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Relationship between Safety Communication and Employee's Performance in Textile Manufacturing Companies In Kenya

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***Abstract*— The objective was to establish how communication influences employee performance in textile manufacturing companies. Theories that anchored the study include: Heinrich domino theory, Human factor theory, behavioral based Safety theory, system theory and social exchange theory. The target population included all the textile manufacturing companies in the export processing zone which are 22 under Export processing zone program. This study sampled 400 respondents and adopted a descriptive cross sectional research design. Data collected using questionnaire and key informant's interviews were used. Collected data was coded for computerized data entry. Descriptive and inferential statistics was done by use of statistical package for social Sciences. Inferential analysis, regression analysis to determine the significance and a magnitude of independent and moderating variables in respect to employee performance in textile industries was done. The statistical analysis showed that there was a correlation between worker's safety communication and employee performance(r = 0.739, P = 0.0001). The study concluded that workers safety communication contribute to improved employee performance. The study recommends that textile manufacturing companies should conduct periodic safety training and awareness of safety standards among employees. Workers should be involved in decision making of safety standards to own those policies.**

***Index Terms*— Safety communication, employee performance, textile industries.**

I. INTRODUCTION

Employee performance is defined as whether a person executes his/herjob duties and responsibilities according to recommended standards. Many companies assess their employee's performance on an annual or quarterly basis in order to define certain areas that need improvement. Performance is therefore, 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. Most businesses implement health and safety measures to keep compensation costs down (Massey & Perry, 2006; Dorman, 2000; Quinlan, Mayhew & Bohle, 2001).

There is evidence that occupational injuries and illnesses impact on productivity losses (Lamm, Massey & Perry, 2006). 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 good working environment has a strong influence on productivity and profitability (De Greef& Van den Broek, 2004).Employee performance management is key in improving employee work performance. A study by Guest, Michie, Conway, and Sheehan, (2003)provides a useful theoretical model that suggests possible links between a series of managerial inputs and performance outputs. The inputs are business strategy, Human Resource (HR) strategy and HR practices. The HR practices include induction, job design, recruitment and selection, appraisal, 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.

Workplace safety is therefore 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, Jukka , and Kaija, (2006) estimated that 264 million workplace injuries occurred in 1998, with more than 700, 000 workers a day suffering from 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

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1) Employee Performance

Employee job performance can be defined asthe achievement of specific tasks measured against predetermined or identified standards of accuracy, completeness, cost and speed. This can be manifested as improvement in production, easiness in using the new technology and motivating workers (Afshan, Sobia, Kamran & Nasir, 2012). The performance-driven objective is expected to be aligned with the organizational policies so that the entire process moves away from being event-driven to become more strategic and a people-centric perspective (Jena, & Pradhan, 2014; London, 2003; Mone & London, 2009).

In organizational research, job performance is viewed as feelings and characteristics concerned with their work (Guest, 2002). Managers and owners think that capable workers are essential for successful business (Eskildsen & Nussler, 2000). There is a direct relationship between employee performance and employee attitude. HaiderandRiaz, (2010) and Malik, Yamamoto, Souras, Malik and Sauerborn, (2010) suggestedthat it is possible to predict performance of employees by giving the behavioral importance to employee when they are at work.

Job performance characteristics contain numerous aspects of the job like salary, uniqueness of job, working environment and management of political issues (Coomber& Louise, 2007). Morrison (1997) argued that highly satisfied employees can demonstrate a high level of performance and attitude as well as the attitude of managers and leaders. Committed employees, generate high level of performance (Poon, 2004). Many researchers identify that job attitudes and working morale are the key sourcesfor enhancing performance of employees (Miliman, 2002). Organizations that motivate their employees have higher levels of performance than the less motivating organizations. In a study conducted by Gopang, Nebhwani, Khatri and Marri, (2017) in small and medium sized industries in Pakistan, a moderate positive correlation was found among Occupational Health and Safety Management (OHSMs) and performance of Small and Medium Enterprises (SMEs). This implies that OHSMs were not properly carried out which influenced the performance of SMEs (Goetzel & Ozminskowski, 2008). This is mainly because many employers associate poor health with reduced employee performance, safety and morale. The organizational cost 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.

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. Human resource plays an important role in performing tasks for accomplishing organizational goals. Human resources are the intellectual property of the firm as they prove to be a good source of competitive advantage (Houger, 2006). In order to succeed, organizations have to obtain and utilize human resources effectively. This will impact on the total production, sales, profit, progress and market position of the company in the market. Employee performance is the major dilemma of organizations in the current environment. Employee's good performance is very essential for the effectiveness of an organization. Employees are the basic source of profit and competitive advantage. Therefore, organizational activities involved in enhancing their employee performance have the motive of organizational performance enhancement(Khan, Dongping &Ghauri, 2014).

According to Gallup (2006) highly motivated and engaged employees take in general fewer sick days up to 37% less. Additionally, absent employees are less productive and high absence rates throughout an organization is a key indicator of lower organizational performance. Bansal, (2005) viewed that 360 degree feedback is another indicator to measure employee performance. Feedback comes from many sources that include: subordinates, customers and managers and it provides a more balanced evaluation which is usually more acceptable as fair and objective. This feedback often represents an accurate and multi perspective view of an employee performance, skill level and point of improvement. Companies are striving to improve production. In the process, employees are overlooking safety procedures whilst attempting to reach performance targets (Moller, 2003; Probst & Brubaker, 2001). Because of performance pressure and time constraints, many workers engage in unsafe behaviors. They include short cuts that compromise safety compliance and can cause accidents.

2) Textile Industry in Kenya

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 (Kinyanjui, Lugulu & McCormic, 2004). 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 (Maiyo& Imo, 2012). 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 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 Export Processing Zone (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 Sub Saharan Africa (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.

At the proposed textile city, land would be leased to foreign companies for investing in cotton ginning, yarn spinning, production of fabrics and home textiles, and garment and apparel accessories manufacturing. The government was also a significant shareholder in textile firms such as KICOMI (Kisumu), Rivertex (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 Raymond evolved and thrived in the import substitution era. Production stagnated from mid-80 and fell sharply after liberalization in the early 1990's.

A policy was constituted by the government in the early 2000's which 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 & Ndirangu, 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).

In Kenya, prior to the enactment of the Occupational Safety Health Act, (2007), matters of OSH were covered under the Factories and Other Places of Work, Act (1972), Chapter 514 of the laws of Kenya. This chapter has since June 2008 been replaced by the OSH Act (2007). The OSH Act is an Act of Parliament that provides for the safety, health and welfare of workers and all persons lawfully present at workplaces. ISO-9000 certification, whose quality standard requirement lay a lot of emphasis on compliance with occupational safety and health regulations, has become a prerequisite for acceptance of products in most markets. In view of the above, there is need for organizations to ensure compliance with OSH at their workplaces as a basic human right and a strategic human relations management issue cannot be over-emphasized.A safe workplace reduces occurrence of work related accidents, diseases and insurance claims resulting in higher productivity levels and low production costs. In Kenya, lack of awareness of the OSH Act of 2007 undermines the safety and health of workers. This has partly contributed to the weak safety culture in the workplace and non-compliance with international safety and health standards that is ISO 9000:2015 (Republic of Kenya, 2015).

B. Statement of the Problem

Kenya's textile sector plays a key role in anchoring the country's deeper movement into middle income status and serving as a source of gainful employment for its fast growing young population (ACTIF, 2013). Kenya has 21 large textile firms which operate in the EPZ, employing an average of 1800 people per company (KNBS, 2015). The existing mills operate using out-dated technology and suffer from low level skilled labour and low productivity (Olweny-CODA, & Karuiki, 2013). In addition, the 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 risksand 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, Michael; Lancaster, Rebecca; Jacobsen Maher, Catherine; Talwalkar, Medha; &Woolmington, Tony, 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 reinforcing OSHA standards (Republic of Kenya, 2007). 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 (IRIN, 2004).This has impacted negatively on the performance of the workers because they absent themselves from work due to injuries and occupational related illnesses (IRIN, 2004).

This is evident from a study conducted by Chemengich, Margaret, VarunVaid, Hesbon, & Fred, (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 workers knowledge, lack of safety promotional policies, lack of safety communication, lack of workers' participation to safety standards and lack of management commitment (Chemengich, *et al.*, 2013).Several studies have been carried out in Kenya regarding the textile industry. Omolo (2006) examined the textile and clothing industry in Kenya: the future of the textile and clothing industry in Sub Saharan Africa. Rael, Mairoand Beatrice (2012) analyzed the performance and challenges of the Kenyan textile industry in a liberalized economy. However, none of these studies carried out has analyzed safety compliance on employee performance in textile industry. This study, therefore investigated the relationship between work safety compliance and employee performance in textile manufacturing companies in Kenya.

C. Objectives of the Study

The study was to establish the relationship betweensafety communication and employee's performance in textile manufacturing companies in selected counties in Kenya.

The hypotheses of the study was; H_{o1}: There is no relationship between safety communication and employee's performance in textile manufacturing companies in selected counties in Kenya

D. Significance of the Study

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 makesa 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. It is important for industries to have safety compliance in their workplace to ensure that injuries are minimized and productivity is increased. Workplace safety needs to remain a vital concern for organizational researchers and practitioners. In this regard, the study is beneficial to several stakeholders who include: Government of Kenya, researchers and scholars, HRM practitioners, management and employees of textile industries.

The management may use the findings of this study to improve their safety standards within the industry, thereby avoiding arising criminal charges and build positive public image of their industry to the customers and potential investors. The employees of the manufacturing industry would avoid injuries in their workplace and bemore productive since they feel that they are well compensated for their efforts and that they are safe within the business' reach. It is important that internal compliance is adhered to, since it ensures that employees are satisfied and that all complaints or issues are monitored and addressed properly before they grow and affect the entire corporation.

The governments of Kenya may use the findings of this study to make policies and regulation of safety standards that the textile industry should comply with. The policy makers may utilize the knowledge gained from this study in assisting the companies on safety issues by designing relevant policies governing the industry players. The Government of Kenyamay use the findings of this study to encourage investors in this industry to invest more especially in the export processing zone textile companies.

At theory level, this study may be used as a reference material for future studies in the same field and points out areas of further study. The study also contributes new knowledge to approaches that can be used to improve safety standards in textile manufacturing companies. Such approaches include training workers on safety standards and improving on safety communication.

E. Scope of the Study

The study covered the textile manufacturing companies in export processing zone in Machakos County and Nairobi County. It targeted the employees and management of the textile manufacturing industries. There are 18 textile companies in Machakos and Nairobi County in the export processing zone. Machakos and Nairobi counties were chosen because of their largest number of textile companies in Kenya. A sample was however used in the study. The time scope for collecting the data was six months. The study looked at the variables that determined safety management system which includedsafety communicationand management commitment

F. Theoretical Review

Accident prevention is the most basic of all safety paradigms. If safety management is effective, then there should be an absence of accidents. Therefore, understanding how accidents occur is fundamental to establish intervention to prevent accidents. Accident models affect the way people think about safety how they identify and analyse risk factors and how they measure performance. Many models are based on an idea of causality. Accidents are thus the result of technical failure, human errors or organizational problems. Theoretical perspectives of safety of workers were based on Human Factor Theory, Social Exchange theory, Behavioural Based Safety.

1) Human Factor Theory

Human factors refer to environmental, organizational and job factors, human and individual characteristics which influence behavior at work in a way that can affect health and safety. A simple way to view human factors is to think about three aspects: the job, the individual and the organization and how they impact on people's health and safety-related behavior.Basically, suchmodelsstatethatwheneverhuman beings are overloaded due to a mismatch between the capacity of the individual and the external demand made upon him, the individual more becomes susceptible to accident. Among various Human Factors Models the study shall look atFerrel's Human Error Theory

Russell Ferrell, Professor of Human Factors at the University of Arizona is the proponent of the theory. According to this theory accident causation is attributed to a chain of events ultimately caused by human error. Human error is in turn caused by one of the three situations: overload, inappropriate response and inappropriate activities (Reason, 1990). He believed that the human errors are the main causes of accidents occurrence and they are caused by the following factors (Abdelhamid & Everett, 2000). Overload is a factor that reflects the incompatibility between the load and the capability of the human. A person's capacity was the product of such factors as his or her ability, training, and state of mind, fatigue, stress and physical condition. The load a person was carrying consisted of tasks for which he/she was responsible and added burden resulted from

environmental factors such as noise, heat, internal factors such as persona problems, emotional stress, anxiety and situational factors e.g. level of risk, unclear instructions. The result of this mismatch is anxiety, pressure, fatigue and emotions that can be intensified by physical environment such as dust, light, noise and fumes where the person is working.

Incorrect response by the person is caused by the incompatible situation where he/she is working in (Taylor, Easter & Hegney, 2004).The manner in which an individual responded to a given situation can cause or prevent an accident. In addition, to inappropriate response this component included workstation incompatibility. The incompatibility of a person's workstation depended on size, force, reach and similar factors can lead to accidents and injuries.Improper activity; the person perform the activity improperly either due to lack of knowledge of appropriate way of performing the activity, or intentionally take the risk.Inappropriate activities can occur when a person undertook a task, but did not know how to do it or a person misjudged the degree of risks involved in a given task and attempts to carry out the job on the basis of that misjudgement. Such inappropriate activities may led to accidents and injuries (Jha,2011).The emphasis in this model is an overload and incompatibility only which is central points in most human factor models.

The choice of this theory is that management should have policies that would minimize human error which attributed to accident causation in the organization. Organizations that hadsafety promotional policies would greatly reduce accidents mainly caused by human error since employee would observe safety when doing their work at their workplace (Jhamb & Jhamb, 2003).It was therefore crucial for every organization to have proper and efficient policies to eliminate or reduce overload, inappropriate response and inappropriate activities which are as a result of human error. Therefore, the above theory informed the second research objective: To establish the influence of safety promotional policies on employee performance in textile manufacturing companies in Kenya.

2) Safety Communication

One of the ways of maintaining a safe and healthy workplace is by communication and feedback of safety programs and procedure to workers. (Kim & Park, 2019).Workplace communication has been found to be very important to companies because it allow companies to be productive and operate effectively. Employees could experience an increase in morale, productivity and commitment if they were able to communicate up and down the communication chain in an organization.Communications plays a central role in promoting the health and wellbeing of workers. Although much literature has shown the positive benefits of safety communication in the workplace, research has yet to explore the nature of these communication practices (Newnam& Goode, 2019). Effective communication mechanisms were critical to engage employees in safety activities and to gain cooperation and support to maintain a positive safety culture. These mechanisms needed to complement the practical and technical safety strategies. Employees with effective communication skills weremore likely to provide corrective feedback for risky behaviours as well as rewarding feedback for safe behaviours.

Safety communication may focus on the following areas including policies and procedures, performance statistics, hazard and incident reports, workplace inductions, risk assessments, and training.Effective communication mechanisms were critical to engage staff in safety activities, to gain cooperation and support, and to maintain a positive safety culture. Communication and consultation at work was integral to achieving a safe work environment by giving and receiving information about hazards and risk controls, influencing attitudes and behaviors, and building commitment and ownership.

In this study, it was expected that companies use appropriate communication strategies to motivate the workers to improve their performance. It was expected that if effective communication of safety standards was promoted, feedback on the improvement of safety standards was given to workers and this wouldin turn contribute to employee engagement on safety issues which ultimately lead to improved performance.

3) Employee Work Performance

In the modern business World, employees (human resources) are considered as the most critical elements of an organization that steers performance to success. Their productivity and work performance is therefore a matter of concern to every organization. Mohamed, Al-Dmour and Ra'ed (2019) define employee work performance as the ability of an employee to feel motivated and committed towards meeting the organizational goals by serving the customers to their satisfaction, being responsible to the assigned duties as well as adhering to the set rules and regulations at the workplace. According to Rentao and Cao (2019), employee performance is characterized with enhanced creativity and innovation towards solving the daily work problems and ensuring that the organizational goals come before the personal goals. Rentao and Cao however, contend that employee work performance is highly moderated by the organizational leadership such that for them to fully commit their skills and energy to the organizational goals, they ought to be motivated, engaged and trained adequately.

Durrab, Khaliq, Qasim, Aamir, and Shahzad (2019) defined employee performance as the ability of workers to meet the set goals by their employers and committing their intellectual capacity to the organization. This is to mean that for an employee to be rendered performing, he or she ought to meet the targets and standards set by the management. To this end, textile manufacturing companies have the first duty to set the balance score-card or performance ratings where employees are rated based on their productivity. Mauya (2015) highlights employee work performance as a key aspect of determining the

overall organizational performance especially in cases where the contracts are based on meeting the outlined targets.

4) Safety Communication and Employee Performance

A study done by Williams (2003) found that one of the most effective ways to improve a safety culture and prevent injuries is to optimize safety-related communication throughout an organization. Unfortunately, employees often fail to "speak up" when they observe risky behaviors even when they know they should. The Safety Culture Survey administered to hundreds of organizations by Safety Performance Solutions Inc. (SPS) indicates 90 percent of respondents believe employees should caution others when they are operating at-risk.

Geller, (2001) found that giving safety related feedback will create interpersonal conflict and they often do not feel competent giving safety feedback or they do not want to insult coworkers who have more experience. Employees will be more open to safety-related feedback if coworkers do a better job of providing and receiving it. Employee's at all organizational levels are well served to provide frequent, genuine praise for safe work practices.

Effective safety communication is not just communicating rules and policies; it is about creating a culture of safety to prevent accidents and ill health. Effective communication is an integral part of achieving an injury-free workplace. Most injuries are due, in part, to risky behaviors, yet employees often are reluctant to provide safety-related feedback to coworkers. Communication needs to change employee beliefs, perceptions and behaviors by convincing them that it is worth the extra effort to work safely.General safety communication can be in the form of notices, warning signs, posters, memo, non-verbal communication, for example, gestures, hand signals, manager visiting the workplace. Other general safety communication include: communication of actions taken after accidents, audits and risk assessments, responsibilities in job descriptions.

G. Research Gaps

Some of the gaps in existing literature that this study would like to fill include the fact that there is inadequate information on the factors that contribute to compliance to work safety standards particularly in textile manufacturing industries. The role of knowledge, safety promotional policies, safety communication, workers' participation in safety standards and management commitment on safety compliance is not clearly documented. This study, therefore would like to address these gaps so as to increase employee productivity in textile industries. In addition reviewed literature show that, despite implementing the safety strategies in workplaces, occupational accidents and incidents have been increasing.

II. RESEARCH METHODOLOGY

A. Introduction

This chapter was structured as follows: research philosophy, research design, study population, target population and sampling technique. It also has a section on how data were collected and analyzed. Pilot testing was done to ensure reliability and validity of the study.

B. Research Philosophy

A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed and used. According to Saunders, Lewis and Thornhill (2007), research philosophy relate to the development of knowledge and the nature of that knowledge. The research philosophy reflected the author's important assumptions that are based on the research strategy. Generally, research philosophy has many branches related to a wide range of disciplines which include: positivism, realism, interpretivist and pragmatism.

The study focused on positivism as it tried to uncover the one truth about how things are. Positivism is a quantitative method which follows a scientific approach to research. It is objective, generalizable, replicable, rigorous and testable for validity. The method also uses mathematical models to predict as well as to test hypotheses. However, it fails to capture feelings, experiences and the uniqueness of the individual. This study used positivist perspective because it was based on the theoretical framework and hypothesis. It used hypothesis and statistical model to test the hypothesis (Awino, Muturia,&Oeba, 2012).

C. Research Design

Research design is the arrangement of conditions for the collection and analysis of data in a manner that aims at combining relevance of the research purpose with economy in procedure (Kothari & Garg, 2014). The study used descriptive cross sectional study design. The descriptive cross sectional design involves making observations of a population or sample of the study at one point in time (Babbie, 2015).

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 gave 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 & Ormrod, 2001).

D. Target Population

The study consisted of employees of textile manufacturing companiesAthi River (Export Processing Zone) and Nairobi (Industrial area). The unit of analysis was the textile manufacturing companies.The selected employees were lower and upper level workers of textile sector because they face more safety related problems at

workplace. According to EPZA 2014-2019 strategic plan, a total of employees in the EPZ program (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 (ACTIF, 2013). There are 18 licensed EPZ firms in Athi River and Nairobi. The study randomly sampled 30% of the total number of licensed firms which was 5 firms. The firms sampled included the following: Global ApparelKenya EPZ Ltd, Royal Garments Epz Ltd, United Aryan EPZ Ltd, Ashton Apparel EPZ Ltd and Alltex EPZ Ltd. The study also randomly sampled 400 from a total of 2744 employees.

E. Sampling Design

There are two main sampling designs used in sampling namely probability and non-probability sampling (Onwuegbuzie, Johnson, & Collins, 2009).The study utilized probability and cluster sampling because of the heterogeneous nature of sampled textile manufacturing firms.The companies were divided into clusters and 5 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 were purposively sampled. These were the manager and sections heads considered to be more knowledgeable on safety issues.

F. Data Collection Instruments

The study used both primary and secondary data sources. Primary data were 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 the employee's perception about safety standards. The study also used secondary data that was obtained from existing literature, books, journals and the internet. A checklist consisting of targeted areas was used to collect relevant information from existing literature.

Data was collectedthrough administration of questionnaires, key informant interviews (the proprietors or in charge of each industry), direct observation and photography. The questionnaire was a useful tool in helping to achieve the main objective of the study. A total of 400 questionnaires were administered by the researcher to the sampled employees in the textile industries.

The questionnaires consisted of six sections; section A sought information regarding socio-economic and demographic characteristics, section B sought general information on safety compliance, section C sought information on worker's knowledge on safety standards, section Dfocused on safety promotional policies, section E focused on workers' participation, section F sought information on safety communication, section G information on management commitment and finally section H sought information on employee performance in the textile manufacturing companies.

G. Data Collection Procedure

According to Kothari (2011), when deciding on a 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 were used to collect qualitative and quantitative data. There were four research assistants who were employed to help with 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.

Key informants were the managers and supervisors of apparel sections. Key informants were 30 managers and supervisors of sections. Purposive sampling was used to select the key informants for this study. The questionnaires were administered face to face with the respondents. This ensured that questions were clarified and unclear answers followed up. Note taking was done during key informant interviews.

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.

H. Data Analysis and Presentation

After collecting data from the field, the completed questionnaire was edited, coded and tabulated before further processing of data. Editing involved checking the raw data in each question. Specifically the questionnaire was scrutinized for accuracy and completeness of answers recorded. Coding involved assigning numerical value to each question. Numerical codes were considered appropriate because they were quick and easy to input in computer. This was followed by data entry using Statistical Package of Social Sciences (SPSS) version 22. After this data was cleaned of any errors to ensure reliability of results and analysis was done. Descriptive statistics such as frequencies and percentages was used to summarize the data. Data was presented using charts, graphs and frequency distribution tables.

To measure knowledge levels of individual respondents, a series of eight dichotomous true/false questions was asked as in appendix 2. Each respondent who answered a question right was deemed knowledgeable and was awarded a score of one and zero otherwise. Other descriptive statistics include: frequency percentage, standard deviation.The study conducted several statistical tests which include: Pearson correlation model and regression model. Pearson correlation was used to

measure the strength of a linear association between two variables.

The study conducted diagnostic tests such as normality test, Skewness and Kurtosis, Kolmogorov-Smirnov and Shapiro-Wilk test. In this study Normality test was conducted statistically using Shapiro Wilks Test. Normality test was used to determine if a data set was well modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed. It measured goodness of fit of a normal model to the data. Skewness measured symmetry or lack of symmetry of data. A distribution, or data set, is symmetric if it looks the same to the left and right of the center point. Kurtosis measured whether the data are heavy-tailed or light-tailed relative to a normal distribution. That is, data sets with high kurtosis tend to have heavy tails. Data sets with low kurtosis tend to have light tails, or lack of outliers. A uniform distribution would be the extreme case. Kolmogorov-Smirnov was used to compare a sample with a reference probability distribution (one-sample K–S test), or to compare two samples (two-sample K–S test).

The Kolmogorov–Smirnov statistic quantifies a distance between the empirical distribution function of the sample and the cumulative distribution function of the reference distribution, or between the empirical distribution functions of two samples. In this study two sample K-S test was used since it is sensitive to differences in both location and shape of the empirical cumulative distribution functions of the two samples. Shapiro Wilk test for normality was used to detect all departure from normality. The test rejects the hypothesis of normality when the p value is less than or equal to 0.05. Failing the normality test allows the researcher to state with 95% confidence the data does not fit the normal distribution while passing the normality test only allows the researcher to state no significant departure from normality was found.

Table 1: Hypothesis Testing Summary

H_0	Hypothesis description	Regression Model Equation	Test conducted
H_{04}	Safety Communication does not have significant influence on employee performance in textile manufacturing companies in selected counties in Kenya	$Y= \beta o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$	β_4 Safety communication $p<0.05$

To test for Hypothesis five (H0) on the moderating effect of management commitment on safety management system and employee performance Baron and Kenny (1986) four step procedure was used. The first step involved a simple regression with the independent variable, safety management system predicting the dependent variable, employee performance of textile workers to satisfy the first condition of moderation. In the second step the independent variable (safety management system) is regressed on the moderating variable (management commitment) while in the third step a simple regression with the moderating variable (management commitment) predicting the dependent variable (employee performance). The last step involves a multiple regression with both the independent variable (safety management system) and moderating variable (management commitment) predicting the dependent variable (employee performance). The moderation effect is proved if the interaction term explains a statistically significant amount of variance in the dependent variable. The Pearson correlation coefficient was computed and finally multiple regression analysis was used to access the nature of relationship between safety communication and performance

I. Ethical considerations

The study observed key ethical considerations. First, the respondents were informed on the importance of the study and the intended use of the data that they provided. An introduction letter was obtained from Jomo-Kenyatta University of Agriculture and Technology (JKUAT) to introduce the researcher to the respondent and justify the need for the study. The respondents were assured of confidentiality and that the information provided would solely be used on academic purpose and no any other use. An informed consent was applied where the respondents were free to withdraw their participation from the study anytime they felt to.

III. RESULT AND DISCUSSION

A. Introduction

This chapter presents the research findings on the relationship between work safety communication and employee performance in the textile companies in Kenya. The chapter also presents the analysis and presentation of findings obtained from the respondents. The chapter also hasa discussion of the findings in accordance with the objectives of the study.

B. Reliability Test Results

Reliability shows the measure of the degree to which the research instrument yields consistent results or data after repeated results (Creswell, 2011). Table 2 shows the reliability test which produced an overall Cronbach Alpha correlation coefficient of above 0.7 for all variables.

Table 2: Reliability Test Results

Variable	Cronbach's Alpha
Safety Communication	0.742
Management Commitment	0.821
Overall α score	0.808

The correlation coefficient showed that all the variables had a Cronbach's coefficient of more than 0.7 hence the instrument deemed reliable. Specifically, for workers knowledge is 0.756, safety promotional policies is 0.784, worker's participation in the implementation of safety standards 0.775, safety communication 0.732 and management commitment 0.763. According to Mugenda and Mugenda (2003), a Cronbach's alpha of more than 0.750 shows a well-framed research instrument that is can adequately collect the required data for the study. The pilot study results showed a strong internal consistency of the study variables and hence the instrument was adopted for the study. This is shown in the table 3.

1) Workers Knowledge on Safety Standards

Workers knowledge on safety standards was established by testing their views on a five point Likert scale comprising of ten items. The Likertscale ranges 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 85% (r = 0.85). A good proportion of the workers (29.6%) strongly agreed while 40.5% agreed that they had knowledge of safety standard, having a mean response of 2.22 with a standard deviation of 1.13.

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Table 3: Workers Knowledge on Safety Standards in the Textile Companies

Items	SA	A	N	D	SD	Mean	S.D.
Eemployees have the appropriate Knowledge of safety standards	29.6%	40.5%	8.9%	19.0%	2.0%	2.22	1.13
Understand challenges relating to health and safety at work	17.2%	43.3%	10.4%	26.8%	2.3%	2.52	1.13
Abides to health and safety rules in our organization	19%	37.0%	9.6%	31.4%	3.3%	2.63	1.20
Are able to easily notice problems relating to employees' safety	16.5%	32.4%	16.5%	32.2%	2.4%	2.71	1.17
Company has upheld safety of employees as a key area of focus	23.6%	34.0%	8.6%	133.0%	0.8%	2.52	1.21
There is anything that can be done to improve safety in the company	19.0%	38.0%	8.6%	32.4%	2.0%	2.60	1.19
Knowledge of safety standards improve employee performance	29.1%	39.0%	5.0%	25.6%	1.3%	2.30	1.19
Aggregate Score						2.5	1.17

Workers were of the opinion that knowledge of safety standards improves employee performance. This is explained by mean response of 2.30 with a standard deviation of 1.19. This was strongly agreed by 29.1% and agreed by 39.0% of the workers (Table4). This means that a good number of respondents agreed that having knowledge of safety standard can significantly improve employee performance. This agrees with the findings of Chinniah (2015) that states that with sufficient knowledge of safety standards, workers can prevent serious and fatal accidents from occurring when handling moving parts of machinery in a factory. Similarly the findings were in line with Okoye, Ezeokonkwo and Ezeokoli (2016) who found out that there was positive relationship which suggested that health and safety knowledge and compliance to health and safety rules were related.

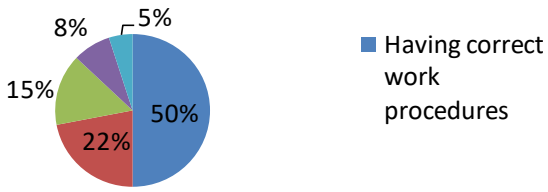

Figure 1: Workers Opinion on the Meaning of Safety Standards

Results in figure 1 shows that half of the workers (50%), understood safety standards as "Having correct work procedures" while 22% of the workers understood it as "Having individual responsibility to safety standards".

To the best of their knowledge on the safety standards, a substantive number of workers (35%) were aware of safety standards such as wearing protective clothing e.g. helmets, overalls and gloves. About 27% knew the safety of using fire extinguisher in case there is fire, 20% of the workers knew safety standards of providing medical examinations and training and finally 18% of the workers knew other safety standards. Thisis illustrated in Figure 2.

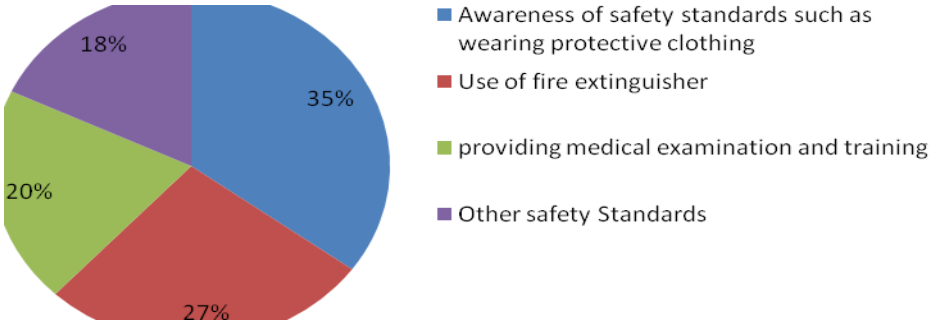

Figure 2: Safety Standards Known by the Workers in the Textile Companies

According to key informant interviews of some employees in the textile companies, workers in the textile companies had knowledge on safety regulation since they are trained regularly. The knowledge of safety among workers was high, although they kept witnessing safety related accidents occasionally. Generally a high percentage had acquired knowledge on work safety since it is a company policy to put work safety first. The company had put a lot of measures in place to address future standards although a good number of the employees were not very keen to implement them. The level of knowledge by the workers on the floor shops was generally good, and they had a leader of each group as far as environment and safety was concerned. Nearly all employed workers were trained on work safety and they also participated in safety drills for example fire drills. However, not all the staffs got trained since some of them were casuals who worked on daily basis and were not aware of any safety regulations but on the contrary, all the permanent staff were aware.

Some of the challenges relating to health and safety at work that the workers were facing included: insufficient protective clothing for example gloves, eye protection goggles, hard hats. This was a challenge to 59.0% of the workers. It was also reported by 41.3% of the respondents that there was insufficient fire hazard equipment installed. Lack of proper waste disposal was experienced by 32.0% of the workers. This has been demonstrated in table 5.

Table 4:Challenges Workers Have Relating to Health and Safety at Work

Challenge	Frequency	Percent	Rank (1- most common)
Insufficient protective clothing:	236	59.0	1
Insufficient fire hazard equipment installed	165	41.3	2
Lack of proper waste disposal	128	32.0	3
Insufficient heat and lighting	57	14.3	4
Others	5	1.3	5

Among the health challenges experienced by the workers include: respiratory illness for example byssinosis, bronchitis and bronchial asthma. About 46.5% of the workers had respiratory illness, 41.5% had work related injuries, 6.5% experienced noise causing hearing problems while 5.5% had other challenges. This is demonstrated in Figure 3. This meant that almost half of the workers had health challenges related to safety issues in the workplace.

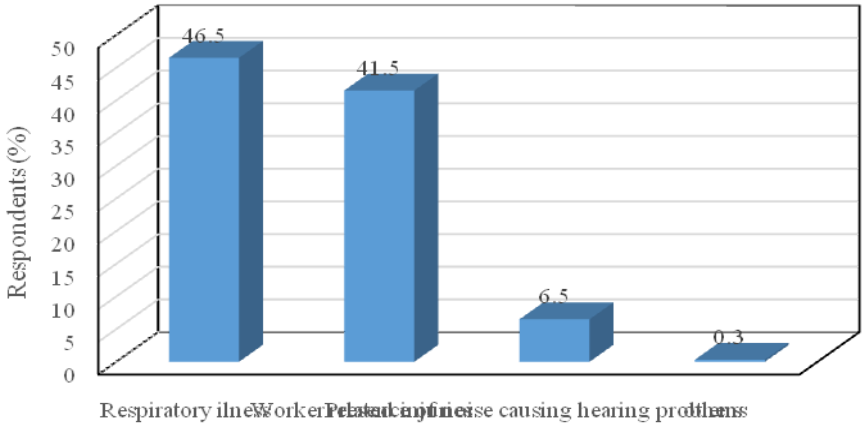

Figure 3: Challenges Relating to Employee Safety

Results from the key informant interviews showed that the key challenges facing the textile industries include: lack of skills experienced by changing from manual to automaticoperations (Table5, high turnover particularly for female employees who are replaced when they went for maternity leave. There was also the challenge of achieving targets. Most of the time the targets were not achieved because the factory employees could go on a go slow when their condition of work was not favorable. Another challenge reported was absenteeism. The culture of absenteeism was due to lack of self-belonging,for example, during end month when the employees got their salary, they absentee themselves. Financial management was also reported as achallenge whereby some employees took loans which exceeded their basic salary.They went against the one-third rule which affectedtheirwork performance.

Another challenge reported was injuries at work. A substantial number of workers reported that some workers were involved in accidental injuries because of fatigue given that leave was hardly given to them and more so they worked for long hours. The other challenge reported was that employees were not medically insured. This made it difficult to get treatment for their injuries. Most of the injuries were associated with long standing positions, needle pricks and noise of the sewing machines.To address these challenges, the respondents stated that the employers should initiate training of the newly recruited employees. The employers should come up with a policy that covers all the health and safety principles to enlighten the workers on safety requirements. They should engage relievers/helpers so that when one employee proceeds to leave,the other stays to sustain production. They should also have qualified industrial engineers who are working hand in hand with supervisors and shop stewards to set an achievable target so as to avoid unnecessary complaints from employees.

These findings meant that there are still a number of challenges relating to employee safety that the textile workers face which include: achieving targets, injuries at work, insufficient training, absenteeism that need to be addressed to ensure workplace safety is observed and which will in turn improve employee performance. This finding is similar to Idoro, (2008) who found that safety learning should not only be considered as an acquisition of knowledge through instructions and training in classrooms or other formal settings rather safety should be considered as the final outcome of a dynamic and collective construction process. In this case, a safe workplace is the result of constant engineering of diverse elements, such as knowledge and skills, equipment, and social interactions, which are integral to the work practices of various project stakeholders.

2) Safety communication

Safety communication of the workers was established by testing the respondents' views on a five point Likert scale for four items. Likert scale used was in a range of 1 – 5 (1-strongly agree, 2-agree, 3-not sure, 4-disagree, 5-strongly disagree). Using Cronbach's alpha coefficient, a reliability of responses on the items was obtained. This gave a Cronbach's alpha value of 74.2% (r = 0.742).

A sizeable number of workers, 36% strongly agreed while 30.4% agreed that safety communications can improve employee performance. This recorded a mean response of 2.17 with a standard deviation of 1.20. In this industry, a total of 58% accepted that the employees were trained on safety communication. This was reflected by a mean response of 2.42 with a standard deviation of 1.16. This was shown in table 5.

Table 5: Safety Communication to Workers in the Textile Companies

Items	SA	A	N	D	SD	Mean	S D
Communication of safety at work?	87 (22%)	162 (41.0%)	30 (7.8%)	110 (27.5%)	6 (1.5%)	2.43	1.17
Is there an effective	70 (17.7%)	115	68 (17.2%)	133 (33.7%)	9 (2.3%)	2.72	1.19

Communication mechanism		(29.1%)					
Employees trained on safety comm.	90 (22.7%)	140 (35.4%)	63 (16%)	96 (24.4%)	6 (1.5%)	2.42	1.16
Can safety Communications improve employee performance	142 (36%)	120 (30.4%)	38 (9.6%)	92 (23.2%)	3 (0.8%)	2.17	1.20
Aggregate Score						2.44	1.18

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

To communicate safety standards to workers, the most preferred mechanism was through notices and memos on notice boards. Other mechanisms used were through staff meetings and through announcements, E-Mails, letters. This was demonstrated in table 7.

Table 6: Mechanism Used to Communicate Safety Standards to Workers

A. Mechanism communicating safety standards	**Frequency**	**Percent**
Through notices and memos on notice boards	284	71.0
Through announcements	41	10.3
Through staff meetings	34	8.5
Others	8	2.0
No idea	15	3.8

A majority of the workers strongly agreed that safety communications can improve employee performance. This is in agreement with study findings by Balasundaram et. al., (2017) who in a study carried out in Ethiopia found that safety communication can affect workers efficiency and quality of work. In case of emergency, forms of communication used to alert workers in the organizations included; 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% of the workers stated that they were communicated to through oral speech that is word of mouth. This was shown in table 8.

Table 7: Forms of Communication Used to Alert Workers in Case of an Emergency

Forms of communication	**Frequency**	**Percent**	**Ranks (1-most used)**
Telephone	153	38.7	1
Oral speech	114	28.9	2
Others	71	18.0	3
Written statement	42	10.6	4
E mail	15	3.8	5
Total	395	100	

According to key informant interviews of some of the employees in the Export Processing Zone, safety communication waskey in improving employee performance. Safety communications aided in ensuring safety standards were properly kept through assigning supervisors responsibilities to train workers on safety issues. Safety communication wentalong way to ensuring that employees met their basic routine to keep safety standards and also ensured factory standards were kept. Employees were aware of the importance of safety in their work thereby reducing the rate of accidents in the factories. Communication helped to reduce the time spent to replace equipment. To improve on safety communication, it was important that safety guidelines were displayed in areas prone to accidents. This ensured that all workers were aware of what was required of them, and what they ought to do in case of emergencies.

A. Correlation Analysis

In order to establish the relationship between safety communication and employee performance, Pearson moment correlation was carried out. The result showed that, there was a significant positive relationship ($r = 0.739$, $P = 0.0001$). Frequent communication of safety to employees resulted into better performance of the employees in an organization. This finding is similar to that of Williams (2003) who found that one of the most effective ways to improve a safety culture and prevent injuries is to optimize safety-related communication

Table 8: Correlation Analysis Results

		Employee Performance	**Safety Communication**
Employee	r- value	1	.732**
Performance	Sig. (2-tailed)		.000
Safety	r- value	.732**	1
Communication	Sig. (2-tailed)	.000	
	N	395	395

1) Testing Hypothesis

The study sought to establish the relationship between safety communication and employee's performance in textile manufacturing companies in Kenya. The corresponding hypothesis formulated was that there is no relationship between safety communication and employee's performance in textile manufacturing companies in Kenya. As indicated in Table 4.22, the regression parameters showed that safety communication was statistically significant, and at $\beta = 0.167$, $t = 2.88$, and $p = 0.004$, the hypothesis of no relationship between safety communication and employee's performance was not accepted and this thus indicated that the relationship between safety communication and employee's performance was significant. The results also indicated that when other variables of interest remained constant, a unit increase in safety communication resulted to 0.167 increase in employee's performance.

2) Safety Communicationand Employee Work Performance

The study found that majority of workers agreed that effective safety communication can improve employee performance. There was a positive relationship between safety communication and employee performance in textile manufacturing companies in Kenya. Most of the employees indicated that there is an effective communication mechanism and that they are trained on safety communication. The most preferred mechanism was through notices and memos on notice boards. Other mechanisms used were through staff announcements, emails and letters. Frequent communication of safety to employees resulted into better performance of employees in their organizations.

The forms of communication used to alert workers in case of emergency included telephone, oral speech, and written statements. Out of these forms, the most commonly used was telephone. Safety communication goes a long way to ensure that employees meet their basic routine to keep safety standards and also ensure factory standards are kept at all-time high. The results further showed that the management commitment had had a significant moderating effect on the relationship between safety communication and employee work performance. It was established that when the management provide adequate safety information, the workers will know what is required of them thus reducing the number of accidents which is a key aspect towards enhancing employee performance.

IV. CONCLUSION

In conclusion, a number of observations concerning safety management system and employee performance in textile companies in Kenya. Besides confirming what the theory and literature say, the study also generated additional insights on the relationship between safety management system and employee performance

It was concluded that there is a positive relationship between safety communication and employee performance. This evident from the fact that when there iscommunication of safety standards to employees, they are more aware of safety standards and their performance is enhanced. This supports knowledge in literature that the efficiency of safety communication remains a function employee performance at various organizational levels.

A. Recommendations of the Study

The study recommends that there should be efficient safety communication from the top management to subordinate staff. Safety regulations and instructions should be well displayed in strategic areas where employees work so as to prevent injuries and accidents in the textile companies. With less injuries and accidents there will be low absenteeism and low turnover thus employee performance will be enhanced. The textile companies will also realize higher output and profits from the sale of their products.

B. Suggestion for further research

While the findings of this study offer useful comprehension regarding the relationship between work safety communication and employee performance in textile manufacturing companies in Kenya, The study recommends further research on work safety communication and employee performance on other manufacturing industries.

V. CONFLICT OF INTEREST

In this research, there was no conflict of interests from any quarters.

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