Industrial Mishaps And Their Preventive Measures - A Case Of Asian Colour System, Chennai, Tamilnadu, India

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ABSTRACT

The basic idea of this research is to study the industrial mishap and preventive measures prevailing in the Asian color system. This work is carried out mainly to find out the causes of the industrial mishap and to know about the safety measures prevailing in the organization. The researcher selects the descriptive research design that is concerned with describing the characteristics of a particular individual, or a group. From the findings, it could be reasoned that arises that however there are varieties in the rate of Mishaps among the respondents across segment factors like marital, education, and experience, yet these are not related to an industrial mishap. It implies there is something different past these variables which may represent Mishaps and should be tested. It might be recommended that the organization need to work much on preventative measures, moderating different dangers, and spotlight on fulfillment of the employees to forestall Mishaps. Keywords: Industrial mishap, safety measures, and the working environment

INTRODUCTION

Industrial Mishaps have been dissected and talked about for as long as 100 years. There is an expression "Prevention is better than cure" which implies it is smarter to prevent awful things from occurring. Industrial mishap implies an abrupt and unexpected occasion, owing to any reason, which

happens to an individual, emerging out of or over the span of their work, and bringing about a business injury to that individual. Mishaps are preventable, yet steps must be taken to forestall them. It is a legitimate commitment of an association to conform to the laws, standard practices, and wellbeing perceptions to stay away from crises and Mishaps. There might be a number of explanations for the Industrial Mishaps; be that as it may, the human factor is one which incorporates un-mind wellness, carelessness, absence of information, and preparation. Another driving component is working conditions. Risky working conditions can incorporate broken machines, defective plans, occupational hazards, fire, and different perils, and so forth. Mishaps will keep on occurring if preventive measures are not to be taken. Mishap counteraction can be accomplished by duty and collaboration between the executives, wellbeing programs, security culture, and responsibility. In the present period of privatization and industrialization in each field, it is basic to coin out this issue. On this ground, the current investigation was proposed.

Scope Of The Study

The study was conducted among employees in the factory of Asian Colour Systems, Chennai. The scope of the study is to find out the causes of an accident and to provide some preventive measures to avoid such mishaps. In the manufacturing industry, there is a very high chance of accidents taking place as the manufacturing process involves mishaps-prone operations in mixing, packing, etc. As mishaps have an impact on the individual, the organization, and the nation, sometimes productively, they need to be reduced if not prevented. Hence a study, analyzing the causes of mishaps is the need for time.

Statement Of Problem

A lot of accidents have taken place for the past few years because the company deals with chemicals and machines. Due to this, the company faces financial loss. So, as a researcher, it is very important to study the industrial Mishaps and preventive measures and to give suggestions and recommendations for the development of the organization. So that in future the company can reduce the accident in more.

OBJECTIVES OF THE STUDY

- 1. To understand what are the Safety measures undertaken by industries to prevent industrial mishaps.
- 2. To identify the effectiveness of the safety training programs conducted by the management.
- 3. To suggest suitable preventive measures to avoid industrial mishaps in the future.

Review Of Literature

An industrial accident is a sudden, undesirable, and unexpected event inside the ordinary course of an enterprise that results in inflicting personal harm to the employees. The accident in query may additionally rise up out of a multiplicity of reasons, which can be closely related to every other. Such accidents are also of various types and values (Albert, 2016).

A few accidents vary upon the severity, sturdiness, and level of the injury suffered by the employee. Such disability is partial, total, fatal, or non-fatal. In certain instances, such an injury might also result in intellectual occupational damage which results in Post Traumatic Stress Disorder (PTSD) which is not unusual amongst those who've survived a primary existence-threatening incident (Clarke, 2006).

But, it is to be noted that self-inflicted damage within the regular course of business hasn't appeared as an industrial accident as such incidents are remote injuries taking place due to personal carelessness and stupidity (Vinotha, 2015).

Research Methodology

There are 310 employees working in Asian Colour System, Chennai. The sample size of 100 employees is taken into consideration for this study. The base of sampling was 'random sampling 'where all elements in the population are considered and each element has an equal chance of being chosen as the subject. The entire study is based on primary as well as secondary data. Primary data was collected through a questionnaire method. The questionnaire consisted of three demographic variables, namely: experience, qualification, and marital status; and organizational variables namely; nature of the job, training, carelessness, stress and fatigue, maintenance of machines and equipment, working environment, first aid, job satisfaction, firefighting equipment. For finding out the results, chi-square, weighted average method, and percentage were applied.

DATA ANALYSIS AND DISCUSSION

a) Demographic Analysis

Socio Demographic Profile	Categories	No. of respondents	Percentage
Age	20-25	38	38
	26-33	28	28
	34-41	24	24
	Above 41	10	10
Year of experience	0-5 years	51	51
	6-10 years	27	27
	11-15 years	13	13
	Above 15 years	9	9
Education	SSLC	38	38
	ITI	43	43
	Diploma	12	12
	Under graduate	7	7
Income status	Below 5000	32	32
	6000-10000	34	34
	10000-15000	21	21
	Above 15000	13	13

Socio Demographic Profile of the Respondents

From the above table, it is inferred that 38% of respondents are at the age of 20 to 25 years and 10% of respondents are at the age of above 41. Then 51% of respondent's experiences are from 0 to 5 years and 9% of the respondent's experiences are above 15 years. The table it is inferred that 43% of respondents' education qualification is ITI and 38% of respondents' education qualification is SSLC. It is inferred that 34% of the respondents said income level is 6000-10000 and 32% that their income level is from below 5000.

Table showing the preference of the respondents towards the methods to reduce mishaps

Options	Xi	Wi	WiXi/∑Wi	Rank
Training	8	1	0.53	V
Working environment	36	5	12	Ι
Maintenance of equipment	19	3	3.8	III
Proper supervising	12	2	1.6	IV
Providing safety equipment	25	4	6.67	II
	100	15		

By using the weighted average method, it is observed that most of the respondents have ranked the Working environment as first. The second rank is for providing safety equipment. The third rank is for maintenance of equipment and the fourth is for the proper supervising and last one is training.

b) Data Analysis With Chi Square Test

Hypothesis

H₀: There is no association between the nature of employment and training program conducted by the organization

 $H_{1}{:}\ There association between the nature of employment and training program conducted by the organization$

Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	45.069 ^a	4	.043
Likelihood Ratio	59.290	4	0.19
Linear-by-Linear Association	38.686	1	0.22
No. of Valid Cases	100		

a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .45.

From the SPSS output, it is generated that the significant value is less than 0.05, therefore the null hypothesis is rejected and the alternate hypothesis is accepted. There is an association between the nature of employment and the training program conducted by the organization. This shows that training has been conducted for an employee once employed

SUGGESTIONS

1. Obey Safety Requirements

One of the principal reasons for injuries and Mishaps in the process is a failure to comply with protection guidelines. In case you are an employer, then make sure to provide the right safety guidelines for your employees and publish warnings and commands all over the workspace to make sure that your workers recognize what they should and shouldn't be doing. If you are a worker, ensure what the policies are and which you follow them – due to the fact even when a protection precaution seems ridiculous, it's in the vicinity because it has prevented harm (or loss of life) in the past.

2. Communicate

Another manner to help prevent injuries at the process is to be in constant communiqué with different employees to your location. If you are working with heavy equipment, ensure absolutely everyone is aware of what you're planning to do. If you need to walk through a difficult zone, ensure you talk to a person and recognize what work is being completed within the location so you are on the alert.

3. Provide/Get Proper Training

As an employer, ensure your people recognize what they may be doing. Offer the right guidance to all who are going to use heavy machinery, chemicals, or dangerous merchandise of any type. As a worker, ensure you know how to correctly use a machine, a chemical, or another risky product – by no means expect you can parent it out yourself

4. Keep Machinery & Equipment In Functioning Order

When was the last time your machine got a tune-up? Does it have any parts that need change? Is there damage that you don't recognize about? Continually make sure you are using a system that has been recently inspected and has obtained the right maintenance before you are taking it out on the process.

5. Don't Take Shortcuts

Quicker isn't always better, especially while protection may be jeopardized. Do your work in the right manner and continually ensure to maintain safety for your primary precedence, despite the fact that it takes a little longer.

CONCLUSION

Industrial mishaps have an immense deal of collision on the health of the employees in addition to the productiveness of the enterprise. With the intention to reduce the occurrence of injuries and their toll on productivity, safety and preventive measures are to be carried out and strictly followed. Workers and management are to be educated on the importance of protection protocols. The management can put in force a reward and penalty gadget for the one's employees who observe protection protocols and those who don't. This may bring about motivating the employees to work as in step with the protocols and recommendations and work via closer to safer working surroundings. The management must train the employees for the worst-case scenario by teaching the do's and don'ts after a mishap to reduce the magnitude of it and decrease the collateral harm. They have to provide adequate training for those employees who are required to perform heavy and distinctive equipment and make sure that people aren't made to work in hazardous surroundings and work for humane running operating hours. The firm ought to ensure that its management implements such measures and intently displays them.

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