

A Study on Employee Safety at Work Place

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Abstract: *The significance of workplace safety and its effects on employee well-being and organizational success are examined in this study. The study evaluates the efficacy of current safety standards by focusing on a number of industries, such as manufacturing, healthcare, construction, and logistics. It looks at how safety procedures are being followed, how aware employees are of their surroundings, and whether there are gaps in safety equipment and training. Employee experiences with safety procedures, the frequency of accidents, and their opinions of workplace safety were the main topics of data collection conducted through surveys and interviews. The survey discovered that although most workplaces have emergency exits, fire extinguishers, and personal protective equipment (PPE), there are still large gaps in worker safety awareness and training. The majority of workers said they felt comfortable going about their work, but a sizable percentage said that safety training and drills weren't done frequently enough. The study also revealed a lack of participation in safety culture, with many workers unclear about how to report safety issues or whether management respected their input on health and safety. The results highlight the necessity of frequent safety training, constant safety measure improvement, and developing an organizational culture that prioritizes safety. Strengthened leadership commitment to workplace safety, improved communication of safety rules, and improved training programs are among the recommendations. These actions are essential for lowering workplace accidents, boosting morale among staff members, and guaranteeing that safety rules are followed. In the end, the study shows that proactive employee safety measures enhance operational effectiveness and corporate reputation in addition to safeguarding the workers.*

Keywords: Accident Prevention, Mental Health and Well-being Workplace Stress, Employee Safety, Workplace Safety, Safety Procedure, Safety Training, Safety Equipment, Health and Safety

I. INTRODUCTION

A key component of organizational management, workplace safety has a direct bearing on workers' health as well as the general effectiveness and prosperity of a company. The term "workplace safety" refers to the set of rules, guidelines, and practices designed to guarantee a safe working environment and reduce the likelihood of mishaps, diseases, and injuries. It includes a broad range of precautions intended to shield workers from potential risks that could come from their regular work, including chemical, biological, physical, and ergonomic ones.

II. OBJECTIVES

- To assess the current safety policies and procedures implemented at the workplace.
- To evaluate employee awareness and understanding of safety protocols and practices in the organization.

III. LITERATURE REVIEW

3.1. Effectiveness of Safety Training Programs

- **Research Gap:** Despite the widespread implementation of safety training programs, there is limited research on the effectiveness of these programs in achieving long-term behavioral change and reducing workplace incidents.
- **Possibility:** Undertake research to assess the effects of various training approaches (e.g., interactive versus conventional lectures) on worker safety practices and incident frequencies. Examine the long-term effects of ongoing instruction and refresher courses on safety compliance.

3.2. Integration of Technology in Safety Practices

- **Research Gap:** Comprehensive study on the integration of emerging technologies, like wearable safety devices, artificial intelligence, and Internet of Things (IoT) solutions, into safety procedures and their efficacy in augmenting workplace safety is lacking.
- **Possibility:** Analyze the ways in which modern technologies can be applied to identify and address safety concerns. Look at case studies where technology has been used effectively to understand how it impacts safety outcomes and identify best practices for implementation.

3.3. Psychological Safety and Its Impact on Physical Safety

- **Research Gap:** While physical safety measures are well-documented, there is less understanding of how psychological safety (i.e., employees' comfort in reporting issues or expressing concerns without fear of retribution) influences overall workplace safety.
- **Possibility:** Study the relationship between psychological safety and physical safety outcomes. Examine how fostering a supportive and open work environment can lead to improved reporting of hazards and a reduction in accidents.

IV. RESEARCH METHODOLOGY

The research will use a mixed-methods approach, incorporating both **quantitative** and **qualitative** data collection techniques:

- **Surveys:** Workers will be surveyed on their perception of workplace safety, awareness of safety protocols, and availability of PPE.
- **Interviews:** In-depth interviews will be conducted with safety officers, HR managers, and line supervisors to gain detailed insights into safety procedures, challenges, and areas of improvement.
- **Workplace Observations:** Observational visits to manufacturing sites will be conducted to directly assess safety measures and adherence to protocols.
- **Company Records:** Analysis of historical safety data, such as accident reports, injury statistics, and compliance with regulatory standards.

Statistical Tools

1. Descriptive Statistics
2. Correlations
3. Model Summary
4. ANOVA
5. Coefficients
6. Residuals Statistics

V. DESCRIPTIVE ANALYSIS

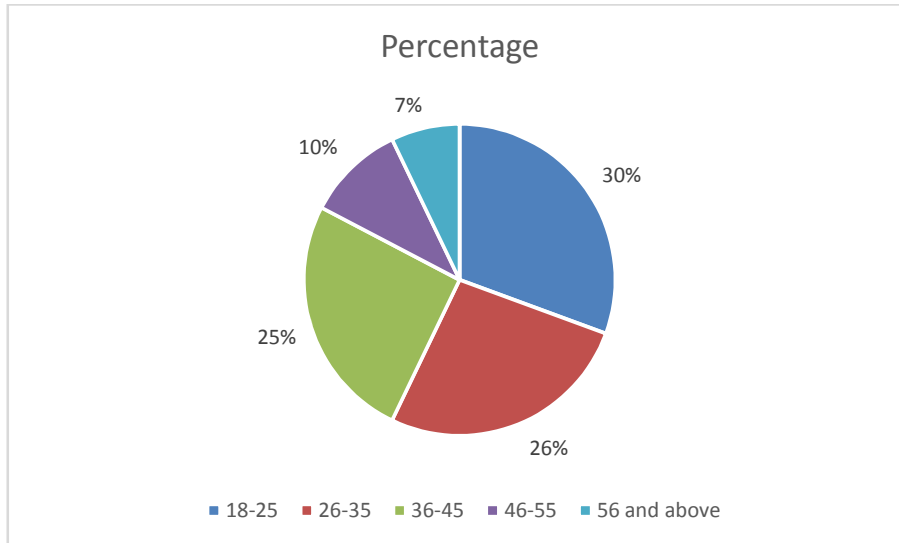
1. Age Distribution of Respondents?

Age Group	Percentage
18-25	30%
26-35	26%
36-45	25%
46-55	10%
56 and above	7%

Analysis:

The distribution of respondents by age group is depicted in the following chart. The largest category comprises of the respondents, with thirty percent falling within the 18–25 age bracket. After this, 26% of responses are between the ages of 26 and 35, and 25% are between the ages of 36 and 45. 10% of respondents are in the 46–55 age range, while 7% of

respondents are in the 56 and older age group. These are the smaller age groups of respondents. With fewer responses in the older age categories, the data shows a fairly balanced distribution throughout the three younger age groups.



Interpretation:

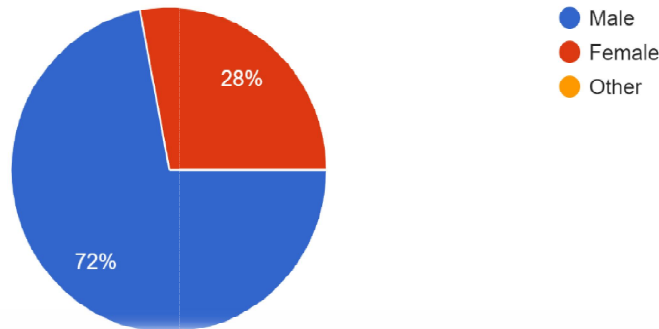
Given this distribution of age groups, it may be beneficial to tailor initiatives or communication strategies to address the diverse needs of each age category. With a significant portion of respondents (30%) in the 18-25 age group, it is crucial to focus on programs that resonate with younger individuals, such as career development and growth opportunities. Similarly, the 26-35 (26%) and 36-45 (25%) groups, which also represent a large proportion, might benefit from a focus on work-life balance or leadership roles. Meanwhile, even though smaller, the older age groups (46-55 and 56 and above, totaling 17%) should not be overlooked, as they may value stability, retirement planning, or recognition for their experience. Addressing these distinct needs can help create a more inclusive environment that resonates with all age groups.

2. Respondent's Gender Distribution

Gender	Frequency	Percentage
Male	72	72%
Female	28	28%
Other	0	0%

Analysis:

The chart shows that 72% of the respondents are male, while 28% are female, with no representation from other genders (0%). This suggests that the majority of the participants in the poll are male, highlighting a significant gender imbalance. This skewed representation could influence the overall results, as the experiences and reporting of stress might differ by gender, potentially limiting the insights into how stress affects a more diverse workforce.



Interpretation

The chart shows the gender distribution of the respondents, with 72% identifying as male and 28% as female, while no respondents identified as "Other." This indicates a significant majority of male participants in the poll, with nearly three-quarters being men, and just over a quarter being women. The absence of responses from non-binary or other gender categories suggests either a lack of representation or non-disclosure in this group. This gender disparity may influence the overall findings, especially in industries or workplaces where men are more prevalent.

VI. ANOVA

The ANOVA F-statistic is 5.110, with a p-value of 0.026. Since this p-value is less than 0.05, we conclude that the model is statistically significant, meaning that the relationship between department/division and workplace safety is meaningful in the population (though it explains only a small portion of the variance).

Hypothesis

Hypothesis Null (H0):

There is no significant difference in employees' perception of overall workplace safety across different departments.

Hypothesis Alternative (H1):

There is a significant difference in employees' perception of overall workplace safety across different departments.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.974	1	3.974	5.110	.026 ^b
	Residual	76.216	98	.778		
	Total	80.190	99			

ANOVA

Characteristics:

The bulk of responders are younger, as evidenced by the age group distribution, with 26% of respondents in the 26–35 age group and 30% in the 18–25 age group. This suggests a workforce that is primarily younger. 72% of respondents identified as male, compared to 28% who identified as female, indicating a skewed gender distribution. The absence of representation from other genders could indicate that the sample lacks diversity or transparency.

Perception of Workplace Safety:

- In general, 39% of participants assessed their workplace safety as "Fair," whereas 36% deemed it to be "Good." Less people (21%) gave safety a "Excellent" rating, suggesting that although people generally think safety is good, it can yet be improved.

- While 33% of respondents feel comfortable "Sometimes," a significant portion still faces safety worries, the majority of respondents (41%) feel safe "Most of the time" while carrying out their professional activities.

Safety Gear and Instruction:

- Among workers, 62% claim to have access to the essential safety gear, whereas 19% do not, which could put those in risky jobs at serious risk.
- 71% of respondents said they have received training on workplace safety procedures. But 17% are unsure and 12% report having no training, suggesting that there are still gaps in knowledge and training.

Reporting and Addressing Safety Concerns:

Although 51% of respondents know how to report safety problems, 24% don't know and 25% aren't sure. This indicates that there is a need for improved communication and reporting process training.

Just 27% of people who raised safety concerns said the problem was satisfactorily remedied, while 33% said nothing was done. This shows inefficiencies in handling safety-related issues and might deter workers from raising similar issues in the future.

Issues with Workplace Health:

Significantly more respondents (59%) than expected reported having health problems related to their jobs, such as respiratory disorders, stress, or back pain. This underscores the need for better physical safety precautions as well as wellness initiatives.

Safety Procedures and Exercises:

Frequent safety drills are widespread; 34% and 40% of respondents, respectively, reported participating in drills on a monthly basis. Nevertheless, 12% of respondents said they never take part in safety drills, which may point to inconsistent application across departments.

Comments Regarding Safety:

Of the respondents, 53% disagreed and only 47% thought management valued their input on health and safety. This suggests a misalignment in the value that management and staff place on employee feedback.

Discussion

The study results show that most workers have access to safety procedures and training, but there are still large gaps that need to be filled to guarantee overall workplace safety. The workforce has differing perceptions of safety, with a significant portion of workers voicing worries about their safety while carrying out their jobs. Almost one-fifth of the workforce lacks access to safety equipment and appropriate training, thus these are important issues that need to be addressed.

There seems to be a barrier to reporting safety concerns: a lack of knowledge about the protocols and discontent with the way issues are resolved. According to the statistics, there are inefficiencies in the way safety issues are handled; a significant percentage of workers said that they reported a concern and that nothing was done about it. This may undermine employee confidence in safety procedures and discourage them from raising problems later on.

The prevalence of health problems associated to the workplace, such as physical discomfort and stress, necessitates a greater emphasis on ergonomic examinations and wellness programs. Furthermore, there is variability in the frequency of safety drills and exercises; certain departments participate frequently, while others do not. Frequent exercises are essential for making sure staff members are equipped to handle situations with competence.

Lastly, the divergence between management and employees regarding the value of feedback on safety is troubling. Employers must promote a more welcoming safety culture where employee input is welcomed and taken seriously.

Implications for Business Practice:

- **Improving Safety Equipment Access and Training:** The company must ensure that all employees, regardless of their role, have access to safety equipment and are adequately trained in workplace safety protocols. This will mitigate risks and enhance employee confidence in the workplace.
- **Enhancing Reporting Systems:** Management should work to improve the reporting process for safety concerns, ensuring that all employees are aware of the procedure and that concerns are addressed promptly and effectively. A transparent feedback loop is crucial in building trust.
- **Addressing Health and Wellness:** The prevalence of work-related health issues underscores the need for a more robust approach to employee wellness. Implementing ergonomic assessments and expanding health programs can mitigate common health problems like back pain and stress.
- **Strengthening the Safety Culture:** To bridge the gap between management and employees, management should prioritize regular communication and feedback on safety issues. Employees should feel that their concerns are taken seriously and that their input directly contributes to workplace safety improvements.

VII. FINDINGS

1. Age Group:

- The majority of respondents are younger, with 30% in the 18-25 age group and 26% in the 26-35 group. Only 7% are aged 56 and above.

2. Gender Distribution:

- 72% are male and 28% are female. No respondents identified as "Other."

3. Department/Division:

- The largest group works in Administration (28%) followed by Marketing/Sales (23%).
- 11% are in Human Resources, and 17% are in various other departments.

4. Years with the Company:

- 47% have been with the company for 1-3 years, and 30% for less than 1 year, suggesting a fairly recent workforce.
- Only 6% have worked for the company between 7-10 years.

5. Employment Type:

- The majority are full-time employees (61%), while 19% are part-time.
- 8% each are contractors and temporary employees, with 4% interns.

6. Rating (Job Satisfaction):

- Most respondents rate their experience as Good (36%) or Fair (39%), while 21% rated it Excellent.
- Only 4% rated their experience as Poor, with no responses for Very Poor.

7. Safety Perception:

- 41% feel safe at work most of the time, while 33% sometimes feel safe.
- Only 1% said they never feel safe, and 4% rarely do.

8. Safety Measures:

- A strong 70% believe the company has adequate safety measures in place.
- 12% said No, and 18% were unsure.

9. Training Received:

- 71% report receiving training, but 12% have not, and 17% are unsure if they received training.

10. Workplace Activities:

- 29% of respondents report experiencing high stress levels.
- 36% report none of the listed activities apply to them.
- Other common activities include prolonged sitting (21%) and heavy lifting (20%).

11. Break Frequency:

- 51% take a break every 2-3 hours, while 28% take one once a day.
- Only 7% take breaks every hour, and 7% report they rarely or never take breaks.

12. Access to Programs:

- 59% have access to company programs, but 24% are unsure, and 17% said they do not have access.

13. Awareness of Procedure:

- 51% of respondents are aware of company procedures.
- However, 25% are unsure, and 24% do not know the procedures.

14. Resolution Status (Safety Concerns):

- Only 27% reported that issues were satisfactorily resolved, while 29% felt they were partially resolved.
- A concerning 33% reported no action was taken.

15. Drill Frequency:

- 40% report that drills happen quarterly, while 34% said monthly.
- 12% stated that drills never happen.

16. General Response (Agreement with Company Policies or Actions):

- 45% disagree with policies or actions, and 8% strongly disagree.
- Only 16% strongly agree, and 31% agree.
- 10% remain neutral.

VIII. CONCLUSION

The importance of creating a safe working environment is emphasized in the study's conclusion on workplace employee safety. Organizations need to prioritize safety measures because of the complexity of today's workplaces and the variety of hazards that employees may encounter. Because of this, safety precautions must be a crucial part of every operational plan. This means not just abiding by the law but also being proactive in identifying and mitigating risks through regular assessments and employee training. By investing in safety protocols, organizations may significantly reduce the chance of accidents and injuries, which will ultimately benefit everyone.

The outcomes also demonstrate the strong correlation between overall production and worker safety. Feeling safe at work improves employee morale and job satisfaction, which increases engagement and productivity. Conversely,

inadequate safety measures might result in higher absence rates, decreased productivity, and even legal problems. Safety programs are more than simply a legal requirement; businesses should view them as a strategic investment in their workforce, since they may have a substantial beneficial influence on employee loyalty and performance. In the end, the study highlights how important it is for management and employees to collaborate and have open lines of communication in order to advance a culture of safety. Worker involvement in safety efforts and feedback gathering can help to improve the efficacy of safety solutions that are tailored to specific workplace problems. Fostering a shared responsibility for safety is one way that organizations can increase their adaptability and resilience. This will assist them in meeting safety requirements as well as creating a positive and respected work environment. In conclusion, prioritizing employee safety is crucial for both legal compliance and successful, long-term business operations.

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