Employees Health and safety Management Life Cycle and Basic Structure

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ABSTRACT: Employers should provide employees with the necessary training to reduce accidents in the workplace. All equipment or apparatus must be operated properly and efficiently by employees. Accident prevention, according to Employee Safety and Health, is largely an engineering problem that may be managed by appropriately implementing mechanical safety measures. In reality, accident prevention and safety are inextricably linked, needing a multi-pronged approach. As a consequence of large-scale industrialization, which exposes people to mechanical, electrical, and radiation threats, its relevance has expanded. As an example, using a simple random selection technique, a total of 300 employees were picked, and a very well questionnaire was designed to obtain the essential information from the respondents. Questionnaires were collected via personal interviews. Several statistical approaches were used in this study, including the percentage method. According to the findings of the research, incorrect material handling is the leading cause of workplace accidents. As a consequence, vestibule training might be part of an employee onboarding program. Ergonomics is a method of enhancing employee safety and well-being. Future Prospects Employee welfare has evolved through time to include: Promoting or maintaining entire worker well-being across all occupations. Employees must be protected against occupational health risks. Workers are safeguarded from the risks that come with their work.

Keywords: Employees, Health, Management, Safety, Workplace.

1. INTRODUCTION

It is your responsibility as a company to make your workplace healthy or safe. A security and patient considerations framework, sometimes known as a wellness program, can help you focus your efforts on improving your work environment. Your arrangement, whatever you choose to name it, describes how your employees protect themselves against work-related injuries and illnesses [1]. Your company's framework will address how you can go about your work, the risks you confront at work, and how you take care of various health and wellness issues. If you own a small business in a low-risk industry, your system could be as simple as listening to and responding to your employees' concerns [2].

Each working environment continues to place a premium on safety and health. Companies throughout the globe, regardless of industry, must guarantee that their employees are safe. It also is smart commercial practice, in addition to satisfying changing government laws on safety. Worker safety and security are much more productive as well as lucrative for businesses that prioritize them. It's not simply about establishing a companies or organization's proper image or reputation. Health & security software aids in the protection of employees in the workplace [3]. This covers office personnel as well as field personnel. The software gives a wealth of learning possibilities for the team. This implies that even at the end of each day, consistent outcomes with fewer errors would be achieved [4]. Health & security software may be updated to reflect the new legislation. This guarantees that onsite personnel has access to the most current information at all times [5].

1.1. Awareness of Health or Safety Management:

Everyone in an industry's safety should be a top concern. Employees who work for companies that show concern for their health and well-being are more productive or efficient. Employee safety and health, on the other hand, have an influence on firms in much more ways than one.

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- Businesses that concentrate on creating a "safety first" culture realize that morale rises as a result. This reduces workplace stress, resulting in better employee health.
- Furthermore, a pleasant workplace contributes to higher overall consumer satisfaction. This one has a direct correlation to increased client retention and company growth. The goal is to keep safety in check while also balancing other business priorities [6].

1.2. Workplace Health or Safety

In the workplace, a robust safety culture delivers a lot. Investment in workplace health & security software significantly avoids terrible incidents from occurring. Any firm must demonstrate care for the health as well as safety of its employees. Figure 1 shows safety management in the workplace.



Figure 1: Illustrate the major types of safety Management for a worker in the organization.

People are an increasing source of worry. People are the most important aspect of every business in terms of manufacturing things and providing services, as well as selling products and generating a profit. As a result, no company can operate without people. The people that make up an organization's employees determine the quality of its work or its efficiency. The human component is the most essential of all the production variables; the success of a firm is dependent on it. The Factories Act of 1948 places a premium on working conditions with relation to different aspects of workers' health, safety, and welfare. Certain duties are imposed on the Employers by these rules. That is, to safeguard employees against accidents, both unwary and negligent, or to provide them with working conditions that are conducive to their health, safety, as well as welfare.

These laws also require management to have inspection personnel on hand and to provide preparations for health, hygiene, overcrowding protection, and amenities like ventilation, lighting, and drinking water. The statute mandates the employment of the welfare officer as well as a health and safety representative in each workplace employing over 300 people. The Workman's Compensation Act of 1923 enables employees to compensation for any harm sustained as a result of their job, as well as some industrial reductions, and employers are required to follow the act's provisions for the employees' well-being. The major goal of the Industrial Disputes Act is to safeguard workers from being forced to labor for excessively extended periods, either physically or mentally [7], [8].

1.3. Business Advantage of occupational health or safety management:

To build or maintain a healthy and secure work atmosphere, several criteria are in place. The key to ensuring a safe workplace is to create and implement a strong safety management system. Safety management is a collection of aspects in a company that must be addressed to offer safe working conditions for everybody who enters. Health or safety becomes an indispensable element of your business's fundamental functioning when you have well-designed and effective safety management systems. Figure 2 shows the advantage of health and safety management.



Figure 2: Illustrate the Benefits of health and Safety Management, such as Improve resilience, fewer cost, Higher cost etc.

1.4. Management of Workers Safety and Health Programs:

All layers of management are committed to protecting as well as promoting the safety of individuals working at or planning to visit member corporation work sites by implementing published policies, holding people accountable for their application, and providing adequate resources, which include qualified safety or health personnel.

- Employee participation in the development, implementation, or evaluation of health or safety initiatives.
- Procedures, including eligibility criteria, to ensure that on-site contractor programs are compliant with this Code's relevant Management Practices.
- Safety and health processes and procedures that are written or up to date for the institution.
- Means of ascertaining the effectiveness of health and safety plans and procedures, as well as the consistency of everyday practices with any of these programs and processes.
- Systems for keeping records or analyzing data to assess safety or health performance, spot trends, and pinpoint
 opportunities for improvement.

The major goal of the occupational health or safety program is to prevent diseases, occupational injuries including fatalities, or suffering especially the financial burden that these events might cause for employees, families, but also employers. The proposed techniques implement the necessary health and safety measures in the workplace. Traditional techniques are often reactive, in the sense that issues are only addressed when an employee is harmed or falls ill, a new platform or legislation is issued, or an outside inspection discovers a flaw that has to be addressed. These best practices emphasize that recognizing and eliminating dangers before they cause damage or sickness is a considerably more effective means of preventing injury or disease[9]–[11]. Employers would find that implementing these recommended practices has added benefits. The following are some of the ways that safety and health programs help businesses:

- Workplace injuries or infections should be avoided.
- Increase compliance with rules or regulations.
- Significantly reduce costs, including workers' compensation premiums.
- Encouraging staff to engage is a good idea.
- Increase their social responsibility goals
- Improves your company's current operations or increases productivity.

In this paper, the author discussed various factors of employee safety and health management. This author discusses health or safety management awareness. Occupational health or safety management also has a business advantage. The key objective of this research.

- The study highlights the need of learning about employee safety and health.
- The project was created in response to the expectations of the workforce.
- It would be beneficial for management to increase the organization's employee safety and health procedures.
- This study will serve as a foundation for the researchers conducting the survey.

2. LITERATURE REVIEW

P. Katsuro et al. studied the impacts of workplace health or safety on worker production. The goal of this investigation was to see what a healthy work environment meant for efficiency in the commercial food sector. The purpose of the review was to look at OHS concerns in various work environments and determine what they signify in terms of usefulness. The developer of the review focused on creation leaders, shop floor workers, and current facility employees. Data was collected through questionnaires, interviews, and observations as study tools. The author of this article discovered that occupational health and safety issues had a detrimental impact on employees' industrial output in the food business, resulting in lower workers' productivity. Workers have a bad attitude about work or poor morale. According to the report, food processing plants could improve their OHS via training as well as the adoption of modern technology [12].

Thanwadee Chinda et al. studied individual but also group values, perceptions, attitudes, competencies, as well as behavior patterns all play a role in determining an ongoing vision to the management of health or safety. It differs from nation to country. Because of variances in ethnicity, country, religion, and neighborhood, employees may act differently. Employee participation and satisfaction are important factors to consider when creating a good safety culture because they encourage continual improvement, which may also lead to increased productivity. The author of this study examines the connections between People, Results, and Production in the textile sector using exploration factor analysis or structural equation modeling. The findings are likely to provide a better understanding of how employee participation in safety leads to increased productivity in the workplace. People Results from Productivity 105 also demonstrate that a successful safety implementation may boost productivity, as evidenced by an indirect impact from Persons to Productive output through People Outcomes. Textile firms may utilize the findings of the investigations to develop a safety program that will boost production [13].

According to N. Holmes et al., mean captions or risk knowledge and understanding in occupational safety between employers or employees influence the management of dangers at work. Employers and workers from an Australian small, blue-collar firm sector took part in a study on perceived risks or conceptions in OHS. To explore the deeper meaning of risk or its control, an anthropological descriptive study was used to extract explanations of risk judgments. In the literature, there are three categories of risk studies: technical, psychological, and social. The role of these interactions in the creation of risk perceptions and their control in OHS has received little consideration. The findings of this study show that interactions among risk perceptions and understandings, but also risk management in OHS, lead to a wide range of risk control interpretations among employers and employees in the Occupational Health and Safety sectors [14].

Determinants of Distribution Network Employees' Safety Procedures was investigated by Kittisak Sriyakul et al. Businesses in the supply chain place less emphasis on their workers' safety actions, and thus face a variety of difficulties connected to employee safety behavior. One of the causes for Indonesia's poor logistic performance is this problem. The purpose of this research is to look at the factors that influence supply chain workers' safety. Furthermore, as a mediator factor, employee engagement is significant in supply chain employee safety behavior. A survey is conducted in this research to get responses from Indonesian supply chain personnel. Workers in the supply chain were polled using 600 surveys in total. 350 replies were received out of the total of 600 surveys. The data is analyzed using partial least squares. Employees' conscientiousness and competence are major drivers of supply chain employee safety behavior, according to the author of this research. Furthermore, effective results need staff dedication [15].

Research questions.

- What are workers' obligations in terms of health or safety?
- What are the safeguards in place for workers at a company?

3. METHODOLOGY

3.1. Design:

In this study, the sort of research employed was descriptive. Descriptive research is simply fact-finding that is primarily concerned with the current, abstracting generation via a cross-sectional examination of the present situation. In natural or physical science, descriptive techniques are often utilized, for example, whenever physics measures, zoology

dissects, biology classifies, or geology analyses rock. However, it is more often used in social science, such as in socioeconomic surveys as well as employment or activity analyses.

3.2. Sample:

In this case, the total population is 700, and 300 representatives were picked using a simple arbitrary inspection approach and a very well-organized poll to isolate the essential data from the respondents. A secret meeting was used to collect polls.

3.3. Data Collection:

Data is acquired through a series of questions. The interview questions were developed in response to issues that employees confront at work, and they were delivered to the employees.

Table 1: Respondents are Distributed Based on their Designation.

Serial No.	Designation	Number of Respondents	Percent
1	Temporary operating trainee	90	30%
2	Operator	78	26%
3	Apprentice	37	12.3%
4	Contract Labour	50	16.6%
5	Executive	45	15%
	Total	300	100%

Table 2: Respondents are distributed based on their Gender.

Serial No.	Gender	Number of Respondents	Percent
1	Female	75	25%
2	Male	195	65%
3	Other	30	10%
	Total	300	100%

Table 3: Clear and Effective Communications Connections inside the Organization about the Health Safety Measures.

Series No.	Effective health and Safety Measures	Number of Respondents	Percent
1	No	65	21.6%
2	Yes	235	78.4%
3	Total	300	100

Table 4: Level of Employee Satisfaction towards Safety Measures

Series No.	Opinion	Number of Respondent	Percent
1	Satisfied	90	30%
2	Highly Satisfied	160	53.3%
3	Dissatisfied	40	13.3%
4	Highly Dissatisfied	10	3.3%
5	Total	300	100%

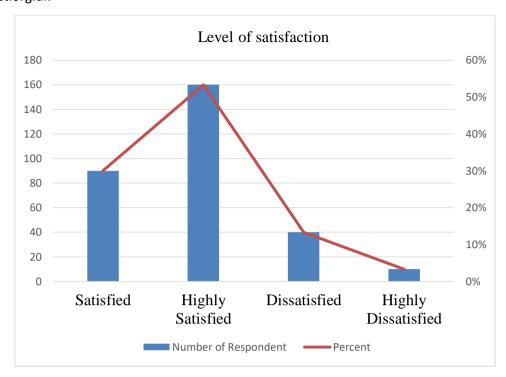


Figure 3: Illustrate the Employee's Level of satisfaction in their organization.

Table 5: Respondent Distribution Based Just on Reasons For the Stress Relief Assessments.

Series No.	Stress Relief Measurement	Number of Respondents	Percent
1	Holidays or leave with pay	60	20%
2	Thanking staff for their efforts	150	50%
3	Work hours that are reasonable	40	13.4%
4	Pauses for rest	50	16.6%
5	Total	300	100

3.4. Data Analysis:

Table 1 shows the response based on Designation in which Temporary operating trainee is 30%, Operator is 26%, Apprentice is 12.3%, Contract Labour is 16.6%, Executive is 15%. Table 2 and 3 shows responses based on Gender, in which, Females is 25 %, Male, are 65%, and other 10%. Table 4 and Figure 3 show the level of satisfaction of employees towards safety measures in which 30 % of employees are satisfied, 53% employees are highly satisfied, 13.3 % workers are dissatisfied and 3.3 % workers are highly dissatisfied. Table 5 shows a response based on Stress relief assessment in which, holidays or leave with pay is 20%, thanking staff for their efforts is 50%. Reasonable work hours are 13 %, and pauses for rest are 16.6%.

4. RESULT AND DISCUSSION

Figure 4 depicts highly responsive employees in response to various inquiries. Out of 300 workers, 30% replied based on their job title, which is Temporary operational trainees. In a survey of 300 workers, 78% said yes. Based on clear and effective internal communications links on health-related safety measures. Out of 300 employees, 53.3 % are very happy with their jobs. The Stress Relief Assessments were completed by 50 % of the 300 employees. Based on gender, 65% of 300 employees replied to the workers' survey.

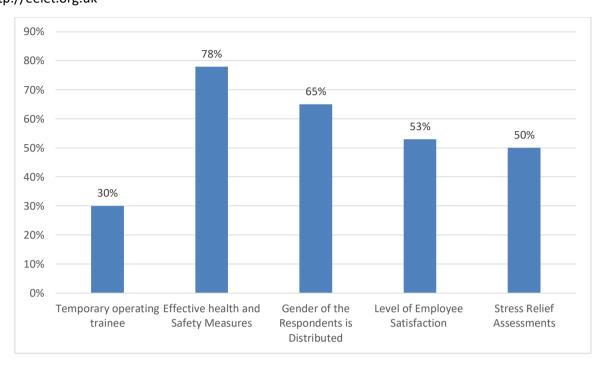


Figure 4: Demonstrate how the worker's overall response changed based on the questions.

The most common cause of workplace accidents in the business is improper material handling. As a result, vestibule training may be included in a training program. The frequency of security training for workers on health and wellbeing may be reduced to once a month rather than twice a year. It is necessary to ensure that proper First Aid facilities are maintained. The rest roam must be rebuilt with enough room, as well as the sports center facilities might be expanded to temporary workers. It is recommended that the ergonomics technique be used. In an ergonomic workplace, items are developed to meet individual strong and weak points so that workers can execute their jobs safely. Counseling helps people solve psychological and technical issues that arise as a result of their workplace environment. Temporary workers might also be subjected to a thorough pre-employment or post-employment medical assessment.

5. CONCLUSION

It entails integrating your health and safety activities and programs into your other company duties, or it includes health and safety arrangements, frameworks, standards, and records. Developing a positive management framework improves your capacity to spot dangers and manage risks in the workplace. This study provided a clear picture of the scenario in which a significant number of accidents occur in the organization, as well as the actions that the organizations should take to decrease these accidents and avoid them in the future. Vestibule training, recreational facilities, first-aid facilities, counseling programs, or pre-employment as well as post-employment medical checkups are some of the proposed approaches for increasing employee safety or health. The survey results will be used to make the required improvements to the company's employee safety and health policies. By using the notion of Ergonomics, the aforementioned concept might be better envisioned to improve employee health and safety.

REFERENCES

- [1] N. S. Schultz, K. K. H. Chui, C. D. Economos, A. H. Lichtenstein, S. L. Volpe, and J. M. Sacheck, "A Qualitative Investigation of Factors that Influence School Employee Health Behaviors: Implications for Wellness Programming," *J. Sch. Health*, 2019, doi: 10.1111/josh.12831.
- [2] I. Hafee, Z. Yingjun, S. Hafeez, R. Mansoor, and K. U. Rehman, "Impact Of Workplace Environment On Employee Performance: Mediating Role Of Employee Health," *Business, Manag. Educ.*, vol. 17, no. 2, pp. 173–193, Nov. 2019, doi: 10.3846/bme.2019.10379.
- [3] P. W. Lichtenthaler and A. Fischbach, "Leadership, job crafting, and employee health and performance," *Leadersh. Organ. Dev. J.*, 2018, doi: 10.1108/LODJ-07-2017-0191.
- [4] S. Gisler, R. Omansky, P. R. Alenick, A. M. Tumminia, E. M. Eatough, and R. C. Johnson, "Work-life conflict and employee health: A review," *Journal of Applied Biobehavioral Research*. 2018. doi: 10.1111/jabr.12157.
- [5] C. Zheng, J. Molineux, S. Mirshekary, and S. Scarparo, "Developing individual and organisational work-life balance strategies to improve employee health and wellbeing," *Empl. Relations*, vol. 37, no. 3, pp. 354–379, Apr. 2015, doi: 10.1108/ER-10-2013-0142.

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http://eelet.org.uk

- [6] M. Van Veldhoven, T. W. Taris, J. De Jonge, and S. Broersen, "The relationship between work characteristics and employee health and well-being: How much complexity do we really need?," *Int. J. Stress Manag.*, 2005, doi: 10.1037/1072-5245.12.1.3.
- [7] S. Cąliş and B. Y. Buÿükakinci, "Occupational Health and Safety Management Systems Applications and A System Planning Model," 2019. doi: 10.1016/j.procs.2019.09.147.
- [8] G. B. Garnica and G. D. C. Barriga, "Barriers to occupational health and safety management in small Brazilian enterprises," *Production*, 2018, doi: 10.1590/0103-6513.20170046.
- [9] S. L. C. da Silva and F. G. Amaral, "Critical factors of success and barriers to the implementation of occupational health and safety management systems: A systematic review of literature," *Safety Science*. 2019. doi: 10.1016/j.ssci.2019.03.026.
- [10] K. Wong, A. H. S. Chan, and S. C. Ngan, "The effect of long working hours and overtime on occupational health: A meta-analysis of evidence from 1998 to 2018," *Int. J. Environ. Res. Public Health*, 2019, doi: 10.3390/ijerph16122102.
- [11] N. de Jager, A. G. W. Nolte, and A. Temane, "Strategies to facilitate professional development of the occupational health nurse in the occupational health setting," *Heal. SA Gesondheid*, 2016, doi: 10.1016/j.hsag.2016.03.003.
- [12] T. M. and S. M. P. Katsurol, C. T. Gadzirayi2, "Impact of occupational health and safety on worker productivity: A case of Zimbabwe food industry", 2010.
- [13] T. Chinda, S. Techapreechawong, and S. Teeraprasert, "An Investigation of Relationships between Employees' Safety and Productivity," pp. 97–106, 2012, doi: 10.32738/ceppm.201209.0010.
- [14] N. Holmes, S. M. Gifford, and T. J. Triggs, "Meanings of risk control in occupational health and safety among employers and employees," *Saf. Sci.*, vol. 28, no. 3, pp. 141–154, 1998, doi: 10.1016/S0925-7535(97)00078-7.
- [15] K. Jermsittiparsert, T. Sriyakul, J. Sutduean, and A. Singsa, "Determinants of supply chain employees safety behaviours," *J. Comput. Theor. Nanosci.*, vol. 16, no. 7, pp. 2959–2966, 2019, doi: 10.1166/jctn.2019.8202.
- [16] Kumar, S. A. S., Naveen, R., Dhabliya, D., Shankar, B. M., & Rajesh, B. N. (2020). Electronic currency note sterilizer machine. Materials Today: Proceedings, 37(Part 2), 1442-1444. doi:10.1016/j.matpr.2020.07.064
- [17] Sharma, R., & Dhabliya, D. (2019). A review of automatic irrigation system through IoT. International Journal of Control and Automation, 12(6 Special Issue), 24-29. Retrieved from www.scopus.com