Kenya. Pilot testing was done to ensure reliability and validity of the study. The study used descriptive cross sectional study design. This design involved making observations of a population or sample of the study at one point in time {6}. Cross-sectional studies provide a clear 'snapshot' of the outcome and the characteristics associated with it, at a specific point in time. This design was chosen because it gives accurate measurements of population, characteristics and attributes. The design is useful in identifying characteristics of an observed phenomenon or exploring possible correlations among two or more phenomenon (Leedy, P. & Ormrod, J. (2001). The focus was employees of the textile manufacturing industries in export processing zone in Machakos County and Nairobi County.

The study focused on employees who are in licensed EPZ firms in Nairobi and Athi River. The target population consisted of mainly lower and upper level workers of textile sector because they face more safety related problems at workplace. According to EPZA 2014-2019 strategic plan, the total number of Kenyan employees in the EPZ program employment (2008-2013) were 39961. However, employment by sector of local jobs for garment manufacturing companies was 82.41% which translate to 32,932 employees. The total firms in the EPZ program are 85 whereby the garment manufacturing firms were 25.88% which are 22 firms countrywide. There are 18 licensed EPZ firms in Athi River and Nairobi. The researcher randomly sampled 30% of the total number of licensed firms which was 5 firms. The five firms have 9,148 employees. Therefore the researcher also randomly sampled 30% of the total number of employees in the five firms which will be 2744. The target population was 2744 from which 400 were sampled. The study utilized probability sampling and cluster sampling was used since measurements because of the heterogeneous nature of sampled textile manufacturing firms and also it reduces the total number of interviews and costs given the desired accuracy. The companies were divided into clusters and 6 clusters were sampled out of a total of 18 clusters. Individual respondents were sampled using systematic random sampling technique. Using a sampling interval of 7. The first respondent was sampled using simple random sampling then the rest were sampled using the interval of 7. Key informants was purposively sampled. Those who are knowledgeable about safety issues in the industry were sampled to serve as key informants. Homogenous groups constituted specific groups

#### Sample Size Determination:

A sampling frame facilitates formation of a sampling unit that refers to one member of set of entities being studied which is the material source of the random variable (Bailey, 2008; Klaus and Oscar, 2008). The sample size for this study was calculate using the formula for definite population as proposed by Israel (2009) A sample of 400 employees was selected from the study population. This was expected to be representative of the total population. The sample size of 400 was appropriate which is sufficient as calculated in the formula below.

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = desired sample size

N= Population

e = margin of error at 5% (standard value of 0.05)

$$n = \frac{2744}{1+2744(0.05)^2} = 400$$

The study used both primary and secondary data sources. Primary data was collected using questionnaires and interviews that consisted of both structured and unstructured questions. Structured questionnaire was used to obtain data such as demographic characteristics of the study population. Unstructured questionnaire was used to obtain data on employee's perception about safety standards. Secondary data was obtained from existing literature, books, journals and internet.

Data was sought using researcher administered questionnaires, focus group discussions, key informant interviews who are the proprietors or in charge of each industry, direct observation and photography. The tools were developed from the literature review and organized according to research objectives. The questionnaires were a useful tool in helping to achieve the main objective of the study. A total of 400 questionnaires were administered by researcher to the sampled employees in the textile industries. The questionnaires seek information on safety promotional policies.

Key informant interviews provided necessary information about the relationship between safety compliance and organizational policies. Direct observation of the respondents' behaviour, reactions and feelings towards particular issues sought by the study provided qualitative data. The researcher also used photography to capture visual data in the field as evidence of situation of safety compliance in the textile manufacturing companies.

According to Kothari (2011), when deciding on data collection procedure, one needs to safeguard against bias and unreliability of the procedure used. The study utilized both qualitative and quantitative research techniques. Structured questionnaire and key informant guide was used to collect qualitative and quantitative data. There were four research assistant who were employed to help in collection of data. They were trained in the various techniques of data collection and in particular how to establish rapport with respondents. In addition, an introductory letter from the University was provided to the respondents. In addition this study operationalized the variables. In this study reliability was assessed using Cronbach's Alpha. Cronbach's Alpha is defined;

$\alpha = (k/k-1)(1 - \sum_{k=1}^k \sigma_{Y_i}^2 / \sigma^2_x)$  where is the  $\sigma^2_x$  variance of the observed total test scores, and  $\sigma^2_{Y_i}$  the variance of component  $i$  for the current sample of persons.

If the items are scored 0 and 1, the formula is  $\alpha = (k/k-1)(1 - \sum_{k=1}^k P_i Q_i / \sigma^2_x)$  where  $P_i$  is the proportion scoring 1 on item  $i$ , and  $Q_i = 1 - P_i$

Damon *et al*, (2010) suggest that Cronbach's Alpha is a popular method for measuring internal consistency reliability of a group of items. Cronbach's alpha values obtained was 0.7. and was desirable. The Validity of the research instruments was tested through consulting with other experts to refine the measures and to ensure the covering all aspects, correlate the measure with other known measures and correlate the measure with some external standard criterion that measure should predict, such as conversion rates, sales, recommendation rates, or actual usage by customers.

#### 4. RESULTS

The study targeted a total of 400 respondents who constituted employees of the textile companies in the export processing zone, Athi River Kenya. Out of these, 395 respondents were available to be interviewed hence the response rate of the study was 98.8%.

##### **Socio-economic and demographic characteristics:**

The demographic characteristics obtained from individual respondents and their background were examined in this segment. The results are presented according to the demographics of the respondents interviewed. Some of the questions asked included: job cadre, section of work, age, gender, level of education and marital status. A total 395 respondents in the textile industry were involved in this study. Out of this number, 46.8% were in the job cadre of tailoring spinners, 26.2% were garment technicians, 9.0% were production managers and 18.0% were from other job cadres in the industry.

The respondents were from different sections of the textile manufacturing process being sewing section (41.3%), finishing section (14.4%), cutting section (13.7%), store section (10.0%) and maintenance section (9.0%). Majority of the respondents were male (51.3%) while 48.7% were females. According to the findings, sampled respondents had an

average age of 30.53 years with a standard deviation of 7.738. The minimum age was 18 years while the maximum was 56 years. Most of the respondents, 64% had secondary level of education as their highest level of education. 17.0% of the respondents had University/college education, 17.7% had primary education while 1.3% of the respondents had no formal education. The result showed that most of the respondents were, 50.6% were married, 37.5% were singles, and 8.1% were separated while 3.0% were widowed.

**Compliance to safety standards:**

The general information on employees’ compliance to safety standards showed that 79.8% of the respondents were compliant with the safety standards. 20.3% were not compliant. The safety standards observed by the employees at the manufacturing industries mainly included appropriate use of fire extinguishers (52.7%) and correct work procedure (12.7%).

**Table 1: Safety standards observed at manufacturing industries**

Safety standard	Frequency (N = 395)	Percent	Rank (1-most observed)
Appropriate use of fire extinguishers	208	52.7	1
Correct work procedure	50	12.7	2
Proper water disposals	48	12.1	3
Others	10	2.5	4
Not observed	79	20	
Total	395	100	

Employees who do not comply to the safety standards mainly do so because of ignorance of safety standards (60.4%), to save time in completion of work (21.5%), work peer pressure (to not comply to safety rules and regulations (15.3%) and other reasons (2.8%).

**Table 2: Reasons for non-compliance to Safety standards**

Reasons	Frequency	Percent	Rank (1-most observed)
Ignorance of safety standards	87	60.4	1
To save time in completion of work	31	21.5	2
Work peer pressure to not comply with safety rules and regulations	22	15.3	3
Others	4	2.8	4
Total	144	100	

**“Constraints to improving safety standards”**

Constraints to improving safety standards in the manufacturing industries were; time limit, ignorance, lack of funds, lack of education, work load, lack of equipment, work peer pressure, work overload, high cost of safety products as shown in table 3.

**Table 3: Constraints to improving safety standards noted by respondents**

Constrain	F.	Percent	Rank (1-most experienced)
Time factor	53	13.25	1
Ignorance	34	8.5	2
Lack of funds	31	7.75	3
Illiteracy	26	6.50	4
Work load	15	3.75	5
Lack of equipment	9	2.25	6
Work peer pressure	8	2.00	7
Work overload	5	1.25	8
High cost of safety products	5	1.25	8

To improve safety standards in the organization they do advocating for implementation of safety measures, advocate for the formation of safety policies, alert employees when there is fire by use of alarms, allow training of workers on safety standards. The organization show appropriate use of fire extinguishers to the employees, avail equipment, avail funds, carry out on job training to employees and create safety training programs. The organization improve correct work procedures and communicating safety culture in the organization

According to key informant interviews of some of the employees in the textile companies in the EPZ, in seven out of eight of the textile companies, management provides training on safety. This was mainly through the following ways; training to employees through various programs for example health and certify trainings under OSHA programs. The safety trainings include first aid, health inspection for fitness to work. In one of the companies, The management has not been providing training and employees hope that they will start training workers on safety issues

Understanding of safety standards to majority of the workers, 44.8%, was “Having individual responsibility to safety standard”. 17% of the workers understand it as “Having joint occupational health and safety committee” or “Adhering to health and safety rules”. To the best of their knowledge on the safety standards, most workers 72.5% are aware of safety standards of wearing protective clothing e.g helmets, overalls, gloves etc. 48.5% know the safety of using fire extinguishers in case there is fire while 28.5% know the safety standard of providing medical examinations and training.

According to key informant interviews of some employees in the textile companies: Workers in the companies have knowledge on safety regulation since they are trained regularly. The company has put a lot of measures in place to address future standards although a good number of the employees are not very keen to implement them. However, not all the staff get trained because there are some casuals who work on daily basis and are not aware of any safety regulations but the permanent staff are aware. It was noted that most of the workers are on casual basis and the management has not put in place any defense mechanism.

There is the challenge of achieving targets, considering that factory employees are unionized. Sometimes it is difficult for industrial engineering department to match sister company in Cambodia, Vietnam since the efficiency is thirty percent more than what is produced. Another challenge reported was absenteeism; the culture of absenteeism due to lack of self-belonging e.g. during end month when the employees get salary, they absent themselves, financial management; some employees take loans which exceed their salary, they go against the one-third rule which affect performance of employee due to a lot of pressure that they have. Another challenge reported was injuries at work: frequent rate at which the machine operators get injured affects sensing machine operators.

To address these challenges, the respondents stated that the employers should; initiate training and action to the newly recruited employees. The employers should come up with a booklet policy that has twelve principles which cover all the health and safety so that she/he can go and read at his/her free time. They should periodically conduct training that involves all employees in production. They should engage the relievers/helpers so that when one employee proceed to maternity they have another to sustain production. Have qualified industrial engineers who are working hand in hand with supervisors and shop stewards to set an achievable target so that to avoid unnecessary complaints from employees. The HR is educating workers on the importance of attending and trying to educate the workers on the repercussion of absenteeism which has reduced the absenteeism to almost two percent from 98 percent. On managing finance, they have tried to talk to financial institution e.g. Sacco to liaise with HR department before giving facilities so that the third rule can be followed to the latter.

Employers need to improve on the level of supervisory and middle level management trainings in order to positively impact on the general workmanship in the factory. If they strictly follow the rules regarding the use of safety measures, for example, ensuring that needle guards are in place before at all times during the operations, it will prevent them from suffering injuries. There should be opportunities for closer intervention between management and employers in order to bridge communication gap that could be existing between the two parties, this may be realized through training programs to highlight and address the gaps.

The challenges are addressed basically by training workers about the stated activities and what precaution they are supposed to take while at work to ensure safety. Displays of work station activity guidelines are to be at all times and have caution signs for possible danger. They should Set realistic deadlines that are within acceptable good practice for such tasks. Targets must be measurable and realistic and the management must provide meals such as assigning correct number of employees to achieve the targets, plus enough people adequate to perform the duties without stressing. The employers need to motivate the staff by increasing their salary, reduce the number of working hours and give leave to workers.

#### **Safety promotional policies and employee’s performance:**

An organization a safety promotional policy was established by testing the respondents’ views on a five point likerts scale for seven items. The likerts scale range from 1 – 5 (1- strongly agree, 2-agree, 3-not sure, 4-disagree, 5-strongly disagree). Analysis of the responses received was tested using Cronbach’s alpha reliability of the items. This gave a Cronbach’s alpha value of 86.8% ( $r = 0.868$ ).

Most of the workers were aware of the safety promotional policies in the industry, mean response of 2.29 with a standard deviation of 1.10. This was strongly agreed by 24.5% of the workers and agreed by 43.3% of them. The workers had received safety training in the company as a greed by 39.5% and strongly agreed by 21.5%, giving a mean response of 2.49 with a standard deviation of 1.19.

**Table 4: Safety promotional policies**

Items	SA	A	N	D	SD	Mean ±SD
Availability	96 (24.3%)	170 (43.1%)	43 (10.9%)	80 (20.2%)	6 (1.5%)	2.29±1.10
Effectiveness	74 (18.7%)	148 (37.5%)	65 (16.5%)	98 (24.8%)	10 (2.5%)	2.53±1.15
workers comply	68 (17.2%)	137 (34.7%)	47 (11.9%)	130 (32.9%)	13 (3.3%)	2.69±1.21
Available mechanism	66 (16.7%)	152 (38.5%)	67 (17.0%)	100 (25.3%)	10 (2.5%)	2.56±1.13
Presence of safety culture	64 (16.2%)	147 (37.2%)	56 (14.2%)	122 (30.9%)	6 (1.5%)	2.63±1.14
Actions taken by management to promote	67 (17.0%)	154 (39.0%)	48 (12.1%)	115 (29.1%)	11 (2.8%)	2.60±1.17
Received safety training	85 (21.5%)	156 (39.5%)	35 (8.9%)	110 (27.8%)	9 (2.3%)	2.49±1.19

SA-strongly agree, A-Agree, N-Not sure, D-disagree, SD-strongly disagree

In case of emergency, forms of communication used to alert workers in the organizations were; telephone, oral speech, written statements, E mail and others. Most of the workers, 38.8% noted that they were communicated to through telephone services. 29.0% of the workers stated that they were communicated to through oral speech e.g word of mouth.

**Promotion of safety culture:**

As an organization, to promote safety culture, majority, 42.5% of the workers stated that they have noted that the organization have developed safety policies. They have created safety training programmes as noted by 30.4% of the workers and ensured that workers adhere to safety regulations (14.7%).

**Table 5: Actions taken by the management to promote safety culture**

Action	F	%	Ranks(1-most noted action)
Developing safety policies	168	42.5	1
Creating safety training programs	120	30.4	2
Ensuring that workers adhere to safety regulations	58	14.7	3
Others	49	12.4	4
Total	395	100	

**Relationship between safety promotional policies and employee’s performance:**

Establishment of the relationship between safety promotional policies and employee performance was carried out using Pearson moment correlation. The findings showed that, there was a significant positive relationship ( $r = 0.791$ ,  $P = 0.0001$ ). Better safety promotional policies in the organization resulted into better performance of the employees in an organization. On the contrary, low levels of safety promotional policies lead to poor performance of the employee.

**Table 6: Correlation table showing relationship between safety promotional policies and employee performance**

		Safety promotional policies	Employees performance
Overall safety promotional policies	Pearson Correlation	1	.791**
	Sig. (2-tailed)		.000
	N	392	391
Overall employees performance	Pearson Correlation	.791**	1
	Sig. (2-tailed)	.000	
	N	391	396

\*\* . Correlation is significant at the 0.01 level (2-tailed).

To have a better employee performance, majority of the workers, 41.3% agreed whereas 27.3% strongly agreed that safety is a factor that can increase workers level of performance. This produced a mean response of 2.31 with a standard deviation of 1.17. The respondents 38% and 14.4% agreed and strongly agreed respectively that organizational targets are usually achievable giving a mean response 2.69 with a standard deviation of 1.16.



**Table 7: Employee performance in the industry**

Items	SA	A	N	D	SD	Mean±SD
Safety is a factor that can increase your level of performance	108 (27.3%)	163 (41.3%)	19 (4.8%)	100 (25.3%)	5 (1.3%)	2.31± 1.17
Organizational targets are usually achievable	57 (14.4%)	150 (38%)	53 (13.4%)	122 (30.9%)	13 (3.3%)	2.69± 1.16
Employees in this company are productive	72 (18.2%)	140 (35.4%)	45 (11.4%)	132 (33.5%)	6 (1.5%)	2.63± 1.17
Room for improvement to boost performance	75 (19%)	160 (40.5%)	28 (7.1%)	122 (30.9%)	10 (2.5%)	2.57± 1.19
Employees perform above the set target by management	55 (14%)	153 (38.6%)	63 (16%)	114 (28.9%)	10 (2.5%)	2.66± 1.13

SA-strongly agree, A-Agree, N-Not sure, D-disagree, SD-strongly disagree

Organizational targets are usually achievable as indicated by 73.0% of the respondents. However, 22.5% of the workers felt that the organizational targets were not usually achieved. This was mainly because of work overload, absenteeism from work, injuries or sick off.

According to key informant interview with some employees in textile companies in the Epz, employee performance in the company is average, although not exactly what the employees aim to achieve. They will perform highly if safety is observed. Generally, the performance is good save for the day to day challenges which employees are always coping with. The safety in the factory can be included during the employee's performance appraisal and new employee's recruitment. There is the legal requirement in OSHA 2017 on training employees on carrying out drills. The management should ensure that the staffs are trained regularly on first aid and safety by a reputable company; fire drills to be conducted regularly and fire detectors to be put in place. It will ensure that staffs are conversant and understand all the safety issues and will be able to counter any emergency.

The key informants were also asked to explain how safety compliance affects employee performance. First, it may lead to occupational disease or injuries which will attribute to absenteeism. Second, since the company introduced a close check on their safety standards of equipments and machines they have witnessed a drop in work safety related accidents which in turn has seen factory efficiency grow if not maintained.

Third, safety compliance if well maintained has a very high rate of effectiveness on achieving production efficiency since it reduces time wasted while taking time nursing injuries sustained time to time and also saves the company from having non-productive workers who would otherwise be on and off duty while nursing injuries got as a result of unsafe working condition. It was also reported that non-compliance has a negative effect whenever it is experienced. This is because the outcome is always low productivity. Occurrence of injuries also means that the well-being of an employee is affected by effects of injuries sustained.

Regarding safety policies the key informants indicated that use of PPE (production protective equipment), for instance, gloves, masks, headgears can help to improve productivity. In addition employees should follow signs, training of evacuations when there is fire, fire safety instructions and that machines should have guards. Training programs need to be put in place and create awareness among the workers so that the company can achieve a result of 100%. Besides the existing policies, much emphasis needs to be put on other production equipment by ensuring all machines are in good working conditions and guarded appropriately. There should be more training programs to raise awareness among workers so that the company reduces the levels of ignorance on such issues.

Safety information and communication play a great role in improving the safety of the worker in the factory; rules on safety are safely placed in strategic areas for workers and all other stake holders. There should be policy on disposal of sharp needles, guidelines on lifting heavy loads and the occupational health and safety policies.

**Ho2:** There is no relationship between safety promotional policies and employee performance in textile manufacturing companies in Kenya. Findings of the study revealed that there was a significant relationship. There researcher therefore fail to accept the null hypothesis.

## 5. DISCUSSION OF RESULTS

This study found that management commitment is associated with promotion of safety in the industry. This finding is similar to that of Hofmann, *et al.*, (2017) who found that local management is important in ensuring safety at work by making “micro-decisions” in the day -to-day operations in deciding how to implement safety policies and procedures as well as how to prioritize safety when there are competing goals.

Study results indicated that management is carrying out activities to promote safety in the industry. This finding support study findings by Marzlan (2013) who found that management support may influence the safety attitude and safety culture of members in their team, which also help to determine the safety performance of the team. The study found that nearly all employed workers are trained on safety and work, participate in safety drills. Some key informants observed that training is a key components in ensuring that safety procedures are observed in the industry, This finding agrees with what Hoffman, Burke & Zohar (2017) found that safety training is an important part of occupational health and safety (OHS) programs that contributes to fulfilling the organizational safety goals

As far as safety promotional policies are concerned most of the workers were aware of existence of safety policies in the industry. A study conducted by Ahmad, Sattar & Nawaz, (2017) under scored the importance safety policy in any work environment. Such policies relate to employment in hazardous processes and welfare of employees. Most of the respondents strongly agreed that workers participation in safety issues affect employee performance. This supports the findings by Al-haadir (2013) who found that safety participation is conceived as an activity that can help in developing an environment that stimulates safety such as voluntarily joining safety training programs and helping coworkers with safety-related issues

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## REFERENCES

- [1] Abdelhamid, T. S., & Everett, J. G. (2000). Identifying root cause of construction accidents. *Journal of Construction Engineering and Management*, 126(1), 52–60.
- [2] ACTIF, (2013) “Policy Research on the Kenyan Textile Industry”
- [3] Ahmed, J.U. (2007). “Research Issues in Case study Method: Debates and Comments” *AIUB Journal of Business and Economics (AJBE)*, Vol. 6, No. 2, pp. 1-14
- [4] Ahmad, I., Sattar, A., & Nawaz, A. (2017). Occupational Health and Safety in industries in developing world. *Gomal Journal of Medical Sciences*, 14(4).
- [5] Al-haadir, S.; Panuwatwanich, K.; Stewart, R.A. Empirical analysis of the impacts of safety motivation and safety climate on safety behaviour. In *Proceedings of the 19th CIB World Building Congress: Construction and Society*, Queensland University of Technology, Brisbane, Australia, 5–9 May 2013.
- [6] Babbie, (2015). *The Practice of Social Research*, Wadsworth Publishing: 13th edition
- [7] Bailey J. (2008) First steps in qualitative data analysis: transcribing. *Fam Pract.*; 25: 127-131.
- [8] Barling, J., & Zacharatos, A. (2000). High performance safety systems: Ten management practices for creating safe organizations . Manuscript in preparation.
- [9] Barling J., Loughlin, C., & Kelloway, E.K (2002) Development and test of a model linking safety-specific transformational leadership and occupational safety. *Journal of Applied Psychology*. 87(3) 488-496
- [10] Belachew, W.A. & Berhane, Y. (1999): Noise induced hearing loss among textile workers. *Ethiopia. J. Health Dev.*, 13 (2): 69- 75.
- [11] Bureau of Labor Statistics (2000). National census of fatal occupational injuries, 1999 (USDL Publication no. 00-236) Washington DC: Author
- [12] Bureau of Labor Statistics (2002) Workplace Injuries and Illnesses in 2001. USDL publication 02-687. Washington, DC: US Dept of Labor.

- [13] Burke MJ, Bradley J, Bowers HN. (2003) Health and safety training programs. In: Edwards JE, Scott J, Raju NS, eds. *The Human Resources Program Evaluation Handbook*. Thousand Oaks, Calif: Sage Publications; 2003: 429–446.
- [14] Burke, M. J., Sarpy, S. A., Tesluk, P. E., & Smith-Crowe, K. (2002). General safety performance: A test of a grounded theoretical model. *Personnel Psychology*, 55, 429-457.
- [15] Chemengich, Margaret, Varun Vaid, HesbonOlweny, & Fred G. Karuiki. (2013). "Policy Research on the Kenyan Textile Industry: Findings and Recommendations." African Cotton and Textile Industries Federation (ACTIF).
- [16] Christian, M.S., Bradley, J.C., Wallace, J.C., & Burke, M.J. (2009). Workplace safety: A meta-analysis of the roles of person and situation factors. *Journal of Applied Psychology*, 94, 1103-1127.
- [17] Coomber B & Louise Barribull, (2007) Impact of job satisfaction components or intent to leave and turnover for hospital based nurses, *International Journal of Nursing Studies*
- [18] CPWR, (2014) Demonstrating Management Commitment: The Center for Construction Research and Training, Safety Culture/Climate in Construction Workshop
- [19] Dr Lew T.K.Y & Mona A, (2012) A critical assessment of Herzberg's theory of motivation, *Borneopost.com*, 10-23
- [20] Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch P.D., & Rhoades, L. (2001) Reciprocation of perceived organizational support. *Journal of Applied Psychology*. 86(1), 42-51
- [21] Evans, Andy & John Parker, (2008) Beyond Safety Management Systems. Pp. 12–17 in *AeroSafety World*.
- [22] Federal Aviation Administration, (2014), Safety Management System, 800 Independence Avenue, SW Washington, DC 20591
- [23] Ferguson, J. (2000). Strategies to improve occupational safety at Rietspruit mine. Unpublished master's dissertation, Milpark Business School, South Africa.
- [24] Fox NS, Brennan JS, Chasen ST; Brennan; Chasen (2008). "Clinical estimation of fetal weight and the Hawthorne effect". *Eur. J. Obstet. Gynecol. Reprod. Biol.* 141 (2): 111–4
- [25] Gardner, J.W. (1998). Can change management be successfully implemented at a gold mine to improve safety and productivity? Unpublished master's dissertation, University of Cape Town, Cape Town, South Africa.
- [26] Geller, E. S. (2001). *The Psychology of Safety Handbook*. Boca Raton, FL: Lewis Publishers. Geller, E. S. (2005). *People-Based Safety: The Source*. Virginia Beach, VA: Coastal Training Technologies Corp.
- [27] Geller, E. S. (2008). *Leading People-Based Safety: Enriching your Culture*. Virginia Beach, VA: Coastal Training Technologies Corp.
- [28] Guest, D. (2002) Human resource management, corporate performance and employee wellbeing: building the worker into HRM, *Journal of Industrial Relation*, 44: 335-358
- [29] Guest, D.E., Michie, J., Conway, N. and Sheehan, M. 2003. Human resource management and corporate performance in the UK. *British Journal of Industrial Relations*. 41(2): 291-314
- [30] Hafez, (2009) "Frequency of hearing loss among textile workers of wearing units in Karachi, Pakistan".
- [31] Hafez, N.A: Hasan, H.M.; Al-Azab, M.R & Seleim, R.S. (1998): Health profile of textile workers in an Egyptian Textile Factory *African Newsletter*.
- [32] Hamalainen P, Jukka T., and Kaija L., (2006) Global estimates of occupational accidents, *International Labour Office*, Switzerland.
- [33] Herzberg, Frederick; Mausner, Bernard; Snyderman, Barbara B. (1959). *The Motivation to Work* (2nd ed.). New York: John Wiley
- [34] Hinkenlmann, Klaus & Kempthorne, Oscar (2008) *Design and Analysis of Experiments I and II* (Second ed.) John Wiley & Sons, Inc ISBN 978-0-470-38551-7 Section 6.3

- [35] Hofmann, D. A., Burke, M. J., & Zohar, D. (2017). 100 years of occupational safety research: From basic protections and work analysis to a multilevel view of workplace safety and risk
- [36] Houser, V.P., (2006) "Trends of employees performance: collaborative efforts between manager and employees". *Journal of Performance Improvement*, 45(5), 26-31
- [37] Ikiara G, Nyandemo S;, Ikiara M. (2004) "African imperatives the world trade orders : Emerging National and Global issues on Kenya's services sector.
- [38] ILO, (2004) Promotional framework for occupational safety and health, International Labor Conference, 93rd Session, Geneva, Switzerland
- [39] ILO, (2006) Occupational safety and health: synergies between security and productivity. Accessed from <http://www.ilo.org/public/English/standards/reIm/gb/docs/gb295/pdf/esp-3.pdf>
- [40] IRIN (2004). Focus on working conditions in EP companies. <http://www.irinnews.org/report/48975/kenya-focus-working-conditions-epz>
- [41] Kothari, C.R. (2011). *Research Methodology; Methods and Techniques*. New Delhi. New Age International Publishers.
- [42] Lamm, F., Massey, C., Perry, M., (2006) Is there a link between workplace health and Safety and Firm performance and productivity. *New Zealand Journal of Employment Relation*. Vol. 32 No.1, pp 75-90
- [43] Leedy, P. & Ormrod, J. (2001). *Practical research: Planning and design* (7th ed.). Upper Saddle River, NJ: Merrill Prentice Hall. Thousand Oaks: SAGE Publications
- [44] Marzlan, O. (2013). Middle-management support and safety training from towards employees safety behavior in the manufacturing environment. Master thesis, University Utara Malaysia
- [45] Michael, Evans, Jansen & Haight, (2005) Management commitment to safety as organizational support: Relationships with non-safety outcomes in wood manufacturing employees, *Journal of Safety Research*, Volume 36, Issue 2, pg 171-179
- [46] Oak Ridge National Laboratory, (2015) Occupational Health and Safety, [www.ornl.gov](http://www.ornl.gov).
- [47] Parker, S. K., Axtell, C. M., & Turner, N. (2001). Designing a safer workplace: Importance of job autonomy, communication quality, and supportive supervisors. *Journal of Occupational Health Psychology*, 6(3), 211-228. doi: <http://dx.doi.org/10.1037/1076-8998.6.3.211>
- [48] Republic of Kenya (2015): Kenya National Industrialization Policy Framework. [industrialization.eac.int/index](http://industrialization.eac.int/index)
- [49] Republic of Kenya (2007): The Occupational Safety and Health Act, 2007
- [50] Rhoades L., Eisenberger, R., & Armeli, S. (2001) Affective commitment to the organization. The contribution of perceived organizational support. *Journal of Applied Psychology*, 86(5)
- [51] Stewart, J. (2001) The Turnaround in Safety at the Kenora Pulp and Paper Mill Professional Safety- The Journal of the American Society of Safety Engineers, 46, 34-45
- [52] The Industrial Organization Psychologist, (2004), What We Teach Students About the Hawthorne Studies, Santa Clara University, Volume 41
- [53] The Manufacturer (2013) "Market Demand will shape the factory of the future," November 20. <http://www.themanufacturer.com/articles/market-demand-will-shape-the-factory-of-the-future>.
- [54] WHO, (2001) International Classification of Functioning, Disability and Health. Geneva, Switzerland: <http://www.who.int/classifications/icf/en/>
- [55] Wright, Michael; Lancaster, Rebecca; Jacobsen Maher, Catherine; Talwalkar, Medha; & Woolmington, Tony. (1999) Evaluation of the Good Health is Good Business Campaign. HSE Contract Research Report 272 / 2000. HSE Books, Sudbur