# The Effect of Awareness of Health and Safety

# **Standards and Management Attitude on Employee's**

# **Productivity in Hattar Industrial Estate**



By

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#### CERTIFICATE

This is to certify that this thesis entitled: **"The Effect of Awareness of Health and Safety Standards and Management Attitude on Employee's Productivity in Hattar Industrial Estate"** submitted by Syed Asfand Yar Shah is accepted in its present form by the Department of Business Studies, Pakistan Institute of Development Economics (PIDE), Islamabad as satisfying the requirements for partial fulfillment of the degree of Master of Philosophy in Business Economics.

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# Dedication

# This work is dedicated to my beloved

**Parents!** 

# Acknowledgement

There is no God but Allah and Muhammad (PBUH) is his messenger. I am solely obliged to Allah almighty for His blessings. My efforts were nothing, but His blessings enabled me to complete this project.

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## Abstract

This study examine the importance of the occupational health and safety (H&S) standards in the industries and its effect on the employee's productivity. Main objective of the study is to examine the awareness and understandings of the employees on the H&S standards and management attitude of the managers on giving the extra effort in implementing the policies of health and safety to the employees and their effect on the employee productivity. For this purpose employees of the Hattar Industrial Estate were interviewed for the collection of the data. Ouestionnaire and interviews were taken from the management and employees of different industries. Quantitative research design, Correlation and Regression Analysis method is used for the collection of the data and for testing the hypothesis of the study. Total number of sample size used for the study is 305 which include 270 employees and 35 management staff of the different industries. Results of the study shows that employee understanding and management attitude has positive relationship between on employee productivity while employee awareness also positively and significantly associated with the employee productivity. On the basis of the results some recommendation are made to the management staff that they should provide the better environment for employees in the workplace. Industries management should continuously reviews their health and safety policies to make them up to date for the employees.

**Keywords:** Employee Awareness, Employee Understandings, Management Attitude, Employee Productivity, Regression Analysis, Quantitative Method.

# **Chapter One**

# **1** Introduction

#### 1.1 Background

Occupational Health and Safety (OHS) indicates the process of workers remain safe and health to perform and regulate their work in a positive way in the workplace and increase their work capability. Workplace of the every business is important and fundamental part to take the responsibility and achievability of the work for the employees as well as society, government departments and work unions. Performance and the motivation level of the employees in the workplace increases through the workplace environment. Involvement of the employees with the organization with the direct environment affect their error rate, innovation and involvement of the employees with the others, number of absentees from the workplace and also affects the job tenure of the employees in one job. Organization aim is to motivate and promote the highest level of physical, social and mental wellbeing of the employee's that has greater effect on the health of the individuals. For the purpose of providing the Health and safety standards instituted by organizations to get the highest level of employees health.

Lehtinen (2001) emphasize that the health and safety in the workplace, working condition in the organization may increase the productivity level of the employee and thus increase the level of the developing countries to compete in the global market with the highest level organization. That is why organization focus on the health and safety standard in the workplace to guarantee the health and safety policies in the workplace effectively. According to Hughes (2007), safety is the shield of the peoples from injuries and unpleasant situation in the workplace while health is the fortification of the worker's from the illness and absentees that can provide the shield of the mind and body for the worker's. Further, health and safety is the process of the wellbeing of the people at workplace such as providing the facilities to the workers at the workplace that can increase the individual's productivity. Safety risk according to Cole (2002), are the aspects that can cause the immediate impact on the employees and harm the health condition of the employees at the workplace. Whereas at the same time health risk slowly and cumulatively decreases the health of the employees in the working environment.

Occupational Health and Safety OSH is a multidisciplinary idea focus on the wellbeing of the worker's in the working environment. It is focus on the promotion of the health and safety standards and understanding of these standard in the workplace (Bhagawati B, 2015). According to Amponsah-Tawiah and Dartey- Baah (2016), occupational health and safety summarizes the psychological, emotional and physical enhancement of the employee's in order to increase the better environment to perform their work and due to this can put their extra effort to achieve the organizational goal. In the developing and developed countries, injuries and death rate are high during the unpleasant work condition in the workplace (Gyekye, S. A, 2006). According to the ILO, at least every years 2.3 million people died during performing their work in the organization, and 350,000 of these deaths are relate to the work- related accidents and injuries which cause the death of the worker's. Additionally, the ILO evaluate that the approximately 264 million non-fatal injuries each year cause work-related sickness, that are the cause of the 3 days absentees of the worker's from the workplace (ILO,2014).

According to Seo et al., (2004), economic and personnel cost are face by the organization in the developing countries due to unsafe and unpleasant environment of the workplace which in turn increase the illness and disease in the workplace. In a recent publication of the ILO in 2014 shown that 860,000 occupational accidents and illness occurs every day in the worldwide and cost of the theses illness and accidents bear by the organization in the worldwide is at least \$2.8 trillion (ILO, 2014).

Productivity is the process of the peoples to produce at least effort and resources in the given time. It is also defines as the measures of organization to put their goods and resources effectively and efficiently. Workplace environment affect the growth and survival of the organization as the scene of the economic regulation, technological influence, work stress, cultural dimensions, demographic importance, competitive environment and workplace conditions and their effect on the environment.

Health and Safety standard has greater impact in the organization especially in the manufacturing sector because lots of the workers have lost their lives and career due to nonfatal accidents and disease in the workplace. For ensuring the healthier working condition in the organization, it is very important for the workers to gain the knowledge and experience about the safe working condition, how to approach the work and fulfilment of the safety in the workplace. According to Casio (1996), it is easy to avoid the unsafe working condition but it is pioneer to have an accident in the workplace.

Organizational commitment is the work related approach that can get the enormous importance from the researcher all over the world. Organizational commitment is the individual linkage and approaches towards his organizational and its goal. (Saks & A.M. 2006). Robbins and S.P. (2001) defines organizational commitment as the "state of mind

in which an employee or employer associate with the organization and its goal and want to recognize their association with the organization in a long-term". It is also explain that the organizational commitment is the degree of the organizational goal and value in which an employee want to associate with the organization. Arnold (2005) define the organizational commitment that the individual relative strength, identification and involvement with an organization. Traditionally, organizational commitment has been measured through the one dimensional construct. (Mowday, 2013). However, Meyer and Allen (1991) explain that organizational commitment has three forms. The threecomponent model of the organizational commitment includes the affective commitment, continuance commitment, and normative commitment. They explain that affective commitment is a worker's emotional affection with the involvement in the organization to identify and enjoy the structure of the organization. Continuance commitment is explained as an individual's want to work in the organization on the base of observed cost attach to the leaving to, and normative commitment is the feeling of satisfaction of the individual to continue their membership with an organization. All these form of the organizational commitment vary with the degree of the organization.

Manufacturing sector of every organization is quite dangerous sector regarding to the accidents and injuries. It can be safe and employee enjoyed their work if the workers of the manufacturing sector follows the standardized procedure for the work. It is very alarming situation that both the employees and employer show minimal commitment to decrease the accidental level and unpleasant environment within the organization. Safety standard at the workplace indicates the reduction of the nonfatal injuries and accidents such as the lack of commitment with the material use in the production, defects in the equipment, injuries and accidents which effect the production of the organization as well as the individual health problems which includes work stress, diseases due to inhaling the toxic gases and insufficient material for the safety.

In recent years some of the employees in the industrial organization face the disabilities temporarily and permanently due to the serious injuries and accidents. These injuries and accidents are the results of the insufficient knowledge about handling the equipment and machineries, by not follow the simple procedures of safety in completing the task or goal of the production and also management are not committed to provide the sufficient safety standard and resources to accomplish the task. In this study we examine the effect of health and safety standard prevailing in the industries and their impact on the employee's productivity performance and management effort to provide right safety standard for employees or not.

#### **1.2 Problem statement**

Casio (1996) distinguished that the use of the machineries and work environment have been the major factor of the safety risk in organizations. Most of the workers are not aware of the importance of the safety measures in the organization which leads to the indirect effect on the cost and benefits on their work and organizations. This is due to the ignorance and less effort of the management and the organization to give importance to the safety measures. Every organizations and has a prime concern to provide the better workplace to the workers, so they can easily perform their work. Insufficient health and safety measures in the organization may leads to the injuries, accidents, illness and extra cost to the organization. Efficient health and safety measures in the organization increases the trust level of the employees, regulatory authorities and customer as well. According to ILO (2014), some workers have been disabled because of accidents that are occur in the workplace due to less awareness of precautions on controlling the workplace station, ignoring the precaution of the safety in order to complete the set goals and managers are not giving them the better workplace and policies for employees. Industrial sector of the Pakistan face these type of problem on a huge amount. Workers health and management responsibilities both are most important for the productivity of the industries and also for the better environment of the industry. Hattar is the industrial state where these problems are face by the workers and also by the management of the industries to provide the safe and better environment for the workers. So that they can get the benefit form this and contribute to increase the productivity of the industries.

Although management and workers try to ensure that the workplace is safe but accident at the workplace increase day by day which indicates that the environment is not safe for the workers to work there. So, this study is used to explain these problems in the Hattar industry whether these problems regarding to the safety and health are being found in the industry or not. And the employee awareness and understanding of the safety measures are match the standards importance or not. Also the management attitude by providing the sufficient amount of the standards fulfil the criteria of the safety procedures and the communication of the safety measures are there between the employees and management. Effect of the health and safety standards on the individual productivity in Hattar industry and how it can boost the performance of the employee and recommendation can help to improve the health and safety of the employee in the industry.

#### **1.3 Research Gap**

In the past, different researcher used to explain the health and safety importance on the worker performance [Fleming & Lardner, 2000; Monge, 1986; Muchemedzi, 2006; Holzer, 2004; Jackson, 1999; Cohen and Michael, 1999; Less, 2002; Mearns et al, 2003; Neal, 2000]. They explain the health and safety measure effect on the worker performance and they get the result that if there is health and safety in the industries then the performance of the employee become better. These studies also explain the importance of the health and safety practices in the organization. It may decrease the ratio of the accidents, injuries, illness and absentees in the workplace.

In the case of the Hattar industry many of the employees are facing the workplace related problems. This study used to discuss H&S measure of the industry and also the awareness of the health and safety standards of the employee and its impact on the employee productivity. Management attitude is more important in the industrial state because management is implementing each and every regulation for the betterment of employee safety and also for the increase in the industrial productivity. Their attitude towards the availability of the standards for employee help workers to increase their productivity. And also discuss the hiring and firing criteria through the experience, age and education differentiation of the employees within the industries.

#### **1.4 Research Question**

Following are the research base questions of the study:

I. What is the relationship between the employee understanding and employee productivity?

- II. What is the relationship between management attitude towards the health and safety standards on employee productivity?
- III. Does the awareness of health and safety measures effects the employee productivity of the industry?

#### **1.5 Research Objective**

Following are the objectives of the study:

- i. To investigate the impact of health and safety measures on employee productivity.
- ii. To examine the impact of employee awareness towards the health and safety standards on employee productivity.
- iii. To explore the impact of management attitude towards health and safety policies on employee productivity.
- iv. To analyze the effect of employee understanding of safety procedure on employee productivity.

#### **1.6** Significance of the Study

One of the main purpose of the organization is to gain the set targets by utilizing the optimal human sources. Health and safety issues within the organization are the main problem for the accomplishment of the targets. Industrial health related issues are significant role in order to accomplish the production goals and also the great challenge for the manufacturing organization to get rid of it. Due to these issues companies suffered from the shortfall of the productions, compensation problems and lawful clashes due to accident, decrease to the standard of the normal life, family related issues and also decrease in the life expectancy and other major effect that are hard to calculate the cost of the quality of the employees its, industries, society and country in general.

Health and safety of the employee is the most responsibility of the organization in order to generate the productivity but also the serious issues for the society and nation as a whole to get the best possible ways for the workers to work in a safe environment. The study increase the morale of the employee and also job security will enhance by getting the better understanding of the health and safety practices within the organization. This study would also help the employee to obey the organization health and safety standards that will decrease the injuries and accident in the long run and also enhancing the performance and productivity of the employee and industry as well. Friendly behavior from the management level towards their employees increase the motivation level and the tenure of the employees in the same industry. Employees aware of their safety precautions and also inform about the problem faced in the workstation to the management for betterment of productivity level. Findings and recommendation of the study not only increase the existing literature for the academic purpose but also give useful and better guideline for the quality of employee health and safety within the organization.

#### **1.7** Organization of the Study

The study is organized in the five chapter. Chapter one is consist of the introduction of the study which include background of the study, purpose of the study, problem statement, research gap, research question, objective of the study, hypothesis and significance of the study. Chapter two consist of the literature of the study which includes the discussion of the previous researchers on the issue of the health and safety in the organization. Chapter three is conducted on the methodology of the study that how we conduct the results. It includes the study area, study design, population, sampling and sampling procedures, data collection, data collection techniques, data reliability, procedures of the data analysis, theoretical framework, conceptual framework and variable description of the study. Chapter four is the result and discussion of the study which includes the results description and their complete discussion. Chapter five of the study includes the conclusion, recommendation, limitation and suggestion for future research.

## **Chapter Two**

## 2 Literature Review

Occupational health is the state of people mind and body from illness that are happen because of process, material and procedure in the workplace, whiles occupational safety is the protection of peoples from physical injuries and accident (Abddllah, 2009). Mathis (2004) occupational health explain through the mental and emotional wellbeing of the worker. What is important for the health and safety is the procedure, physical or material strategy to promote and protect the workers' health and safety. That is, to eliminate the hazardous factors, condition and behaviors for workers health and safety. OHS upgrading the mental, physical and social wellbeing of the worker in the workplace. The term occupational health and safety has been used by OHSAS 18001 (2008), to explain the factor and condition of the health and safety in industries that put their impact both in the positive and negative way.

Armstrong (2006) Involvement of the employee in the development of the organization is necessary element. According to a published report in 2001 by the UK Health and Safety Commission (HSC) and the Health and Safety Executive (HSE), enhancing the involvement of employee in the organization decreases the injuries from 1.2 to 0.1 per 100,000 man hours. It is explain that the Occupational health and safety policy is not only needed within the timber industry but as said by Alli (2001), all government institutions should be committed to developing one in order to minimize government expenditure on compensation paid to workers as a result of injuries and accidents at the workplace.

#### 2.1 Concept of Occupational Health Safety

Safety define through the dictionary that is free from accident. And health is the state of complete mental, social wellbeing and physical and not just the absence of infirmity or disease<sup>1</sup> Thus health and safety state to the avoiding and defending people from injury and work-related disease in any form due to dangers and risk that may damage, harm, cause unsafe environment to people or damage tools or the services put in place at the workstation.

Health and safety threats and danger must be accomplished and organized to attain optimal level of the H&S Act. Management involves management, specialist and coordination of the human and physical assets, together with arrangement and society, announcement, assortment, physical activity of subordinates, responsibility and accountability. To achieve work-related safety and health purposes, all parties involved at the workplace such as administration, workers or staffs and union officers and people apprehensive have to be obviously committed to the health and safety programs. (WHO, 1999)<sup>2</sup>

# 2.2 Safety and Productivity in Organization

Productivity is usually perceived as an amount of the quantity of output produced per unit of input. In many countries, government sector productivity has been supposed to be zero in the state books. According to Boyle (2006), productivity of the government region has been measured as equivalent in value to the total value of inputs. This output one-fourth input agreement has gradually come under analysis in recent years. The task is

<sup>&</sup>lt;sup>1</sup> World health organization 1999.

to develop substitute guesses based on output measurement in a government sector framework where shared facilities are delivered and the services shared to the individuals in no market operations. (Boyle, 2006).

Holzer (2004) Debate that even though the productivity concept of the organization operations for decades, perhaps abridged, misread and misused. The idea of performance may denote more eye-catching intangible path toward development. Still, both ideas are fundamental premises of government management and the essential of an ongoing struggle that continues because it discourses an important relation: a productive public is reliant on the government that has high performance. Idea of the productivity is linked with the idea of the performance. (Jackson, 1999).

According to Holzer (2004) productivity and performance are meanings of many influences reaching from higher management, devoted employees at all heights, workers physical capital performance measures, incentive structures, community participation and response to improvement of budget-management conclusions. It is thus significant to accumulation abilities for productivity development. Productivity at organizational and process levels has concentrated on manufacturing industry; it is based on a statement of an organizational essential procedure as an industrial production process (Gunderson L., 1992).

Muchemedzi (2006), explain the OHS that it is the science of health and has significant relation with the work and workplace. Oxenburg (2004) industrial productivity is totally depend on the health and safety condition of the workers in the workplace. Most of the cases less attention to the health and safety precaution has negative reaction on the health of the workers and cause the accidents, illness and injuries

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but these measures have a gap, for example, a low incidence of injury does not essentially mean that suitable safety systems and controls are in place (Health and Safety Executives, 2006).

According to Gunderson. L (2002) most of the researchers try to quantify the effect of performance on the workplace environment and directly effect on the industrial performance. Example of the performance effect is decrease in the per employee gross sales, conversion of the inputs into output, disagreement rate and tools of the productions. The maximum outcome from the variables is controlled through the existing of the data from the industries (Stainer, 2000). In this study workplace innovation includes rearranging the jobs, rigorous orders, allocating the responsibilities, it is hard to measure the correct productivity of the industries (Stainer, 2000).

#### 2.3 Measuring Productivity

Productivity is a performance measure covering both efficiency and effectiveness. It is essential, therefore, to know who the productive employee are. High performing, operational organizations have a culture that inspires employee participation. Therefore, employees are more eager to get participate in decision-making, goal setting or problem resolving actions, which after result in higher employee performance (Hellriegel, Slocum & Woodman, 1998). Inspire a more modern grace of participating management, increase employee productivity and gratification, and even lower workers'' compensation rates. (Madison & Wisconsin, 2000).

According to Monge (1986), job satisfaction generates productivity through taking high quality incentive and through increasing working abilities at time of implementation. There is sign that participative climate has a more considerable result on worker's satisfaction then participation in precise decision and it seems that involvement in goal setting does not have solid effect on productivity. Contribution has a strong result on both job satisfaction and productivity (Qureshi, 2007)

According to PMBOK Guide (2007), the mostly used performance measures can be assembled in some of these general classes; effectiveness, efficiency, quality and timeliness. Effectiveness inspects the degree to which the procedure output follows to the necessities. The efficiency refers the degree to which the procedure yields the obligatory output at a minimum resource cost. On the other hand, the quality characteristics checks on the degree to which a product or service come across customer requirements and beliefs. The timeliness characteristic measures on whether a unit of work was done suitably and in good time. On the basis of these categories, questionnaire developed for the employee productivity.

Furthermore, organizational behavior there is an undefined query about the job design that how can job design effects the individual job performance of the employee (Parker and Wall 1998). In the same time it is also define that participation of the employees in the workplace may increases the productivity of the individual as well as industry (Bélanger, 2000; Black and Lynch 2000). Convergence of the workplace to job stress and healthier is the prime concern for the innovation work place organization practices and for the job design (Karasek and Theorell, 1990).

Muchemedzi and Charamba, (2006) indicates that occurrence of the accident in the workplace is not only depend on the single cause but it is the combination of the different factors. Accident is caused due to different practices that are unsafe for the workplace (the human resource element that cause from the insufficient attitude, workplace

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conditions, insufficient information that are required for the safety of the workplace). They are also caused by not having the awareness about machineries and their use under the safety laws.

#### 2.4 Employee and Working Environment

According to Fleming and Lardner (2000), physical relaxation of the employees to focus on the job includes the better state of mind and sufficient health and safety for the body. And these condition has major contribution in the productivity. Higher level of productivity includes the completion of the specific as well as the lower increase in the welfare of the society. Management and employees are stick on the common goal that is to provide the positive working condition to work. These goal include the better workplace for work, quick response from management and reward on the completion of the organization goal.

Occupational health and safety act 651 explain the health and safety that the factor that affect the wellbeing of the workers, constructor, visitors and other people that are involve in the organization. Management of the occupational health and safety risk is the part of overall management that facilitate the business of the organization. This includes the organization construction, preparation, actions, duties, practices, measures, processes and assets for managing, implementing, fulfilment, appraising and organizing the organization's health and safety policy.

Employee's performance can be calculated through the relationship of the out of the individual and productivity. Employees technology and objective of the organization is the factor that are affect to productivity in the cooperate level. Employee performance and physical environment are also affect the productivity in the cooperate level. And other factors include skill that employees gain from the training for the job. (Knight, 2005).

#### 2.5 Safety Awareness Program

Noe et al., (2008) Stresses on the fact that safety awareness programs are necessary for the organization and these programs are held by the organization without the compliances of the occupational Safety and Health Administration (OSHA). And these program affects the organizational culture of adopting the safety awareness in a positive way by overcome the accidents and injuries in the workplace. Health and safety awareness consist of the three factors that are identifying the safety problems, communicate the problems with the employees and promote the safety importance among the employees.

Armstrong (2006) proposed the awareness of the safety awareness by decreasing the negative propaganda and convert it into the positive promotion, by making the hard decision on the unpleasant environment and action of the employees, by promoting the positive awareness of safety measures at the difficult workplace, understanding and attention of the employees into useful techniques of using the machineries carefully, clear, specific and understandable training for the employees and managers should be aware of the major issues face by the employees in the workplace.

Dessler (2005) addresses that the positive assessment for the programs can increase the importance of the safety in the workplace. Luis *et a*l (2007) addresses that management should communicate with the employees on the safety policies and reinforcement of the safety measures in the workplace. OSHA encourage the employees to take the safety policies seriously in the workplace, also giving the rewards by avoiding the unpleasant situation in the workplace, follows the rules of safety and decreasing the behavior of unsafe work.

 $H_1$ : Employee awareness of the health and safety standards are positively associated with the employee productivity.

## 2.6 The Influence of Occupational Health and Safety Practices on Employee Productivity:

Wilson & Rosenfeld (2004) stated that health and safety procedures and management are the important factor for the business to increase the total value of the human resource. These factor are dependent on the communication of the managers and employees when they feel sick, facing the injuries problems in the workplace and the employees and management are on the same page for solving the issues regarding the workplace. They also includes the compensation of the injured employees, their insurance and also the help from the management on the safety programs. Wilson & Rosenfeld (2004) also explain that all these incentive increases the motivation level of the employees and in turn increases the productivity of the individuals which give benefit to the industries.

Safety and health procedures for the employees affects the recruitment of the employee, machineries and equipment use in the workplace, job design and services provided to the workers (Managing Health and Safety Journal 2001). Occupational health and safety policies in the workplace are easily readable for the employees, managers and supervisor can increase the awareness and understanding of the safety standards. And these written statements can help to overcome the consequences of the problems, monitoring the safety of the workplace and controlling the hazardous situation (Health Safety Journal 2001). Accidents and hazardous situation may cause the interruption of the

production line and also the damage of the property in the workplace. So it is important for the management to control the injuries and risk in the workplace by asserting the safety measures properly.

Chabra (2005), stress that the occupational health and safety has an enormous effect in the risky industries. Safety policies decreases the ratio of the injuries and accidents in the workplace which has greater effect on the employees and management. Where these policies and procedures are followed, productivity of the labor is greater than where these policies are not followed. Because labor perform their task freely and confidently when they get the safer workplace while labor feel insecure and unsafe in the workplace when there is lack of safety measures. All these measure increase the productivity of the employees and their morale is also high for doing the work efficiently.

#### 2.7 How are Health, Safety and Productivity Related?

Armstrong (2006) further explain that the factor of the total cost of the employment are the understanding of the employees. They understand the cost of the employees includes salary, bonuses, compensation on the sickness leave and overtime payment. Employees also aware that their pay is due to peripheral benefits that includes their health insurance, injuries recoveries and their work compensation. Another factor that enlightened are consists of the labor cost which includes the confident level of the employees and also the human resource capital (training on the increase in individuals productivity, promotions and their safety).

According to the Certo (2008) from the past years many researchers explain the cost of poor health and employer cost. For instance, a study by Goetzel et al. (1998) explain that an employee with the higher level of depression and stress cause the

management to invest more in the health care department as compared to the other who have lest depression and stress in the workplace.

Kinick and Williams (2008) explain that the managers are confused to implement the policies and which of the department is responsible of the implementation of the interventions. Higher authorities assumed that the accidents and injuries are handle by the medical department of the organization, training and assessment of the employees could be handled by the psychological department and the behavior problems are handle by the labor relation department of the organization. This nature of the organization struggled to find out the main problem and solution the problem.

#### 2.8 Safety Standard and Health Problem Faced by Employee

According to the factory officer and shop act 1970, it is the duty of employee to take a reasonable care for their own health in the organization. Pantry (1995), explain that the work related issues are the part of the employment and it's started since the industrialization begun. These issues are important for the workers, their families and society as well in the physical, emotional and financial wellbeing prospective.

Every employee in an organization has a right to work in a safe and secure environment. The major concern for the employee is to give better, secure and friendly environment to their workers. A workers prefer those organization for work in which their health and safety are properly being taking care of. For the better condition for the work, good health and economic development increases through work. However, working condition disclose the health risk to the workers such as accidents, illness, disease, injuries, mental and physical disorders, eye disease, hearing problems and communication disease (Weeks et al., 1991). According to Cole (2002), factor of employee productivity is divided into two factors. That is management factor which include organizational development plans such as responsibilities allocation within the organization to all the employees, define the job description to the employees, and degree of approach to the management support needs to complete their tasks, pattern of work, shift the work load, break time and holidays and implementing the health and safety standards. Development, training and safe work pattern are also includes in the management factor. And the factor that effects the employee productivity is work policies, design of factories and offices, tools used for the work, ability of the worker and environment of the workplace.

Clark (2005) explain that absenteeism is used to calculate the cost of the unhealthy workplace and have been well documented in the literature. World Health Organization reports (2002), sights that due to the mental health problems at least one employee suffer in his life. And also report form the five leading health charities in 2006 depicts that one million of the matured employees are out of the work due to the problems of mental health in UK.

 $H_2$ : Employee understanding of the health and safety standards are positively associated with the employee productivity.

#### 2.9 Organizational Role and Attitude to Health and Safety

For the advancement of the safety in the organization is termed as the management of the safety and also shown in the outlooks, outputs, policies, moto of the organization and norms of the workers in order to relate with the safety. Stranks (2000) reveals the importance of the safety in the organization and also the responsibilities of the management in order to avoid the accidents. It explain that the avoidance of the accident in the workplace is the responsibility of the supervisory force of the organization. Thus it also reveal that if the owner of the organization is not directly involve in avoiding the accidents in the workplace no one other is probably try to make workplace pleasant for the work. Beach (2000) explain that the programs on the control of accident is response of the upper level management effort and also the contribution and communication of the employees. This reveal that the upper level management should format evidence and balance the structure so that the performance on the H&S are being check and remedial activities originated when required for the betterment

Commitment form the management is the main factor for the research of the climate (Lees, 2002). As indicated by Less (2002), the assurance or commitment with the management can be made observable if workers are able to consider the importance of security in employment plan, administration commitment in safety gatherings, by break down of pace of work, through the investigation of occurrence of mishaps and accidents along with follow up exercises, by knowing about the significance of protection and safety and through participating in several programs related to occupational health. The industries' investments in these zones increases perceptions of the organization's responsibility among its workers, along with it, builds more trust and reliability in the above mentioned areas as said, safety conducts (Mearns et al., 2003). In organizations, to what extent safety and security of employee is esteemed can be checked through workers' perceptions and opinions i.e. how they accept that security measures are actually valued in industries. (Neal, 2000).

 $H_3$ : management attitude towards providing health and safety standards are positively associated with the employee productivity.

#### 2.10 Employee Involvement in Health and Safety

Workers contribution might be named as the readiness of employees to accept the responsibility for their exercises or actions in making their workplaces free from accidents and mishaps. From an administrative perspective, workers involvement or inclusion states to the limit of laborers to responsively effect the administration and work process in a venture or an organization. (Cohen and Michael, 1999).

The issues related to income revenues and absenteeism can be decreased by Laborer's high confidence and assurance. As worker's high confidence and affirmation are connected with high security performances or execution. As per Alazab (2003), built on the investigations of the United Kingdom's health and safety, officials make out that organizations that supported workers inclusion in well-being and security issues frequently observed a decrease in mishaps and accidents plus there occurs advancements related to awareness of risks thus improving efficiency and productivity.

# **Chapter Three**

## **3** Methodology

#### 3.1 Introduction

This chapter discuss the method and procedure of sampling design collecting, data and analyses. In order to determine the effect of health and safety standards on the employee productivity of the Hattar Industrial Estate. This chapter includes the brief explanation of the study area, study design, population, and sample size, sampling procedure, data collection techniques, data reliability, theoretical and conceptual framework and procedures of the data analysis.

#### 3.2 Study Area

Hattar is industrial state in Khyber Pakhtunkhwa KPK, province of Pakistan. Back in 1965, the government of KPK approved a five-phase plan for the HIE to in install 142 industries established over as area of 10363 acres. According to Sarhad Development Authority, only 184 units of the HIE are functional currently, 91 units are closed, 69 are under construction and 15 are vacant plots. The industries estate today houses a large number of chemical unit, heavy electrical plant, textile mills, food processing unit, paper manufacturing, textile, steel mills, and vegetable oil processing unit, leather industries and many more.

Idea behind the selection of the Hattar Industry is to identify the problems of the Health and safety for employees in the workstations. As Hattar Industry is bases on the different chemical and mechanical units so the importance of the health and safety precautions needs to identify for the employees. Different cases are seen in the industries about the illness and accident of the employees and precautions for the safety of the employees are not fully utilized by the organizations. So that why this study try to identify the main health and safety measures within the Hattar Industry and its impact on the employee's health.

#### **3.3 Study Design**

Study design is the structure of the entire study and explain the idea of conducting the whole study. This study use to analyze the descriptive survey for the collection of the data from the respondent. Descriptive survey design to study the hypothesis on the current situation of the productivity level and also the awareness and understanding of the employees on safety measures. It is also very useful for generalizing the result form the sample of the population so that the idea can made from the individualities, norms of the respondents and qualities of the population. Descriptive study design is often use for the study the behavior of the respondents on the variables that are studied for the research.

#### **3.4** Population

According to Fraenkel and Warren (2002), population indicates the overall set of the target area where individuals are working with the same nature and having same characteristics. This study is interested in the Hattar industrial Estate and target population is consist of the operation employees and managers of the industry. According to the Sarhad Development Authority, at least 66000 of the employees are working in the Hattar Industrial Estate. Out of total population, 270 operational employees and 35 management staff are selected at random for homogeneous population.

#### **3.5** Sampling and Sampling Procedures

According to Amedahe (2004), sampling is the process of collecting data from the chunk pf population that can explain the behavior of the entire population in the study. The general idea taken by many researchers is that the greater the sample sizes, lower will be the risk of error occurs in the sampling. Empirically it is evident that if the sample is true representative then the size of the sample doesn't matters. The actual sample size estimated by the formula with 5% margin error is 384. For this study targeted sample size is 305 which includes 270 employees because most of the problems are faced by the operational employees in the industries and 35 managers because decision making of the policies are under the management level in the industries. During the study, we faced non-response problem and adjust our sample size according to the particularly higher management renamed reluctant to provide response.

Sampling techniques used in the study are convenience non-random Sampling techniques. Convenience non random sampling is used to collect the data from the group of people which are easy to contact and reach.

#### 3.5.1 Sample Size Formula

Assuming the distribution of proportion to be normally distributed the actual population size doesn't matter at all in calculation of sample size. To get the optimal sample size our calculation is based upon margin of error and level of confidence. The contemporary empirical studies use 5% margin of error with 95% confidence level. In the calculation provided below we will present optimal sample size. Following self-explanatory table and formula we can get optimal sample size.

Level of Confidence (LOC)Recommended value: 1.96 confidence level)		
Margin of Error, desired precision (MOE)	The smaller the margin of error, the larger the sample size needed. Recommended value: 0.05	
Baseline levels of the indicators, Expected true Proportion. (Ind)	Recommended value: 0.5	

$$n = \frac{LOC^2 \times Ind \times (1 - Ind)}{MOE^2}$$
$$n \approx 384$$

Empirically it is evident that if the sample size is representative then sample size doesn't matters. The actual sample size estimated by the formula with 5% margin error is 384. During the study we face non-response problem and adjust our sample size according to particular the higher management renamed reluctant to provide response. So, the sample size for this study is 305 due to the non-response problem.

# **3.6 Data Collection**

This study adopted the applied primary data in order to explain the real condition of the safety practices and its effect on the employees. Primary data is collected through the direct interviews from the managers and also from the operational employees.

# **3.7 Data Collection Technique**

For the study data is collected from the different industries in the time duration of 1.5 month. Data were collected from the employees and managers through questionnaire and interviews. Employees questionnaire are based on the 23 items which includes 6 items of employee productivity, 6 items of the employee understandings and 11 items of

the employee productivity. While managers questionnaires are based on the 27 items which includes 16 items of the management attitude and 11 items of the employee productivity. Data are collected from the respondent through self-interviews based on the questionnaires. Data was then organized for the processing and analyzing.

# **3.8 Data Reliability and Instrument**

Data were obtained from the response of the respondent ant then examined by the way of sorting the data coding in the data and give order to the response in the SPSS. Reliability analysis run on the data to check the reliability of the variables. Reliability analysis shows that all the variables are reliable and fit for the procedure in the study.

Sr.	Variables	Codes	No. of	Reliability	Measurement
No			Items	Value	Scale
1.	Employee	EP	11	0.735	1= Strongly
	Productivity				Disagree,
					5= strongly Agree
2.	Employee	EA	6	0.639	1=Yes, 2= No
	Awareness				
3.	Employee	EU	6	0.747	1 = SA,
	Understanding				5=SD
4.	Management	MA	16	0.709	1 = SA,
	Attitude				5=SD
5.	Demographic		4	NA	NA
	variables				

# **3.9** Procedure for Data Analysis and Presentation

Data are then used for the analysis of the variables and frequencies and percentages of the respondent are used to check the influence of the variables in the industries. Statistical Package for Service Solution (SPSS) were used to analyze the other statistical analysis for the data. Qualitative approach were used to code the data in the form of text. 5-likeret scale were used for the question and code in the SPSS. Therefore, qualitative techniques were used to interpret, collect, present, analyze and conclusion of the data.

Correlation and Regression analysis are conducted between the variables. Regression analysis explains the casual relationship between the variables. Values of the regression analysis depicts that the one percent change in the independent variables explains how much of the variation in the dependent variable. It also explain the overall change of the model through the value of  $\mathbb{R}^2$ .

As data was collected from the management and employees separately, regression analysis are taken on both of the data set to investigate the relationship of the independent variables on dependent variables.

# **3.10 Underlying Theories**

Theoretical framework explains the theory of the health and safety importance in the workplace and that can lead to the increase in the production of the employees. Various theories that are given the concept of safety measures in the workplace are important for the health and safety of the employees. Some of the theories are Maslow's hierarchical of needs, theory of accident, theory of compensating wage differentials, protection motivation theory and theory of reasoned action.

Maslow's hierarchical of need (1968) explain that safety needs are used for the employees of the industries. And these needs are more of the psychological needs which includes the security of the home, food, shelter and safety at workplace. Safety needs of

the Maslow's theory of motivation may impact the behavior of the employees in the industries. If the industries give the safety in the workplace then the employees feel secure and more productive in nature.

Theory of Accident defines that accident is an unplanned, unexpected and uncontrolled event that leads to injure human body or no injury or property damage or both. Lack of knowledge, commitment, effective use of <sup>the</sup> machineries, skills to overcome the problems and unsafe workplace are the reason of the occurrence of the accident in the workplace. For the study, theory of accident are more applicable because industrial works are not aware of the safety measures and procedures which leads to the accident or unplanned event in the workplace. Study discuss the awareness of the health and safety standards and the management commitment so theory of accident can explain the idea by identifying the occurrence of the accidents in the workplace.

# **3.11 Conceptual Framework of the Study**

Conceptual framework of the study indicates the relationship of the variables between themselves. As study includes the employee awareness, employee understandings, and management attitude and employees productivity for the analysis. Employee awareness, employee understanding and management attitude are used as an independent variables while employee productivity is used as a dependent variables for abstracting the relationship. Conceptual frame work of the study explain the relationship of the variable. And these are:

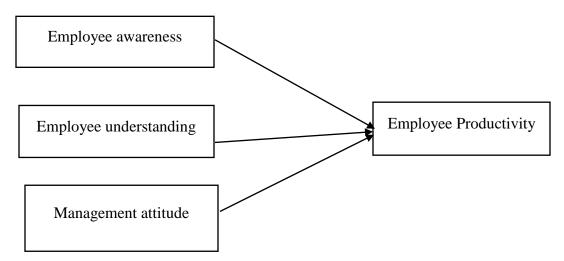


Figure 3.11.1. Conceptual Framework of the study

# **3.12 Variable Description**

Description of the variables and there effect on the employee productivity are shown by the different researchers which are given in the table below:

Table 3.12.1. Variable Description

Variables	Signs	Citation
Employee Awareness	Positive	Pantry (1995), international Labor Organization (1996), World Health Organization (2002).
Employee Understanding	Positive	Krishnan (1999), Wayne (2002), World Health Organization (2002)
Management Attitude	Positive	Jorma (2004) Beach (2000), Zohar (2000)

# **Chapter Four**

# **4** Results and Discussion

# 4.1 Introduction

This chapter is used to discuss the reviews of the respondents which are nominated to find out the effect of awareness of health and safety standards and management attitude of the employee productivity of Hattar Industrial Estate. Data were collected through the questionnaire to explain the objective of the study. The first objective is To investigate the impact of health and safety measures on employee productivity: second objective is to examine the impact employee awareness towards the health and safety standards on employee productivity; the third objective is to explore the impact of management attitude towards health and safety policies on employee productivity; and the last objective is to analyze the effect of employee understanding of safety procedure on employee productivity. Results are explain through the sequence of the question and try to relate findings with the alternative and supportive views as discuss in the literature review.

In the beginning of this chapter, study explain the descriptive statistics of the variables and then move towards the reliability analysis. After the reliability analysis, correlation analysis of the variables are used to discuss and then regression analysis of the model is being to be explain. As questionnaire is filled from both the employees and management of the industries separately so questionnaire has divided into two parts which includes the employees and management portion respectively. In the first half of the descriptive analysis, this study explain the employee's point of view regarding the

health and safety measures in the industry. And in the second half of the descriptive analysis, management point of view will be discuss.

# 4.2 Descriptive Analysis of Employee's Responses:

In the first half of the descriptive analysis shows the Descriptive statistics of the variables used to explain the frequencies of the demographic variables of the response of the employees. Responses were taken from 270 employees for the analysis. Frequencies and the percentage of the respondent is interpreted to the responses on the Likert scale mostly uses "strongly disagree", "disagree", "neutral", "agree", "strongly agree", "yes" and "no" respectively. The proceeding of the interpretation is start from the background of the respondent.

### **4.2.1** Frequencies of Demographic Variables

The first part of this chapter includes the background of the respondent. It includes the gender, age, education, specifications and work experience of the respondents. Data has been presented in the tables.

#### **4.2.1.1** Gender of the Respondent

Respondent were ask to select their gender by selecting the appropriate box. Purpose of this is to check the number of male and female worker's in the industry. Table shows that all of the respondent 270 are the male's workers ratio is 100% in the industry and there is no contribution of the females workers in the industry. The situation is alarming indicating that no contribution of female workers in area under study.

Value	Frequency	Percent	Valid Percent	Cumulative Percent
Male	270	100.0	100.0	100.0

Data explain that there is no contribution of the female workers in the industry. That these industries are relay on the male workers due to the toughness of the work and also the male dominant society. Female workers quotas must be introduce by the authorities that female also contribute in the society.

#### **4.2.1.2** Age of the Respondent

Graphical representation of the age of respondent shows that what percentage is belong to the respective groups. Its shows the nature of the industries and also their process of recruiting and firing the employees with the passage of time. Most of the respondent belongs to 18-31 years of age which shows that industries relays on the young employees for their better productivity. So more than 50% of the employees are under the age of 31 years and it explain the nature of hiring and firing process of the industries.

Percentages of Age of the Respondents 37.8 25.9 16.7 13 6.7 18-24 25-31 32-38 39-45 45 or above

Figure 4.2.1.2. Graphical Representation of the Age of the Respondents

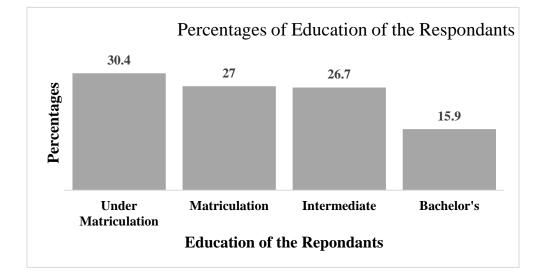
Figure 4.2.1.2 shows the graphical representation of the age of the respondents. Which shows that the 25.9% of the respondent are belongs to the 18-24 years group, 37.8% of the respondents are belongs to the age group of the 25-31 years, 16.7% of the respondents are belong to the 32-38 years of the age group, 13% of the respondents are belong to the 32-38 years and 6.7% of the respondents are belong to the above 45 years of age group. Graph presents that the most of the workers belong to the age group of 25-31 years which shows that industries want to communicate only the young peoples for the productions. Because the performance of the young workers are more efficient that the old ones. Graph explain only 6% of the employees are the age of 45 or above which explain that experience matter in every work for the betterment of the productivity while in the industrial level when employees are more experienced and their age increases they are fire from the job because of their less effective and efficient work in the workstations. Industries are focused on the young employees for the work to be done on time.

Data explain that most of the employees are belong to the age group of 18-31 years of age which means that industries relay on the fresh and young age group of employees for the production. With the increase in the age of the employees contribution of the employees decreases. So authorities must create check n balance on the employees and industries that without any problems employees are not fire from the jobs and industries are stick to manage the aged employees in the industries rather than firing the old and experience employees.

### **4.2.1.3** Education of the Respondents

Education graph differentiate the workers according to their education level. Distribution shows that most of the employees are the part of under matriculation and matriculation education and above 50% of the employees are belong to these group of education. Only few of the employees are highly education which means that less than 16% employees are graduate in their respective fields.

Figure 4.2.1.3. Graphical Representation of the Education of the Respondents



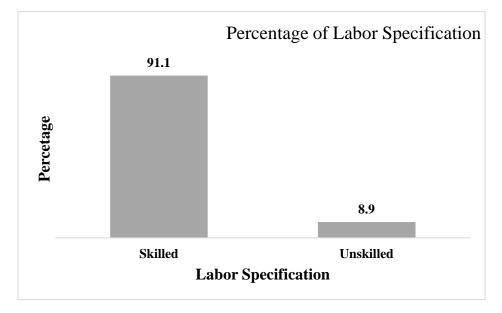
In the figure 4.2.1.3 shows the graphical representation of the education level of the respondents. Its shows the percentages of the respondents from which they are representing their respective groups. Graphs shows that 30.4% of the respondents are belong to the under matriculation level of education, 27% of the respondents are belong to the matriculation education level, 36.7% of the respondents are belong to the intermediate of education and 15.9% of the respondents belongs to the bachelors education. Bachelor's education explain the higher level of education which includes the above 12 year of education. Percentage of the bachelor's level of education indicated major factor of unemployment that highly graduated people are willing to work as a labor for the survival. First is Graphs explain that most of the labor respondents are lies between under matriculation level of education that explain the 30.4 percent of the data.

Data shows that employees with higher education has less percentage in the industries while they have better understanding of the machineries. Authorities also give attention on increasing the higher educated peoples percentage in the industries so they can put their effort in the production and easily manageable for the management.

#### 4.2.1.4 Labor Specification

Labor specification table and graph shows the percentage of the skilled and unskilled labor work in the industries. Skilled labor are those labor that knows how to use the station (machinery) and also know the pros and crons of the use of the machinery. Unskilled labor are those labor that shows some inexperience in the use of the station (machinery) due to less work experience on the job. Unskilled workers increases their skill level with the increase in the work experiences during the job.

Figure 4.2.1.4 Graphical Representation of the Labor Specification of the Respondents



In the figure 4.2.1.4 explain the graphical representation of the labor specification of the respondents and its shows that show many of the respondents are skilled or unskilled. According to the graph about 91.9% of the respondents are skilled labor and they how to use the machineries and protect themselves from the accident. And 8.9% of the labor are unskilled labor and they don't know what to so in the uncertain situation and depend on the other reaction for their own safety.

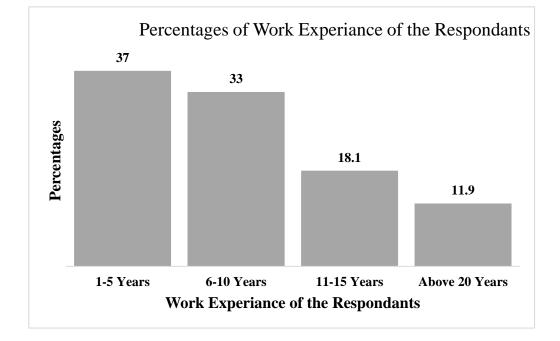
Data explain that the unskilled labor is in very few amount in the industries but management must give training to all the employees on the performing of the duties in a better way. And also arrange seminars on awareness and understanding of the safety measures and handling the machineries within industries.

#### **4.2.1.5** Work experience of the Respondent

Work experience graph and table explain the experience of the employees on their respective jobs. It explain that most of the employees about 70% are belongs to the 1-10 year of work experience. That shows that in most of the cases industries depend on the hiring and firing of the employees. Because of the more percentage in the 1-10 years of work experience group, it shows that after sometimes may be employees don't want to work in same industries due to insufficient benefits or industries don't want the employees who has less productivity with passage of time. Employee's performance in the industries are diminishing return to scale with the passage of time.

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Figure 4.2.1.5 Graphical Representation of the Work Experience of the Respondents



In the figure 4.2.1.5 explain the experience of the respondents according to their stay in the job. According to the graph about 37% of the respondents are belong to the experience group of 1-5 years, 33% of the respondents are lies between the 6-10 years of the work experience group, 18.1% of the respondents are between the 11-15 years of work experience and about 11.9% of the respondents are lies in the about 20 years of work experience. Graphical representation shows that the most of the respondents are lies between the 1- 5 years of the work experience group and that explain the 37 percent of the whole data. Because of frequent hiring and firing less than 12% employees have above 20 years of education. Due to job nature employers need young and energetic workers and they continuously replace older ones by the new ones. Or it may be the case that due to unfavorable working conditions working keeps changing the firm.

With the increase in the wok experience of the employees on the jib there ration in the industries decrease which is critical situation because as experience increase age of the employees also increase and industries relay on the young employees. Management and higher authorities of the industrial management should made quotas for the experience employees and give them all the benefits of the jobs. It is very important to make good relation with employee because if there is no criteria for the experience employees then young employees also not take interest in the work which is not good for the production of the industries.

# 4.2.2 Descriptive Analysis of Employee Awareness, Employee Understanding on Employee Productivity

In the first half the analysis, data is collected from the employees of the industries. 270 employees are used for the collection of the data and analyze the relation of the employee <sup>awareness</sup>, employee understanding on employee productivity. For the analysis of the employee awareness and employee understanding on employee productivity, data is collected from the employees of the industries.

# 4.2.2.1 Employees awareness of safety procedure

Employee awareness explains the know-how of safety procedure to the employees. And the objective of the study is to identify the safety procedures and health and safety standard within the organizations. It gives the overview about the procedures, usage of the safety procedure, know how about the risk assessment and safety procedure handbook available for the employees. Overview of the awareness of the employees are given in the table.

 Table 4.2.2.1 Employee Awareness

S.NO	Statements	Yes	No	Total
1	Does the industry has safety policies to follow?	261 (96.7%)	9 (3.3%)	270
2	Organization has written safety policies that include environmental health and safety procedures and working conditions?	248 (91.9%)	22 (8.1%)	270
3	Is the organization's written health and safety policy or programs available to all employees?	208 (77%)	62 (23%)	270
4	Are you aware of any accidents/ diseases that had occurred in your company for the past 12 months?	203 (75.2%)	67 (24.8%)	270
5	Does the organization have procedures for employees for reporting pains or other diseases in relation to the job processes?	238 (88.1%)	32 (11.9%)	270
6	Does the organization have an accident book or similar accident record system?	224 (83%)	46 (17%)	270

From the table it is explained that majority of the employees are aware of the safety procedures and standards that are used in the organization for the better environment of the organization. 261 represent about 96.7% said that there is a health and safety policies in the organization while 9 represent about 3.3% said there is no health and safety policies within the industries. 248 represent about 91.9% said that organizations has written policies that includes the safety procedure, better environment, better health and working conditions for the employees while 22 represents about 8.1% said that there is no written policies for the health and safety standard in the organizations. Further it is shown in the table that 208 respondent about 77% are agree that the written policies of the organization are available to every employee while 63 respondent represent about 23% intimate that written policies are not available to every employee of the industries. Majority of the respondent 203 about 75% are aware of the accidents and other disease that are occur in last 12 months within the industries while 67

respondent about 25% are not aware of the any disease and accident occur in the industries in the last 12 months.

In the last, 238 respondent about 88.1% of the employees explain that there is a criteria for the employees to report their pain and other problems to the management while 32 respondent about 11.9% of the employees said that there is no criteria for the employees to report their problems and other pain to the management level. 224 respondent about 83% are agree that industries maintain their records about the accidents and other disease and there is accident record book or other record system while 46 respondent about 17% are disagree that there is no record system for accidents or any other system within the industries. Data explain that most of the employees in the industries has awareness about the safety procedures and industrial system for managing the health and safety of the employees. It also shows that safety procedures are as important as awareness about these procedures to the employees of the industries. And also government put check and balance on the industries for fulfilling the labor laws and also providing the safety standard to each and every employee of the industries equally so that they can better work in the field and beneficial for the production of the industries.

### 4.2.2.2 Employees Understanding of Safety Procedure/Policies

Research question sough to review the understanding level of the employees about the health and safety procedures in the industries. Objective of this is to identify the level of understandings of the Safety procedures and also to investigate the accidents in the organization, trainings for the employees and handling machineries. Overview of the understandings of the employees are given in the table.

Sr.No	Statement	Strongly Disagree	Disagree	Neutral	Strongly Agree	Agree
1	Industries have a safety policies copy or manual for the organization?	42 (15.6%)	48 (17.8%)	62 (23%)	42 (15.6%)	76 (28.1%)
2	Does the organization have health and safety procedures and regulations?	1 (.4%)	9 (3.3%)	63 (23.3%)	99 (36.7%)	98 (36.3%)
3	Only approved working equipment are followed for the work?	3 (1.1%)	13 (4.4%)	93 (34.4%)	69 (25.6%)	92 (34.1%)
4	Do you have any knowledge of the Health and Safety Act?	30 (11.1%)	69 (25.6%)	80 (29.6%)	33 (12.2%)	58 (21.5%)
5	Management advised their workers on the health and safety aspect of your job routine?	4 (1.5%)	9 (3.3%)	67 (24.8%)	95 (35.2%)	95 (35.2%)
6	Do you address the problems faced in performing duties to your management?	1 (.4%)	9 (3.3%)	49 (18.1%)	68 (25.2%)	143 (53%)

Table 4.2.2.2 Employee Understandings of Health and Safety policies

From the table it is shown that majority of the respondent representing 118 respondent about 43.7% are agreed and strongly agree that there is a copy of health and safety manual and orientation programs that are provided by the industries. Similarly 90 respondent represent 33.4% are disagree about the copy of health and safety manual and orientation programs provided by the industries. These stats shows that half of the employees didn't know about the manual of the health and safety standards and they also don't know about the programs that are provided by the industries for the understanding

of the health and safety standards. Industries should communicate with the employees for the awareness and understandings of the health and safety policies because same percentage of the employees didn't understand the safety policies as understand the safety policies.

Further, it is explain from the response that 197 respondent represent 73% are agreed that there is a health and safety procedures and regulation in the industries while 10 respondents about 3.4% are disagree about the health and safety procedure and regulation in the industries. 63 respondent about 23.3% not understand about the policies either these are health and safety procedures or not. It explain that majority of the respondent are understand the procedures and regulation that are provide by the industries. While very small chunk of the respondent not understand the procedures very specifically. Industries should explain the procedures to all employees briefly that every employee should know about the procedures and understand the policies for their better protection form accidents.

At least 161 respondent represents 59.7% agreed that all the working activities are standardized in the workplace and they facilitate with standardize working condition for performing their work while 16 respondent about 5.5% are disagreed that the workplace is standardize for the performing their activities. And 93 respondent about 34.4% are not sure about the standard of the workplace activities. Data shows that majority of the employees are understand the standards of the workplace activities and they understand the workplace standards but as the same level employees didn't understand what are the standard of the workplace for performing their work in the industries. Industries should

give the understanding programs to the employees about the workplace standards so that they can perform their work efficiently.

91 respondent represent about 33.5% are aware and understand about the health and safety act while 99 respondent about 36.7% of the employees are not aware and understand the health and safety act. And 80 respondent about 29.6% of the employee know about the health and safety act but didn't understand the act so they can get the benefits from the act in their performance. Data shows that very few of the employees are aware of the Act and can get the benefits from the act in their performance and more are not aware and understand the Act. Industries should arrange seminar and programs for the employee that can help them in understanding the health and safety Act which is beneficial for the employees in their performance and fro the industries in their production.

Management advice employees on their job schedules about the health and safety measures. 190 respondent represent 70.4% of the employees agree that management give advice on health and safety on their jobs so they can work in a safe environment while 13 respondent about 4.8% are disagree about the management advice of health and safety measures on performing their job. 80 respondent about 29.6% are not understand that the management advice is about the health and safety measures of the job performance. Data explain that most of the employees understand the management advice on their job while very few employees didn't understand the advice. And 30% of the entire employees didn't understand the advice. And safety on their job activities. Which means that employees not understand the health and safety standard of the jobs that they are performing so management first give the briefly understanding of the job

activities and their safety on the job so they can better contribute in the production of the industries.

For the understandings of the employees it is necessary that employees should notify their problem to the management easily. About 211 respondent represent 78.2% of the data agree that they can easily share their problems with the management for the counter these problems while 10 respondent about 3.7% of the employees are disagree that there is no platform for the employee to share their problems with the management level. And 49 respondent about 18.1% of the employees are not sure about the communication with the management for their problems facing in their job. Data explain that industries has a platform for the employees to share their problems with management and they can easily share their problems with the management. Some of the employees are

#### 4.2.2.3 Employee Productivity

Question are sought to determine the current state of the employees productivity behavior. Questions indicates the effect of the employee awareness, employee understanding on employee productivity. It explain the employees increases their productivity overtime, condition on workplace, customer satisfaction on production and top priorities of the employees during work. All these behavior of the employees are discuss in the table given below.

Sr. no	Statement	Strongly Disagree	Disagree	Neutral	Strongly Agree	Agree
1	Employee's quality of work improves overtime with safety procedures?	13 (4.8%)	16 (5.9%)	61 (22.6%)	78 (28.9%)	102 (37.8)
2	Employees are able to work within the set deadlines?	5 (1.9%)	23 (8.5%)	61 (22.6%)	75 (27.8%)	106 (39.3%)
3	Employees have steadily increased their personal output as they get the safer workplace?	3 (1.1%)	24 (8.9%)	79 (29.3%)	66 (24.4%)	98 (36.3%)
4	Employees are able to work under less than perfect conditions?	26 (9.6%)	62 (23.0%)	88 (32.6%)	36 (13.3%)	58 (21.5%)
5	Overtime we have been able to reduce service cycle time?	5 (1.9%)	13 (7.0%)	93 (34.4%)	40 (14.8%)	112 (41.5%)
6	Employees provide suggestions to enhance their productivity?	5 (1.9%)	31 (11.5%)	98 (36.3%)	45 (16.7%)	90 (33.3%)
7	Employees are eager to learn on ways of making themselves more productive and about safer workplace?	9 (3.3%)	48 (17.8%)	100 (37.0%)	48 (17.8%)	65 (24.1%)
8	Overtime we have increased customer satisfaction with the quality productivity?	8 (3.0%)	12 (4.4%)	86 (31.9%)	69 (25.6%)	95 (35.2%)
9	Employees are able to generate more than an hour's" worth of productivity of each hour with higher safety in workplace?	10 (3.7%)	14 (5.2%)	74 (27.4%)	54 (20.0%)	118 (43.7%)
10	Employees have a sense of what to do and when not to do during accidents?	6 (2.2%)	29 (10.7%)	82 (30.4%)	39 (14.4%)	114 (42.2%)
11	Employees are able to identify and give top attention to top priorities? E.g health and safety.	3 (1.1%)	23 (8.5%)	96 (35.6%)	51 (18.9%)	96 (35.5%)

# Table 4.2.2.3. Employee Productivity

Tables explain the frequencies and percentages of the employee satisfaction and their production level during the work. It shows that 180 respondent represent 66.7% are agree

that their work is improve overtime and they can better complete their work within the time effectively and efficiently while 29 respondent about 10.7% are disagree that overtime quality of work is not increases which shows that around 10% of the employees are not increases their quality of work. 181 respondent represents 67.1% are agree that employees should complete their task within the set deadlines because all the employees in the industries have contract base job so they have to complete their work within the set deadlines while 29 respondent represents 10.4% are disagree that employees are not able to complete their work in the set deadlines.

Further, it is explain through the data that 164 respondent represents 60.7% are agree that employee increase their output with the experience they got in the workplace while 27 respondent represent 10% are disagree they their personal output has no improvement with the experience and they have to work according to the management ask to work. It is also explain that environment of the workplace and condition also effect the potential of the employees, about 94 respondent represent 34.8% of the employees are agree that they are able to work under the perfect condition because task given from the management is more important than the condition they face in the production and they have to complete their target while same level of the employees are disagree about 88 respondent represent 32.6% that perfect condition are important for the employees to complete their task.

Moreover, it is explain that around 152 respondent 56.3% are agree that employees are able to reduce the cycle time of the task with the passage of the time. It means that overtime employees are used to of the task and they can easily repeat the task again and again with less time and effort. While 18 respondent represent 9% of the employees who are disagree from the statement that employees reduces their cycle time with the repetition of the tasks. Also 135 respondent represents 50% of the employees are agree that they are communicate with the management to enhance their productivity while 36 respondent represents 13.4% of the employees are disagree that they are not giving any suggestion to increase their productivity. It is also discuss the eager of the employees to learn how to increase their productivity and response explain that 113 respondent represent 42% are agree that they are eager to increase their productivity while 57 respondent represent 22% are disagree that they are not learn how to be more productive. It means that some of the employees are used to complete their work without increasing their productivity.

Customer satisfaction is more important for the industries to survive and employees try to make an effort to satisfy the customers with their quality production. Data shows that 164 respondent represent 60% of the employees are agree that they work hard and make an effort to satisfy customers with their quality production. While 20 respondent represent 7% are not make any effort to satisfy the customers, they want to complete their production task and finish their work. Industrial employees are learn to how to work and generate more than hours work within in hours production. It is very important for the employees to give more than 100% of the effort within hour production. And also stats of the respondent shows that 172 respondent represent 60% of the employees are agree that they try to give extra effort in the production level while 24 respondent represent 8% are disagree that they are not interested in the extra effort for the increase in production. Employee's sense of doing the best possible things in the workplace can help the production level and also the safety of the employees. That means employees sense of knowing what is best in the work place is better for the industries as well as for the individuals too. 154 respondent represent 56% are agree that employees have quite sense of what to do and what not to do in the workplace while 35 respondent represent 13% are disagree that employees have no sense of the doing the better things in the workplace. Employee's attention to give top priorities to best things in the workplace is important for the environment of the workplace and they can easily perform their work. It can help the employees to feel save and productive is very much important in the workplace. 147 respondent represent 55% are agree that employees give top attention to top priorities in the workplace and 26 respondents represent 9% of the employees disagree that employees are not able to give top attention to the top priorities in the workplace.

Data of the employees on employee awareness, employee understanding and employee productivity explain that employees are more positive and aware of the safety measures and its effect on the production of the individuals. Response show that employees are eager to learn and implement the workplace safety so they can easily perform their duties and make their effort in increasing the production of the industry. On the other hand management should provide better environment to the employees so they feel free and secure in the workplace. Communication gap between the management and employees should be reduce so they can easily communicate about the problems they face in the workplace.

# 4.2.3 Correlation Matrix of Employee Awareness and Employee Understanding with Employee Productivity

In the first step of the correlation analysis employee awareness, employee understanding

and employee productivity are correlated with each other or not.

1	2	3
1		
.388***	1	
(.000)		
.110*	.500***	1
(.071)	(.000)	
	1 .388 <sup>***</sup> (.000) .110*	1 .388 <sup>***</sup> 1 (.000) .110* .500 <sup>***</sup>

Table 4.3.1 correlation matrix for employee's

\*p < 0.1, \*\*p < 0.05, \*\*\*p < 0.001

The Correlation Analysis in Table 4.3.1 discloses the direction of relationship (either positive or negative) among variables. In this study, correlation analysis shows that all variables are correlated, mostly positive correlated as prescribed in the hypothesis. At the significance level 1%, 5% and 10%, it is stated through the test that all the variables are correlated with each other. It depicts that employee awareness, employee understandings and employee productivity are positively associated with value of 500<sup>\*\*</sup>, .388<sup>\*\*</sup>, .110<sup>\*\*</sup> respectively. Employee awareness and employee understanding is correlated with each other at the significant level of .000. Negative sign shows that they are negatively correlated with each other. Employee awareness is also negatively correlated with employee productivity at the significance level 0.071. Employee understanding is positively correlated with employee productivity at the significance level 0.000.

#### 4.2.4 Regression Analysis for Employees

Employee's response used the data of the employee awareness and employee understandings and its effect on the employee productivity. Regression line for the employees data are

$$EP = \beta_{\circ} + \beta_1 EA + \beta_2 EU + \varepsilon$$

Regression line shows that the  $\beta_{\circ}$ ,  $\beta_{1}$ ,  $\beta_{2}$  are the coefficient of the model and EA and EU shows the symbol of the independent variables that are employee awareness and employee understandings. EP explain the symbol of the dependent variables which is employee productivity. Regression analysis of the employee awareness and employee understanding on the employee productivity are shown in the table

Variables	coefficier	nt t	Sig.	
Constant	1.433	4.001	.000	
Employee Awareness	.332	1.730	.085	
Employee Understandings	.520	9.416	.000	
$R^2 = .258$ $\Delta R^2 = 0.240$				

Table 4.2.3 Regression analysis of variables

So the regression line is;

#### $EP = 1.433 + .332EA + .520EU + \varepsilon$

Regression analysis of the variables explain that employee awareness and employee understanding affects the employee productivity and both the variables are associated with the employee productivity. Results shows that employee awareness is positively associated with the employee productivity with the coefficient value .332 at the significant value of .085. So first hypothesis of this study is accepted that *employee awareness of safety procedure is positively associated with the employee productivity*. Employee understandings is also positively associated with the employee productivity at the coefficient value .520 with the significant value of .000. Second hypothesis of the study is also accepted that *employee understanding of the safety procedures are positively associated with the employee productivity*. Constant is the table shows the starting point of the regression line. Regression line start form the 1.433. The value of the R<sup>2</sup> shows the total change of the variable in the model. Value of R<sup>2</sup> is .258 which explain that 25% of the change in the model is explain by the employee awareness and employee understandings. Actual change in the model shows through the change in R<sup>2</sup> that explain the actual effect of Employee Awareness and Employee Understanding on the Employee Productivity. Value of the  $\Delta R^2$  is 0.240 which explain that the 24% change in the Employee Productivity is actually explain by the Employee Awareness and Employee Understanding.

# 4.3 Descriptive Analysis of Management Response

In the second half of the descriptive analysis shows the Descriptive statistics of the variables used to explain the frequencies of the demographic variables, management attitude and employee productivity according to the response of the respondent. Frequencies and the percentage of the respondent is interpreted to the responses on the Likert scale mostly uses "strongly disagree", "disagree", "neutral", "agree" and "strongly agree" respectively. The proceeding of the interpretation is start from the background of the respondent. Data is collected from the management of the different industries.

Questionnaire was filled from the 35 managers of the different industries for the analysis purpose.

#### **4.3.1** Frequencies of Demographic Variables

The first part of second half includes the background of the respondent. It includes the gender, age, education, specifications and work experience of the respondents of the managers. Approximately 35 managers approach for the data from different industries in Hattar Industrial Estate. Data has been presented in the tables.

#### **4.3.1.1** Gender of the Respondent

In the table 4.3.1.1 shows the gender of the respondent that's are used to fill the questionnaire. Study shows that the all the respondents are the male so there is no female respondent in the industry. 35 respondent 100% are male respondent. It is clear from the data that industries is a male dominant industry and there is no contribution of the females even in the management level.

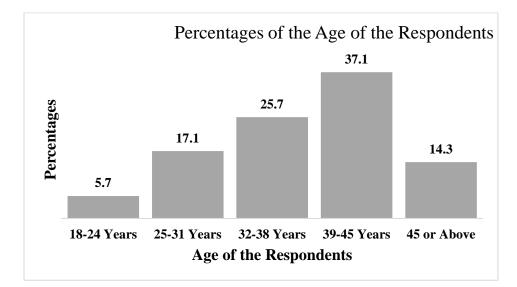
 Table 4.3.1.1 Gender of the Respondent.

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	35	100.0	100.0	100.0

# 4.3.1.2 Age of the Respondent

Age of the respondent graph and table explain from which group, managers are belongs to. It means that manager's age is distributed into different groups for the betterment of showcasing the data. Age of the respondent shows that most of the managers belongs to the age group of 39-45 years. Which means that highly qualified and experienced managers are used for the management of the employees.

#### Figure 4.3.1.2 Graphical Representation of the Age of the Respondents



In the figure 4.3.1.2 explain the graphical representation of the respondents that are participating in the study. Graph shows the percentage age of the respondents those lies between the age groups. According to the data about 5.7% of the r3spondents are lies between the 18-24 years of age group, 17.1% of the respondents are lies between the 25-31 years of the age group, 25.7% of the respondents are in the age group of 32-38 years, 37.1% of the respondents are lies between the 39-45 years of the group and 14.3% of the respondent are lies between the above 45 years age group. Graphical representation shows that most of the respondents are lies between the 39-45 years of age group and that's is approximately 37.1 percent.

## **4.3.1.3** Education of the Respondent

Education level of the management group is most important aspect of the arrangement of the work in the industries. Because for the processing and managing the workers in the industries is quiet difficult work and getting the full production from the employees. Data shows that most of the management staff is highly qualified and belongs to the higher education level. Tertiary education includes the graduate and Ph.D.'s level of education. Graph shows that about 65% of the management staff is highly qualified and educated in their respective fields to manage the process of the production.

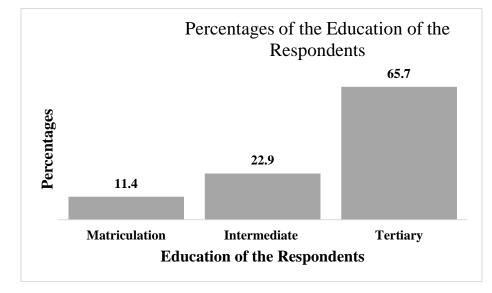


Figure 4.3.1.3 Graphical Representation of the education of the Respondents

In the figure 4.3.1.3 explain the graphical representation of the education level of the respondents. Graph explain the percentages of the respondent according to their education level. Its show that about 11.4% of the respondents are belong to the matriculation education, 22.9% of the respondents are belong to the intermediate education group and about 65.7% of the respondents are belong to the tertiary level of education. Graphs shows that most of the respondent are belong to the tertiary level of education which is 65.7% of the whole data.

## 4.3.1.4 Work Experience of the Respondent

Work experience gives the better idea and efficient work decision making ability in the management department. Greater the work experience, more will be the decision making ability and handling the pressure of the work force in the industries. Graph shows that more than 50% of the management of the respondent belongs to the work experience group of more than 10 years of the work in the industries.

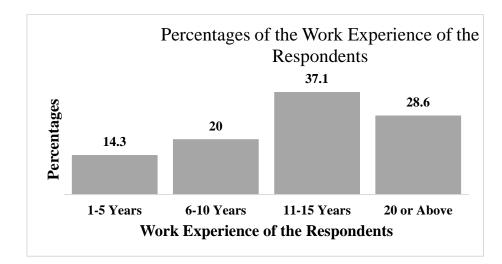


Figure 4.3.1.4. Graphical Representation of the Work Experience of Respondents

In the figure 4.3.1.4 explain the graphical representation of the work experience of the respondents. Its shows that 14.3% of the respondent are lies between the 1-5 years of work experience, 20% of the respondents are lies between the 6-10 years of the work experience, 37.1% of the respondent are lies between the 11-15 years of work experience and 28.6% of the variables to the above 20 year of work experience group. Graphs explain that most of the respondents are lies between 11-15 years of work experience which explain 37 percent of the data.

# 4.3.2 Descriptive Analysis of Management Attitude on Employee Productivity

In the second half of the analysis management attitude effect on employee productivity is analyze, for this purpose 35 managers from different industries are used for the collection of the data. For analyzing the management attitude towards the employees, 35 management staff were interviewed separately from different industries which shows their point of view on the attitude of management. Their response on management attitude and employee productivity are discuss below.

# 4.3.2.1 Management Attitude towards Health And Safety Measures For Employees:

Management attitude towards the health and safety standards of the industries is most important aspect in order to accomplish the output level of the industries. Question sought the view of the management attitude towards employees of the industries. The main object was to access the management views on providing the better training to employees on their performance, evaluating the progress of supervisors, records of accidents and providing the safety standards to employees. Responses of the managers are given in the table.

Sr. No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Does the management staff provide Training program to advance supervisor's ability in guiding Work Program?	0	2 (5.7%)	7 (20%)	9 (25.7%)	17 (48.6%)
2	Does your company whenever they estimate their supervisor's successes, supplements Work Safety Factor as a supervisor's ability?	0 (0%)	2 (5.7%)	9 (25.7%)	21 (60%)	3 (8.6%)
3	In increasing the safe work level, does your company have standard forms for safe work quality records?	0 (0%)	1 (2.9%)	9 (25.7%)	17 (48.6%)	8 (22.9%)
4	Does Work safe Quality record in the company's management is important?	0 (0%)	2 (5.7%)	10 (28.6%)	8 (22.9%)	15 (42.9%)
5	Company provide Investigation Program upon accident report?	2 (5.7%)	0 (0%)	10 (28.6%)	14 (40%)	9 (25.7%)
6	Is there an Investigating Team to investigate work accident in your company?	0 (0%)	4 (11.4%)	7 (20%)	14 (40%)	10 (28.6%)
7	On employing new employees, does your establishment look upon safety Documentation?	0 (0%)	2 (5.7%)	11 (31.4%)	11 (31.4%)	11 (31.4%)
8	Does your business make available certain incentive to employee executing business Safety Management?	2 (5.7%)	0 (0%)	7 (20%)	19 (54.3%)	7 (20%)

Table explain the views of the managers providing the best possible safety measure to employees in order to increase their performance of the individuals. Table shows that 26 respondent represent 63.4% of the managers are agree that management provide training to supervisor in order to enhance their capability in the workplace while 2 respondent about 5.7% of the manager are disagree that there is no program or training for the

supervisor to enhance their capability in the workplace. And 7 respondent about 20% are neither agree nor disagree with the availability of the training session for the supervisors. Data explain that there is a training session for the manager to enhance their ability and capability in the workplace but as the response of other manager it shows that training session has minimum effect on the supervisor capability because of not knowing the bigger picture of the training sessions.

Industries has to increase their power to groom the managers so that they can better evaluate the supervisor and new employees to feel secure in the workplace.

Further, it is explain that 24 respondent represent 68.2% of the managers are agreed that industries evaluate their supervisory achievements and also include the work safety factor as a supervisor achievements while 2 respondent about 5.7% are disagree with the statement that there is no work safety factor are involve is evaluating the supervisor achievements. 9 respondent about 25.7% are not aware of the work safety factor but they are agree that management is full aware and cooperate with them on the safety of the employees as well as supervisors. Data explain that work safety factors are evaluate with the supervisors achievements and it would beneficial for the supervisor to work in a better environment and give their 100% in the workplace.

In order to maintain the safety level in the workplace it is necessary for the industries that they should maintain the record of the safety work. Data explain that majority of the managers are agree about 25 respondent represent 71.5% that industries maintain the record of the safety work within the industries while only 1 respondent about 2.9% are disagree with the statement. And 9 respondent about 25.7% are neutral neither on the side of agree nor on disagree. Data explain that there is a record of the

safety work in the industries. And this positive thing for the industries as well as for the employee's to generate more effort in workplace.

Work safe quality record is important for the industries to evaluate the production level of the employee's. If industries maintain these records then it will give them a huge benefit in order to manage the problems of the individuals. Data explain that 23 put 35 managers represent 65.8% of the data are agree that work safe quality record is important for the industries production as well as evaluation of the employees while 2 represent 5.7% of the data are disagree that there is no need of the record for evaluation and increase the production of the industries. 10 respondent represent 28.6% are agree and disagree at the same point that sometime it will be important and sometimes it has no use in the production. Majority of the data about 65% are agree that record of work safe quality is important in the industries and also industries should maintain each and every record In the industries so they can easily communicate with the employees.

Industries provide investigation program upon accident reports. Data explain that about 23 respondent 65.7% are agree that there should be investigation program on accident reports in every industry because these programs give increases the interest of knowing the problems of the accident and their drawbacks while 2 respondent about 5.7% are disagree with the investigation program on the accident reports. On the other , 24 respondent represent 68.6% of the data agree that industries and investigation team on accident occur in the workplace while 4 respondent represent 11.4% are disagree that there is no investigation team in the workplace for the accidents. Most of the industries indicates that they have no separate team for the investigation of the accident but when the accident occur in the workplace management made a team for the investigation of the accidents.

Moreover, data also explain that 22 respondent represents 62% of the data that industries required a safety certification when recruiting the new employees while 2 of the respondents are disagree with the safety certification when recruiting new employees. 26 respondent represent 75% of the data that industries give incentive to the employees who are involve in the industries safety managements while 2 respondents about 5.7 are disagree with the statement.

It is also discuss with the management about the cooperate programs on the work safe communication with management and their employees and stats shows that management communicate with their employees on work safety. Data explain that 22 respondent out 35 represent 63% agree that management communicate with their employees on the work safety while 2 respondent disagree with statement that employees should complete their work on a given time and communication has no effect on their performance. 28 respondent represent 80% of the management is agree that they give verbal instruction to the employees on the safety precaution before the work new work assigned to the employees. While 17 respondent represent 48.5% of the management are agree that the training on the safety precaution are given to the employees.

 Table 4.3.2.1b. Management Attitude

Sr.No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
9	Is there some kind of an umbrella to offer cooperative program on work safe infrastructures upon the management and their employees?	0 (0%)	2 (5.7%)	11 (31.4%)	14 (40%)	8 (22.9%)
10	In your company, is it common to convey work and safety method instructions by your supervisor in verbal before commencing work?	2 (5.7%)	2 (5.7%)	3 (8.6%)	17 (48.6%)	11 (31.4%)
11	Does your company deliver training program on Applying Safety Precaution?	0 (0%)	3 (8.6%)	15 (42.9%)	13 (37.1%)	4 (11.4%)
12	Does your company afford program on Conversation About safety awareness?	0 (0%)	1 (2.9%)	13 (37.1%)	13 (37.1%)	8 (22.9%)
13	Does your business offer program to depiction advertisements for safety awareness?	0 (0%)	0 (0%)	4 (11.4%)	12 (34.3%)	19 (54.3%)
14	Have you delivered employees with other written health and safety material?	1 (2.9%)	1 (2.9%)	7 (20%)	10 (28.6%)	16 (45.7%)
15	Are you satisfied that people requiring specific health and safety information instruction, supervision, training and consultation have received it? E.g. on dangerous machinery?	0 (0%)	0 (0%)	6 (17.1%)	16 (45.7%)	13 (37.1%)
16	Do you refer employees about their health and safety worries?	0 (0%)	2 (5.7%)	12 (34.3%)	12 (34.3%)	9 (25.7%)

Awareness of the safety measure among the employees is important to complete

their work. And management should discuss the safety measure among the employees for

the betterment of their work. 21 respondent represent 60% of the management was agree that they are involve with the employees on the awareness of the safety precaution that can help them in a better to work in safe environment. 31 respondent represent 88% of the management agree that written precaution on the safety awareness are poster in every workplace to get benefits in the workplace.

Data explain that the management attitude are very important for the production of the industries. It sought that management do provide the training to improve the supervisor, capability of the employees in the workplace. It also explain that management try to increase the awareness of safety arrangement among the employees, safety precaution are also written on the posters, verbal communication with employees on the safety precaution before the start of new work, in-house training is offered to the managers and other operational staff is also provided.

Managers should cooperate with the employees in every situation so they can easily adjust in the workplace and freely work in the industries. Stats shows that employees are eager to learn the safety precaution and cooperated with management for avoiding the accident in the workplace. Manager should provide communication and discussion programs with the employees on their problems facing in the workplace so they can easily communicate with the management about their problems and create better environment.

#### 4.3.2.2 Employee Productivity

The question is sought to get the information from the management on the productivity of the employees. 35 managers are interviewed to get the information on

productivity of the employees and the idea on the production level of the employees. All

the stats are given in the table below.

Sr. No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Employee's quality of work improves overtime with safety procedures?	0 (0%)	0 (0%)	7 (20%)	14 (40%)	14 (40%)
2	Employees are able to work within the set deadlines?	2 (5.7%)	3 (8.6%)	7 (20%)	14 (40%)	9 (25.7%)
3	Employees have steadily increased their personal output as they get the safer workplace?	2 (5.7%)	2 (5.7%)	6 (17.1%)	15 (42.9%)	10 (28.6%)
4	Employees are able to work under less than perfect conditions?	0 (0%)	6 (17.1%)	18 (51.4%)	9 (25.7%)	2 (5.7%)
5	Overtime employees have been able to reduce service cycle time?	2 (5.7%)	1 (2.9%)	15 (42.9%)	12 (14.3%)	5 (34.3%)
6	Employees provide suggestions to enhance their productivity?	0 (0%)	2 (5.7%)	9 (25.7%)	10 (28.6%)	14 (40%)
7	Employees are eager to learn on ways of making themselves more productive and about safer workplace?	0 (0%)	3 (8.6%)	18 (51.4%)	7 (20%)	7 (20%)
8	Overtime we have increased customer satisfaction with the quality productivity?	0 (0%)	0 (0%)	5 (14.3%)	13 (37.1%)	17 (48.6%)
9	Employees are able to generate more than an hour's" worth of productivity of each hour with higher safety in workplace?	0 (0%)	3 (8.6%)	11 (31.4%)	13 (37.1%)	8 (22.9%)
10	Employees have a sense of what to do and when not to do during accidents?	0 (0%)	1 (2.9%)	6 (17.1%)	14 (40%)	14 (40%)
11	Employees are able to identify and give top attention to top priorities? E.g health and safety.	0 (0%)	0 (0%)	8 (22.9%)	15 (42.9%)	12 (34.3%)

Table 4.3.2.2. Employee Productivity

Table explain the response of the managers on the current status of the employee productivity. Managers were questioned about the productivity of the employees that what is the status of the productivity level of the employees when gives the better safety measures and also the management attitude towards employees. Table shows that majority of the management about 28 respondent represents 80% of the data are agree that employees try to improve their quality of work overtime while none of the managers were disagree about the statement. Which explain managers were agreed that the quality of the employees increases with the increase in experience. 23 respondent represents 65.7% of the managers are agree that employees are good enough to complete their work in set deadlines while 5 respondent represent 14% are disagree that employees need extra time for the completion of their work.

Majority of the management staff were also agreed that most of the employees are eager to increase their personal output steadily. 25 respondent represents 71% of the data agree about the statement while 4 respondent about 11% are disagree that employees are not interested in increasing their output. Perfect condition for performing the assigned duties are important for the industrial worker's and management is responsible to provide the better environment. 11 respondent represent 30% of the managers are agree that employees are able to work in less perfect condition while 6 respondent represent 17% of the managers are disagree that employees are not able to perform under less perfect condition. Most important aspect is 18 managers represent 51% of the data are not answer about the perfect condition for the employees in the workplace which shows that managers follows pessimistic approach while answering the question.

Moreover, 17 respondent represent 48% of the managers are agree that employees reduces their duration of complete the task overtime while 3 respondent represents 8% of the managers are disagree that employees taken the same duration for completion of task at any stage. It show that majority of the employees are decreasing their work duration with the passage of time. Suggestion from the employees to enhance their productivity is beneficial for the managers because it give some relief to management by focusing on the suggestion and make changes in the policies easily. 24 respondent represent 68% of the managers are agree that employees give suggestions to enhance their productivity and these suggestions has positive impact on the production of the employees. While 2 of the managers are disagree about the suggestions of the employees on their productivity enhancement. 14 respondent represent 40% of the managers are agree that employees are eager to learn on way of making themselves more productive while 3 of the managers represent s 8% are disagree that employees has np interest on making themselves more productive.

Most of the industries maintain their position in the market due to satisfy the customers with their productions. Customer satisfaction I the prime concern for the industries to survive so they put extra effort to satisfy their customers. 30 respondent represents 85% out of 35 response are agree that employees try to satisfy the customers from its quality work. Management were also agree that employees want to work hard in order to generate more than an hour effort in one hour. Response form the respondent explain the 21 of the respondent represent 60% of the managers were agree that employees generate more than an hour effort in workplace within an hour. While 3 respondent represent 8.6% of managers are disagree with the statement. 28

respondent represent 80% of the managers are agree that employees are able to know what to do and what not to do in the workplace. And also 27 respondent represent 77% of the managers are agree that employees are also able to give top attention to top priorities in the workplace.

Data explain that managers are satisfy with the work of the employees and their attitude towards employees are also good in the workplace. Employees increase their production with the passage of time and also generate extra power in the workplace when they get the high safety measures. Management and government should put check and balance on the industries and their safety precaution in the workplace. Management should communicate with the employees on their problems and try to give attention on their problems. It can help the employees and management to increase their productivity.

**4.3.3 Correlation Matrix of Management Attitude with Employee Productivity** In the second step of correlation analysis management attitude and employee productivity are analyze to check whether these variables are correlated or not.

Variables	1	2	3	4	5
Age	1				
Education	.413*	1			
	(.014)				
Work Experience	.816**	.443**	1		
	(.000)	(.008)			
Management Attitude	.407*	.334*	.432**	1	
	(.015)	(.050)	(.009)		
Employee Productivity	.522**	.414*	.386*	.459**	1
	(.001)	(.013)	(.022)	(.006)	

Table 4.3.2 correlation matrix for Managers

\*p<0.1, \*\*p<0.05, \*\*\*p<0.001

The Correlation Analysis in Table 4.3.2 discloses the direction of relationship (either positive or negative) among variables. In this study, correlation analysis shows that all variables are correlated, mostly positive correlated as prescribed in the hypothesis. At the significance level 1%, 5%, 10% respectively. It is stated through the test that all the variables are correlated with each other. It depicts that education is positively and significantly associated with age at the value of .413 with significant value of 0.014. Work experience is positively and significantly correlated with age and education with the value of .816 and .443 at the significant value .000 and .008. Management attitude is positively and significantly correlated with age, education and work experience of the respondent with the value of .407, .334 and .432 at the significant value .015, .050 and

.009. Employee productivity is positively and significantly correlated with age, education, work experience and management attitude with the value of .522, .414, .386 and .459 at the significant value .001, .013, .022 and .006.

#### 4.3.4 Regression Analysis of Managers

Regression analysis of the manager's response consist of the variable of management attitude and employee productivity. And the regression line for the model shoes;

$$EP = \beta_{\circ} + \beta_1 MA + \varepsilon$$

MA and EP represents the symbol of management attitude and employee productivity respectively. While  $\beta_0$  and  $\beta_1$  are the coefficient of the model. Analysis of the variables are shown in the table.

Table4.3.3	Regression	Analvsis o	of Manager	's Response
1 0010 11010	negi ession	1111119505 0	Julunase	s nesponse

	Variables	coefficient	t	Sig.
	Constant	.839	1.329	.194
Ma	nagement Attitude	.486	2.459	.020
$R^2 = .601$	$\Delta R^2 = .080$			

So the regression line for mangers response is;

#### $EP = .839 + .486MA + \varepsilon$

Table explain the effect of the management attitude on the employee productivity. It shows that management attitude has positive association with the employee productivity with the coefficient value of .486 with significant value of .020. Third hypothesis of the study is accepted that *Management attitude towards providing the health and safety procedures are positive associated with employee productivity*. Intercept shows that

starting point of the regression line which is .839. The value of the R<sup>2</sup> explain the total change in the model due to the independent variable. Value of R<sup>2</sup> explains that 60% of the variation in the model will explain by the management attitude.  $\Delta R^2$  Explain the actual change in the model by neglecting the R<sup>2</sup> of the controlled variables from the R<sup>2</sup> of the independent variable which gives the actual change in the model due to the independent variables. The value of the  $\Delta R^2$  is .080 which shows that 8% of the change in the employee productivity is explain by the management attitude.

## **Chapter Five**

## 5 Discussion, Conclusion, Recommendation and Limitation

#### 5.1 Introduction

In this chapter, overview of the research study and also discuss the major findings of the study. Recommendation and limitation of the study will be briefly discuss in this chapter. And also the suggestion for the future study are also made from this study.

#### 5.1.1 Discussion

Conceptual framework of the study shows the relationship of the employee awareness, employee productivity and management attitude of the safety standards on the employee productivity. From the response of the employees, two main objective and hypothesis of the study were abstracted. First main objective and hypothesis of the study is to check the relationship between the employee awareness and the employee productivity of the employees. So the first hypothesis of the study accepted that:

*H*<sub>1</sub>: Employee awareness of safety procedure is positive associated with the employee productivity.

Second main objective and hypothesis of the study were also positively associated with the employee productivity of the individuals. Employee understanding of the employees on the health and safety standards within the industries were positively associated with the employee productivity. So, second hypothesis of the study are:

 $H_2$ : Employee understanding of safety procedures are positive associated with the employee productivity.

From the results, it is clear that understanding of the safety procedures are as much important as the awareness of the procedures. And it shows the significant impact on the productivity of the individuals. Employee understanding of the safety procedures include the understanding of the procedures guided by the management such as providing the copy of the procedures to the employees, knowledge of the safety procedures used in the industries, approved working standard used in workplace, understanding of the health and safety Act, management advice about the safety standards and how to share their experience about the standards to others. According to the response, approximately 60% of the employees were agreed about the understanding of the safety standards and their impact on the employee productivity. And 14% of the employees were not understand the procedures used for the safety. Results shows that employee understanding is positively associated with the employee productivity. As 55% of the employees shows positive response of the effect of the health and safety standards on employee productivity.

As the model of the study were consist of the three main objective and hypothesis. Two of the objective and hypothesis are based on the response of the employees as discussed above. Third main objective and hypothesis were based on the response of the management. That is the effect of the management attitude towards providing the health and safety procedures on the employee productivity. On the response of the management, third hypothesis of the study is accepted that is

*H<sub>3</sub>: Management attitude towards providing the health and safety procedures are positive associated with employee productivity.* 

Management attitude towards providing the health and safety includes training on the conducting the work program, increasing the safety of the workplace, managing the safety records, investigation programs on accidental reports, safety certification, investigation team for the accidents, incentives on the safety management, instruction on the safety methods, safety precaution programs, posters for the safety awareness, providing health and safety written information and consultation with the employees on their safety concerns.

Results shows on the response on the management that approximately 70% of the management staff were agreed on the importance of the management attitude towards the providing the safety procedures. And 64% of the management staff were agreed on the importance of the safety procedures and management attitude effect on the employee productivity. Which shows the positive effect of the management attitude on the employee productivity.

#### 5.2 Key Findings

Key findings of the study explain that awareness of the employee towards the health and safety is very important for the employees as well as for the development and productivity of the organizations. Not only has the awareness of the safety procedures but also the understanding of the safety procedures had parallel impact on the productivity and wellbeing of the individual employees. Results from the study finds that most of the employees are well aware of the safety procedures and about 85% of the employees are aware of the safety policies in the industries, accidents record of last 12 months, written health and safety policies within the organization, availability of the safety policies to all employees and accidental book record in the industries. This is because of the empirical normative beliefs and personal normative beliefs.

Further, it is also clear from the data that employee understandings has major impact on the productivity of the employees. Understanding of the employee shows that employees understand the health and safety procedures, copy of the health and safety procedures are available to the employees, standardize equipment usage in the workplace, health and safety act and communication with the management and employees. Majority of the employees about 59% of the employees are understand the health and safety procedures in the workplace and their productivity level is positively affected from the safety measures. Results shows that employee understandings and employee productivity has significant on each other. As understanding of the employees on the safety procedures increases it will ultimately increase their productivity level of the employees. Understanding of the employees on the health and safety procedures give an indirect benefit to the industries by decreasing the absentees and extra cost of accidents and illness.

Management attitude towards provide the health and safety standards has major effect on the productivity level of the employees. Because managers are responsible for the pros and cons of the problems face by the employees during the workplace. And also managers are responsible for the managing the pleasant workplace environment, safe equipment, training session during the work, working conditions, programs on the awareness and understandings of the safety measures and work related problems. Results from the data shows that approximately 70% of the management staff were agreed on the responsibilities of the safety precautions and attitude of the managers towards the employees. Impact of the management attitude has significant association on the individual productivity. Manager should provide the best possible workplace for the employees so that they can give their 100% of the effort in completing their and organizational goals.

#### 5.3 Conclusion

Key findings of the study explain that most of the employees in Hattar Industrial Estate are aware of the health and safety procedures but did not follows the instructions properly. This behavior of the employees effect their productivity level as well as the reputation of the organization. Organization try to fulfill the safety procedures in the workplace but employees show no concern in following the rules properly. Study used the data of employee's awareness, employee understandings, management attitude and employee productivity for the estimation of the results. Qualitative technique were used to collect the data from the management and employees. Sample size of the study consist of the 305 respondent which include 270 employees and 35 managers for collecting the data. Purposive sampling technique were used because data were collected from the employees of the Hattar Industrial Estate. Simple random sampling technique were also used to give equal chance to every employee in participating in the study.

For the estimations of the results descriptive survey design were used to calculate the percentages of the positive and negative response of the employees and managers. Regression analysis method were used to abstracting the association of the variables between each other's. Results from the data concluded that employee awareness and employee understandings shows the significant association with the employee productivity. Management attitude also show the significant association with the employee productivity. On the basis of the results some recommendation were made to for the industries to follow so they can enjoy the better environment in the workplace.

#### 5.4 **Recommendation**

The following are the recommendation for the policy maker of the industries:

Management should be more committed or take responsibility to provide the basics of the health and safety standard in the organization. And also give concern to the problems of the employee's issues regarding the safety in the workplace. Management should provide the suggestion box to the employees so they can easily suggest about the safety of the workplace give their opinion. Occupational health and safety of the organization is prime concern for the management and policies and structure of the health and safety procedures must be improve for the betterment of the employees and production of the organization. They have to investigate the injuries and accidents and should not wait for the accidental committees report.

Organization and management staff should allocate funds for the improvement of the health and safety standards. And these programs should include the immediate reporting near miss techniques, investigation of the accidents, technologies for the safer environment. Organization should provide the full mandate to the health and safety committees to implement the best possible recommendation on the safety standards. Copy of the every safety measure should be provided to the employees so they can feel safe in the workplace.

Employees should be trained to adopt the safety procedures and rules in the workplace. Training programs, health and safety acts should be well known by the employees so they firm can give the up to date safety procedures to the employees. Organization should provide competition programs between the departments on

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practicing the health and safety measures so that employees feel more motivated and encourage about the safety practices.

#### 5.5 Limitations

Similarly as with several human deeds, this research is also not without limitations. A portion of the prerequisites in the survey questionnaire were thoughtful in a way that workers and managers were hesitant in addressing the queries about organization data and all other things considered, which were basic in giving the required response for this research as they were of the view that giving the correct answers may influence them ultimately or straightforwardly.

#### **5.6 Future Directions**

Suggestion for the future research is that a similar kind of the study should be conducted in the direction of the health care institution, hospitals and other sensitive industries. Same study should held in the public and private institution of the health and safety in order to check the level of the health and safety.

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# Appendix

## QUESTIONNAIRE

## A. Employees

### 1. Gender

1	1	
Gender	Male	Female

### 2. Age

1	18 - 24 years	25 - 31 years	32-	38	39 - 45 years	46 or above
			years			

#### 3. Education

Under matriculation	Matriculation	Intermediate	Bachelor's
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#### 4. Labors specification

Skilled Unskilled
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## 5. Work experience

1 - 5 years	6-10 years	11-15 years	Above 20 years

## 6. Employees awareness of safety procedure

Sr.	Statements	Yes	No
No			
1	Does the company have a safety policy?		
	۔ کیا کمپنی میں کوئی احتیاطی تدبیر ہے؟		
2	Does the organization have a written health and safety policy that includes programs		
	and procedures for environmental, health, safety (EHS) and working conditions?		
	کیا اس آرگنائزیشن میں صحت اور احتیاط کے لئے تحریری پالیسی ہیں جن میں ماحول، صحت، حفاظت		
	اور دوسرے کام کے حالات کے بارے میں لکھا گیا ہو؟		
3	Is the organization's written health and safety policy or programs available to all		
	employees?		
	کیا اس آرگنائزیشن کے صحت اور حفاظتی تحریر تمام ملازمین کے پاس موجود ہیں؟		
4	Are you aware of any accidents/ diseases that had occurred in your company for the		
	past 12 months?		
	کیا آپ کو اپنی کمپنی میں ہونے والے پچھلے12 مہینوں کے حادثات اور بیماریوں کے بارے میں پتہ ہے؟		
5	Does the organization have procedures for employees for reporting pains or other		
	diseases in relation to the job processes?		
	کیا اس آرگنائزیشن میں کوئ ایسا طریقہ کار ہے؟ جس سے ملازم کام کے دور ان ہونے والی اپنی بیماری		
	اور تكليف كو بتا سكين؟		
6	Does the organization have an accident book or similar accident record system?		

کیا آرگنائزیشن میں حادثات کا ریکارڈ رکھا جاتا ھے؟
---

## 7. Employees understanding of safety procedure/policies

<b>S</b>	7. Employees understanding of s	• 1	-		Strongly	Agnee
Sr.	Statement	Strongly	Disagree	Neutral	Strongly	Agree
No		Disagree			Agree	
1	Do you have a copy of health and safety					
	manual and orientation programs for health					
	and safety provided by your organization?					
	کیا آپ کے پاس آر گنائزیشن سے دی گئ ہدایت نامہ اور					
	صحت اور حفاظتی پروگرام کی کاپی موجود ہوتی ہے؟					
2	Does the organization have health and safety					
	procedures and regulations?					
	کیا آرگنائزیشن کے پاس صحت اور حفاظت کے لیے قوائد					
	ی ر <i>ا سرچین سے چین سے اور سے سے یے ور</i> و ضوابط ہیں؟					
3						
3	Are only approved working standards used					
	when performing your work?					
	کیا صرف منظور شدہ کام کرنے کا معیار استعمال کیا جاتا					
	ہے، جب آپ کام کررہے ہو۔					
4	Do you have any knowledge of the Health and					
	Safety Act?					
	کیا آپ کو صحت اور حفاظتی ایکٹ کے بارے میں					
	معلومات هيں؟					
5	Has management advised you on the health					
-	and safety aspect of your job schedule?					
	کیا آپ کے کام کے بارے میں منیجمنٹ نے صحت اور					
	حفاظتی پہلو کے بارے میں آگاہ کیا ہے؟					
6	Do you notify management about the health					
	problems experienced in performing your					
	duties					
	کیا آپ کو کام کرتے وقت صحت سے متعلق مسئلے ہوئے آپ نے منیجمنٹ کو آگاہ کیا؟					
	آپ نے منیجمنٹ کو اگاہ کیا؟					

#### 3. Employee Productivity

G	3. Employee Productivity	<u>G</u> ( ) ]	D	NT. 4.1	<u>G</u> 4	<b>A</b>
Sr.	Statement	Strongly	Disagree	Neutral	Strongly	Agree
No		Disagree			Agree	
1	Employee's quality of work improves overtime?					
	وقت کے ساتھ ساتھ ملازمین کے کام کرنے کی صلاحیت					
	بہتر ہوتی ہے؟					
2	Employees are able to work within the set					
	deadlines?					
2	ملازمین اپنا کام دئے گئے وقت پر پورا کرتے ہیں؟					
3	Employees have steadily increased their personal					
	output? ملازمین اینی ذاتی بیداو ار کی صلاحیت کو آہستہ آہستہ زیادہ					
	کرتے ہیں؟					
4	Employees are able to work under less than					
	perfect conditions?					
	ملازمین کم بہتر ماحول میں بھی کام کرنے کے اہل ہوتے ہیں؟					
5	میں: Overtime we have been able to reduce service					
3	cycle time?					
	وقت کے ساتھ ساتھ ملازمین اپنے کام کو پورا کرنے کا					
	وہے سے ساتھ ساتھ ماکر میں اپنے کام مو اپر اسرے کے دورانیہ کم کرتے ہیں؟					
6	Employees provide suggestions to enhance their					
U	productivity?					
	ملازمین اپنی پیداوار کو بڑھانے کی ترغیب بھی دیتے ھیں؟					
7	Employees are eager to learn on ways of making					
ľ	themselves more productive?					
	ملازمین اپنے کام کرنے کی پیداوار کو ذیادہ کرنے کے لیے					
	ویں پانچ کی جو سے بی جو شہ ہوتے ہیں؟					
8	Overtime we have increased customer					
	satisfaction with the quality productivity?					
	وقت کے ساتھ ساتھ ملازمیں اپنے کوالٹی کام سے کسٹمرز					
	کو زیادہ مطمئن کرتے ہیں؟					
9	Employees are able to generate more than an					
	hour's" worth of productivity of each hour?					
	مزدور اتنی اہلیت رکھتے ہیں کہ وہ ایک گھنٹے میں پورے					
	گھنٹے کی پیداوار دے سکیں؟					
10	Employees have a sense of what to do and when					
	not to do?					
	ملازمین میں اس بات کی اہلیت ہوتی ہے کہ ان کو کیا کرنا					
	ہے اور کیا نہیں کرنا؟					
11	Employees are able to identify and give top					
	attention to top priorities?					
	ملازمین اپنی ترجیحات کی شناخت اور ان کی بہتری کے					
	اہل ہوتے ہیں؟					

## QUESTIONNAIRE

#### **B.** Management

## Gender

Gender	Male	Female

Age

18 - 24 years	25 - 31 years	32-	38	39 - 45 years	46 or above
		years			

#### Education

Under matriculation	Matriculation	Intermediate	Tertiary
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## Work experience

1 - 5 years6-10 years11-15 yearsAbove 20 years
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#### Management attitude towards health and safety measures for employee

Sr.	Statement	Strongly	Disagree	Neutral	Strongly	Agree
No		Disagree			Agree	
1	Does the management in provide Training to					
	improve supervisors capability in conducting					
	Work Program?					
	کیا منیجمنٹ سپروائزر کے کام کو نکھارنے کے لیے					
	کوئ تربیت دیتے ہیں؟					
2	Does your company whenever they evaluate their					
	supervisors achievements, inserts Work Safety					
	Factor as a supervisors capability?					
	کیا کمپنی سپروائزر کی قابلیت کا اندازہ لگاتے ہوئے					
	حفاظتی عوامل کو بھی مد نظر رکھتی ہے؟					
3	In increasing the safe work level, does your					
	company have standard forms for safe work					
	quality records?					
	حفاظتی کام کی سطح کو بڑھانے کے لئے کیا کمپنی					
	کے پاس حفاظتی کام کے معیار کا ریکارڈ رکھتی					
	ہے؟					
4	How important does Work safe Quality record in					

the company's management?         خاطتی کام کے معیار کا ریکار ڈ کمپنی منیجمنٹ         5       Does your company provide Investigation Program upon accident report?         م کیا آب کی کمپنی حادثاتی رپورٹ کی تحقیقی پروگراھے؟         6       Is there an Investigating Team to investigate work accident in your company?         کیا آب کی کمپنی میں حادثاتی رپورٹ کی تحقیق پروگراھے؟         7       On recruiting new employees, does your company look upon safety Certification?         نئے ملاز موں کو رکھتے وقت کمپنی حفاظتی تیم ھے؟         8       Does your company provide certain incentive to employee implementing company's Safety Management?         ملاز موں کی حفاظتی منیجمنٹ میں کام کر رہی ھوتی هری کی کی خوتی ھے جو کہ         9       Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees?         می کی کی کی ایسا باہمی پروگرام کی سہولت ھے جو منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے اس ای اس vour company, is it common to convey work	
٩       ٩       ٩       ٩       ٢	
<ul> <li>5 Does your company provide Investigation Program upon accident report? فرایم کرتی ه_2 غری ه_2 </li> <li>کیا آپ کی کمپنی دادثاتی رپورٹ کی تحقیق پروگر ام غرافیم کرتی ه_2</li> <li>6 Is there an Investigating Team to investigate work accident in your company? خیابی عربی میں حادثات کی تحقیق کے لیے </li> <li>7 On recruiting new employees, does your company look upon safety Certification? نئے ملازموں کو رکھتے وقت کمپنی حفاظتی تصدیق </li> <li>8 Does your company provide certain incentive to employee implementing company''s Safety Management?</li> <li>ملازموں کی حفاظتی منیجمنٹ میں کام کررہی ہوتی </li> <li>9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees?</li> <li>چیا کوئ ایسا باہمی پروگرام کی سہولت ه_ جو کی </li> <li>کیا کوئ ایسا باہمی پروگرام کی سہولت هے جو </li> <li>کیا کوئ ایسا باہمی پروگرام کی سہولت هے ہی </li> </ul>	
Program upon accident report?         ٩ كيا آپ كى كمپنى حادثاتى رپورٹ كى تحقيقى پروگر ام         ٥ Is there an Investigating Team to investigate work         accident in your company?         كيا آپ كى كمپنى ميں حادثات كى تحقيق كے ليے         ? On recruiting new employees, does your         company look upon safety Certification?         نتي ملازموں كو ركهتے وقت كمپنى حفاظتى تصديق         8 Does your company provide certain incentive to         employee implementing company's Safety         Management?         مكرتى هے جو كہ         ملازموں كى حكوي خلائدہ ديتى هے جو كہ         ي كيا كمپنى ان لوگوں كوكوئ فائدہ ديتى هوتى         8 Does your company provide certain incentive to         employee implementing company's Safety         Management?         مكرتى هوتى         ي كيا كوئ كوكوں كوكوئ فائدہ ديتى هے جو كہ         8 Does your company now work safe         communications upon the management and their         employees?         ي كوئ ايسا باہمى پروگرام كى سہولت هے جو كي ليے         ي كوئ ايسا باہمى پروگرام كى سہولت هے جو كې ليے         9 Is there some sort of an umbrella to provide         communications upon the management and their         employees?       ي كوئ ايسا باہمى پروگرام كى سہولت هے جو ي كي ليے         ي كوئ كوئ ايسا باہمى پر دوروروں كے منظم رابطے كے ليے	
الله البي البي المالي مالي	
<ul> <li>فراہم کرتی ھے؟</li> <li>6 Is there an Investigating Team to investigate work accident in your company?</li> <li>کیا آپ کی کمپنی میں حادثات کی تحقیق کے لیے?</li> <li>7 On recruiting new employees, does your company look upon safety Certification?</li> <li>قریم ھے؟</li> <li>7 On recruiting new employees, does your company look upon safety Certification?</li> <li>قریم ھے؟</li> <li>8 Does your company provide certain incentive to employee implementing company's Safety Management?</li> <li>۸ کرتی ھے ج</li> <li>۸ کرتی ھے ج</li> <li>9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees?</li> <li>9 Is there some sort of an umbrella to provide cooperative any of the action work safe communications upon the management and their employees?</li> <li>9 Extendence of the action of t</li></ul>	
<ul> <li>فراہم کرتی ھے؟</li> <li>6 Is there an Investigating Team to investigate work accident in your company?</li> <li>کیا آپ کی کمپنی میں حادثات کی تحقیق کے لیے?</li> <li>7 On recruiting new employees, does your company look upon safety Certification?</li> <li>قریم ھے؟</li> <li>7 On recruiting new employees, does your company look upon safety Certification?</li> <li>قریم ھے؟</li> <li>8 Does your company provide certain incentive to employee implementing company's Safety Management?</li> <li>۸ کرتی ھے ج</li> <li>۸ کرتی ھے جو کہ ملاز موں کی حفاظتی منیجمنٹ میں کام کررہی ھوتی ہی جو کہ ملاز موں کی حفاظتی منیجمنٹ میں کام کررہی ھوتی ہی جو کہ الحقاق منیجمنٹ میں کام کررہی ھوتی ہی جو کہ ملاز موں کی حفاظتی منیجمنٹ میں کام کررہی ھوتی ہیں؟</li> <li>9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees?</li> <li>9 Zu کوئ ایسا باہمی پروگرام کی سہولت ھے جو کہ منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے کی کی دو میں؟</li> </ul>	
<ul> <li>6 Is there an Investigating Team to investigate work accident in your company? کیا آپ کی کمپنی میں حادثات کی تحقیق کے لیے کی تحقیقاتی ٹیم ہے؟ On recruiting new employees, does your company look upon safety Certification? قری ہے؟ On recruiting new employees, does your company look upon safety Certification? قری ہے؟</li> <li>8 Does your company provide certain incentive to employee implementing company's Safety Management? Anagement? ملاز موں کی حفاظتی منیجمنٹ میں کام کرر ہی ہوتی ہی?</li> <li>9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees? علی کوئ ایسا باہمی پروگرام کی سہولت ہے جو کی لیے کوئ ایم کر سہولت ہے جو کی کی کوئ کی منظم رابطے کے لیے کی کی کوئ ایسا باہمی پروگرام کی سہولت ہے جو پر کی کی کی کی کی کی کی ایسا باہمی پروگرام کی سہولت ہے جو پر کی کی کی کی کی کردی کی ایم کر سہولت ہے جو پر کی کر کوئ کی ایسا باہمی پروگرام کی سہولت ہے جو پر کی کی کی کی کیوں کی خوال کی سہولت ہے جو پر کی کر کرئ کی ایس کر کر کر کی کر کر کی کی سہولت ہے جو پر کی کر کر کی کی سہولت ہے جو پر کی کر کرئی ہی کی پر کر کر کی کی سہولت ہے جو پر کی کر کر کی کی سہولت ہے جو پر کی کر کر کی کی سہولت ہے جو پر کی کر کر کی کی سہولت ہے کی لیے کی لیے کی لیے کی کر کر کی کی کر کر کی کی کر کر کی کی کر کر کر کی کی کر کر</li></ul>	
accident in your company?         الحياتي تيم هي؟         الحياتي تيم هي؟         الحياتي تيم هي؟         الحياتي تيم هي؟         الحياتي الحياجي	
<ul> <li>کیا آپ کی کمپنی میں حادثات کی تحقیق کے لیے تحقیقاتی ٹیم ہے؟</li> <li>7 On recruiting new employees, does your company look upon safety Certification?</li> <li>نئے ملازموں کو رکھتے وقت کمپنی حفاظتی تصدیق کرتی ہے؟</li> <li>8 Does your company provide certain incentive to employee implementing company''s Safety Management?</li> <li>کیا کمپنی ان لوگوں کوکوئ فائدہ دیتی ہے جو کہ ملازموں کی حفاظتی منیجمنٹ میں کام کررہی ہوتی ہیں؟</li> <li>9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees?</li> <li>کیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے پری گرام کی سہولت ہے جو منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے پری گری کی ایسا جامی پروگرام کی سہولت ہوتی ہیں؟</li> </ul>	
٩       الحقیقاتی تیم هے؟         ٦       On recruiting new employees, does your company look upon safety Certification?         ٥       نئے ملازموں کو رکھتے وقت کمپنی حفاظتی تصدیق         ٤       Does your company provide certain incentive to employee implementing company's Safety Management?         ٨       کرتی هے جو کہ معرفقائی مذہبی کام کررہی هوتی هے جو کہ معرفی منابع میں کام کررہی هوتی ہوتی ہوتی ہوتی ہوتی ہوتی ہوتی ہوتی ہ	
<ul> <li>7 On recruiting new employees, does your company look upon safety Certification? قند معندي حفاظتی تصديق تصديق النه عربتی حفاظتی تصديق النه يمروني دوت کمپنی حفاظتی تصديق</li> <li>8 Does your company provide certain incentive to employee implementing company's Safety Management? حيا كمپنی ان لوگوں كوكوئ فائدہ ديتی هے جو كہ ملاز موں كی حفاظتی منيجمنٹ ميں كام كرر ہی هوتی الی دوتی وي وي كوي فائدہ ديتی هي جو كہ وي كمپنی ان لوگوں كوكوئ فائدہ ديتی هے جو كہ وي كمپنی ان لوگوں كوكوئ فائدہ ديتی هي جو كہ ملاز موں كی حفاظتی منيجمنٹ ميں كام كرر ہی هوتی الی وي كوي فائدہ ديتی هي جو كہ ميں؟</li> <li>9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees? کيا كوئ ايسا باہمی پروگرام كی سبولت هے جو كم يور كي كي كوئ ايسا باہمی پروگرام كی سبولت هے جو كم منظم رابطے كے ليے كي منيجمنٹ اور مزدوروں كے منظم رابطے كے ليے مي؟</li> </ul>	
company look upon safety Certification?         نئے ملازموں کو رکھتے وقت کمپنی حفاظتی تصدیق         کرتی ہے؟         8 Does your company provide certain incentive to employee implementing company''s Safety Management?         مکیا کمپنی ان لوگوں کوکوئ فائدہ دیتی ہے جو کہ ملازموں کی حفاظتی منیجمنٹ میں کام کررہی ہوتی ہیں؟         9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees?         عیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو لیسا باہمی پروگرام کی سہولت ہے جو لیسے کی نظم رابطے کے لیے میں؟	
<ul> <li>نئے ملازموں کو رکھتے وقت کمپنی حفاظتی تصدیق</li> <li>کرتی ھے؟</li> <li>8 Does your company provide certain incentive to employee implementing company''s Safety Management?</li> <li>کیا کمپنی ان لوگوں کوکوئ فائدہ دیتی ھے جو کہ ملازموں کی حفاظتی منیجمنٹ میں کام کررہی ھوتی ویں؟</li> <li>9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees?</li> <li>کیا کوئ ایسا باہمی پروگرام کی سبولت ھے جو کی ایس باہمی پروگرام کی سبولت ھے جو کی منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے میں؟</li> </ul>	
العلى       العلى <t< th=""><th></th></t<>	
<ul> <li>8 Does your company provide certain incentive to employee implementing company''s Safety Management?</li> <li>کیا کمپنی ان لوگوں کوکوئ فائدہ دیتی ہے جو کہ ملازموں کی حفاظتی منیجمنٹ میں کام کررہی ہوتی ہی ?</li> <li>9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees?</li> <li>کیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو کم کی یہ کام کرتے ہیں؟</li> </ul>	l
employee implementing company''s Safety Management?         کیا کمپنی ان لوگوں کوکوئ فائدہ دیتی ہے جو کہ ملازموں کی حفاظتی منیجمنٹ میں کام کررہی ہوتی ہیں؟         9       Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees?         کیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے ہیں؟	
Management?       کیا کمپنی ان لوگوں کوکوئ فائدہ دیتی ہے جو کہ         کیا کمپنی ان لوگوں کوکوئ فائدہ دیتی ہے جو کہ         ملازموں کی حفاظتی منیجمنٹ میں کام کررہی ہوتی         سی؟         9       Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees?         کیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو کی منظم رابطے کے لیے منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے میں؟	
کیا کمپنی ان لوگوں کوکوئ فائدہ دیتی ہے جو کہ ملازموں کی حفاظتی منیجمنٹ میں کام کررہی ہوتی ہیں؟ 9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees? کیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے سہولت فراہم کرتے ہیں؟	
ملازموں کی حفاظتی منیجمنٹ میں کام کررہی ہوتی ھیں؟ 9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees? کیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے سہولت فراہم کرتے ھیں؟	
یس؟         9       Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees?         عیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو منظم رابطے کے لیے منظم رابطے کے لیے میں؟	
9 Is there some sort of an umbrella to provide cooperative program on work safe communications upon the management and their employees? 221 كوئ ايسا باہمی پروگرام كی سہولت ہے جو منظم رابطے كے ليے منظم رابطے كے ليے سہولت فراہم كرتے هيں؟	
cooperative program on work safe communications upon the management and their employees? کیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے سہولت فراہم کرتے ہیں؟	
communications upon the management and their employees? کیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے سہولت فراہم کرتے ہیں؟	
employees? کیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے سہولت فراہم کرتے ہیں؟	
کیا کوئ ایسا باہمی پروگرام کی سہولت ہے جو منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے سہولت فراہم کرتے ہیں؟	
منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے سہولت فراہم کرتے ہیں؟	
منیجمنٹ اور مزدوروں کے منظم رابطے کے لیے سہولت فراہم کرتے ہیں؟	
and safety method instructions by your supervisor	
in verbal before commencing work?	
کیا آپ کی کمپنی میں یہ بات عام ہے کہ سپروائزری	
کام شروع ہونے سے پہلے احتیاطی ہدایت دیں؟	
11     Does your company provide training program on	
Implementing Safety Precaution?	I
کیا آپ کی کمپنی حفاظتی احتیاط کو لاگو کرنے کے	
لیے تربیتی پروگرام فراہم کرتی ہے؟	
<b>12</b> Does your company provide program on Discussion Depending sofictive superpress?	
Discussion Regarding safety awareness?	
کیا آپ کی کمپنی احتیاطی آگاہی کے اوپر بحث مہیا	
كرتى هے؟	
13 Does your company provide program to expose	
posters for safety awareness?	

14	کیا آپ کی کمپنی احتیاطی تدابیر کی آگاہی کے پوسٹرز لگانے دیتی ہے؟ Have you provided employees with other written health and safety information? کیا آپ اپنے ملازمین کو مزید صحت اور حفاظتی	 		
	معلومات تحریرمیں فراہم کی ہیں؟			
15	Are you satisfied that people requiring specific health and safety information instruction, supervision, training and consultation have received it? Eg on dangerous machinery? کیا آپ مطمئن ہیں کہ ورکرز کو صحت وحفاظتی انفار میشن و تربیت خطرناک مشینریز کو استعمال کرنے کے لیے دی جاتی ہے؟			
16	Do you consult employees about their health and safety concerns? کیا آپ ملازمین سے ان کی صحت اور حفاظت کے لیے رابطہ کرتے ہیں؟			

# **Employee Productivity**

Sr.	Statement	Strongly	Disagree	Neutral	Strongly	Agree
No		Disagree			Agree	
1	Employee's quality of work improves overtime?					
	وقت کے ساتھ ساتھ ملازمین کے کام کرنے کی					
	صلاحیت بہتر ہوتی ہے؟					
2	Employees are able to work within the set					
	deadlines?					
	ملازمین اپنا کام دئے گئے وقت پر پورا کرتے ہیں؟					
3	Employees have steadily increased their personal					
	output?					
	ملازمین اپنی ذاتی پیداوار کی صلاحیت کو آہستہ					
	آہستہ زیادہ کرتے ہیں؟					
4	Employees are able to work under less than					
	perfect conditions?					
	ملازمین کم بہتر ماحول میں بھی کام کرنے کے اہل					
	ہوتے ہیں؟					
5	Overtime we have been able to reduce service					
	cycle time?					
	وقت کے ساتھ ساتھ ملازمین اپنے کام کو پور اکرنے					
	کا دور انیہ کم کرتے ہیں؟					
6	Employees provide suggestions to enhance their					
	productivity?					
	ملازمین اپنی پیداوار کو بڑھانے کی ترغیب بھی					

	دیتے ہیں؟			
7	Employees are eager to learn on ways of making			
	themselves more productive?			
	ملازمین اپنے کام کرنے کی پیداوار کو ذیادہ کرنے			
	کے لیے پرجوش ہوتے ہیں؟			
8	Overtime we have increased customer satisfaction			
Ŭ	with the quality productivity?			
	وقت کے ساتھ ساتھ ملازمین اینے کوالٹی کام سے			
	کسٹمرز کو زیادہ مطمئن کرتے ہیں؟			
9	Employees are able to generate more than an			
	hour's" worth of productivity of each hour?			
	مزدور اتنی اہلیت رکھتے ہیں کہ وہ ایک گھنٹے میں			
	پورے گھنٹے کی پیداوار دے سکیں؟			
10	Employees have a sense of what to do and when			
	not to do?			
	ملازمین میں اس بات کی اہلیت ہوتی ہے کہ ان کو			
	کیا کرنا ہے اور کیا نہیں کرنا؟			
11	Employees are able to identify and give top			
	attention to top priorities?			
	ملازمین اپنی ترجیحات کی شناخت أور ان کی بہتری			
	کے اہل ہوتے ہیں؟			

#### **Controlled variable**

Gender, age, qualification and work experience effect the performance of the employee (Mawritz et al., 2012). So demographic variables of the study has been included. One way ANOVA is used to check the significant value of the variables and their effect on the model. It shows that the demographic variables are associated with the employee productivity or not. However, results shows that for the response of the variables are taken from the employees and management separately and the response of demographic variables are different for employees and management.

Controlled variable

F

Age	1.322	.262
Education	.359	.782
Labor Specification	1.478	.230
Work Experience	.869	.457

Table One way ANOVA for the Employees Productivity of Employee's

Controlled variable	F	Sig.
Age	4.982	.003
Education	9.119	.001
Work Experience	3.603	.024

Table one way ANOVA for Employee Productivity of Management