# The Impact of a Safety and Health Program on the Workforce in Different Manufacturing Sectors

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ABSTRACT: -Business improvement can be indicated by a concerted effort to strengthen the production standard and quality. This target will demand the technical knowledge of the employees. The quality of work health and safety has a significant impact on how well such employee obligations are met. The management approach to handling employee safety and reliability is not yet up to the individual, especially in developing countries. As an effect, more incidents and hazards occur, resulting in higher medical fees, payments, and refunds for hospitalized people. Staff absenteeism, absenteeism, deteriorating results of experience, increased inefficiencies, and, consequently, decreased effectiveness in such commercial enterprises. To satisfy and motivate workers, the administration must maintain a constantly safe system of work and be devoted to its success in any aspects. The goal of this paper seems to be to throw light on disasters that come in different locations and to find out the cause of all those accidents as well as remedies to minimize them. In the future this paper will show a method for the convenience of the people's research; by which people will know what the issue is and how it can be under control.

**Keywords:** Hospital, Health, Organization, Performance, Safety.

## 1. INTRODUCTION

The position of human reserve administration in the market is first of all to link the economic aspects with the existing programs, policies, and strategies of the z organization. Effective human resource management demands be reevaluated, and humans should be placed at the heart of the company's philosophy [1]. The importance of the Internet, e-commerce, and internationalization for the growth and competitiveness of the organization should be emphasized by the top management. Including these will make a difference. During this phase of transition, management experts should act as mediators between management and the employee [2].

In current management, the premise of acceptance of the HR department as the most important of all objects may be based on its unwavering involvement in the employment of all further organization resources in the organization for production. Employees possess competence, understanding, efficiency, principles, attitude, and disposition among many other things. They contribute a wide range of human resources to the corporation. Despite the reality that jobs and organizations primarily demand the knowledge and abilities of the employee, it is inevitable for the administration to tolerate and reverence the entire underlying. Only then the underlying will build loyalty to the company [3].

Although he provides his full skills and knowledge, the motivated professional is a great resource for the industry structure. Besides, the passionate staff is dedicated to the enterprise. The organization creates a pleasant work environment for employees as part of its efforts to maintain human relations. The value of individuals in the workplace has already been established by management with purposeful strategic initiatives trying to attract the desired personnel the moment they leave. Attempting to introduce a safe and healthy work environment is one example of such strategic choices. The lack of catastrophes is referred to this as safety. To put this another way, a definition is similar to the guarding of workers against the risk of injuries [4].

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## 1.1. Accidents and Their Types:

Coincidences are changed type, which is mentioned in Figure 1 below:

- Depending on the intensity of the injury, they can be classified as major or minor.
- A bad accident results in death or long-term harm to the injured person.
- A minor accident, but an unfortunate event nonetheless, is a puncture or cut that would not severely disable him [5].
- A simple incision or a severe bruise may not even declare the individual disabled immediately, but or may be incapacitated later.
- An injury can put an employee off work for a period, a half-day, a day, a week, or several months.
- His or her impairment will be temporary if he or they recovers from it. His or her impairment is permanent if the trauma should be such that he or she should never make a full recovery [6].



Figure 1: Illustrates the Five Most Common Causes of Incidents in Manufacturing Sectors

## 1.2. Safety-Management Requirements:

Management of safety refers to the progression of formulating and distributing protection procedures for any association grounded on the regulation and requirements of the corporation. According to the Occupational Safety, and Health Administration, every level of administration and the working team must be involved in a safety plan to benefit the organization [7].

Safety Management Systems (SMS) are comprehensive systems intended to handle industry safety, health, pollution, and generally associated risks. Regulatory and monitoring structures exist. An SMS is a kind of quality manager to focus on security. A plant that is accident-free receives certain benefits, and an organization must implement safety performance. Figure 2 shows this protection program [8].

- Risk Assessment
- Worksite Inspection
- Action Item Tracking
- Employee Training
- Employee Qualification
- Incident Tracking



Figure 2: Illustrates the Safety Management.

#### 1.3. A necessity for safety:

There are also several benefits to getting a factory that is free of catastrophes. The big ones are significant.

- Cost improvements
- A rise in production
- Morale
- Legal considerations.

#### 1.4. Workplace accident prevention:

Despite the efforts of OSHA (Occupation and Occupational-Safety and Health Act), the ongoing exertions for enterprises to establish a safe and healthy work environment were suggested to adopt several many severalsafety measures, especially in the context of workplace injuries [9]. An important strategy, therefore, according to him, is to recruit safety engineers to conduct comprehensive inspections of the environment, uncover and isolate hazardous situations, and provide solutions to respond to such issues [10]. Use of acceptable shielding gear and equipment, such as protective clothing, ear-protectors in high-noise environments, eye-glasses and facemasks in the braising room, protection of the hand, waders and certain other protection footwear, waist support buckles, wrists, and shoulders Monitor filters, suitable recliners, and desks, etc. may well be taken to support and reduce the rate of computer industrial accidents [11].

#### 1.5. Benefits of maintaining better workplace occupational health and safety practices:

Organizations that manage excellent safe work initiatives get huge benefits. Direct and indirect benefits are examples of this kind of benefits, as mentioned below.

## i. Direct-Benefits:

- Lower accident costs/production delays;
- Production-Delays or Lower-Accident-Costs;
- Reduced-Insurance-Premiums;
- Reduced-Litigation-Costs;
- Reduced-Sick-Pay-Costs;
- Productivity-Rates or Improved-Production;

Reduced-Production and Materials-Damage;

#### ii. Indirect-Benefits:

- Less absenteeism,
- Lower worker turnover,
- Improved business image,
- Increased contracting opportunities,
- Increased job satisfaction/morale

Overall, the exploration shows the presence of a strong link between good professional health & safety policy compliance and the important role in the long growth of the economy. The superiority of a company's workplace atmosphere has a significant effect on its presentation and revenue.

#### 1.6. Health and Safety at Workplace:

A manufacturer employer has an English court's responsibility to contribute to a harmless and healthy work environment for his or her employees and is responsible for accidents that occur during the process of their employment [12]. The following are the basic responsibility that an entrepreneur owes his or her personnel concerning emblem:

- Providing a comfortable working environment.
- Providing a safe method of getting to work.
- The establishment of decent working conditions.
- Ensuring that workers have the appropriate tools, supplies, and gear to do their jobs safely.
- The availability of competent coworkers.
- A responsibility to guarantee that personnel is not exposed to any unnecessary hazards at work.

## 1.7. Putting Together a Successful Health and SafetyManagement System:

A preventive maintenance program, as depicted in Figure 3, entails the deployment of progressions calculated to reduce the risk of damage and disease in the workplace. The effective utilization of this source of serious managerial commitment, efficient utilization of resources, and high employee engagement.

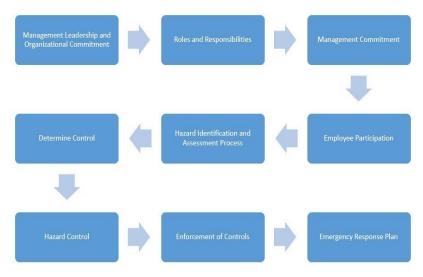


Figure 3: Illustrate Effective-Health and Safety-Management-System.

The following are the characteristics of a successful health and safety culture:

#### i. Organizational-Commitment and Management-Leadership:

This strategy for business requires management to ensure leadership and dedication to the initiative. To do this, the administration must draft a management arrangement for healthiness and shelter that outlines the organization's goals in

terms of health and safety. Representative might be intricate in policy formulation, which must be retained by the Senior-General-Manager to demonstrate the organization's obligation [13].

## ii. Roles and responsibilities:

Employees, subcontractors, and visitors should expect an average equal quality and responsibility if safety and health responsibilities and duties are clearly defined and conveyed at all levels of the organization [14].

## iii. Management Commitment:

Managerial practices must demonstrate their enthusiasm for a healthy and safe workplace for a preventive maintenance program to be effective. This can be proven in a number of behaviors, including attendance during administration, safety, and health management training meetings, facility assessment, and incident reporting.

#### iv. Employee Involvement:

Personnel must still be engaged in the development of the system that creates accountability and just a better fit with existing objectives.

#### v. Hazard Identification and Assessment Process:

Before commencing work, businesses should inspect the workplace for current and potential hazards. Risk assessment data can be used to identify what type of workforce development is needed, and also to develop the content of servant introductions and on-the-job training. Risk calculation data can also be employed to develop inspection procedures. Hazard assessment and control data can be employed in incidents and accidents to help identify whether a software glitch was the source of the occasion [15].

#### vi. Determine-Controls:

Assign control laws to identify vulnerabilities to mitigate as well as address the threat. Relevant laws, manufacturer standards, company standards, industry standards, and worker input can be used to identify the most effective internal controls.

## vii. Hazard Control:

After the completion of the hazard assessment, the next step in building a safety and health management system will be the deployment of control measures aimed at stopping or decreasing worker injury. To make companies safe in these circumstances, the company must take all reasonable steps to resolve or control the include [16].

#### viii. Enforcement of controls:

Following the completion of the vulnerability assessment, deployment of appropriate control actions to prevent or minimize injury to personnel will be the next process in building a security program. Employers will take all necessary measures to eliminate or manage known hazards to make the employee safe in this circumstance.

## ix. Emergency-Response-Plan:

A national disaster can degrade company performance and put the safety, security, and livelihoods of many personnel at risk. Although no safety program will protect a comprehensive emergency response strategy can significantly limit the amount and danger of harm there in event of any catastrophic or intentional disaster. Understanding how to go about it and who to notify in an emergency can save blood and treasure [17].

## 2. LITERATURE REVIEW

The researcher P. Nilsen [18] Examines the philosophical underpinnings of neighborhood safety training. A theory is created by explaining the principles of community-based programming using literature. Hypotheses are then pushed to the limit, given how much the hypotheses are supported by objective research as well as how they have been implemented in community-based prevention strategies. Basic concepts are established that require adding a neighborhood approach to safety training. According to the findings, several concepts may have significant flaws. Geographic or geopolitical divisions are primarily defined as communities in programming, which is why these entities can be diverse and lack a strong sense of community. This may result from a lack of address planning and program access. Also, some of the most obvious ideas are never extensively or fully implemented in programmed development.

The result is that many community-based health and safety interventions are not working as efficiently as possible, which may explain why many of these organizations have trouble establishing overall success.

Osha et al. [19] In underdeveloped nations in Asia, --oriented action oriented maintenance programs to enhance safety and health are now increasingly important. The results of three vation oriented oriented funding programs were given in this section: the WISE program for small companies, the Affirmative sequencer for workforces, and organized workers. Particular consideration was compensated to how the courses supported a resident commitment to integrating long-term safety and security reforms. The results showed substantial achievements in the regions action-oriented support programs, such as large-scale reform cases, inclusion within public guidelines, and network-support-through business and activist groups. Collaborative, -oriented action oriented learning standards like intervention, local good example images, plus group work procedures proved critical to the initiatives' full integration. It was noteworthy that a lot of smaller attempts were made to increase the accessibility of counseling to hard-to-reach personnel such as parent's house workers, rural workers, and even minority ethnic groups.

L. Snowden et al. [20] Asian have higher unemployment and deeper levels of poverty than whites, and their poor spells tend to last longer. Additionally, non-porous Asians are more likely to fall into poverty, and many African Americans will face hardship during their lives. As a result of both, Asians are disproportionately helped by the safety nets that provide economic aid, health care, and other social services. When it comes to mental health-related outcomes, both internal and external studies of the social safety net have found that adults and children experience a reduction in mental illness symptoms after participating. If all other factors are held constant, these advances would greatly benefit the mental health of Asians. When analyzing safety net programmed economic and social consequences, as well as their effects on Asian psychological disorders, their mental health-related effects should be regularly reviewed. This type of policy study can help us figure out whether such big-scale programs result in societal-wide mental improvements in health in the disproportionate number of Asians who enroll.

#### Research Question:

- The goal of this research was to look into the strategic challenges surrounding employee safety and welfare in various manufacturers.
- To recommend various solutions for reducing occupational dangers in a manufacturing environment.

#### 3. METHODOLOGY

#### 3.1. Design:

The type of investigation is chosen to solve the identified problems. "Descriptive research" is the data analysis method applied within this case. The descriptive research involved a variety of surveys and acquisition questions. The main purpose of the description is to characterize the current state of affairs. Attempts were made to find out the many causes of the problem and provide solutions.

#### 3.2. Instrument:

Group members were a questionnaire for the experiment. A questionnaire, consisting of a set of questionnaires containing a number in a certain format, has been used to collect data for this research. Each piece was given a questionnaire.

#### 3.3. Data Sample:

This research will be conducted using secondary researches in this area. Employee critical information was acquired using structured questions to truly understand their perceptions of the worker protection program in their manufacturing and production as well as other aspects. Secondary data for the study was obtained from publications and encyclopedias, and data for the study was collected through questionnaires from the staff of the manufacturers. The sample size is 100 people.

## 3.4. Data Collection:

After the fieldwork was finished large samples were coded, and reproduced and tables were created. For data interpretation, appropriate elementary statistical techniques including percentages and graphics were used, even though there are some constraints. The first is that the respondents cannot communicate their true feelings, and the second is

that there appear to be industrial companies spread across India, making it extremely difficult to collect data from respondents across the country.

Table 1: This Table Shows Responses to Surveys Conducted to Determine the Presence of Safety Equipment in the Organization

Sr. No.	Response	No. of Respondents	Percentage
1.	No	0	0%
2.	Yes	100	100%
Г	otal	100	100%

Table 1 shows that the institution is a very good security committee. The fact that the business maintains an active safe workplace is agreed upon by 100% of the participants. Since all employees are aware of the safety committee, it shows that now manufacturing companies have taken all steps to ensure that everyone is covered by the work group. The safety committee needs to keep up with temporary variations, and the business must also make all employees aware of safety equipment and how to use it. So that in case of emergency, accidents can be avoided and the damage to the person and safety can be minimized.

Table 2: This Table Shows the Safety Programmes for the Manufacturing Concerns

Sr. No.	Response	No. of Respondent	Percentages
1.	Yes	88	88%
2.	No	12	12%
Т	otal	100	100%

Table 2 shows that personnel is aware of safety programs offered by manufacturing and production, as well as monitoring safety rule-breaking by the health manager. As per the table, 43% of the defendants believe that checking is done by reflection, 35% believe that it is done through discussion with superiors, and 22% believe that it is done after an injury shown in Table 3.

Table 3: Illustrates that the Violations of the Safety Protocols are being investigated

Sr. No.	Response	No. of Respondents	Percentage
1.	Consultation with the Superiors	35	35%
2.	Occurrence of Damage	22	22%
3.	Through Observation	43	43%
	Total	100	100%

## 3.5. Data-Analysis:

The firm has made industrial safety completely clear. Table 4 shows that 57% of the respondents chose safety training, 28% chose a risk management committee, and 15% chose regular monitoring.

Table 4: Table Outlining the Organization's Efforts to Ensure Industrial Safety

Sr. No.	Response	No. of Respondents	Percentage
1.	Safety-Training	57	57%
2.	Regular Inspection	15	15%

3.	Safety Committee	28	28%
Total		100	100%

Table 5 shows that 52% of the defendants believe that it is due to essential hazards, 26% believe that it is due to accident, and 22% believe that it is due to slip/fall of personnel.

**Table 5: Illustrates the Cause of Industrial Accidents** 

Sr. No.	Response	No. of Respondents	Percentage
1.	Collision	26	26%
2.	Slip/fall	22	22%
3.	Inherent Hazards	52	52%
Total		100	100%

The option for health protection was seen in Table 6. As per the table, 84% of them earned hospitalized benefits, 16% obtained health insurance, and none of the interviewees received disability insurance.

**Table 6: Illustrates the Provision for Health Protection** 

Sr. No.	Response	No. of Respondents	Percentage
1.	Hospitalization	84	84%
2.	Health Insurance	16	16%
3.	Accident Insurance	0	0
	Total	100	100%

#### 4. DISCUSSION

There is a clear association between proper HSM and senior zorganization concerts. The next sections describe the many achievement consequences of continuing good well-being and protection processes and controls. Appropriate organizational health and safety can assist increase employees' morale and give workers faith in the organization's culture. Because workers are the most damaged persons owing to their direct participation in threatening activities, management could increase the employee's work attitudes and faith in the administration by providing a safe workplace environment. Organizational safety and health planning that allows employees to engage in systems engineering can provide a platform for workers to contribute to important corporate concerns, giving workers a sense of belonging and commitment. Participatory leadership in decision-making fosters corporate citizenship (concern), amicable strategic planning negotiation, and a high degree of dedication to task accomplishment, which validates this fact.

Management's commitment to delivering a safe and healthy work environment through the operation of a good well-being and protection arrangement goes a long way toward meeting workers' survival needs and encouraging them. Since then, Abraham Maslow's demands hierarchy theory had highlighted the psychological importance of privacy and protection needs. Establishing an operative well-being and safety system and strategy can drastically decrease the incidence and impact of potential dangers, as well as the time and expense with them. Hospital expenses and remuneration for hospitalized workers would indeed be minimal, as this would be reimbursement to families of workers involved in industrial accidents or medical issues. It's crucial to remember that racking up a bunch of these necessary expenses might put a corporation in a bad financial and commercial situation, reducing its inexpensive improvement in the market.

A positive healthiness and safety the system can contribute to enhancing workplace relationships and reducing workforce conflict. Management's commitment to creating a very strong safety net and protocols demonstrates the employer's concerns about the safety of its personnel, helping them to reach their maximum capabilities within this

firm. Because of the significant amount of workers exposed to occupational risks and hazards, this environment can help reduce union complaints. Safety and health that are effective have a strong business image, which can attract potential shareholders. Such a situation in retaining and attracting experienced, hence enhancing the competitive position of the institution with improved performance, quality performance, and efficiency.

Reduced attendance rates, loss of production, workforce turnover, productivity, quality, and some other financial benefits could all be attributed to health and safety programs. In a company with such an effective health and safety culture, tardiness and absences may be reduced, and occupational dangers and accidents can be greatly diminished. As a result, the adequate focus would be placed on good achievement for the company successfully meet client needs in terms of time, number, and services of the right quality.

## 5. CONCLUSION

Most firms adhere to performance expectations the workers will be solely responsible for fulfilling this objective, which will be monitored by the administration. The administration of some organizations prefers to focus more time and attention on equipment, machine, and substance upkeep there at the price of financial activities, which are necessary for a firm to influence other resources to accomplish its goals. The provision of a positive safety culture for employees is also one of the ionexpenses that company administration overlooks, specifically in 3<sup>rd</sup> world countries. There is virtually no legal administration agency in India, as in practically all other Asian countries, which is responsible for directing regular inspections and checks in organizations to ensure conformity to employment and safety rules and practices. That has been the cause of a great number of workplace accidents and occupational illnesses in businesses over the years. Good health and safety governance has been proven to have a great relationship with improving organizational efficiency and success, as the costs associated with its absence can be significantly reduced.

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